

Masaryk University

EXHAUSTIVE Course Information on total 404 courses of the Medical Curriculum of students of medicine at Masaryk University, Faculty of Medicine for 2019/2020 (in alphabetic order) for cross-referencing of MediTec partners when devising or modifying their respective curricula. This DOCUMENT IS NOT PUBLIC AND IS INTENDED ONLY OFR USE BY MediTec PARTNERS !

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aVLAM9X1c Intensive Care Medicine - practice ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2/0. 1 credit(s). Type of Completion: z (credit).

Teacher(s)

prof. MUDr. Vladimír Šrámek, Ph.D. (lecturer)
prof. MUDr. Roman Gál, Ph.D. (seminar tutor)
MUDr. Jan Maláska, Ph.D. (seminar tutor)
MUDr. Václav Zvoníček, Ph.D. (seminar tutor)
doc. MUDr. Ivan Čundrle, CSc. (seminar tutor)
MUDr. Roman Štoudek (seminar tutor)
doc. MUDr. Petr Štourač, Ph.D. (seminar tutor)
MUDr. Robert Wagner, Ph.D. (seminar tutor)
MUDr. Petr Dominik (lecturer)
MUDr. Václav Zvoníček, Ph.D. (lecturer)
MUDr. Lukáš Dadák, Ph.D. (seminar tutor)
MUDr. Jozef Klučka (seminar tutor)
MUDr. Milan Kratochvíl (seminar tutor)
MUDr. Ivo Křikava, Ph.D. (seminar tutor)
MUDr. Igor Sas (seminar tutor)
MUDr. Martin Slezák (seminar tutor)
MUDr. Jan Stašek (seminar tutor)

MUDr. Eva Straževská (seminar tutor)
Irena Vaňurová (seminar tutor)
MUDr. Iveta Zimová (seminar tutor)
Lenka Dobrovolná (assistant)
Martina Matoušková (assistant)
Eva Podborská (assistant)

Supervisor

MUDr. Jan Maláška, Ph.D.
Department of Anaesthesiology and Intensive Care Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine
Contact Person: MUDr. Václav Zvoníček, Ph.D.
Supplier department: Department of Anaesthesiology and Intensive Care Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine

Prerequisites (in Czech)

aVLFA0822c && aVLCH0832c && aVLLP0633c && aVLDI7X1c Diagn.imaging methods-pr. && aVLOT7X1c Otorhinolaryngology - practice && aVLIN7X21c Infectious diseases I - prac.
(Do I meet enrolment requirements?)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- General Medicine (eng.) (programme LF, M-VL)
- General Medicine (programme LF, M-VL)

Course objectives

On the end of the course the student will be able to perform basic cardiopulmonary resuscitation and will understand how to perform advance cardiopulmonary resuscitation. The student will be able to asses the critical ill patient.

Syllabus

- **Intensive care practical training- two weeks intensive course**
- **time: 10:15-12:30**
- **!Study group 31 has courses at ARK, study group 30 at KARIM!**
- abbreviation:
- ARK = Anesteziologicko-resuscitační klinika FN u sv. Anny v Brně,
- KARIM= Klinika anesteziologie, resuscitace a intenz. med., FN Brno, Bohunice
- KDAR= Klinika dětské anesteziologie a resuscitace, FN Brno, Dětská nemocnice
-
- **1st week**
- *Monday*: CPR, chest compression, recognition of arrest, laryngeal mask, intubation
- *Tuesday*: Advanced CPR, defibrillation, drugs for CPR, cycles of CPR
- *Wednesday*: Shocks, hypovolemia, pulmonary embolism, myocardial infarction
- *Thursday*: Respiratory insufficiency, asthma, COPD, PNO, asphyxia, tamponade
- *Friday*: Paediatric intensive care, **!courses are located in KDAR!**
- **2nd week at ARK**

- *Monday*: intoxication, gastric lavage, hyperkalaemia, hyponatremia, anaphylactic shock
- *Tuesday*: trauma, head trauma, thoracic and abdominal trauma, basic approach
- *Wednesday*: scenario of critically ill patient, sepsis
- *Thursday*: MOF- definition, CVVHD, acid base- practical training
- *Friday*: scenario of critically ill. Credit

Literature

required literature

- KLEMENTA, Bronislav, Olga KLEMENTOVÁ and Pavel MARCIÁN. *Resuscitace*. 1. vyd. [Olomouc: EPAVA, 2014. 279 s. ISBN 9788086297415. [info](#)
- DOPORUČENÉ POSTUPY PRO RESUSCITACI ERC 2015.: časopis Urgentní medicína. MEDIPRAX CB s.r.o., 2015, Ročník 18 ISSN 1212-1924, <https://cprguidelines.eu> – záložka 2015 Guidelines – Translations – Czech.
- Perkins GD, Handley AJ e al. Adult basic life support and automated external defibrillation section Collaborators. European Resuscitation Council Guidelines for Resuscitation 2015: Section 2. *Resuscitation*. 2015 Oct;95:81-99.
- Soar J, Nolan Jpet al. Adult advanced life support section Collaborators. European Resuscitation Council Guidelines for Resuscitation 2015: Section 3. Adult advanced life support. *Resuscitation*. 2015 Oct;95:100-47
- *ABC of intensive care*. Edited by Graham Nimmo - Mervyn Singer. 2nd ed. Chichester, West Sussex, UK: Blackwell Pub., 2011. xi, 76. ISBN 9781405178037. [info](#)

recommended literature

- *Oh's intensive care manual*. Edited by Andrew D. Bersten - Neil Soni. 7th ed. [S.l.]: Butterworth-Heinemann, 2014. xix, 1242. ISBN 9780702047626. [info](#)
- Pavel Ševčík. *Intenzivní medicína*. 3. přeprac. a rozšíř. vyd. Praha: Galén, 2014. s. 1047-1051, 5 s. ISBN 978-80-7492-066-0

Teaching methods

lectures and discussions, presentation of patients by consultant, simulation.

Assessment methods

credit requirements is participation in course, one absence is accepted.

Language of instruction

English

Further comments (probably available only in Czech)

The course is taught each semester.

The course is taught: in blocks.

Teacher's information

<http://www.akutne.cz>

European Resuscitation Council a Česká resuscitační rada. DOPORUČENÉ POSTUPY PRO RESUSCITACI ERC 2015.: MEDIPRAX CB s.r.o., 2015, Ročník 18 ISSN 1212-1924. Český překlad shrnutí doporučených postupů pro KPR 2015, který byl vydán jako

mimořádné vydání časopisu Urgentní medicína, je k dispozici ke stažení z webu <https://cprguidelines.eu> – záložka 2015 Guidelines – Translations – Czech.

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

aVLAM9X1p Intensive Care Medicine - lecture *

Faculty of Medicine

Autumn 2019

Extent and Intensity

2/0/0. 3 credit(s). Type of Completion: zk (examination).

Teacher(s)

prof. MUDr. Vladimír Šrámek, Ph.D. (lecturer)
prof. MUDr. Roman Gál, Ph.D. (lecturer)
doc. MUDr. Petr Štourač, Ph.D. (lecturer)
doc. MUDr. Ivan Čundrle, CSc. (lecturer)
MUDr. Petr Dominik (lecturer)
MUDr. Jan Hruďa, Ph.D. (lecturer)
MUDr. Jozef Klučka (lecturer)
MUDr. Milan Kratochvíl (lecturer)
MUDr. Ivo Kříkava, Ph.D. (lecturer)
MUDr. Jan Maláska, Ph.D. (lecturer)
MUDr. Igor Sas (lecturer)
MUDr. Jan Stašek (lecturer)
MUDr. Roman Štoudek (lecturer)
prof. MUDr. Danuše Táborská, DrSc. (lecturer)
MUDr. Václav Zvoníček, Ph.D. (lecturer)
MUDr. Martin Slezák (seminar tutor)
MUDr. Eva Straževská (seminar tutor)
MUDr. Iveta Zimová (seminar tutor)
Lenka Dobrovolná (assistant)
Martina Matoušková (assistant)
Eva Podborská (assistant)
Irena Vaďurová (assistant)

Supervisor

MUDr. Jan Maláska, Ph.D.
Department of Anaesthesiology and Intensive Care Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine
Contact Person: MUDr. Václav Zvoníček, Ph.D.
Supplier department: Department of Anaesthesiology and Intensive Care Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine

Prerequisites (in Czech)

aVLFA0822c && aVLCH0832c && aVLLP0633c && aVLDI7X1c Diagn.imaging methods-
pr. && aVLOT7X1c Otorhinolaryngology - practice && aVLIN7X21c Infectious diseases I - prac.
(Do I meet enrolment requirements?)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the course is to understand the basics of intensive care medicine. Lectures consist of etiology, diagnostics and treatment of most frequent critical conditions. The specific management of critically ill will be explained, including mechanical ventilation and advanced cardiopulmonary resuscitation.

Syllabus

- Paediatric intensive care Nutrition. Acid-base balance disorders, electrolyte disorders Sepsis Intoxication Intensive care. Hemodynamic monitoring Shock. Fluid resuscitation Blood transfusions. Haematological management Disorders of consciousness, status epilepticus Respiratory failure. Status asthmaticus

Literature

required literature

- KLEMENTA, Bronislav, Olga KLEMENTOVÁ and Pavel MARCIÁN. *Resuscitace*. 1. vyd. [Olomouc: EPAVA, 2014. 279 s. ISBN 9788086297415. [info](#)
- DOPORUČENÉ POSTUPY PRO RESUSCITACI ERC 2015: časopis Urgentní medicína. MEDIPRAX CB s.r.o., 2015, Ročník 18 ISSN 1212-1924, <https://cprguidelines.eu> – záložka 2015 Guidelines – Translations – Czech.
- Perkins GD, Handley AJ et al. Adult basic life support and automated external defibrillation section Collaborators. European Resuscitation Council Guidelines for Resuscitation 2015: Section 2. *Resuscitation*. 2015 Oct;95:81-99.
- Soar J, Nolan J et al. Adult advanced life support section Collaborators. European Resuscitation Council Guidelines for Resuscitation 2015: Section 3. Adult advanced life support. *Resuscitation*. 2015 Oct;95:100-47
- *ABC of intensive care*. Edited by Graham Nimmo - Mervyn Singer. 2nd ed. Chichester, West Sussex, UK: Blackwell Pub., 2011. xi, 76. ISBN 9781405178037. [info](#)

recommended literature

- *Oh's intensive care manual*. Edited by Andrew D. Bersten - Neil Soni. 7th ed. [S.l.]: Butterworth-Heinemann, 2014. xix, 1242. ISBN 9780702047626. [info](#)
- Náhradní obsah: Pavel Ševčík. *Intenzivní medicína*. 3. přeprac. a rozšíř. vyd. Praha: Galén, 2014. s. 1047-1051, 5 s. ISBN 978-80-7492-066-0

Teaching methods

Lectures are obliged. The main teaching method is with a support of PPT.

Assessment methods

final classification: oral exam and written test – condition to pass the exam is credit of Intensive care medicine – practice.

Language of instruction

English

Further Comments

The course can also be completed outside the examination period.

The course is taught annually.

The course is taught: every week.

Listed among pre-requisites of other courses

- aVLCH11XX Surgery - state exam
aVLFA0822p && aVLNE9X1p && aVLPY9X1p && aVLDV7X21p && aVLAM9X1p && aVLVL7X61c && aVLVL9X62c && aVLVL9X63c && aVLVL9X64c && aVLVL9X65c && aVLIN9X22 && aVLON091p && VYCET(1,aVLAL091,aVLDO091,aVLKF101,aVLKB091,aVLFP091) && aVLCH9X33c && aVLCJ0888 && VSSP03X (Do I meet enrolment requirements?)
- aVLPD11XX Pediatrics - state exam
aVLFA0822p && aVLNE9X1p && aVLPY9X1p && aVLDV7X21p && aVLAM9X1p && aVLVL7X61c && aVLVL9X62c && aVLVL9X63c && aVLVL9X64c && aVLVL9X65c && aVLIN9X22 && aVLON091p && VYCET(1,aVLAL091,aVLDO091,aVLKF101,aVLKB091,aVLFP091) && aVLCH9X33c && aVLCJ0888 && VSSP03X (Do I meet enrolment requirements?)
- aVLPG11XX Obstetrics and Gynaecology - State Exam
aVLFA0822p && aVLNE9X1p && aVLPY9X1p && aVLDV7X21p && aVLAM9X1p && aVLVL7X61c && aVLVL9X62c && aVLVL9X63c && aVLVL9X64c && aVLVL9X65c && aVLIN9X22 && aVLON091p && VYCET(1,aVLAL091,aVLDO091,aVLKF101,aVLKB091,aVLFP091) && aVLCH9X33c && aVLCJ0888 && VSSP03X (Do I meet enrolment requirements?)
- aVLPL11XX General Medicine Practice and Geriatrics
aVLFA0822p && aVLNE9X1p && aVLPY9X1p && aVLDV7X21p && aVLAM9X1p && aVLVL7X61c && aVLVL9X62c && aVLVL9X63c && aVLVL9X64c && aVLVL9X65c && aVLIN9X22 && aVLON091p && VYCET(1,aVLAL091,aVLDO091,aVLKF101,aVLKB091,aVLFP091) && aVLCH9X33c && aVLCJ0888 (Do I meet enrolment requirements?)
- aVLVL11XX Internal Medicine - State Exam
aVLFA0822p && aVLNE9X1p && aVLPY9X1p && aVLDV7X21p && aVLAM9X1p && aVLVL7X61c && aVLVL9X62c && aVLVL9X63c && aVLVL9X64c && aVLVL9X65c && aVLIN9X22 && aVLON091p && VYCET(1,aVLAL091,aVLDO091,aVLKF101,aVLKB091,aVLFP091) && aVLCH9X33c && aVLCJ0888 && VSSP03X (Do I meet enrolment requirements?)
- aVLZP11XX Public Health - State exam
aVLFA0822p && aVLNE9X1p && aVLPY9X1p && aVLDV7X21p && aVLAM9X1p && aVLVL7X61c && aVLVL9X62c && aVLVL9X63c && [aVLVL9X64c](#) && [aVLVL9X65c](#) && aVLIN9X22 && aVLON091p && VYCET(1,aVLAL091,aVLDO091,aVLKF101,aVLKB091,aVLFP091) && aVLCH9X33c && aVLCJ0888 && VSSP03X (Do I meet enrolment requirements?)

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

aVLAN0121c Anatomy I - dissection ✱

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/0/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

doc. RNDr. Ladislava Horáčková, Ph.D. (seminar tutor)
MUDr. Ivana Hradilová Svíženská, CSc. (seminar tutor)
MUDr. Marek Joukal, Ph.D. (seminar tutor)
MUDr. Ilona Klusáková, Ph.D. (seminar tutor)
MUDr. Kateřina Kubičková (seminar tutor)
doc. MUDr. Pavel Matonoha, CSc. (seminar tutor)
RNDr. Michaela Račanská, Ph.D. (seminar tutor)
MUDr. Drahomíra Stančeva Pernicová, Ph.D. (seminar tutor)
MUDr. Lenka Vargová, Ph.D. (seminar tutor)
Mgr. Kateřina Vymazalová, Ph.D. (seminar tutor)
Dana Procházková (assistant)

Supervisor

MUDr. Marek Joukal, Ph.D.
Department of Anatomy - Theoretical Departments - Faculty of Medicine
Contact Person: prof. RNDr. Petr Dubový, CSc.
Supplier department: Department of Anatomy - Theoretical Departments - Faculty of Medicine

Timetable of Seminar Groups

aVLAN0121c/A: No timetable has been entered into IS.
aVLAN0121c/B: No timetable has been entered into IS.

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

At the end of the course students should be able to:

1. Describe all components (bones, joints, muscles, vessels and nerves) of the upper and lower extremities, and back
2. Relate features of extremities and back with respect to adjacent structures
3. Review arrangement of layers from the superficial to deep ones in all regions of the upper and lower limbs and back
4. Create the anatomical prosection of some studied region using specified dissecting

procedures

5. Distinguish abnormalities of the prosections.

Syllabus

- 1st day:back - skin incisions, subcutis, innervation, blood supply; UL - reg. deltoideoscapularis, dissection of the arm; LL - reg. glutea; reg. femoris ant.
- 2nd day:back - dissection of the trapezius, latissimus dorsi; UL - completion of the dissection of the arm; reg. antebrachii, skin, subcutic, superficial muscles; LL - reg. femoris post., reg. cruris.
- 3rd day:back - dissection of the rhomboids, levator scapulae, erector spinae; UL - completion of the dissection of the forearm; palma manus; LL - completion of the dissection of the crus; dorsum pedis;
- 4th day:back - dissection of the splenius, semispinalis, mm. serrati; mm. nuchae profundi, trigonum suboccipitale, mm. multifidi; UL - completion of the dissection of the palma manus; dorsum manus; LL - planta pedis
- 5th day: Demonstration of the dissected regions

Literature

required literature

- [DUBOVÝ, Petr](#). *Instructions for anatomical dissection course*. 3. vyd. Brno: Masarykova univerzita, 2013. 71 pp. ISBN 978-80-210-6202-3. [info](#)

recommended literature

- DRAKE, Richard L., Wayne VOGL and Adam W. M. MITCHELL. *Gray's anatomy for students*. 3rd ed. Philadelphia, Pa.: Churchill Livingstone, 2015. xxv, 1161. ISBN 9780702051319. [info](#)
- [DUBOVÝ, Petr](#). *Gross anatomy and structure of the human nervous system. Part I. Surface anatomy and structural arrangement of the central nervous system. 2. dotisk 3. vyd.* Brno: Masarykova univerzita, 2016. 92 pp. ISBN 978-80-210-6125-5. [info](#)
- Anne M. Gilroy, Brian R. MacPherson (eds.) *Atlas of Anatomy*, 3rd Edition, 2016, Thieme Medical Publishers, Inc. ISBN: 9781626232525
- KACHLÍK, David and Ondřej VOLNÝ. *Memorix anatomy : comprehensive book of human anatomy in English and Latin*. Illustrated by Radovan Hudák - Jan Balko - Simona Felšňová - Šárka Zaváza. 1st edition. Praha: Triton, 2015. xvii, 610. ISBN 9788073879501. [info](#)
- Gosling, Harris, Humpherson, Whitmore & Willan. *Human Anatomy, Color Atlas and Textbook*, 6th Edition. Elsevier Books, 2016. ISBN 9780723438274

Teaching methods

Anatomical dissection of the human body

Assessment methods

Completion of the course is assessed by the course-unit credit. A precondition for obtaining the course-unit credit is 100% attendance and demonstration of the basic knowledge during an examination at the close of the dissection course. When 100%

attendance could not be fulfilled due to an illness (medical confirmation required) the dissection course has to be substituted in full extent during the second week of the examination period of the semester. The results of the examination will be included in the results of the practical part of the final examination in Anatomy. A minimum of 6 out of 10 possible points (grade E) in the examination at the end of the course is required for fulfillment. For unsuccessful students a resit date will be offered (involved in the final exam date).

Language of instruction

English

Further comments (probably available only in Czech)

The course is taught annually.

Information on the extent and intensity of the course: 1,3 hours per week.

Listed among pre-requisites of other courses

- aVLAN0222c Anatomy II - dissection
aVLAN0121s && aVLAN0121c (Do I meet enrolment requirements?)
- aVLAN0222p Anatomy II - lecture
aVLAN0121s && aVLAN0121c (Do I meet enrolment requirements?)
- aVLAN0222s Anatomy II - seminar
aVLAN0121s && aVLAN0121c (Do I meet enrolment requirements?)

Teacher's information

A student has to wear the lab coat and plastic shoe covers, use the dressing forceps 14.5 or 16 cm long, and scalpel handle No. 4 with scalpel blades No. 23 or 21.

The course is also listed under the following terms [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

aVLAN0121p Anatomy I - lecture ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

2/0/0. 0 credit(s). Type of Completion: z (credit).

Teacher(s)

prof. RNDr. Petr Dubový, CSc. (lecturer)

doc. RNDr. Ladislava Horáčková, Ph.D. (lecturer)

MUDr. Ivana Hradilová Svíženská, CSc. (lecturer), RNDr. Michaela Račanská, Ph.D. (deputy)

doc. MUDr. Pavel Matonoha, CSc. (lecturer)

MUDr. Lenka Vargová, Ph.D. (lecturer)

MUDr. Marek Joukal, Ph.D. (seminar tutor)

MUDr. Ilona Klusáková, Ph.D. (seminar tutor)

MUDr. Kateřina Kubičková (seminar tutor)

RNDr. Michaela Račanská, Ph.D. (seminar tutor)

MUDr. Drahomíra Stančeva Pernicová, Ph.D. (seminar tutor)

Mgr. Kateřina Vymazalová, Ph.D. (seminar tutor)

Dana Procházková (assistant)

Supervisor

MUDr. Marek Joukal, Ph.D.

Department of Anatomy - Theoretical Departments - Faculty of Medicine

Contact Person: prof. RNDr. Petr Dubový, CSc.

Supplier department: Department of Anatomy - Theoretical Departments - Faculty of Medicine

Timetable

Tue 12:10–14:00 [A22/116 aula](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

At the end of the course students should be able to:

1. Name all parts of the human skeleton including the detailed relief.
2. Describe correctly joints of the bones.
3. Describe the movements occurring at each joint.
4. Characterize the newborn skull.
5. Distinguish the male and female skull and pelvis.
6. Identify individual muscles of the human body, discuss their attachments and innervations.
7. Define actions of individual muscles and muscular groups.
8. Define the components of the major organ systems (digestive, respiratory, urinary, and male genital)
9. Explain the morphology of the organs
10. Create apprehension about position and spatial relationships of particular organs and organ systems

Syllabus

- 1. Introduction to anatomy (anatomical terminology, planes and directions of the human body). Osteology, rules for description of bones. Introduction to radiology. Skeleton of the spine and thorax.
- 2. Skeleton of the upper and lower limb.
- 3. Bones of the neurocranium.
- 4. Bones of the splanchnocranium. Skull.
- 5. Diarthroses (general structure). Joints of the spine, thorax and skull. Joints of the upper limb (art. humeri et cubiti).
- 6. Joints of the upper limb (art. radiocarpalis et mediocarpalis, canalis carpi). Joints of the lower limb (art. coxae, art. genus, art. talocruralis, art. tarsi transversa). Arches of the foot.
- 7. General description of a muscle. Functional muscular groups and their representatives.
- 8. Selected muscles of the back and extremities.

- 9. Digestive system 1 (structure of the digestive tube, oral cavity, pharynx, oesophagus, small and large intestine).
- 10. ~Digestive system 2 (liver, gall bladder, bile ducts, pancreas). Peritoneal cavity.
- 11. Respiratory system (laryngeal muscles and their function, laryngoscopic picture, blood supply of lungs, mechanism of respiration).
- 12. Spinal nerve; dorsal rami; plexus brachialis, lumbalis et sacralis.
- 13. Dissection I. (dissection of the back, upper and lower extremities).
- 14. Urinary system. Male genital system. Male pelvic floor.

Literature

required literature

- DRAKE, Richard L., Wayne VOGL and Adam W. M. MITCHELL. *Gray's anatomy for students*. 3rd ed. Philadelphia, Pa.: Churchill Livingstone, 2015. xxv, 1161. ISBN 9780702051319. [info](#)
- [DUBOVÝ, Petr](#). *Gross anatomy and structure of the human nervous system. Part I. Surface anatomy and structural arrangement of the central nervous system. 2. dotisk 3. vyd.* Brno: Masarykova univerzita, 2016. 92 pp. ISBN 978-80-210-6125-5. [info](#)

recommended literature

- Anne M. Gilroy, Brian R. MacPherson (eds.) *Atlas of Anatomy*, 3rd Edition, 2016, Thieme Medical Publishers, Inc. ISBN: 9781626232525
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- Gosling, Harris, Humpherson, Whitmore & Willan. *Human Anatomy, Color Atlas and Textbook*, 6th Edition. Elsevier Books, 2016. ISBN 9780723438274

Teaching methods

Lectures

Assessment methods

Assessment is carried out after completion of following subjects within the scope of anatomy final examination: VLAN0121s Anatomy I – seminar, VLAN0121c Anatomy I – dissection, VLAN0222p Anatomy II – lecture, VLAN0222s Anatomy II – seminar, VLAN0222c Anatomy II – dissection)

Language of instruction

English

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

Information on course enrolment limitations: Mimo studenty LF, max. 15 studentů z PřF

The course is also listed under the following terms [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

aVLAN0121s Anatomy I - seminar ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

doc. RNDr. Ladislava Horáčková, Ph.D. (seminar tutor)
MUDr. Ivana Hradilová Svíženská, CSc. (seminar tutor)
MUDr. Marek Joukal, Ph.D. (seminar tutor)
MUDr. Ilona Klusáková, Ph.D. (seminar tutor)
MUDr. Kateřina Kubíčková (seminar tutor)
doc. MUDr. Pavel Matonoha, CSc. (seminar tutor)
RNDr. Michaela Račanská, Ph.D. (seminar tutor)
MUDr. Drahomíra Stančeva Pernicová, Ph.D. (seminar tutor)
MUDr. Lenka Vargová, Ph.D. (seminar tutor)
Mgr. Kateřina Vymazalová, Ph.D. (seminar tutor)
Dana Procházková (assistant)

Supervisor

MUDr. Marek Joukal, Ph.D.
Department of Anatomy - Theoretical Departments - Faculty of Medicine
Contact Person: prof. RNDr. Petr Dubový, CSc.
Supplier department: Department of Anatomy - Theoretical Departments - Faculty of Medicine

Timetable of Seminar Groups

aVLAN0121s/30: Thu 15:00–16:40 [P01007/S107](#)
aVLAN0121s/31: Fri 9:20–11:00 [P01007/S107](#)
aVLAN0121s/32: Fri 7:30–9:10 [P01008/S108](#)
aVLAN0121s/33: Thu 15:00–16:40 [P01008/S108](#)
aVLAN0121s/34: Fri 11:10–12:50 [P01007/S107](#)
aVLAN0121s/35: Fri 11:10–12:50 [P01008/S108](#)
aVLAN0121s/36: Fri 9:20–11:00 [P01008/S108](#)
aVLAN0121s/37: Fri 9:20–11:00 [P01009/S109](#)
aVLAN0121s/38: Fri 7:30–9:10 [P01007/S107](#)
aVLAN0121s/39: Fri 9:20–11:00 [P01006/S106](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

At the end of the course students should be able to:

1. Name all parts of the human skeleton including the detailed relief.
2. Describe correctly joints of the bones.
3. Describe the movements occurring at each joint.
4. Characterize the newborn skull.
5. Distinguish the male and female skull and pelvis.
6. Identify individual muscles of the human body, discuss their attachments and innervations.
7. Define actions of individual muscles and muscular groups.
8. Define the components of the major organ systems (digestive, respiratory, urinary, and male genital)
9. Explain the morphology of the organs
10. Create apprehension about position and spatial relationships of particular organs and organ systems

Syllabus

- 1. Skeleton of the spine and thorax (vertebrae, sacrum, coccyx, ribs, sternum).
- 2. Skeleton of the upper and lower limb. Description of x-ray pictures.
- 3. Bones of the neurocranium.
- 4. Bones of splanchnocranium. Skull. Description of x-ray pictures.
- 5. Joints of the spine, thorax and skull. Joints of the upper limb (art. humeri et cubiti). Description of x-ray pictures.
- 6. Joints of the upper and lower limbs. Pelvis. Pelvic planes. Description of x-ray pictures.
- 7. Muscles of the back and upper extremity.
- 8. Muscles of the upper and lower extremity.
- 9. Muscles of the head. Oral cavity (incl. tongue and salivary glands), pharynx, oesophagus, stomach, small and large intestine. Description of x-ray pictures.
- 10. Muscles of the abdomen. Liver, gall bladder, spleen, pancreas. Peritoneal cavity. Description of x-ray pictures.
- 11. Muscles of the thorax. External nose, nasal cavity proper), larynx, bronchi, lungs, thyroid gland. Description of x-ray pictures.
- 12. Demonstration of the regions and structures of the back and extremities (including vessels and nerves).
- 13. Dissection I. (dissection of the back, upper and lower extremities).
- 14. Practical examination of the dissected regions (part of the final examination)

Literature

required literature

- DRAKE, Richard L., Wayne VOGL and Adam W. M. MITCHELL. *Gray's anatomy for students*. 3rd ed. Philadelphia, Pa.: Churchill Livingstone, 2015. xxv, 1161. ISBN 9780702051319. [info](#)
- [DUBOVÝ, Petr](#). *Gross anatomy and structure of the human nervous system. Part I. Surface anatomy and structural arrangement of the central nervous system*. 2. dotisk 3. vyd. Brno: Masarykova univerzita, 2016. 92 pp. ISBN 978-80-210-6125-5. [info](#)

recommended literature

- Anne M. Gilroy, Brian R. MacPherson (eds.) Atlas of Anatomy, 3rd Edition, 2016, Thieme Medical Publishers, Inc. ISBN: 9781626232525
- KACHLÍK, David and Ondřej VOLNÝ. *Memorix anatomy : comprehensive book of human anatomy in English and Latin*. Illustrated by Radovan Hudák - Jan Balko - Simona Fejšová - Šárka Zaváza. 1st edition. Praha: Triton, 2015. xvii, 610. ISBN 9788073879501. [info](#)
- Gosling, Harris, Humpherson, Whitmore & Willan. Human Anatomy, Color Atlas and Textbook, 6th Edition. Elsevier Books, 2016. ISBN 9780723438274

Teaching methods

Practice with the human anatomical specimens

Assessment methods

Completion of the subject is assessed by the course-unit credit. A precondition for obtaining the course-unit credit is 95% attendance at the seminars (1 non-attendance tolerated).

Language of instruction

English

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

Listed among pre-requisites of other courses

- aVLAN0222c Anatomy II - dissection
aVLAN0121s && aVLAN0121c (Do I meet enrolment requirements?)
- aVLAN0222p Anatomy II - lecture
aVLAN0121s && aVLAN0121c (Do I meet enrolment requirements?)
- aVLAN0222s Anatomy II - seminar
aVLAN0121s && aVLAN0121c (Do I meet enrolment requirements?)
- aVLHE0221c Histology and Embryology I - practice
aVLAN0121s && aVLBI0121c (Do I meet enrolment requirements?)
- aVLHE0221p Histology and Embryology I - lecture
aVLAN0121s && aVLBI0121c (Do I meet enrolment requirements?)

Teacher's information

Students will wear lab coats, plastic shoe covers, and protective gloves. Students will bring a wire pointer for study of the skeleton and dressing forceps for study with prosections.

The course is also listed under the following terms [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

aVLAN0222c Anatomy II - dissection ✳

Faculty of Medicine

Spring 2018

Extent and Intensity

0/0/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

doc. RNDr. Ladislava Horáčková, Ph.D. (seminar tutor)

MUDr. Ivana Hradilová Svíženská, CSc. (seminar tutor)

MUDr. Marek Joukal, Ph.D. (seminar tutor)

MUDr. Roman Kopáček (seminar tutor)

RNDr. Michaela Račanská, Ph.D. (seminar tutor)

Mgr. Kateřina Vymazalová, Ph.D. (seminar tutor)

Dana Procházková (assistant)

Supervisor

MUDr. Marek Joukal, Ph.D.

Department of Anatomy - Theoretical Departments - Faculty of Medicine

Contact Person: prof. RNDr. Petr Dubový, CSc.

Supplier department: Department of Anatomy - Theoretical Departments - Faculty of Medicine

Prerequisites (in Czech)

[aVLAN0121s Anatomy I -sem.](#) && [aVLAN0121c Anatomy I - dis.](#)

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

At the end of the course students should be able to:

1. Define topographical regions of the head, neck, thorax, abdomen, and pelvis
2. Identify basic anatomical structures (bones, joints, viscera, vessels, and nerves) in the regions of the head, neck, thorax, abdomen, and pelvis
3. Demonstrate practically particular organs of the head, neck, thorax, abdomen, and pelvis at the human cadaver
4. Create the anatomical prosection of some studied region using specified dissecting procedures
5. Distinguish abnormalities of the prosections.

Syllabus

- Dissection of the head: parotidomasseteric region, anterior facial region, temporal region, occipitofrontal region, cranial cavity, dissection of the brain, pharynx, parapharyngeal space, soft palate, infratemporal fossa, larynx, nasal cavity, orbit, temporal bone.
- Dissection of the neck: skin incisions, subcutaneous tissue, infrahyoid muscles, carotid triangle, suprahyoid region, cervical and brachial plexuses, subclavian triangle.

- Dissection of the thorax: skin incisions, subcutaneous tissue, muscular layer, axillary fossa, intercostal spaces, thoracic cavity, pleura and lungs, pericardium and heart, mediastinum.
- Dissection of the abdomen: skin incisions, subcutaneous tissue, muscular layer, inguinal region, abdominal cavity, situs viscerum, removal of organs, branches of the abdominal aorta, retroperitoneal space.
- Dissection of the pelvis: perineal region, external genital organs, ischioanal fossa, pelvic floor, organs of the lesser pelvis, the wall of the pelvis.

Literature

required literature

- [DUBOVÝ, Petr](#). *Instructions for anatomical dissection course*. 1. dotisk 3. vyd. Brno: Masarykova univerzita, 2016. 71 pp. ISBN 978-80-210-6202-3. [info](#)
- DUBOVÝ, Petr. *Gross anatomy and structure of the human nervous system*. Third edition. Brno: Masarykova univerzita, 2012. 90 stran. ISBN 9788021061255. [info](#)

recommended literature

- DRAKE, Richard L., Wayne VOGL and Adam W. M. MITCHELL. *Gray's anatomy for students*. 3rd ed. Philadelphia, Pa.: Churchill Livingstone, 2015. xxv, 1161. ISBN 9780702051319. [info](#)
- GILROY, Anne Marie. *Atlas of anatomy*. ?, 2016. ISBN 9781626232525. [info](#)
- KACHLÍK, David and Ondřej VOLNÝ. *Memorix anatomy : comprehensive book of human anatomy in English and Latin*. Illustrated by Radovan Hudák - Jan Balko - Simona Felšöová - Šárka Zaváza. 1st edition. Praha: Triton, 2015. xvii, 610. ISBN 9788073879501. [info](#)

not specified

- Gosling, Harris, Humpherson, Whitmore & Willan. *Human Anatomy, Color Atlas and Textbook*, 6th Edition. Elsevier Books, 2016. ISBN 9780723438274

Teaching methods

Anatomical dissection of the human body

Assessment methods

Completion of the subject is assessed by the course-unit credit. A precondition for obtaining the course-unit credit is 100% attendance and demonstration of basic knowledge during examination at the close of the practicals. The student who fails the 100% attendance due to an illness (after presentation of a medical certificate) substitutes the course to the full extent during the examination period of the semester. A minimum of 6 out of 10 possible points (grade E) in each examination is required for fulfillment. The results of the examination will be included in the results of the practical part of the final examination in Anatomy. The unsuccessful student will be re-examined at the respective date of the theoretical part of the final examination in Anatomy.

Language of instruction

English

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: in blocks.

Note related to how often the course is taught: blokové pitvy 13. a 14. týden.

Information on the extent and intensity of the course: 2,7.

Listed among pre-requisites of other courses

- aVLLP0431c Clinical Introduction I - practice
aVLFY0321c && aVLFY0321s && aVLBC0321s && aVLBC0321c && aVLAN0222c && aVLAN0222s (Do I meet enrolment requirements?)
- aVLLP0431p Clinical Introduction I - lecture
aVLFY0321c && aVLFY0321s && aVLBC0321s && aVLBC0321c && aVLAN0222c && aVLAN0222s (Do I meet enrolment requirements?)
- aVLTZ0451 Theoretical Bases of Clinical Medicine I - seminar
aVLFY0321c && aVLFY0321s && aVLBC0321s && aVLBC0321c && aVLBI0222p && aVLAN0222c && aVLAN0222s (Do I meet enrolment requirements?)

Teacher's information

A student has to wear the lab coat and plastic shoe covers, use the dressing forceps 14.5 or 16 cm long, and scalpel handle No. 4 with scalpel blades No. 23 or 21.

The course is also listed under the following terms [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

aVLAN0222p Anatomy II - lecture ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

3/0/0. 7 credit(s). Type of Completion: zk (examination).

Teacher(s)

prof. RNDr. Petr Dubový, CSc. (lecturer)

doc. RNDr. Ladislava Horáčková, Ph.D. (lecturer)

MUDr. Ivana Hradilová Sviženská, CSc. (lecturer), RNDr. Michaela Račanská, Ph.D. (deputy)

MUDr. Marek Joukal, Ph.D. (seminar tutor)

MUDr. Kateřina Kubíčková (seminar tutor)

RNDr. Michaela Račanská, Ph.D. (seminar tutor)

Mgr. Kateřina Vymazalová, Ph.D. (seminar tutor)

MUDr. Ilona Klusáková, Ph.D. (assistant)

Dana Procházková (assistant)

Supervisor

MUDr. Marek Joukal, Ph.D.

Department of Anatomy - Theoretical Departments - Faculty of Medicine

Contact Person: prof. RNDr. Petr Dubový, CSc.

Supplier department: Department of Anatomy - Theoretical Departments - Faculty of Medicine

Prerequisites (in Czech)

[aVLAN0121s Anatomy I -sem.](#) && [aVLAN0121c Anatomy I - dis.](#)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

At the end of the course students should be able to:

1. Describe cardiovascular organs, organs of senses, peripheral and central nervous systems
2. Explain function of the cardiovascular system, senses, peripheral and central nervous systems
3. Relate cardiovascular organs, organs of senses, peripheral and central nervous systems with respect to adjacent structures
4. Identify distribution and function of the sympathetic and parasympathetic components of the autonomic nervous system
5. Define topographical regions of the head, neck, thorax, abdomen, and pelvis
6. Identify basic anatomical structures (bones, joints, viscera, vessels, and nerves) in the regions of the head, neck, thorax, abdomen, and pelvis
7. Review mutual continuity between particular organ systems.

Syllabus

- 1. Female genital system. Female pelvic floor
- 2. Heart, aortic arch
- 3. Arteries, veins, lymph system (digest)
- 4. Spinal cord and brain stem (structure)
- 5. Cranial nerves (III-VII, IX-XII)
- 6. Cerebellum and diencephalon (structure, connections, functions). Hypothalamo-pituitary connections
- 7. Telencephalon (structure). Basal ganglia (connections, functions)
- 8. Blood supply, meninges and ventricles of the CNS, cerebrospinal fluid
- 9. Auditory and vestibular system. Cranial nerve VIII
- 10. Visual system and orbital region
- 11. Human body imaging techniques. Organ projections
- 12. Autonomic nervous system (cervical sympathetic system, enteric system, central modulation of the ANS)
- 13.+ 14. Dissections

Literature

required literature

- DUBOVÝ, Petr. *Gross anatomy and structure of the human nervous system*. Third edition. Brno: Masarykova univerzita, 2012. 90 stran. ISBN 9788021061255. [info](#)

recommended literature

- DRAKE, Richard L., Wayne VOGL and Adam W. M. MITCHELL. *Gray's anatomy for students*. 3rd ed. Philadelphia, Pa.: Churchill Livingstone, 2015. xxv, 1161. ISBN 9780702051319. [info](#)
- GILROY, Anne Marie. *Atlas of anatomy*. ?, 2016. ISBN 9781626232525. [info](#)
- KACHLÍK, David and Ondřej VOLNÝ. *Memorix anatomy : comprehensive book of human anatomy in English and Latin*. Illustrated by Radovan Hudák - Jan Balko - Simona Felšöová - Šárka Zaváza. 1st edition. Praha: Triton, 2015. xvii, 610. ISBN 9788073879501. [info](#)

not specified

- Gosling, Harris, Humpherson, Whitmore & Willan. *Human Anatomy, Color Atlas and Textbook*, 6th Edition. Elsevier Books, 2016. ISBN 9780723438274

Teaching methods

lectures

Assessment methods

The subject is evaluated in the scope of the final examination.

Final examination:

The final examination in Anatomy consists of a practical and a theoretical part. To pass successfully the exam, the student has to obtain at least the grade E in both practical and theoretical parts of the final examination.

The practical part of final examination is represented by the results of the examinations in Anatomy I - Dissection and Anatomy II - Dissection. The student, who has not obtained at least grade E during above-mentioned courses, will be re-examined at the respective date of the theoretical part of the final examination in Anatomy.

The theoretical part of final examination first proceeds in the form of a test with subsequent oral examination. To be entitled to proceed to oral examination, the student has to obtain at least 12 out of 18 points in the test. When successful at the test the student does not repeat it during a re-sit date. The student takes the test only during the regular and 1st re-sit dates. When unsuccessful at the test during the 1st re-sit date, the student will not repeat the test before the oral examination of the 2nd re-sit date. In the course of oral examination the student answers 4 questions selected by lot out of preannounce sets of questions and presents anatomical descriptions of two imaging techniques.

Language of instruction

English

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

Information on course enrolment limitations: Mimo studenty LF, max. 15 studentů PřF

Listed among pre-requisites of other courses

- aVLLP0532c Clinical Introduction II - practice
aVLLP0431c && (aVLAN0222p || VSAN0333p) && (aVLHE0322c || VSHE0322c)&&
(aVLBC0422c || VSBC041c)&& aVLFY0422c (Do I meet enrolment requirements?)

- aVLLP0633c Clinical Introduction III - practice
aVLLP0532c && (aVLAN0222p || VSAN0333p) && aVLHE0322p && aVLBC0422p && aVLFY0422p (Do I meet enrolment requirements?)
- aVLPA0521c Pathology I - practice
(aVLAN0222p || VSAN0333p) && (aVLHE0322p || VSHE0322p) && (aVLLM0421c || VLLM0421c) (Do I meet enrolment requirements?)
- aVLPA0521p Pathology I - lecture
(aVLAN0222p || VSAN0333p) && (aVLHE0322p || VSHE0322p) && (aVLLM0421c || VLLM0421c) (Do I meet enrolment requirements?)
- aVLTZ0552 Theoretical Bases of Clinical Medicine II - seminar
aVLTZ0451c && (aVLAN0222p || VSAN0333p) (Do I meet enrolment requirements?)

The course is also listed under the following terms [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

aVLAN0222s Anatomy II - seminar *

Faculty of Medicine

Spring 2018

Extent and Intensity

0/3/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

doc. RNDr. Ladislava Horáčková, Ph.D. (seminar tutor)
MUDr. Ivana Hradilová Svíženská, CSc. (seminar tutor)
MUDr. Marek Joukal, Ph.D. (seminar tutor)
MUDr. Kateřina Kubičková (seminar tutor)
RNDr. Michaela Račanská, Ph.D. (seminar tutor)
Mgr. Kateřina Vymazalová, Ph.D. (seminar tutor)
Dana Procházková (assistant)

Supervisor

MUDr. Marek Joukal, Ph.D.
Department of Anatomy - Theoretical Departments - Faculty of Medicine
Contact Person: prof. RNDr. Petr Dubový, CSc.
Supplier department: Department of Anatomy - Theoretical Departments - Faculty of Medicine

Prerequisites (in Czech)

[aVLAN0121s Anatomy I - sem.](#) && [aVLAN0121c Anatomy I - dis.](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

At the end of the course students should be able to:

1. Define female genital organs, organs of the cardiovascular system, senses, and organs of peripheral and central nervous systems
2. Identify particular anatomical features of the female genital organs, cardiovascular system, eye, ear, central and peripheral nervous systems (i.e. brain, spinal cord, and peripheral nerves) including their blood supply
3. Characterize function of female genital organs, organs of cardiovascular system, senses, peripheral and central nervous systems
4. Discuss the distribution and function of the sympathetic and parasympathetic nervous systems
5. Relate studied organs with respect to adjacent structures

Syllabus

- 1. Female genital system, female pelvic floor, description of X-ray pictures
- 2. Heart, aorta ascendens, arcus aortae. A. carotis communis, externa
- 3. Descending aorta, main arteries and veins. V. portae, portal-systemic anastomoses. Fetal circulation.
- 4. Gross anatomy of the CNS (spinal cord, brain stem). Attachments of cranial nerves to the brain stem. Cranial nerves nuclei
- 5. Cranial nerves (III-VII, IX-XII), course. Skull base
- 6. Cranial nerve V. Gross anatomy of the cerebellum and diencephalon
- 7. Telencephalon (anatomy; grey matter – cortex + basal ganglia; white matter – pathways)
- 8. Blood supply of the CNS, meninges, cerebral ventricles, cerebrospinal fluid
- 9. Auditory and vestibular system. Temporal bone
- 10. Visual system and orbital region
- 11. Imaging techniques, reading of anatomical structures
- 12. Preparation for dissections. Regions of the head, neck, thorax, abdomen and pelvis.
- 13. + 14. Dissections (head, neck, thorax, abdomen and pelvis)

Literature

required literature

- DUBOVÝ, Petr. *Gross anatomy and structure of the human nervous system*. Third edition. Brno: Masarykova univerzita, 2012. 90 stran. ISBN 9788021061255. [info](#)

recommended literature

- DRAKE, Richard L., Wayne VOGL and Adam W. M. MITCHELL. *Gray's anatomy for students*. 3rd ed. Philadelphia, Pa.: Churchill Livingstone, 2015. xxv, 1161. ISBN 9780702051319. [info](#)
- GILROY, Anne Marie. *Atlas of anatomy*. ?, 2016. ISBN 9781626232525. [info](#)
- KACHLÍK, David and Ondřej VOLNÝ. *Memorix anatomy : comprehensive book of human anatomy in English and Latin*. Illustrated by Radovan Hudák - Jan Balko - Simona Felšöová - Šárka Zaváza. 1st edition. Praha: Triton, 2015. xvii, 610. ISBN 9788073879501. [info](#)

not specified

- Gosling, Harris, Humpherson, Whitmore & Willan. Human Anatomy, Color Atlas and Textbook, 6th Edition. Elsevier Books, 2016. ISBN 9780723438274

Teaching methods

Practice with the human anatomical specimens

Assessment methods

Completion of the subject is assessed by the course-unit credit. A precondition for obtaining the course-unit credit is 95% attendance at the seminars (1 non-attendance tolerated).

Language of instruction

English

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

Information on course enrolment limitations: Mimo studenty LF, max. 15 studentů z PřF

Listed among pre-requisites of other courses

- aVLFY0321c Physiology I - practice
(aVLBI0222p || VSBI0222p) && (aVLBF011p || VSBF011p) && (aVLAN0222s || VSAN0232s) (Do I meet enrolment requirements?)
- aVLFY0321p Physiology I - lecture
(aVLBI0222p || VSBI0222p) && (aVLBF011p || VSBF011p) && (aVLAN0222s || VSAN0232s) (Do I meet enrolment requirements?)
- aVLFY0321s Physiology I - seminar
(aVLBI0222p || VSBI0222p) && (aVLBF011p || VSBF011p) && (aVLAN0222s || VSAN0232s) (Do I meet enrolment requirements?)
- aVLLP0431c Clinical Introduction I - practice
aVLFY0321c && aVLFY0321s && aVLBC0321s && aVLBC0321c && aVLAN0222c && aVLAN0222s (Do I meet enrolment requirements?)
- aVLLP0431p Clinical Introduction I - lecture
aVLFY0321c && aVLFY0321s && aVLBC0321s && aVLBC0321c && aVLAN0222c && aVLAN0222s (Do I meet enrolment requirements?)
- aVLTZ0451 Theoretical Bases of Clinical Medicine I - seminar
aVLFY0321c && aVLFY0321s && aVLBC0321s && aVLBC0321c && aVLBI0222p && aVLAN0222c && aVLAN0222s (Do I meet enrolment requirements?)

Teacher's information

A student has to wear the lab coat and plastic shoe covers, use the dressing forceps 14.5 or 16 cm long, and a probe.

The course is also listed under the following terms [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

aVLBC0321c Biochemistry I - practice *

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

Ing. Martina Čarnecká, Ph.D. (seminar tutor)
doc. RNDr. Jiří Dostál, CSc. (seminar tutor)
Mgr. Jana Gregorová, Ph.D. (seminar tutor)
MUDr. Miroslava Hlaváčová (seminar tutor)
MUDr. Michaela Králíková, Ph.D. (seminar tutor)
Mgr. Milena Matejovičová, Ph.D. (seminar tutor)
RNDr. Hana Paulová, CSc. (seminar tutor)
Mgr. Ondřej Peš, Ph.D. (seminar tutor)
Mgr. Jiří Slanina, Ph.D. (seminar tutor)
prof. RNDr. Eva Táborská, CSc. (seminar tutor)
doc. RNDr. Josef Tomandl, Ph.D. (seminar tutor)
Mgr. Marie Tomandlová, Ph.D. (seminar tutor)
Mgr. Katarína Kostolanská (assistant)
Lenka Nerudová (assistant)
Mgr. Lucie Novotná (assistant)
Mgr. Anna Pleskačová (assistant)
Mgr. Roman Sándor (assistant)

Supervisor

prof. RNDr. Eva Táborská, CSc.
Department of Biochemistry - Theoretical Departments - Faculty of Medicine
Supplier department: Department of Biochemistry - Theoretical Departments - Faculty of Medicine

Timetable of Seminar Groups

aVLBC0321c/30: Fri 13:30–15:10 [A16/213](#), *H. Paulová*
aVLBC0321c/31: Thu 14:00–15:40 [A16/212](#), *J. Dostál*
aVLBC0321c/32: Thu 14:00–15:40 [A16/216](#), *J. Dostál*
aVLBC0321c/33: Wed 14:00–15:40 [A16/216](#), *E. Táborská*
aVLBC0321c/34: Fri 13:30–15:10 [A16/216](#), *H. Paulová*
aVLBC0321c/35: Thu 16:00–17:40 [A16/216](#), *J. Tomandl*
aVLBC0321c/36: Thu 16:00–17:40 [A16/213](#), *J. Tomandl*
aVLBC0321c/37: Wed 14:00–15:40 [A16/212](#), *E. Táborská*
aVLBC0321c/38: Fri 13:30–15:10 [A16/216](#)

Prerequisites (in Czech)

[aVLBI0222c Biology II - pract.](#) && [aVLBF011c Biophysics - pract.](#)
(Do I meet enrolment requirements?)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Seminars and exercises have a common content and serve for active practice of the subject matter in Biochemistry I. The aim of the course is to obtain knowledge on essential metabolic processes on the cellular level. Understanding of these processes is a base for comprehension of metabolism on the tissue and organ level. In the introductory lessons are summarized basic terms from chemistry needed for understanding of body structure and physico-chemical processes occurring in it ((chemical composition of the body, survey of biologically important elements, water, electrolytes, non-electrolytes, osmotic pressure, acid-base, redox and precipitation reactions), the following lectures are focused on biochemical pathways in cells.

Learning outcomes

In the end of the course will students understand the meaning of basic chemical terms (pH, osmolality, electrolyte, buffer, etc.) and apply this knowledge when describing the properties of body fluids.

Describe the role of macro- and microbiogenic elements in the organism

Discuss the properties and function of enzymes

Describe basic catabolic and anabolic pathways of carbohydrate, lipid and protein metabolism, and their relationships.

Understand the principles of energy production, utilization and deposition at the cellular level.

Explain the function of cell membranes and the principle of compartmentalization at the cellular level and the transport processes on the membrane.

Describe protein synthesis, starting with the replication and transcription, translation and post-translational modifications. Understand the relationship between protein structure and function.

Explain the function of hemoglobin in oxygen transport and maintaining acid-base balance.

Discuss the principles of some diseases at the molecular level.

Syllabus

- Introduction into the metabolism of cells (differences between prokaryotic and eukaryotic cell, compartmentation of metabolic processes, non-covalent interactions). Structure of haemoglobin and its relationship to the function. Hb types in the blood of healthy subjects, HbCO and MetHb, abnormal Hb types. Enzymes - reaction rate, progress curve, the Michaelis plot and K_m , enzyme inhibition. Coenzymes, their relationship to vitamins. Written test I (Biochemical methods, haemoglobin, enzymology, coenzymes.) Membrane structure and assembly. Transport across membranes. Metabolism of glucose: Glycolysis under anaerobic and aerobic conditions and the oxidation of pyruvate. Gluconeogenesis. Glycogenesis and glycogenolysis. Metabolism of proteins. Common features of amino acid conversion. The synthesis of urea. Nitrogen balance. Important reactions in amino acid catabolism. Written test II (Membranes, transport across membranes, metabolism of saccharides and amino acids.) Biosynthesis and desaturation of fatty acids. The sources of essential fatty acids. Metabolism of triacylglycerols. Metabolism of phospholipids. Biosynthesis of eicosanoids. Peroxidation of lipids. Written test III (Metabolism of lipids.) The citric acid

cycle. The respiratory chain and oxidative phosphorylation. Replication, transcription, proteosynthesis.

Literature

required literature

- Seminar texts available in Information system

Teaching methods

Course is based on group discussion to the given topics. The outlines of discussion are in the recommended textbook. Complementary materials are available in section Study materials.

Assessment methods

Full attendance in lessons is the principal condition. If any absence, it must be apologized through Office of studies. If apology is recorded in Information System, then student is allowed to make up the absence according to teacher's instructions.

Language of instruction

English

Further Comments

The course is taught annually.

Listed among pre-requisites of other courses

- aVLBC0422c Biochemistry II - practice
aVLBI0222p && aVLBF011p &&aVLBC0321s && aVLBC0321c && aVLFY0321c && aVLFY0321s (Do I meet enrolment requirements?)
- aVLBC0422p Biochemistry II - lecture
aVLBI0222p && aVLBF011p &&aVLBC0321s && aVLBC0321c && aVLFY0321c && aVLFY0321s (Do I meet enrolment requirements?)
- aVLBC0422s Biochemistry II - seminar
aVLBI0222p && aVLBF011p &&aVLBC0321s && aVLBC0321c && aVLFY0321c && aVLFY0321s (Do I meet enrolment requirements?)
- aVLLP0431c Clinical Introduction I - practice
aVLFY0321c && aVLFY0321s && aVLBC0321s && aVLBC0321c && aVLAN0222c && aVLAN0222s (Do I meet enrolment requirements?)
- aVLLP0431p Clinical Introduction I - lecture
aVLFY0321c && aVLFY0321s && aVLBC0321s && aVLBC0321c && aVLAN0222c && aVLAN0222s (Do I meet enrolment requirements?)
- aVLTZ0451 Theoretical Bases of Clinical Medicine I - seminar
aVLFY0321c && aVLFY0321s && aVLBC0321s && aVLBC0321c && aVLBI0222p && aVLAN0222c && aVLAN0222s (Do I meet enrolment requirements?)

The course is also listed under the following terms [Autumn 2016](#), [Accreditation autumn](#).

aVLBC0321p Biochemistry I - lecture ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

3/0/0. 0 credit(s). Type of Completion: z (credit).

Teacher(s)

Ing. Martina Čarnecká, Ph.D. (lecturer)
doc. RNDr. Jiří Dostál, CSc. (lecturer)
Mgr. Jana Gregorová, Ph.D. (lecturer)
MUDr. Miroslava Hlaváčová (lecturer)
MUDr. Michaela Králíková, Ph.D. (lecturer)
Mgr. Milena Matejovičová, Ph.D. (lecturer)
RNDr. Hana Paulová, CSc. (lecturer)
Mgr. Ondřej Peš, Ph.D. (lecturer)
Mgr. Jiří Slanina, Ph.D. (lecturer)
prof. RNDr. Eva Táborská, CSc. (lecturer)
doc. RNDr. Josef Tomandl, Ph.D. (lecturer)
Mgr. Marie Tomandlová, Ph.D. (lecturer)
Mgr. Katarína Kostolanská (assistant)
Lenka Nerudová (assistant)
Mgr. Lucie Novotná (assistant)
Mgr. Anna Pleskačová (assistant)
Mgr. Roman Sándor (assistant)

Supervisor

prof. RNDr. Eva Táborská, CSc.
Department of Biochemistry - Theoretical Departments - Faculty of Medicine
Supplier department: Department of Biochemistry - Theoretical Departments - Faculty of Medicine

Timetable

Tue 13:30–15:20 [A11/334](#), Wed 10:10–11:00 [A11/234](#)

Prerequisites (in Czech)

[aVLBF011c Biophysics - pract.](#) && [aVLBI0222c Biology II - pract.](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the course is to obtain knowledge on essential metabolic processes on the cell level. Understanding of these processes is a base for comprehension of metabolism on the tissue and organ level. In the introductory lessons are summarized basic terms from chemistry needed for understanding of body structure a physico-chemical processes occurring in it ((chemical composition of the body, survey of biologically important elements, water, electrolytes, non-electrolytes, osmotic pressure, acid-base, redox and

precipitation reactions), the following lectures are focused on biochemical pathways in cells.

Learning outcomes

In the end of the course will students understand the meaning of basic chemical terms (pH, osmolality, electrolyte, buffer, etc.) and apply this knowledge when describing the properties of body fluids.

Describe the role of macro- and microbiogenic elements in the organism

Discuss the properties and function of enzymes

Describe basic catabolic and anabolic pathways of carbohydrate, lipid and protein metabolism, and their relationships.

Understand the principles of energy production, utilization and deposition at the cellular level.

Explain the function of cell membranes and the principle of compartmentalization at the cellular level and the transport processes on the membrane.

Describe protein synthesis, starting with the replication and transcription, translation and post-translational modifications. Understand the relationship between protein structure and function.

Explain the function of hemoglobin in oxygen transport and maintaining acid-base balance.

Discuss the principles of some diseases at the molecular level.

Syllabus

- Chemical composition of human body, survey of biochemically important elements, ROS. Water (properties, distribution), electrolytes, nonelectrolytes, osmotic pressure, osmolality, osmolarity. Acid-base processes (pH, values of pH in organism). Buffers, Henderson-Hasselbalch equation. Introduction to metabolism. Bases of bioenergetics (Gibbs energy, macroergic compounds and their formation, chemical equilibrium and steady state). Redox equilibrium (electrode potential, Nernst-Peters equation, biological redox systems). Membrane structure, the assembly and recycling of membranes. Specialized structures of plasma membrane – lipid rafts, caveols, tight junctions. Membrane transport. Enzymes. Characteristic features of biocatalysis, enzyme structure and function, nomenclature and classification of enzymes. Enzyme cofactors, review of structures and functions. Mechanisms of enzyme action. Kinetics of enzyme catalyzed reactions. Assays of enzyme activity, the conditions used. Factors affecting catalytic activity of enzymes, types of enzyme inhibition. Metabolism: basic concepts and design. Biological oxidations, generation of high-energy compounds. Saccharide metabolism: the glycolytic pathway and aerobic decarboxylation of pyruvate. Gluconeogenesis. Glycogen biosynthesis and breakdown. The pentose phosphate pathway. The glucuronate pathway. Interconversions of monosaccharides and of their derivatives. Protein and amino acid metabolism. The common reactions in amino acid degradation. The ureosynthetic cycle. Metabolic breakdown of individual amino acids. Biosynthesis and breakdown of fatty acids, ketogenesis. Synthesis of triacylglycerols. Metabolism of phospholipids and glycolipids. Synthesis of eicosanoids. Biosynthesis and transformations of cholesterol, biosynthesis of bile acids. Interrelationships among the major pathways involved in energy metabolism. The

citric acid cycle. Synthesis of haem. Mitochondria. Oxidative phosphorylation - mitochondrial electron transport chain, synthesis of ATP. Structure of haemoglobin, structure-function relationships (the oxygen saturation curve, inducement of haemoglobin saturation and oxygen transport. Bohr effect. Normal haemoglobin types in blood, haemoglobin concentration. Other forms (glycohaemoglobin, methaemoglobin, carboxyhaemoglobin) and abnormal haemoglobins. Biosynthesis and catabolism of purine and pyrimidine nucleotides. Chromatin, DNA replication. DNA transcription. Regulation of gene expression. Protein synthesis and post-translational processing.

Literature

required literature

- RODWELL, Victor W., David A. BENDER and Kathleen M. BOTHAM. *Harper's illustrated biochemistry*. 30th ed. New York: Mc Graw- Hill, 2015. xii, 817. ISBN 9781259252860. [info](#)
- KOOLMAN, Jan and Klaus-Heinrich ROEHM. *Color Atlas of Biochemistry*. 3rd ed. : Georg Thieme Verlag, 2013. ISBN 978-3-13-100373-7. [info](#)

Teaching methods

Teaching form are lectures.

Assessment methods

Subject is a first part of two-semester subject Biochemistry and is not terminated by exam nor course unit credit.

Language of instruction

English

Further Comments

The course is taught annually.

The course is also listed under the following terms [Autumn 2016](#), [Accreditation autumn](#).

aVLBC0321s Biochemistry I - seminar ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2/0. 4 credit(s). Type of Completion: z (credit).

Teacher(s)

Ing. Martina Čarnecká, Ph.D. (seminar tutor)

doc. RNDr. Jiří Dostál, CSc. (seminar tutor)

Mgr. Jana Gregorová, Ph.D. (seminar tutor)

MUDr. Miroslava Hlaváčová (seminar tutor)

MUDr. Michaela Králíková, Ph.D. (seminar tutor)

Mgr. Milena Matejovičová, Ph.D. (seminar tutor)

RNDr. Hana Paulová, CSc. (seminar tutor)

Mgr. Ondřej Peš, Ph.D. (seminar tutor)

Mgr. Jiří Slanina, Ph.D. (seminar tutor)
prof. RNDr. Eva Táborská, CSc. (seminar tutor)
doc. RNDr. Josef Tomandl, Ph.D. (seminar tutor)
Mgr. Marie Tomandlová, Ph.D. (seminar tutor)
Mgr. Katarína Kostolanská (assistant)
Lenka Nerudová (assistant)
Mgr. Lucie Novotná (assistant)
Mgr. Anna Pleskačová (assistant)
Mgr. Roman Sándor (assistant)

Supervisor

prof. RNDr. Eva Táborská, CSc.
Department of Biochemistry - Theoretical Departments - Faculty of Medicine
Supplier department: Department of Biochemistry - Theoretical Departments - Faculty of Medicine

Timetable of Seminar Groups

aVLBC0321s/30: Tue 10:30–12:10 [A16/215](#), *H. Paulová*
aVLBC0321s/31: Mon 14:00–15:40 [A16/215](#), *J. Dostál*
aVLBC0321s/32: Mon 14:00–15:40 [A16/215](#), *J. Dostál*
aVLBC0321s/33: Mon 16:00–17:40 [A16/215](#), *E. Táborská*
aVLBC0321s/34: Tue 10:30–12:10 [A16/215](#), *H. Paulová*
aVLBC0321s/35: Tue 16:40–18:20 [A16/215](#), *J. Tomandl*
aVLBC0321s/36: Tue 16:40–18:20 [A16/215](#), *J. Tomandl*
aVLBC0321s/37: Mon 16:00–17:40 [A16/215](#), *E. Táborská*
aVLBC0321s/38: Tue 10:30–12:10 [A16/215](#), *J. Slanina*

Prerequisites (in Czech)

[aVLBI0222c Biology II - pract.](#) && [aVLBF011c Biophysics - pract.](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Seminars and exercises have a common content and serve for active practice of the subject matter in Biochemistry I. The aim of the course is to obtain knowledge on essential metabolic processes on the cellular level. Understanding of these processes is a base for comprehension of metabolism on the tissue and organ level. In the introductory lessons are summarized basic terms from chemistry needed for understanding of body structure a physico-chemical processes occurring in it ((chemical composition of the body, survey of biologically important elements, water, elektrolytes, non-elektrolytes, osmotic pressure, acid-base, redox and precipitation reactions), the following lectures are focused on biochemical pathways in cells.

Learning outcomes

In the end of the course will students understand the meaning of basic chemical terms (pH, osmolality, electrolyte, buffer, etc.) and apply this knowledge when describing the properties of body fluids.

Describe the role of macro- and microbiogenic elements in the organism

Discusse the properties and function of enzymes

Describes basic catabolic and anabolic pathways of carbohydrate, lipid and protein metabolism, and their relationships.

Understand the principles of energy production, utilization and deposition at the cellular level.

Explain the function of cell membranes and the principle of compartmentalization at the cellular level and the transport processes on the membrane.

Describe protein synthesis, starting with the replication and transcription, translation and post-translational modifications. Understand the relationship between protein structure and function.

Explain the function of hemoglobin in oxygen transport and maintaining acid-base balance.

Discusses the principles of some diseases at the molecular level.

Syllabus

- Chemical composition of human body.
- Water, electrolytes, osmotic pressure, osmolality. pH, buffers. Structure of haemoglobin and its relationship to the function. Hb types in the blood of healthy subjects, HbCO and MetHb, abnormal Hb types. Enzymes - reaction rate, progress curve, the Michaelis plot and Km, enzyme inhibition. Coenzymes, their relationship to vitamins. Membrane structure and assembly. Transport across membranes. Metabolism of glucose: Glycolysis under anaerobic and aerobic conditions and the oxidation of pyruvate. Gluconeogenesis. Glycogenesis and glycogenolysis. Metabolism of proteins. Common features of amino acid conversion. The synthesis of urea. Nitrogen balance. Important reactions in amino acid catabolism. Biosynthesis and desaturation of fatty acids. The sources of essential fatty acids. Metabolism of triacylglycerols. Metabolism of phospholipids. Biosynthesis of eicosanoids. Peroxidation of lipids. The citric acid cycle. The respiratory chain and oxidative phosphorylation. Replication, transcription, proteosynthesis.

Literature

required literature

- Seminar texts available in Information system

Teaching methods

Course is based on group discussion to the given topics. The outlines of discussion are in the recommended textbook. Complementary materials are available in section Study materials.

Assessment methods

Full attendance in seminars is the principal condition. If any absence, it must be apologized through Department of Study Affairs up to five days. If apology is recorded in

Information System, then student is allowed to make up the absence according to teacher's instructions. Four revision tests are written in seminars, semestral limit for credit is 42. If the semestral limit is not fulfilled, student must write the Credit test (limit 14/30). All absences must be made up before writing the credit test. One repetition of the Credit test is approved.

Language of instruction

English

Further Comments

The course is taught annually.

Listed among pre-requisites of other courses

- aVLBC0422c Biochemistry II - practice
aVLBI0222p && aVLBF011p &&aVLBC0321s && aVLBC0321c && aVLFY0321c &&
aVLFY0321s (Do I meet enrolment requirements?)
- aVLBC0422p Biochemistry II - lecture
aVLBI0222p && aVLBF011p &&aVLBC0321s && aVLBC0321c && aVLFY0321c &&
aVLFY0321s (Do I meet enrolment requirements?)
- aVLBC0422s Biochemistry II - seminar
aVLBI0222p && aVLBF011p &&aVLBC0321s && aVLBC0321c && aVLFY0321c &&
aVLFY0321s (Do I meet enrolment requirements?)
- aVLLP0431c Clinical Introduction I - practice
aVLFY0321c && aVLFY0321s && aVLBC0321s && aVLBC0321c && aVLAN0222c &&
aVLAN0222s (Do I meet enrolment requirements?)
- aVLLP0431p Clinical Introduction I - lecture
aVLFY0321c && aVLFY0321s && aVLBC0321s && aVLBC0321c && aVLAN0222c &&
aVLAN0222s (Do I meet enrolment requirements?)
- aVLTZ0451 Theoretical Bases of Clinical Medicine I - seminar
aVLFY0321c && aVLFY0321s && aVLBC0321s && aVLBC0321c && aVLBI0222p &&
aVLAN0222c && aVLAN0222s (Do I meet enrolment requirements?)

The course is also listed under the following terms [Autumn 2016](#), [Accreditation autumn](#).

aVLBF011p Biophysics - lecture ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

3/0/0. 6 credit(s). Type of Completion: zk (examination).

Teacher(s)

Mgr. Vladan Bernard, Ph.D. (lecturer)
MUDr. Aleš Bourek, Ph.D. (lecturer)
MUDr. Lenka Forýtková, CSc. (lecturer)
prof. RNDr. Vojtěch Mornstein, CSc. (lecturer)
Mgr. Daniel Vlček, CSc. (lecturer)
Marta Vágnerová (assistant)

Supervisor

prof. RNDr. Vojtěch Mornstein, CSc.

Department of Biophysics - Theoretical Departments - Faculty of Medicine

Contact Person: prof. RNDr. Vojtěch Mornstein, CSc.

Supplier department: Department of Biophysics - Theoretical Departments - Faculty of Medicine

Timetable

Wed 11:10–12:00 [A11/334](#), Thu 12:30–14:20 [A11/334](#)

Prerequisites

Common level of high school knowledge in physics

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

At the end of the course students will understand and explain biophysical principles and laws; understand biophysical principles of the main devices; evaluate data obtained by the basic biophysical methods in light of a scientific, effective, safe and efficient attitude to their use; understand possible usage of the biophysical techniques and medical devices in practice; explain basic principles of the so-called physiological biophysics and (in certain extent) the theory and methods of molecular biophysics.

Learning outcomes

After finishing the course students will understand and explain biophysical principles and laws important for medicine; understand biophysical principles of the main medical devices; understand possible usage of biophysical techniques and medical devices in common practice; explain basic principles of the so-called physiological biophysics and basic ideas the theory and methods of molecular biophysics.

Syllabus

- **Introduction into medical biophysics.**
- 1. Introduction. Biophysical view on structure of matter.
- 2. Biological effects of ionising radiation.
- 3. Thermodynamic principles and entropy.
- 4. Thermodynamic processes in living organisms.
- 5. Introduction into molecular biophysics I (subject of study).
- 6. Introduction into molecular biophysics II (methods of study).
- 7. Biophysics of biomembranes. Bioelectric phenomena.
- 8. Biophysics of cardiovascular system.
- 9. Biophysics of respiratory system.
- 10. Biophysical function of sensory receptors. Biophysics of hearing.
- 11. Biophysics of vision.
- 12. Effects of mechanical forces and acoustic fields on the living organisms.
- 13. Biological effects of electromagnetic fields and non-ionising radiation.
- 14. Introduction into biocybernetics and modelling.
- 15. Free theme.

- **Physical principles of medical technology.**
- 1. Medicine and technology. Biosignals and their processing.
- 2. Conventional X-ray imaging methods.
- 3. Modern tomographic methods (CT, MRI).
- 4. Radionuclide diagnostics.
- 5. Methods and instruments for ionising radiation therapy.
- 6. Measurement and registration of temperature.
- 7. Optical laboratory instruments.
- 8. Optical diagnostic instruments.
- 9. Electrodiagnostic methods.
- 10. Ultrasound imaging.
- 11. Ultrasound Doppler and duplex methods.
- 12. Measurement and registration of mechanical quantities.
- 13. Methods and instruments used in physiotherapy.
- 14. Modern physical methods in surgery. Lithotripsy.
- 15. Artificial body organs. Nanotechnology in medicine.

Literature

recommended literature

- [HRAZDIRA, Ivo](#), [Vojtěch MORNSTEIN](#), [Aleš BOUREK](#) and [Jiřina ŠKORPÍKOVÁ](#). *Fundamentals of biophysics and medical technology*. Edited by Vojtěch Mornstein. 3. dotisk 2., přeprac. vyd. Brno: Masarykova univerzita, 2019. 325 pp. ISBN 978-80-210-5758-6. [info](#)

Teaching methods

lectures

Assessment methods

The exam has theoretical character but can be done only with the credits gained for practicals. The exam consists of written test consisting of 25 questions and oral part, which can be done only when the number of correctly answered test questions is 14 or more. This limit is lowered to 11 in the last exam resit. The oral part consists of 2 questions as a rule. They are chosen from the list which is available in department web page. The examined student has to be able to explain the problems and characterise their possible clinical importance.

Language of instruction

English

Further Comments

The course can also be completed outside the examination period.

The course is taught annually.

Listed among pre-requisites of other courses

- aVLBC0422c Biochemistry II - practice
aVLBI0222p && aVLBF011p &&aVLBC0321s && aVLBC0321c && aVLFY0321c &&
aVLFY0321s (Do I meet enrolment requirements?)

- aVLBC0422p Biochemistry II - lecture
aVLBI0222p && aVLBF011p &&aVLBC0321s && aVLBC0321c && aVLFY0321c && aVLFY0321s (Do I meet enrolment requirements?)
- aVLBC0422s Biochemistry II - seminar
aVLBI0222p && aVLBF011p &&aVLBC0321s && aVLBC0321c && aVLFY0321c && aVLFY0321s (Do I meet enrolment requirements?)
- aVLFY0321c Physiology I - practice
(aVLBI0222p || VSBI0222p) && (aVLBF011p || VSBF011p) && (aVLAN0222s || VSAN0232s) (Do I meet enrolment requirements?)
- aVLFY0321p Physiology I - lecture
(aVLBI0222p || VSBI0222p) && (aVLBF011p || VSBF011p) && (aVLAN0222s || VSAN0232s) (Do I meet enrolment requirements?)
- aVLFY0321s Physiology I - seminar
(aVLBI0222p || VSBI0222p) && (aVLBF011p || VSBF011p) && (aVLAN0222s || VSAN0232s) (Do I meet enrolment requirements?)
- aVLLM0421c Medical Microbiology I - practice
(VSBI0222p || aVLBI0222p) && (VLBF011p || aVLBF011p) (Do I meet enrolment requirements?)
- aVLLM0421p Medical Microbiology I - lecture
(VSBI0222p || aVLBI0222p) && (VLBF011p || aVLBF011p) (Do I meet enrolment requirements?)
- aVLPX042t Vocational Training in Nursing
(VLBF011p || aVLBF011p) && (VSPO011p || aVLPO011p) && (VSLT0221s || aVLLT0222s) (Do I meet enrolment requirements?)

Teacher's information

<http://www.med.muni.cz/biofyz/md.htm>

The course is also listed under the following terms [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

aVLBI0121c Biology I - practice ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/3/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

Mgr. Kateřina Cetkovská, Ph.D. (lecturer)

Mgr. Petr Fojtík (seminar tutor)

Mgr. Iva Gudernová (seminar tutor)

Mgr. Pavla Havlíčková (seminar tutor)

Mgr. Hana Hříbková (seminar tutor)

Mgr. Šárka Jelínková (seminar tutor)

Mgr. Aneta Kohutová (seminar tutor)

Mgr. Tatiana Kováčová (seminar tutor)

Mgr. Markéta Nováková, Ph.D. (seminar tutor)

Mgr. Veronika Palušová (seminar tutor)
MUDr. Martin Pešl, Ph.D. (seminar tutor)
Mgr. Petra Pospíšilová, Ph.D. (seminar tutor)
Mgr. Vladimír Rotrekl, Ph.D. (seminar tutor)
doc. MUDr. Iva Slaninová, Ph.D. (seminar tutor)
Mgr. Kateřina Straková, Ph.D. (seminar tutor)
Mgr. Barbora Štefanovic (seminar tutor)
Mgr. Barbora Valčíková (seminar tutor)
Mgr. Tereza Váňová (seminar tutor)
Gretsen Velezmoro Jauregui, M.Sc. (seminar tutor)
Mgr. Kateřina Vopěnková, Ph.D. (seminar tutor)
Mgr. Karolína Zoufalová (seminar tutor)
Jana Růžičková (assistant)
Mgr. Martina Vráblíková (assistant)

Supervisor

prof. Ing. Petr Dvořák, CSc.
Department of Biology - Theoretical Departments - Faculty of Medicine
Contact Person: Mgr. Kateřina Vopěnková, Ph.D.
Supplier department: Department of Biology - Theoretical Departments - Faculty of Medicine

Timetable of Seminar Groups

aVLBI0121c/30: Thu 7:30–10:00 [A7/214](#)
aVLBI0121c/31: Mon 12:30–15:00 [A7/214](#)
aVLBI0121c/32: Fri 10:10–12:40 [A7/214](#)
aVLBI0121c/33: Tue 8:30–11:00 [A7/214](#)
aVLBI0121c/34: Thu 15:00–17:30 [A7/214](#)
aVLBI0121c/35: Tue 14:20–16:50 [A7/214](#)
aVLBI0121c/36: Wed 13:40–16:10 [A7/214](#)
aVLBI0121c/37: Wed 8:00–10:30 [A7/214](#)
aVLBI0121c/38: Mon 9:50–12:20 [A7/214](#)
aVLBI0121c/39: Mon 15:10–17:40 [A7/214](#)

Prerequisites

Knowledge of high-school biology on the level of Overview of High School Biology (https://is.muni.cz/auth/do/med/el/overview/overview_ENG.qwarp) or similar is required.

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

After completion of the course student: operates light microscope and can perform some of the basic cytochemical staining techniques; understands the basics of electron microscopy, genetic toxicology, gene engineering or the methods of karyotyping; is able to evaluate the risk of hereditary diseases in a patient on the basis of assigned family anamnesis of this disease; is able to propose and interpret elementary molecular screening

methods for some hereditary, neoplastic or microbial diseases. Student is also able to apply this knowledge and skills in other subject, especially histology, pathology and human genetics.

Learning outcomes

After completion of the course student: operates light microscope and can perform some of the basic cytochemical staining techniques; understands the basics of electron microscopy, genetic toxicology, gene engineering or the methods of karyotyping; is able to evaluate the risk of hereditary diseases in a patient on the basis of assigned family anamnesis of this disease; is able to propose and interpret elementary molecular screening methods for some hereditary, neoplastic or microbial diseases. Student is also able to apply this knowledge and skills in other subject, especially histology, pathology and human genetics.

Syllabus

- Week 1: Instructions. Non-cellular organisms and infectious agents
- Week 2: Prokaryotic cells and their medical significance
- Week 3: Microscopic observation of eukaryotic cells
- Week 4: *In vitro* culture of human cells - significance for medical research
- Week 5: Plasma membrane - osmosis, cell fusion
- Week 6: Principles of electron microscopy, cellular ultrastructure
- Week 7: DNA structure and replication. **Control test 1 (knowledge of the weeks 1 to 6 - lectures, seminars, practices)**
- Week 8: Transcription and translation
- Week 9: Methods of cell cycle studying
- Week 10: Mitosis observation under light microscope
- Week 11: Biological significance of meiosis - gametogenesis
- Week 12: Human karyotype and chromosomal abnormalities
- Week 13: no practice - dissection week
- Week 14: Genetic disorders - autosomal inheritance **Control test 2 (knowledge of the weeks 7 to 13 - lectures, seminars, practices)**

Literature

required literature

- Actual protocols for practices are provided in electronic form in the Information System of the Masaryk University (IS): Study Materials of the course aVLBI0121c

Teaching methods

laboratory practice, class discussion

Assessment methods

Practical classes are mandatory.

Requirements for course completion: full attendance in the practices (1 absence, excused or unexcused, is allowed); all protocols completed (also for missed lessons) and checked and signed by appropriate teachers; successfully passed 2 written control tests during the semester (20 questions each, 4 possibilities, 1 answer correct, student need to reach at least 12 points out of 20 in each test). In case you do not pass one of the control tests and

its re-sit, you have to pass the final test (so-called Credit test) based on knowledge of the entire semester lectures, seminars and practices. The test comprises of 20 questions: 10 test questions (multiple answers can be correct, negative marking is obtained for incorrect answers) + 10 given terms for written explanation. At least 10 points out of 20 are needed to pass.

In case of student's late arrival to the practice or poor activity at the practice, student is required to write an essay in the length of 2 pages on a given topic. Same for the case of 2nd and any additional absence in practices (excused or unexcused). Find the instructions for essay writing in the Course-related instructions in the IS, bring the essay printed to the teacher who specified the topic and be ready to answer the teacher's questions regarding the topic.

In case of 3 absences, (or more than 3 absences all excused by the Office for Studies within 5 days from the beginning of the absence and introduced to the Information System), it is addressed individually and course-unit credit is awarded only after the proof of the student's knowledge of the entire semester topics (Credit test, see above).

In case of 4 or more unexcused absences, course-unit credit is not awarded.

Language of instruction

English

Follow-Up Courses

- [aVLBI0222c Biology II - practice](#)
- [aVLBI0222p Biology II - lecture](#)

Further comments (probably available only in Czech)

The course is taught annually.

Listed among pre-requisites of other courses

- aVLBI0222c Biology II - practice
aVLBI0121c && aVLBI0121s (Do I meet enrolment requirements?)
- aVLBI0222p Biology II - lecture
aVLBI0121c && aVLBI0121s (Do I meet enrolment requirements?)
- aVLEB041 Essential Biology
aVLBI0121c || aZLBI0121c (Do I meet enrolment requirements?)
- aVLHE0221c Histology and Embryology I - practice
aVLAN0121s && aVLBI0121c (Do I meet enrolment requirements?)
- aVLHE0221p Histology and Embryology I - lecture
aVLAN0121s && aVLBI0121c (Do I meet enrolment requirements?)

Teacher's information

<https://is.muni.cz/auth/el/1411/podzim2019/aVLBI0121c/index.qwarp>

What to bring to each practice: printed protocol for the respective practice, your own writing materials. Download the protocol for each practice from the Study materials in the IS, and study it in advance. Lab shoes, lab coats and disposable gloves are not required, but for the tasks with staining lab coats are recommended.

Substitution of practices: In exceptional cases (illness, appointment at the doctor's or foreign policy, 1 or 2 times per semester as maximum) student can arrange a substitution

with another group. To arrange a substitution, write an e-mail to the contact person of the course at least 24 hours before your planned substitution and specify the group (date and time) you would like to attend instead. Substitution is only possible on the same teaching week. When the capacity of the group you intended to substitute with is fully used, the substitution does not need to be approved. Repeated substitution with other groups is not allowed.

Complete Biology instructions to be found at the following link:
https://is.muni.cz/auth/el/1411/podzim2019/aVLBI0121c/op/Biology_practices_instructions.pdf

The course is also listed under the following terms [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

aVLBI0121p Biology I - lecture *

Faculty of Medicine

Autumn 2019

Extent and Intensity

1/0/0. 0 credit(s). Type of Completion: z (credit).

Teacher(s)

Mgr. Kateřina Cetkovská, Ph.D. (lecturer)
prof. Ing. Petr Dvořák, CSc. (lecturer)
doc. Mgr. Lumír Krejčí, Ph.D. (lecturer)
Mgr. Pavel Krejčí, Ph.D. (lecturer)
Mgr. Vladimír Rotrekl, Ph.D. (lecturer)
doc. MUDr. Iva Slaninová, Ph.D. (lecturer)
prof. MUDr. David Šmajš, Ph.D. (lecturer)
RNDr. Mário Špírek, PhD. (lecturer)
Mgr. Stjepan Uldrijan, CSc. (lecturer)
Mgr. Kateřina Vopěnková, Ph.D. (lecturer)
Mgr. Kateřina Straková, Ph.D. (seminar tutor)
Jana Růžičková (assistant)
Mgr. Martina Vráblíková (assistant)

Supervisor

prof. Ing. Petr Dvořák, CSc.
Department of Biology - Theoretical Departments - Faculty of Medicine
Contact Person: Mgr. Kateřina Vopěnková, Ph.D.
Supplier department: Department of Biology - Theoretical Departments - Faculty of Medicine

Timetable

Thu 10:20–11:10 [A11/334](#)

Prerequisites

Knowledge of high-school biology on the level of Overview of High School Biology (https://is.muni.cz/auth/do/med/el/overview/overview_ENG.qwarp) or similar, and knowledge of all previous lectures and practical classes of the subject. Expected

knowledge for each lecture is specified in the course syllabus. Literature recommended to study before each lecture is detailed in the interactive syllabus of the course.

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

After completion of the course student: understands elementary cellular processes and processes taking place during development of a human body; comprehends the complexity of intercellular communication and mutual regulation of individual cells in a multicellular organism; knows basic principles of bacterial and viral diseases; is able to express basic coherence between malfunction in cellular processes and development of diseases, especially hereditary diseases, cancers or developmental defects, and understands the principle of genetic determination of hereditary diseases; can explain and justify action of some therapeutics with emphasis on modern medicine. Student is also able to apply this knowledge and skills in other subject, especially physiology, pathophysiology and human genetics.

Learning outcomes

After completion of the course student: understands elementary cellular processes and processes taking place during development of a human body; comprehends the complexity of intercellular communication and mutual regulation of individual cells in a multicellular organism; knows basic principles of bacterial and viral diseases; is able to express basic coherence between malfunction in cellular processes and development of diseases, especially hereditary diseases, cancers or developmental defects, and understands the principle of genetic determination of hereditary diseases; can explain and justify action of some therapeutics with emphasis on modern medicine. Student is also able to apply this knowledge and skills in other subject, especially physiology, pathophysiology and human genetics.

Syllabus

- Week 1:
 - Introduction to medical biology - from understanding of cellular principle to modern biomedicine (prof. Ing. Petr Dvořák, CSc.)
- Week 2:
 - Bacteria and viruses – characteristics, reproduction strategies and principles of treatment (Mgr. Kateřina Vopěnková, Ph.D.)
- Week 3:
 - Structure, functions and function anomalies of eukaryotic cells (Mgr. Kateřina Cetkovská, Ph.D.)
- Week 4:
 - Cells in the context of the entire organism – principles of cell adhesion and intercellular communication (Mgr. Kateřina Cetkovská, Ph.D.)
- Week 5:

- Cell signalling and the principle of cell differentiation (Mgr. Kateřina Vopěnková, Ph.D.)
- Week 6:
- The importance of genetic information – the journey from a gene to protein; DNA replication (RNDr. Mário Špírek, Ph.D.)
- Week 7:
- Cell cycle – molecular mechanisms of regulation and significance for oncology (Mgr. Stjepan Uldrijan, CSc.)
- Week 8:
- Mitotic division in normal and cancer cells (Mgr. Vladimír Rotrekl, Ph.D.)
- Week 9:
- Meiosis and the principle of genetic variability (Mgr. Vladimír Rotrekl, Ph.D.)
- Week 10:
- The basics of genetics, the nature of dominance and recessivity (Mgr. Kateřina Vopěnková, Ph.D.)
- Week 11:
- Genetics of human diseases – molecular principles of genetically determined disorders (doc. MUDr. Iva Slaninová, Ph.D.)
- Week 12:
- Cell death – mechanisms and regulation of apoptosis and its significance for medicine (doc. MUDr. Iva Slaninová, Ph.D.)
- Week 13:
- dissection week - no lecture
- Week 14:
- Epigenetics – the link between genes and environment (Mgr. Stjepan Uldrijan, CSc.)

Literature

required literature

- ALBERTS, Bruce. *Essential cell biology*. 4th edition. New York, N.Y.: Garland Science, 2014. xxiii, 726. ISBN 9780815344551. [info](#)
- *Medical genetics at a glance*. Edited by D. J. Pritchard - Bruce R. Korf. 3rd ed. Chichester, England: Wiley-Blackwell, 2013. 1 online r. ISBN 9781118689028. [info](#)

recommended literature

- HARDIN, Jeff, Gregory BERTONI and Lewis J. KLEINSMITH. *Becker's world of the cell*. 8th ed. Boston: Benjamin Cummings, 2012. xxviii, 79. ISBN 9780321709783. [info](#)
- LODISH, Harvey F. *Molecular cell biology*. 6th ed. New York, N.Y.: W.H. Freeman and Company, 2008. xxxvii, 11. ISBN 9780716776017. [info](#)
- SNUSTAD, D. Peter and Michael J. SIMMONS. *Principles of genetics*. 5th ed. Hoboken: John Wiley & Sons, Inc, 2009. xix, 823. ISBN 9780470388259. [info](#)
- WEINBERG, Robert A. *The biology of cancer*. 2nd ed. New York: Garland Science, 2014. 1 v. ISBN 9780815345282. [info](#)

- *Principles of development*. Edited by Lewis Wolpert. 2nd ed. Oxford: Oxford University Press, 2002. xxv, 542. ISBN 0198792913. [info](#)

Teaching methods

lecture

Assessment methods

Lecture attendance is optional. Students continue with following subjects without proof of this semester's knowledge. Biology I (aVLBI0121p) is followed by Biology II (aVLBI0222p) that is completed with a written examination test. The test is based on knowledge of all topics from both semesters (lectures, seminars, practices).

Language of instruction

English

Follow-Up Courses

- [aVLBI0222p Biology II - lecture](#)

Further comments (probably available only in Czech)

The course is taught annually.

Teacher's information

<https://is.muni.cz/auth/el/1411/podzim2019/aVLBI0121p/index.qwarp>

Students are obliged to **follow the Interactive syllabus of the course** where they can find all relevant information (schedule, substitutions, public holidays etc.), and also corresponding study literature for each week, and links to animations and videos relevant to the topic (<https://is.muni.cz/auth/el/1411/podzim2019/aVLBI0121p/index.qwarp>)

The two required text books can be borrowed from the Campus university library (<https://kuk.muni.cz/?page=&lang=english>). They are also available as an electronic books which can be read on computers in the university library:

Essential cell biology by Alberts to be found through e-prezencka (<https://kuk.muni.cz/?page=9&lang=english>)

Medical genetics at a glance by Pritchard to be found at <http://discovery.muni.cz>

The course is also listed under the following terms [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

aVLBI0121s Biology I - seminar ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/1. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

Mgr. Kateřina Cetkovská, Ph.D. (lecturer)

prof. Ing. Petr Dvořák, CSc. (lecturer)

doc. MUDr. Iva Slaninová, Ph.D. (lecturer)

Mgr. Stjepan Uldrijan, CSc. (lecturer)
Mgr. Kateřina Vopěnková, Ph.D. (lecturer)
Mgr. Kateřina Straková, Ph.D. (seminar tutor)
Mgr. Martina Vráblíková (assistant)

Supervisor

prof. Ing. Petr Dvořák, CSc.
Department of Biology - Theoretical Departments - Faculty of Medicine
Contact Person: Mgr. Kateřina Vopěnková, Ph.D.
Supplier department: Department of Biology - Theoretical Departments - Faculty of Medicine

Timetable

Thu 11:30–12:20 [A11/334](#)

Prerequisites

Seminars revise the knowledge discussed at the Biology lectures - knowledge from the lectures is required.

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the seminars is to revise and deepen the knowledge discussed at the respective Biology lecture, and especially to put them in a broader medical context. By interactive problem-solving tasks students will practise how to apply theoretical knowledge into medical practice.

Learning outcomes

The aim of the seminars is to revise and deepen the knowledge discussed at the respective Biology lecture, and especially to put them in a broader medical context. By interactive problem-solving tasks students will practise how to apply theoretical knowledge into medical practice.

Syllabus

- Week 1:
 - Introduction to medical biology - from understanding of cellular principle to modern biomedicine (Mgr. Kateřina Cetkovská, Ph.D.)
- Week 2:
 - Bacteria and viruses – characteristics, reproduction strategies and principles of treatment (Mgr. Kateřina Vopěnková, Ph.D.)
- Week 3:
 - Structure, functions and function anomalies of eukaryotic cells (Mgr. Kateřina Cetkovská, Ph.D.)
- Week 4:
 - Cells in the context of the entire organism – principles of cell adhesion and intercellular communication (Mgr. Kateřina Cetkovská, Ph.D.)
- Week 5:

- Cell signalling and the principle of cell differentiation (Mgr. Kateřina Vopěnková, Ph.D.)
- Week 6:
- The importance of genetic information – the journey from a gene to protein; DNA replication (Mgr. Kateřina Vopěnková, Ph.D.)
- Week 7:
- Cell cycle – molecular mechanisms of regulation and significance for oncology (Mgr. Stjepan Uldrijan, CSc.)
- Week 8:
- Mitotic division in normal and cancer cells (Mgr. Kateřina Cetkovská, Ph.D.)
- Week 9:
- Meiosis and the principle of genetic variability (Mgr. Kateřina Vopěnková, Ph.D.)
- Week 10:
- The basics of genetics, the nature of dominance and recessivity (Mgr. Kateřina Vopěnková, Ph.D.)
- Week 11:
- Genetics of human diseases – molecular principles of genetically determined diseases (doc. MUDr. Iva Slaninová, Ph.D.)
- Week 12:
- Cell death – mechanisms and regulation of apoptosis and its significance for medicine (Mgr. Kateřina Cetkovská, Ph.D.)
- Week 13:
- dissection week - no seminar
- Week 14:
- Epigenetics – the link between genes and environment (Mgr. Stjepan Uldrijan, CSc.)

Literature

required literature

- *Essential cell biology*. Edited by Bruce Alberts. 3rd ed. New York: Garland Science, 2009. 1 v. ISBN 9780815341307. [info](#)
- *Medical genetics at a glance*. Edited by D. J. Pritchard - Bruce R. Korf. 3rd ed. Chichester, England: Wiley-Blackwell, 2013. 1 online r. ISBN 9781118689028. [info](#)

Teaching methods

Seminar is organized in an interactive way based on class discussions, problem solving and voting using a voting system.

Assessment methods

Seminar attendance is mandatory.

Requirements for course completion - full attendance in the seminars (1 absence, excused or unexcused, is allowed). Other absences have to be excused by the Office for Studies within 5 days from the beginning of the absence and introduced into the Information System (IS).

Students continue with following subjects without proof of this semester's knowledge. The subject is followed by Biology II-lecture (VLBI0222p) that is completed with a

written examination test covering the knowledge of all Biology topics from both semesters (lectures, seminars, practices).

Language of instruction

English

Follow-Up Courses

- [aVLBI0222p Biology II - lecture](#)

Further comments (probably available only in Czech)

The course is taught annually.

Listed among pre-requisites of other courses

- [aVLBI0222c Biology II - practice](#)
[aVLBI0121c](#) && [aVLBI0121s](#) ([Do I meet enrolment requirements?](#))
- [aVLBI0222p Biology II - lecture](#)
[aVLBI0121c](#) && [aVLBI0121s](#) ([Do I meet enrolment requirements?](#))

Teacher's information

<https://is.muni.cz/auth/el/1411/podzim2019/aVLBI0121s/index.qwarp>

Seminars revise the knowledge discussed at the Biology lectures -knowledge from the lectures is thus required.

Students are obliged to **follow the Interactive syllabus of the course** where they can find all relevant information (week schedule, substitutions, public holidays etc.):

<https://is.muni.cz/auth/el/1411/podzim2019/aVLBI0121s/index.qwarp>

The course is also listed under the following terms [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

aVLBI0222c Biology II - practice ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

0/3. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

Ivana Aćimović, M.Sc. (seminar tutor)
Mgr. Kateřina Cetkiovská, Ph.D. (seminar tutor)
Mgr. Petr Fojtík (seminar tutor)
Mgr. Iva Gudernová (seminar tutor)
Mgr. Pavla Havlíčková (seminar tutor)
Mgr. Šárka Jelínková (seminar tutor)
Mgr. Aneta Kohutová (seminar tutor)
Mgr. Markéta Nováková, Ph.D. (seminar tutor)
Mgr. Veronika Palušová (seminar tutor)

Mgr. Lenka Paštěková, Ph.D. (seminar tutor)
MUDr. Martin Pešl, Ph.D. (seminar tutor)
Mgr. Vladimír Rotrekl, Ph.D. (seminar tutor)
doc. MUDr. Iva Slaninová, Ph.D. (seminar tutor)
Mgr. Kateřina Straková, Ph.D. (seminar tutor)
Shyam Sushama Jose (seminar tutor)
Mgr. Barbora Štefanovic (seminar tutor)
Mgr. Barbora Valčíková (seminar tutor)
Mgr. Tereza Váňová (seminar tutor)
Mgr. Kateřina Vopěnková, Ph.D. (seminar tutor)
Mgr. Karolína Zoufalová (seminar tutor)
Jana Růžičková (assistant)
Mgr. Martina Vráblíková (assistant)

Supervisor

prof. Ing. Petr Dvořák, CSc.
Department of Biology - Theoretical Departments - Faculty of Medicine
Contact Person: Mgr. Kateřina Vopěnková, Ph.D.
Supplier department: Department of Biology - Theoretical Departments - Faculty of Medicine

Prerequisites (in Czech)

[aVLBI0121c Biology I - pract.](#) && [aVLBI0121s Biology I - seminar](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

After completion of the course student: operates light microscope; understands the basics of electron microscopy, genetic toxicology, gene engineering or the methods of karyotyping; is able to evaluate the risk of hereditary diseases in a patient on the basis of assigned family anamnesis of this disease; is able to propose and interpret elementary molecular screening methods for some hereditary, neoplastic or microbial diseases. Student is also able to apply this knowledge and skills in other subject, especially histology, pathology and human genetics.

Syllabus

- Week 1: Genetic disorders - gonosomal inheritance
- Week 2: Deviations from Mendelian genetics
- Week 3: Genetic prognosis and genetic counselling
- Week 4: Human population genetics
- Week 5: **Control test 3 (knowledge from week 13 of the autumn semester to week 4 of the spring semester - lectures, seminar, practices)**
- Week 6: Molecular diagnostics of cancer
- Week 7: Gene engineering

- Week 8: Molecular analysis of human genotype
- Week 9: Molecular diagnostics of human pathogenic bacteria
- Week 10: Restriction mapping of DNA
- Week 11: Genetic toxicology
- Week 12: **Control test 4 (knowledge from week 5 to week 11 of the spring semester - lectures, practices)**
- Week 13: substitution practices (groups not having dissections clashing with the class)
- Week 14: substitution practices (remaining groups)

Literature

required literature

- Protocols for practices are provided in electronic form in the Information System of the Masaryk University in the Study Materials of the course aVLBI0222c

Teaching methods

laboratory practice, class discussion

Assessment methods

Practical classes are mandatory.

Requirements for course completion: full attendance in the practices (1 absence, excused or unexcused, is allowed); all protocols completed (also for missed lessons) and checked and signed by appropriate teachers; successfully passed 2 written control tests during the semester (20 questions each, 4 possibilities, 1 answer correct, student need to reach at least 12 points out of 20 in each test). In case you do not pass one of the control tests and its re-sit, you have to pass the final test (so-called Credit test) based on knowledge of the entire semester lectures and practices. The test comprises of 20 questions: 10 test questions (multiple answers can be correct, negative marking is obtained for incorrect answers) + 10 given terms for written explanation. At least 10 points out of 20 are needed to pass.

In case of student's late arrival to the practice or poor activity at the practice, the student is required to write an essay in the length of 2 pages on a given topic. Same for the case of 2nd and any additional absence in practices (excused or unexcused). Find the instructions for essay writing in the Course-related instructions in the IS, bring the essay printed to the teacher who specified the topic and be ready to answer the teacher's questions regarding the topic.

In case of 3 absences, (or more than 3 absences all excused by the Office for Studies within 5 days from the beginning of the absence and introduced to the Information System), it is addressed individually and course-unit credit is awarded only after the proof of the student's knowledge of the entire semester topics (Credit test, see above).

In case of 4 or more unexcused absences, course-unit credit is not awarded.

Language of instruction

English

Follow-Up Courses

- aVLBC0321p Biochemistry I - lecture
- aVLBC0321s Biochemistry I - seminar

- aVLHE0322c Histology and Embryology II - practice
- aVLHE0322p Histology and Embryology II - lecture

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

Listed among pre-requisites of other courses

- aVLBC0321c Biochemistry I - practice
aVLBI0222c && aVLBF011c (Do I meet enrolment requirements?)
- aVLBC0321p Biochemistry I - lecture
aVLBF011c && aVLBI0222c (Do I meet enrolment requirements?)
- aVLBC0321s Biochemistry I - seminar
aVLBI0222c && aVLBF011c (Do I meet enrolment requirements?)
- aVLHE0322c Histology and Embryology II - practice
(aVLHE0221c || VSHE0221c) && (aVLBI0222c || VSBI0222c) (Do I meet enrolment requirements?)
- aVLHE0322p Histology and Embryology II - lecture
(aVLHE0221c || VSHE0221c) && (aVLBI0222c || VSBI0222c) (Do I meet enrolment requirements?)

Teacher's information

<https://is.muni.cz/auth/el/1411/jaro2018/aVLBI0222c/index.qwarp>

What to bring to each practice: printed protocol for the respective practice, your own writing materials. Download the protocol for each practice from the Study materials in the IS, and study it in advance. Lab shoes, lab coats and disposable gloves are not required, but for the tasks with staining lab coats are recommended.

Substitution of practices: In exceptional cases (illness, appointment at the doctor's or foreign policy, 1 or 2 times per semester as maximum) student can arrange a substitution with another group. To arrange a substitution, write an e-mail to the contact person of the course at least 24 hours before your planned substitution and specify the group (date and time) you would like to attend instead. Substitution is only possible on the same teaching week. When the capacity of the group you intended to substitute with is fully used, the substitution does not need to be approved. Repeated substitution with other groups is not allowed.

Complete Biology instructions to be found at the following link:

https://is.muni.cz/auth/el/1411/jaro2018/aVLBI0222c/op/Biology_practices_instructions.pdf

The course is also listed under the following terms [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

aVLBI0222p Biology II - lecture ❄

Faculty of Medicine

Spring 2018

Extent and Intensity

1/0. 4 credit(s). Type of Completion: zk (examination).

Teacher(s)

Mgr. Kateřina Cetkovská, Ph.D. (lecturer)
prof. Ing. Petr Dvořák, CSc. (lecturer)
doc. Mgr. Lumír Krejčí, Ph.D. (lecturer)
Mgr. Pavel Krejčí, Ph.D. (lecturer)
Mgr. Vladimír Rotrekl, Ph.D. (lecturer)
doc. MUDr. Iva Slaninová, Ph.D. (lecturer)
prof. MUDr. David Šmajš, Ph.D. (lecturer)
RNDr. Mário Špírek, PhD. (lecturer)
Mgr. Stjepan Uldrijan, CSc. (lecturer)
Mgr. Kateřina Vopěnková, Ph.D. (lecturer)
Mgr. Kateřina Straková, Ph.D. (seminar tutor)
Jana Růžičková (assistant)
Mgr. Martina Vráblíková (assistant)

Supervisor

prof. Ing. Petr Dvořák, CSc.
Department of Biology - Theoretical Departments - Faculty of Medicine
Contact Person: Mgr. Kateřina Cetkovská, Ph.D.
Supplier department: Department of Biology - Theoretical Departments - Faculty of Medicine

Prerequisites

[aVLBI0121c Biology I - pract.](#) && [aVLBI0121s Biology I - seminar](#)

Knowledge of high-school biology and all previous lectures and practical classes of the subject are prerequisites for studying the course. Expected knowledge for each lecture is specified in the course syllabus. Literature recommended to study before each lecture is detailed in the interactive syllabus of the course.

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

After completion of the course student: understands elementary cellular processes and processes taking place during development of a human body; comprehends the complexity of intercellular communication and mutual regulation of individual cells in a multicellular organism; knows basic principles of bacterial and viral diseases; is able to express basic coherence between malfunction in cellular processes and development of diseases, especially hereditary diseases, cancers or developmental defects, and understands the principle of genetic determination of hereditary diseases; can explain and justify action of some therapeutics with emphasis on modern medicine. Student is also

able to apply this knowledge and skills in other subject, especially physiology, pathophysiology and human genetics.

Learning outcomes

After completion of the course student: understands elementary cellular processes and processes taking place during development of a human body; comprehends the complexity of intercellular communication and mutual regulation of individual cells in a multicellular organism; knows basic principles of bacterial and viral diseases; is able to express basic coherence between malfunction in cellular processes and development of diseases, especially hereditary diseases, cancers or developmental defects, and understands the principle of genetic determination of hereditary diseases; can explain and justify action of some therapeutics with emphasis on modern medicine. Student is also able to apply this knowledge and skills in other subject, especially physiology, pathophysiology and human genetics.

Syllabus

- 1. week:
- DNA damage and repair – from molecular mechanisms to clinical significance (doc. Mgr. Lumír Krejčí, Ph.D.)
- 2. week:
- Introduction to cancer biology (Mgr. Stjepan Uldrijan, CSc.)
- 3. week:
- Oncogenes and oncoviruses in cancer transformation (Mgr. Stjepan Uldrijan, CSc.)
- 4. week:
- Tumour suppressor genes and their significance for diagnostics and therapy (Mgr. Stjepan Uldrijan, CSc.)
- 5. week:
- Paradigm of cancer stem cells and implications for anti-cancer therapies (doc. MUDr. Iva Slaninová, Ph.D.)
- 6. týden:
- Gene therapy – targets and strategies of molecular therapies (doc. MUDr. Iva Slaninová, Ph.D.)
- 7. week:
- Stem cells and tissue engineering – prospects of regenerative medicine (prof. Ing. Petr Dvořák, CSc.)
- 8. week:
- From a single cell to human I – introduction to developmental biology (Mgr. Vladimír Rotrekl, Ph.D.)
- 9. week:
- From a single cell to human II – molecular basis of mammalian development in health and disease (Mgr. Pavel Krejčí, Ph.D.)
- 10. week:
- Human genome and genomics in current biomedicine (prof. MUDr. David Šmajš, Ph.D.)
- 11. week:
- Human microbiome (prof. MUDr. David Šmajš, Ph.D.)
- 12. week:

- Bioinformatics in medicine – from molecules to populations (Mgr. Vladimír Rotrekl, Ph.D.)
- 13. week:
- Modern approaches in studying macromolecules and their use in current biomedicine (Mgr. Vladimír Rotrekl, Ph.D.)
- 14. week:
- Substitution lecture

Literature

required literature

- ALBERTS, Bruce. *Essential cell biology*. 4th edition. New York, N.Y.: Garland Science, 2014. xxiii, 726. ISBN 9780815344551. [info](#)
- *Medical genetics at a glance*. Edited by D. J. Pritchard - Bruce R. Korf. 3rd ed. Chichester, England: Wiley-Blackwell, 2013. 1 online r. ISBN 9781118689028. [info](#)

recommended literature

- HARDIN, Jeff, Gregory BERTONI and Lewis J. KLEINSMITH. *Becker's world of the cell*. 8th ed. Boston: Benjamin Cummings, 2012. xxviii, 79. ISBN 9780321709783. [info](#)
- LODISH, Harvey F. *Molecular cell biology*. 6th ed. New York, N.Y.: W.H. Freeman and Company, 2008. xxxvii, 11. ISBN 9780716776017. [info](#)
- SNUSTAD, D. Peter and Michael J. SIMMONS. *Principles of genetics*. 5th ed. Hoboken: John Wiley & Sons, Inc, 2009. xix, 823. ISBN 9780470388259. [info](#)
- WEINBERG, Robert A. *The biology of cancer*. 2nd ed. New York: Garland Science, 2014. 1 v. ISBN 9780815345282. [info](#)
- *Principles of development*. Edited by Lewis Wolpert. 2nd ed. Oxford: Oxford University Press, 2002. xxv, 542. ISBN 0198792913. [info](#)

Teaching methods

lecture

Assessment methods

The course Biology II builds on knowledge gained from subject Biology I - lecture (aVLBI0121p) and is completed with a written examination test taken on computers. It contains questions based on the topics discussed in the lectures and practices. The students are expected to be able to solve given problems on their own, and to derive the solutions by their own consideration based on the theory discussed in the course of both semesters and supplemented by the recommended reading.

Language of instruction

English

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

Listed among pre-requisites of other courses

- aVLBC0422c Biochemistry II - practice
aVLBI0222p && aVLBF011p &&aVLBC0321s && aVLBC0321c && aVLFY0321c && aVLFY0321s (Do I meet enrolment requirements?)
- aVLBC0422p Biochemistry II - lecture
aVLBI0222p && aVLBF011p &&aVLBC0321s && aVLBC0321c && aVLFY0321c && aVLFY0321s (Do I meet enrolment requirements?)
- aVLBC0422s Biochemistry II - seminar
aVLBI0222p && aVLBF011p &&aVLBC0321s && aVLBC0321c && aVLFY0321c && aVLFY0321s (Do I meet enrolment requirements?)
- aVLFY0321c Physiology I - practice
(aVLBI0222p || VSBI0222p) && (aVLBF011p || VSBF011p) && (aVLAN0222s || VSAN0232s) (Do I meet enrolment requirements?)
- aVLFY0321p Physiology I - lecture
(aVLBI0222p || VSBI0222p) && (aVLBF011p || VSBF011p) && (aVLAN0222s || VSAN0232s) (Do I meet enrolment requirements?)
- aVLFY0321s Physiology I - seminar
(aVLBI0222p || VSBI0222p) && (aVLBF011p || VSBF011p) && (aVLAN0222s || VSAN0232s) (Do I meet enrolment requirements?)
- aVLFZ041 Selected Lessons from Physiology
(aVLBI0222p || aZLBI0222p) && (aVLFY0321c || aZLFY0321c) (Do I meet enrolment requirements?)
- aVLLM0421c Medical Microbiology I - practice
(VSBI0222p || aVLBI0222p) && (VLBF011p || aVLBF011p) (Do I meet enrolment requirements?)
- aVLLM0421p Medical Microbiology I - lecture
(VSBI0222p || aVLBI0222p) && (VLBF011p || aVLBF011p) (Do I meet enrolment requirements?)

Zobrazit další předměty

Teacher's information

<https://is.muni.cz/auth/el/1411/jaro2019/aVLBI0222p/index.qwarp>

Students are obliged to **follow the Interactive syllabus of the course** where they can find all relevant information (schedule, substitutions, public holidays etc.), and also corresponding study literature for each week, and links to animations and videos relevant to the topic (<https://is.muni.cz/auth/el/1411/jaro2019/aVLBI0222p/index.qwarp>)

The two required text books can be borrowed from the Campus university library (<https://kuk.muni.cz/?page=&lang=english>). They are also available as an electronic books which can be read on computers in the university library:

Essential cell biology by Alberts to be found through e-prezencka (<https://kuk.muni.cz/?page=9&lang=english>)

Medical genetics at a glance by Pritchard to be found at <http://discovery.muni.cz>

The course is also listed under the following terms [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

aVLCJ0181 Czech Language for Foreigners I - practice ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/3/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

Mgr. Linda Doleží, Ph.D. (seminar tutor)
PhDr. Magdalena Pintarová (seminar tutor), PhDr. Ivana Rešková, Ph.D. (deputy)
PhDr. Renata Prucklová (seminar tutor), PhDr. Ivana Rešková, Ph.D. (deputy)
Mgr. Martin Punčochář (seminar tutor)
PhDr. Ivana Rešková, Ph.D. (seminar tutor)
Mgr. Jarmila Šafránková (seminar tutor), PhDr. Ivana Rešková, Ph.D. (deputy)
Mgr. Petra Wachsmuthová (seminar tutor)
Mgr. Veronika Tománková, Ph.D. (assistant)
PhDr. Jana Vyorálková (assistant)

Supervisor

PhDr. Ivana Rešková, Ph.D.
Language Centre, Faculty of Medicine Division - Faculty Branches of University Departments -
Faculty of Medicine
Contact Person: Mgr. Veronika Tománková, Ph.D.
Supplier department: Language Centre, Faculty of Medicine Division - Language Centre

Timetable of Seminar Groups

aVLCJ0181/30: Mon 7:30–10:00 [KOM 410](#), *L. Doleží*
aVLCJ0181/31: Mon 7:30–10:00 [A11/211](#), *R. Prucklová*
aVLCJ0181/32: Thu 7:40–10:10 [A11/228](#), *L. Doleží*
aVLCJ0181/33: Wed 7:30–10:00 [A11/327](#), *I. Rešková*
aVLCJ0181/34: Tue 14:50–17:20 [KOM 410](#), *M. Punčochář*
aVLCJ0181/35: Tue 7:30–10:00 [A11/228](#), *M. Punčochář*
aVLCJ0181/36: Mon 18. 9. to Fri 22. 9. Thu 7:30–10:00 [A11/327](#), Mon 25. 9. to Fri 22.
12. Thu 7:00–9:30 [A11/327](#), *M. Punčochář*
aVLCJ0181/37: Tue 14:10–16:40 [A11/228](#), *L. Doleží*
aVLCJ0181/38: Mon 7:15–9:45 [A9/324](#), *M. Punčochář*
aVLCJ0181/39: Tue 9:20–11:50 [A11/334](#), *J. Šafránková*

Prerequisites

No previous knowledge of Czech language is needed.

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The main aim of the course Czech for Foreigners is to teach students communicate with patients in Czech without any help of English speaking doctors or interpreters and independently take case history. Successful communication in Czech is required by all medical universities during their practical trainings at Czech hospitals. The aim of the Czech I course is working knowledge of the Czech language on the A1 level of the "Common European Framework of Reference" (CEFR/Independent User) checked by an examination.

Learning outcomes

After first year students can understand vocabulary and basic phrases related to students, their families, and their immediate specific surrounding, provided people speak clearly and at a slow rate. The knowledge enables students to communicate in common routine tasks, such as shopping, accommodation, using public transport, orientation in the city, asking the way, being able to describe their place of living and people they know by simple phrases and sentences. Students should also be able to fill in forms with personal data, such as name, nationality and address when applying for residence accommodation. Emphasis put on knowledge of parts of body and basic useful phrases in medical communication.

Syllabus

- 1st week: LEKCE 1/1: *Communicative Competency*: Introduction, Greetings. Phrases in the classroom. Instructions. Where are you from? What do you do? *Grammar*: Czech alphabet. Pronunciation. Vowels, diphthongs. Consonants, assimilation of consonants in groups. Personal pronouns. The verb "být". The numbers 1 - 10.
- 2nd week: LEKCE 1/2: *Communicative Competency*: What do you do in Brno? *Grammar*: Who is it? What is it? Natural genders in Czech. Addressing people. Verb conjugation I (-at, -et/ět/-it, -ovat). The verb "mít".
- 3rd week: LEKCE 2/1: *Communicative Competency*: Where is it? Locations. How can I get there? *Grammar*: Grammatical genders I. Nominative sg. Ten, ta, to. Adjectives: hard and soft. Adverbs of direction and location.
- 4th week: TEST 1. LEKCE 2/2: *Communicative Competency*: Asking for and giving directions. Jedu autem etc. Writing e-mails. *Grammar*: The verbs jít versus jet. Líbí se mi, chutná mi. The numbers 11-1000. Project 1: Mail kamarádovi/kamarádce.
- 5th week: LEKCE 3/1: *Communicative Competency*: Food and drink. In a restaurant. *Grammar*: Genders II (revision). Conjugation -u. The verbs chtít, jít and mít rád/a.
- 6th week: LEKCE 3/2: *Communicative Competency*: Invitation. *Grammar*: The accusative singular I. Expressions with the verb mít.
- 7th week: TEST 2. LEKCE 4/1. *Communicative Competency*: My family. How old are you? *Grammar*: Possessive pronouns. Jaký, -á, -é?
- 8th weeks: LEKCE 4/2. *Communicative Competency*: Petr's family. *Grammar*: Revision of the accusative. Accusative sg of Ma. Questions KOHO, CO? Verbs and basic prepositions with accusative. The numbers 1000-10 000. Project 2: Moje rodina.

- 9th week: TEST 3. LEKCE 5/1. *Communicative Competency*: REVISION: Formal and informal dialogues (Introduction, In a restaurant, Invitation, Your family). *Grammar*: When is it? What time is it? Times of the day.
- 10th week: LEKCE 5/2: *Communicative Competency*: Marina's day. Daily routine. *Grammar*: What time is it? Talking about time (revision). Modal verbs I. Days of the week.
- 11th week: TEST 4 (ORAL TEST).
- 12th week: REVISION TEST 5 (1-5). LEKCE 5/3. *Communicative Competency*: When will we meet? Marina's week. *Grammar*: Modal verbs II. The expression rád/a/i. Prepositions od-do. PROJECT 3: Můj den.
- 13th week: DISSECTION PRACTICE.
- 14th week: FINAL REVISION. *Communicative Competency*: Skřivánek, nebo sova? *Grammar*: Time expressions.
- 15th week: FINAL TEST FOR ALL GROUPS.

Literature

required literature

- HOLÁ, Lída. Český krok za krokem 1. Praha: Akropolis 2016. 260 s. ISBN 978-80-7470-129-0.
- HOLÁ, Lída a kol. Český krok za krokem 1. Pracovní sešit (Lekce 1-12). Praha: Akropolis 2016. 160 s. ISBN 978-80-7470-133-7.

Teaching methods

The tuition is realised in the form of practical courses. The following teaching methods are used: class discussion, roleplay, work in groups, reading, listening, writing HW (including Projects), word study. Emphasis put on selfstudy!

Assessment methods

The tuition is realised in the form of practical courses. The students' presence in these courses is strictly required; a maximum of two unexcused absences is tolerated. Students are allowed to substitute a maximum of TWO classes with another group. Substitutions are not possible in the weeks when Progress Test take place. Students must inform the teacher of the group in which they intend to substitute their missed class in writing in advance. If they fail to do so, they will not be allowed to attend the class. If a student has more than two unexcused absences, they will not be allowed to take the Final test. The tuition is finished by a course-unit credit given on the basis of the students' presence, preparation for classes, sitting Progress Tests and their successful passing of a credit test. The basic limit for passing all tests is 70%. In case of passing five Progress tests, which are obligatory for all students, the basic limit in the credit test is reduced by 10%. Students who score a minimum of 90% in EACH progress test are not obliged to take the credit test. Any copying, recording or leaking tests, use of unauthorized tools, aids and communication devices, or other disruptions of objectivity of exams will be considered non-compliance with the conditions for course completion as well as a severe violation of the study rules. Consequently, the teacher will finish the exam by awarding grade "N" in the Information System, and the Dean will initiate disciplinary proceedings that may result in study termination.

Language of instruction

English

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

Listed among pre-requisites of other courses

- [aVLCJ0282 Czech Language for Foreigners II - practice](#)
[aVLCJ0181](#) || [VSCJ0181](#) ([Do I meet enrolment requirements?](#))

Teacher's information

Current information about the subject, consultation hours, etc. is accessible on the notice boards at the Language Center, Faculty of Medicine Division. Contact with teachers is provided by the secretary of the department (Kamenice 5, A15), tel.: 549 498 170.

The course is also listed under the following terms [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

aVLCJ0282 Czech Language for Foreigners II - practice ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

0/3/0. 4 credit(s). Type of Completion: zk (examination).

Teacher(s)

Mgr. Linda Doleží, Ph.D. (seminar tutor)

PhDr. Magdalena Pintarová (seminar tutor), PhDr. Ivana Rešková, Ph.D. (deputy)

Mgr. Martin Punčochář (seminar tutor)

PhDr. Ivana Rešková, Ph.D. (seminar tutor)

Mgr. Jarmila Šafránková (seminar tutor)

Mgr. Petra Wachsmuthová (seminar tutor)

PhDr. Jana Vyoralčková (assistant)

Supervisor

PhDr. Ivana Rešková, Ph.D.

Language Centre, Faculty of Medicine Division - Language Centre

Contact Person: Mgr. Veronika Tománková, Ph.D.

Supplier department: Language Centre, Faculty of Medicine Division - Language Centre

Prerequisites

[aVLCJ0181 Czech for Foreigners I](#) || [VSCJ0181 Czech for Foreigners I-p](#)

General Czech at the A1+ CEFR level.

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)

- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the tuition is working knowledge of the Czech language on the A2 level of the "Common European Framework of Reference" (CEFR) checked by an examination. Students will also learn the vocabulary and phrases from the healthcare at the level of A1 and A2 according to the CEFR. The main aim of the course Czech for Foreigners is to teach students communicate with patients in Czech without any help of English speaking doctors or interpreters and independently write case history.

Learning outcomes

First year students can understand vocabulary and basic phrases related to students, their families, and their immediate specific surrounding, provided people speak clearly and at a slow rate. The knowledge enables students to communicate in common routine tasks, such as shopping, accommodation, using public transport, orientation in the city, asking the way, being able to describe their place of living and people they know by simple phrases and sentences. Students should also be able to fill in forms with personal data, such as name, nationality and address when applying for residence accommodation. Students also know vocabulary (parts of body) and phrases from the healthcare at the level of A1 and A2 according to the CEFR.

Syllabus

- **Syllabus of Czech for Foreigners II.**
- 1st week: REVISION LESSON. UNIT 6/1: *Conversation*: Daily routine. Talking about time. What did you do today? *Grammar*: Past tense I-regular forms.
- 2nd week: UNIT 6/2: *Conversation*: Where were you? *Grammar*: Past tense II (irregular forms). Reflexive verbs: ses, sis. The second position in Czech sentences. Locative singular.
- 3rd week: PROGRESS TEST 1 (UNITS 1-6). LESSON 6/3: *Conversation*: Do you know who it was? (Karel IV.) *Grammar*: Time expressions. Verbs ZNÁT a VĚDĚT. Countries and nationalities.
- 4th week: UNIT 7/1: *Conversation*: Houses and flats. Furniture. *Grammar*: Nominative and accusative plural
- 5th week: UNIT 7/2: *Conversation*: Looking for accommodation. *Grammar*: Numerals dva-dvě. The date: ordinal numbers, months, seasons.
- 6th week: PROGRESS TEST 2. UNIT 8/1: *Conversation*: Planning our weekend. *Grammar*: The future tense. Human body I (Head).
- 7th week: UNIT 8/2: *Conversation*: Free time activities. *Grammar*: KAM? Expressing directions. Prepositions NA-DO-K/KE). Human body II (Neck and Trunk).
- 8th week: PROGRESS TEST 3 (VIDEO). REVISION Units 6-8. *Conversation*: What did you do yesterday? Plan your future. Human body I and II. *Grammar*: Revision.
- 9th week: UNIT 9/1: *Conversation*: Describing of Human body. What do we look like? *Grammar*: Nominative plural of body parts. Personal pronouns in the accusative and dative (Bolí/bolelo mě, je mi dobře/špatně.) Human body III (Internal and genital organs).

- 10th week: UNIT 9/2: *Conversation*: At the doctor's. At the pharmacy. *Grammar*: Accusative object-centered constructions. Prepositions with the accusative (na, pro, za, o). Human body IV (Extremities).
- 11th week: PROGRESS TEST 4. UNIT 10/1: *Conversation*: The place where we live. *Grammar*: The genitive singular I. Prepositions with the genitive. Human body V (Skeleton).
- 12th week: PROGRESS TEST 5 (ORAL). UNIT 10/2: *Conversation*: Kde jsi byl? Kam půjdeš/pojedeš? U lékaře. Lidské tělo I-V. *Grammar*: Revision.
- 13th-14th week: DISSECTION PRACTICE. Czech class according Dissection practice schedule. UNIT 10/3: *Conversation*: Travelling. Plans for summer holiday. *Grammar*: Genitive singular II. Expressing directions.
- 15th week: Final Written Exam.

Literature

required literature

- HOLÁ, Lída. *Česky krok za krokem 1*. Praha: Akropolis 2016. 260 s. ISBN 978-80-7470-129-0.
- HOLÁ, Lída a kol. *Česky krok za krokem 1. Pracovní sešit (Lekce 1-12)*. Praha: Akropolis 2016. 160 s. ISBN 978-80-7470-133-7.
- ČERMÁKOVÁ, Iveta. *Talking medicine : Czech for medical students*. 3., rev. English ed. Prague: Karolinum Press, 2012. 261 s. ISBN 9788024621043. [info](#)

recommended literature

- GRUNDOVÁ, Dominika. *Needs of Patients. Czech-English Phrasebook for Beginners*. 2., revid. vyd. Praha: Eurolex Bohemia, 2004. 104 pp. ISBN 80-86432-86-6. [info](#)

Teaching methods

The tuition is realised in the form of practical courses. The following teaching methods are used: class discussion, roleplay, work in groups, reading, listening, writing HW (including Projects), word study.

Assessment methods

The tuition is realised in the form of practical courses. The students' presence in these courses is strictly required; a maximum of two unexcused absences is tolerated. Students are allowed to substitute a maximum of TWO classes with another group. Substitutions are not possible in the weeks when Progress Test take place. Students must inform the teacher of the group in which they intend to substitute their missed class in writing in advance. If they fail to do so, they will not be allowed to attend the class. If a student has more than two unexcused absences, they will not be allowed to take the Final test. The tuition is finished by an end-of-term examination (ETE) consisting of a WRITTEN and an ORAL part. Passing the examination is conditioned by proper attendance, active participation in practical courses, sitting for Progress Tests and successful passing of written and oral exams. The basic limit for passing all tests is 70%. In case of passing all class tests, which are obligatory for all students, the basic limit in the written exam is reduced by 10%. Without successful passing the written exam students will not be

allowed to sit for the oral part! Any copying, recording or leaking tests, use of unauthorized tools, aids and communication devices, or other disruptions of objectivity of exams (credit tests) will be considered non-compliance with the conditions for course completion as well as a severe violation of the study rules. Consequently, the teacher will finish the exam by awarding grade "F" in the Information System.

Language of instruction

English

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

Credit evaluation note: kredity B.

Listed among pre-requisites of other courses

- [aVLCJ0383 Czech Language for Foreigners III - practice](#)
[aVLCJ0282](#) || [VSCJ0282](#) ([Do I meet enrolment requirements?](#))

Teacher's information

Current information about the subject, consultation hours, etc. is accessible on the notice boards at the Language Center, Faculty of Medicine Division. Contact with teachers is provided by the secretary of the department (Kamenice 5, A15), tel.: 549 498 170.

The course is also listed under the following terms [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

aVLCJ0383 Czech Language for Foreigners III - practice ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[PhDr. Ivana Rešková, Ph.D.](#) (seminar tutor)

[Mgr. Martin Punčochář](#) (seminar tutor)

[PhDr. Magdalena Pintarová](#) (seminar tutor), [PhDr. Ivana Rešková, Ph.D.](#) (deputy)

[Mgr. Jarmila Šafránková](#) (seminar tutor)

[PhDr. Renata Prucklová](#) (seminar tutor)

[Mgr. Linda Doleží, Ph.D.](#) (seminar tutor)

[Mgr. Petra Wachsmuthová](#) (seminar tutor)

[Mgr. Veronika Tománková, Ph.D.](#) (assistant)

[PhDr. Jana Vyorálková](#) (assistant)

Supervisor

[PhDr. Ivana Rešková, Ph.D.](#)

[Language Centre, Faculty of Medicine Division - Language Centre](#)

Contact Person: [Mgr. Veronika Tománková, Ph.D.](#)

Supplier department: [Language Centre, Faculty of Medicine Division - Language Centre](#)

Timetable of Seminar Groups

aVLCJ0383/30: Wed 15:00–16:40 [A15/113](#), *R. Prucklová*
aVLCJ0383/31: Thu 11:50–13:30 [A11/211](#), *J. Šafránková*
aVLCJ0383/32: Fri 8:00–9:40 [A11/211](#), *M. Punčochář*
aVLCJ0383/33: Fri 8:00–9:40 [A11/228](#), *I. Rešková*
aVLCJ0383/34: Fri 9:50–11:30 [A11/228](#), *J. Šafránková*
aVLCJ0383/35: Mon 25. 9. to Fri 22. 12. Wed 8:00–9:40 [A9/324](#), *L. Doleží*
aVLCJ0383/36: Wed 14:20–16:00 [KOM 410](#), *M. Punčochář*
aVLCJ0383/37: Thu 10:10–11:50 [A11/211](#), *M. Pintarová*
aVLCJ0383/38: Fri 11:40–13:20 [A11/228](#), *I. Rešková*

Prerequisites

[aVLCJ0282 Czech for Foreigners II](#) || [VSCJ0282 Czech for Foreigners II -p](#)
General Czech at the A2+ CEFR level. The knowledge of specialist discipline-specific vocabulary covered in the aVLCJ0282 Czech Language for Foreigners II course.
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the tuition is working knowledge of the Czech language on the A2 level of the "Common European Framework of Reference" (CEFR) checked by an examination. The main aim of the course Czech for Foreigners is to teach students communicate with patients in Czech without any help of English speaking doctors or interpreters and independently take case history.

Learning outcomes

Second year students

- can understand basic vocabulary and phrases related to their immediate specific surrounding, such as personal information, information about their studies and jobs
- are also able to understand the meaning of short, simple notes and messages, read short, simple texts, find specific information in simple materials, and understand short, simple personal letters
- can communicate in simple and routine tasks requiring a simple and direct exchange of information on familiar topics and activities
- can use a series of phrases to describe in simple terms their family, educational background and their job
- can write short, simple notes and messages related to matters in areas of their immediate needs and simple letters
- know all basic parts of body in Czech and can use a series of phrases to describe basic symptoms of diseases and aches.

Syllabus

- 1st week: Revision. *Conversation*: What did you do during summer? *Grammar*: Revision of accusative forms in sg and plural, prepositions, verbs. The locative sg. The question KDE.
- 2nd week: LESSON 10. *Conversation*: Invitation to visit. *Grammar*: Genitive singular of nouns. Prepositions with the genitive. The question KAM. *Medical Czech*: Parts of body -Revision (L1).
- 3rd week: LESSON 11/1. *Conversation*: On holiday. *Grammar*: Long and short verbs of motion: jít/chodit, jet/jezdit. *Medical Czech*: At the doctor's office and at the pharmacy-Revision (L9).
- 4th week: PROGRESS TEST 1 (Revision). LESSON 11/2. *Conversation*: Travelling. *Grammar*: Prefixes I (při- and od-). *Medical Czech*: Symptoms of diseases (L4).
- 5th week: LESSON 11/3. *Conversation*: Complications while travelling. *Grammar*: Prefixes II. *Medical Czech*: Symptoms of diseases II.
- 6th week: LESSON 12/1. *Conversation*: Traditional holidays. *Grammar*: Forming of Aspect in Czech. *Medical Czech*: NURSING I (<https://is.muni.cz/auth/el/1411/podzim2019/aVLCJ0383/um/71182011/?info=1>)
- 7th week: PROGRESS TEST 2. LESSON 12/2. *Grammar*: Imperfective and perfective verbs. *Medical Czech*: NURSING II.
- 8th week: LESSON 12/3. *Conversation*: What are your plans for holidays? *Grammar*: Future tense of perfective verbs. *Medical Czech*: Nursing III.
- 9th week: LESSON 14/1 *Conversation*: Talking about the weather. *Grammar*: Adjectives x adverbs. Forming adverbs. *Medical Czech*: Illness, diseases (TM L3).
- 10th week: PROGRESS TEST 3. LESSON 14/2. *Conversation*: Who is the fairest? *Grammar*: Comparison of adjectives. *Medical Czech*: Illness, diseases II.
- 11th week: LESSON 15. *Conversation*: At the hospital. *Grammar*: The dative sg. *Medical Czech*: Revision of TM Chapters 3 and 4.
- 12th week: PROGRESS TEST 4 (Oral).
- 13th week: Final revision.
- 14th week: FINAL TEST FOR ALL GROUPS.

Literature

required literature

- HOLÁ, Lída. *Česky krok za krokem 1*. Praha: Akropolis 2016. 260 s. ISBN 978-80-7470-129-0.
- HOLÁ, Lída, Petra BULEJČÍKOVÁ and Silvie PŘEVŘÁTILOVÁ. *Česky krok za krokem 1 : pracovní sešit 1-12*. 1. vydání. Praha: Akropolis, 2016. 160 stran. ISBN 9788074701337. [info](#)
- HOLÁ, Lída, Petra BULEJČÍKOVÁ a Silvie PŘEVŘÁTILOVÁ. *Česky krok za krokem 1: pracovní sešit 13-24*. 1. vydání. Praha: Akropolis, 2019. 160 stran. ISBN 9788074701344.
- ČERMÁKOVÁ, Iveta. *Talking medicine : Czech for medical students*. 3., rev. English ed. Prague: Karolinum Press, 2012. 261 s. ISBN 9788024621043. [info](#)

Teaching methods

The tuition is realised in the form of practical courses. Teaching methods: listening, reading, speaking (class discussion, team work), listening comprehension, projects, homework. Online work: multilingual website mluvtecesky.net. Emphasis put on selfstudy!

Assessment methods

The tuition is realised in the form of practical courses. The students' presence in these courses is strictly required; a maximum of two unexcused absences is tolerated. Students are allowed to substitute a maximum of TWO classes with another group. Substitutions are not possible in the weeks when Progress Test take place. Students must inform the teacher of the group in which they intend to substitute their missed class in writing in advance. If they fail to do so, they will not be allowed to attend the class. If a student has more than two unexcused absences, they will not be allowed to take the Final test. The tuition is finished by a course-unit credit given on the basis of the students' presence, preparation for classes, sitting Progress Tests and their successful passing of a credit test. The basic limit for passing all tests is 70%. In case of passing four Progress tests, which are obligatory for all students, the basic limit in the credit test is reduced by 10%. Students who score a minimum of 90% in EACH progress test are not obliged to take the credit test. Any copying, recording or leaking tests, use of unauthorized tools, aids and communication devices, or other disruptions of objectivity of exams will be considered non-compliance with the conditions for course completion as well as a severe violation of the study rules. Consequently, the teacher will finish the exam by awarding grade "N" in the Information System, and the Dean will initiate disciplinary proceedings that may result in study termination.

Language of instruction

English

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

Credit evaluation note: kredity B.

Listed among pre-requisites of other courses

- [aVLCJ0484 Czech Language for Foreigners IV - practice](#)
[aVLCJ0383](#) || [VSCJ0383](#) (Do I meet enrolment requirements?)

Teacher's information

<http://mluvtecesky.net>

Actual information about the subject, consultation hours, etc. is accessible on the notice boards at the Foreign Languages Department. Contact with teachers is provided by the secretary of the department (Kamenice 5, A 15), tel.: 549 498 170.

The course is also listed under the following terms [Autumn 2016](#), [Accreditation autumn](#).

aVLCJ0484 Czech Language for Foreigners IV - practice ❄

Faculty of Medicine

Spring 2018

Extent and Intensity

0/2/0. 4 credit(s). Type of Completion: zk (examination).

Teacher(s)

[PhDr. Magdalena Pintarová](#) (seminar tutor)

[PhDr. Renata Prucklová](#) (seminar tutor)

[Mgr. Martin Punčochář](#) (seminar tutor)

[PhDr. Ivana Rešková, Ph.D.](#) (seminar tutor)

[Mgr. Jarmila Šafránková](#) (seminar tutor)

[Mgr. Petra Wachsmuthová](#) (seminar tutor)

[PhDr. Jana Vyorálková](#) (assistant)

Supervisor

[PhDr. Ivana Rešková, Ph.D.](#)

[Language Centre, Faculty of Medicine Division - Language Centre](#)

Contact Person: [Mgr. Veronika Tománková, Ph.D.](#)

Supplier department: [Language Centre, Faculty of Medicine Division - Language Centre](#)

Prerequisites

[aVLCJ0383 Czech for Foreigners III](#) || [VSCJ0383 Czech for Foreigners III -p](#)

General Czech at the A2/B1 CEFR level. The knowledge of specialist discipline-specific vocabulary covered in the aVLCJ0383 course.

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the tuition is working knowledge of the Czech language on the A2/B1 level of the "Common European Framework of Reference" (CEFR)(Independent User) checked by an examination. The main aim of the course Czech for Foreigners is to teach students communicate with patients in Czech without any help of English speaking doctors or interpreters and independently write case history.

Learning outcomes

Second year students

- can understand basic vocabulary and phrases related to their immediate specific surrounding, such as personal information, information about their studies and jobs
- are able to understand the meaning of short, simple notes and messages, read short, simple texts, find specific information in simple medical texts
- write short, simple personal emails
- know all basic diseases in Czech and can use a series of phrases to describe injuries and accidents
- know basic instructions used in doctor-patient's communication
- take patient's family history.

Syllabus

- **Czech for foreigners IV**
- 1st week: Revision (TM 3, 4, Nursing). *Medical Czech:* Diseases and complaints I (TM 5). *Conversation:* Tell your lifestory (U 14). *Grammar:* The genitive, dative and accusative in singular (incl. personal pronouns).
- 2nd week: *Medical Czech:* Diseases and complaints II. Chřipka (TM 5). *Grammar:* The locative in singular. Revision of Czech prepositions.
- 3rd week: PROGRESS TEST 1 (Revision). *Conversation:* What would happen, if... (U 15/1). *Medical Czech:* Pain I (TM 6). Transformations e.g. při chůzi/když chodím. *Grammar:* The conditional.
- 4th week: *Conversation:* Personalities (U 15/2). *Grammar:* Structure "měl/a bys..." (giving advice).
- 5th week: *Medical Czech:* Pain II (<http://mluvtecesky.net/en/courses/medical1/3/1>). *Grammar:* Forming adverbs.
- 6th week: PROGRESS TEST 2 (ORAL). *Conversation:* Compare things and people. Discuss the weather (U 16). *Grammar:* Comparative and superlative of adjectives and adverbs.
- 7th week: Revision of comparison. *Medical Czech:* Injuries, accidents I (TM 7).
- 8th week: *Conversation:* Fashion and clothes (U 18). *Medical Czech:* Injuries, accidents II. *Grammar:* Revision of dative sg. Prepositions with dative.
- 9th week: PROGRESS TEST 3. *Conversation:* Likes and dislikes (chutnat, líbit se, mít rád, milovat). *Grammar:* Dative object-centered structures.
- 10th week: *Medical Czech:* Doctor-patient communication I. Instructions (TM 8). *Grammar:* Imperative (U 20).
- 11th week: *Medical Czech:* Doctor-patient communication II: Current diseases (<http://mluvtecesky.net/en/courses/medical1/4/1>). *Grammar:* Instrumental in sg. (L 19)
- 12th week: PROGRESS TEST 4 (ORAL). *Medical Czech:* Family history (TM 19).
- 13th week: PROGRESS TEST 5. Revision of the genitive, dative, accusative, locative and instrumental sg, comparison, conditional and imperative.
- 14th week: Diseases, Pain, Examination of the patient, FA. FINAL WRITTEN EXAM (May, 29th).

Literature

required literature

- HOLÁ, Lída. *Česky krok za krokem 1*. Praha: Akropolis 2016. 260 s. ISBN 978-80-7470-129-0.
- HOLÁ, Lída, Petra BULEJČÍKOVÁ a Silvie PŘEVŘÁTILOVÁ. *Česky krok za krokem 1: pracovní sešit 13-24*. 1. vydání. Praha: Akropolis, 2019. 160 stran. ISBN 9788074701344.
- ČERMÁKOVÁ, Iveta. *Talking medicine : Czech for medical students*. 3., rev. English ed. Prague: Karolinum Press, 2012. 261 s. ISBN 9788024621043. [info](#)

recommended literature

- GRUNDOVÁ, Dominika. *Needs of Patients. Czech-English Phrasebook for Beginners*. 2., revid. vyd. Praha: Eurolex Bohemia, 2004. 104 pp. ISBN 80-86432-86-6. [info](#)

Teaching methods

The tuition is realised in the form of practical courses. The following teaching methods are used: class discussion, roleplay, work in groups, reading, listening, writing HW (including Projects), word study.

Assessment methods

The tuition is realised in the form of practical courses. The students' presence in these courses is strictly required; a maximum of two unexcused absences is tolerated. Students are allowed to substitute a maximum of TWO classes with another group. Substitutions are not possible in the weeks when Progress Test take place. Students must inform the teacher of the group in which they intend to substitute their missed class in writing in advance. If they fail to do so, they will not be allowed to attend the class. If a student has more than two unexcused absences, they will not be allowed to take the Final test. The tuition is finished by an end-of-term examination (ETE) consisting of a WRITTEN and an ORAL part. Passing the examination is conditioned by proper attendance, active participation in practical courses, sitting for Progress Tests and successful passing of written and oral exams. The basic limit for passing all tests is 70%. In case of passing five class tests, which are obligatory for all students, the basic limit in the written exam is reduced by 10%. Without successful passing the written exam students will not be allowed to sit for the oral part! Students who score a minimum of 90% in EACH progress test are not obliged to take the written part of Final exam. Any copying, recording or leaking tests, use of unauthorized tools, aids and communication devices, or other disruptions of objectivity of exams (credit tests) will be considered non-compliance with the conditions for course completion as well as a severe violation of the study rules. Consequently, the teacher will finish the exam by awarding grade "F" in the Information System. The Dean will initiate disciplinary proceedings that may result in study termination.

Language of instruction

English

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

Credit evaluation note: kredity B.

Listed among pre-requisites of other courses

- [aVLCJ0585 Czech Language for Foreigners V - practice](#)
([VSCJ0484](#) || [aVLCJ0484](#)) ([Do I meet enrolment requirements?](#))

Teacher's information

<http://mluvtecesky.net>

Current information about the subject, consultation hours, etc. is accessible on the notice boards at the Language Center, Faculty of Medicine Division. Contact with teachers is provided by the secretary of the department (Kamenice 5, A15), tel.: 549 498 170.

The course is also listed under the following terms [Spring 2019](#), [Accreditation spring](#).

aVLCJ0585 Czech Language for Foreigners V - practice ✱

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[PhDr. Magdalena Pintarová](#) (seminar tutor), [PhDr. Ivana Rešková, Ph.D.](#) (deputy)

[Mgr. Martin Punčochář](#) (seminar tutor)

[PhDr. Ivana Rešková, Ph.D.](#) (seminar tutor)

[Mgr. Jarmila Šafránková](#) (seminar tutor)

[Mgr. Petra Wachsmuthová](#) (seminar tutor), [PhDr. Ivana Rešková, Ph.D.](#) (deputy)

[Mgr. Veronika Tománková, Ph.D.](#) (assistant)

[PhDr. Jana Vyorálková](#) (assistant)

Supervisor

[PhDr. Ivana Rešková, Ph.D.](#)

[Language Centre, Faculty of Medicine Division - Faculty Branches of University Departments - Faculty of Medicine](#)

Contact Person: [Mgr. Veronika Tománková, Ph.D.](#)

Supplier department: [Language Centre, Faculty of Medicine Division - Language Centre](#)

Timetable of Seminar Groups

aVLCJ0585/30: Thu 9:35–11:15 [A11/327](#), *M. Punčochář*

aVLCJ0585/31: Mon 9:30–11:10 [KOM 200](#), *M. Pintarová*

aVLCJ0585/32: Mon 13:20–15:00 [A11/211](#), *M. Punčochář*

aVLCJ0585/33: Thu 11:10–12:50 [A15/113](#), *I. Rešková*

aVLCJ0585/34: Mon 14:00–15:40 [KOM S116](#), *M. Pintarová*

aVLCJ0585/35: Wed 7:30–9:10 [A11/228](#), *M. Punčochář*

aVLCJ0585/36: Mon 25. 9. to Fri 6. 10. Tue 13:30–15:10 [KOM 409](#), Mon 16. 10. to Wed 20. 12. Tue 13:30–15:10 [KOM 409](#), *J. Šafránková*

Prerequisites

([VSCJ0484 Czech for Foreigners IV -p](#) || [aVLCJ0484 Czech for Foreigners IV](#))

General Czech at the A2 CEFR level. The knowledge of specialist discipline-specific vocabulary covered in the aVLCJ0484 Czech Language for Foreigners IV course.

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the tuition is working knowledge of the Czech language on the B1 level of the "Common European Framework of Reference" (CEFR) checked by an examination. The main aim of the course Czech for Foreigners is to teach students communicate with patients in Czech without any help of English speaking doctors or interpreters and independently write case history.

Learning outcomes

At the end of the course students

-should be able to understand information related to very familiar topics that they regularly encounter at school, in the hospital, and in their free time, provided the information is communicated clearly

-apply medical language in doctor-patient, doctor-doctor, and doctor-nursing staff communication

-take patient's history (Personal, Family, Social and Work History)

-use practical medical vocabulary relating to physical examination of patient and cardiology.

Syllabus

- 1st week: Revision: Travelling. My holiday. *Medical Czech*: FAMILY HISTORY (Revision). *Grammar*: Declension in sg and pl.
- 2nd week: RELATIONS BETWEEN PEOPLE (Czech Step by Step L 19). *Medical Czech*: PERSONAL HISTORY I (TM 20). *Grammar*: Revision of the Instrumental sg. Prepositions with acc and instrumental (L 20). Revision of the Imperative.
- 3rd week: *Medical Czech*: Revision: Diseases. Injuries. PERSONAL HISTORY II. SOCIAL HISTORY (TM 21). *Grammar*: Time expressions (TM 20/page 116). Instrumental plural.
- 4th week: LEKCE 1: SEZNAMUJEME SE: Dopis Davidovi. *Medical Czech*: Practising Personal and Social history(<http://mluvtecesky.net/en/courses/medical1/6/1>, <http://mluvtecesky.net/en/courses/medical1/9/1>). WORK HISTORY (TM 22). *Grammar*: Declension of KDO/CO, někdo/něco, nikdo/nic.
- 5th week: PROGRESS TEST 1. *Medical Czech*: PHYSICAL EXAMINATION OF THE PATIENT (TM 9, <http://mluvtecesky.net/en/courses/medical1/10/1>). *Grammar*: Accusative sg and pl. New verbs used with acc.
- 6th week: LEKCE 2: RODINNÉ VZTAHY. *Medical Czech*: PRESENTING COMPLAINTS(<http://mluvtecesky.net/en/courses/medical1/4/1>).*Grammar*: Revision of personal pronouns in acc. Relative clauses with KTERÝ in sg.
- 7th week: *Medical Czech*: DAY IN HOSPITAL (TM 11). *Grammar*: Locative sg. Adverbs of location and direction (kam? odkud? kudy?), prepositions. Personal pronouns in loc.
- 8th week: LEKCE 3: KDE BYDLÍME A ŽIJEME. *Medical Czech*: HEALTH CONDITION I (TM 12). *Grammar*: Comparison of adjectives and adverbs.
- 9th week: PROGRESS TEST 2 (ORAL). *Medical Czech*: HEALTH CONDITION II.
- 10th week: LEKCE 4: CESTOVÁNÍ. *Medical Czech*: HISTORY OF CARDIOVASCULAR DISEASES (TM 22). *Grammar*: Genitive sg and pl. Personal pronouns in genitive.

- 11th week. *Medical Czech: CARDIOLOGY* (<http://mluvtecesky.net/en/courses/medical2/2/1>). *Grammar*: Prepositions in use.
- 12th week: PROGRESS TEST 3 (video).
- 13th week: *Medical Czech: REVISION: Taking History (FA, OA, SA, PA). Physical Examination of the patient. Day in Hospital. Health Condition. Cardiology. Grammar*: Declension in sg and pl, personal pronouns, prepositions.
- 14th week: FINAL TEST

Literature

required literature

- ČERMÁKOVÁ, Iveta. *Talking medicine : Czech for medical students*. 3., rev. English ed. Prague: Karolinum Press, 2012. 261 s. ISBN 9788024621043. [info](#)
- REŠKOVÁ, Ivana, Roye MAUTHNER, Emanuel CARVALHEIRO MARQUES, Anshu JHA and Stuart Andrew HOPKINSON. *How to take a patient's history*. 1. vydání. Brno: CJV MU, 2015. 10 pp. [info](#)
- HOLÁ, Lída and Pavla BOŘILOVÁ. *Česky krok za krokem 2*. 1. vyd. Praha: Akropolis, 2009. ISBN 978-80-86903-92-7. [URL](#) [info](#)

Teaching methods

The tuition is realised in the form of practical courses. Teaching methods: listening, reading, speaking (class discussion, team work), listening comprehension, projects, homework. Emphasis put on selfstudy!

Assessment methods

The tuition is realised in the form of practical courses. The students' presence in these courses is strictly required, maximally two properly apologised absences are tolerated. The tuition is finished by a course-unit credit given on the basis of the students' presence, preparation for classes, sitting for Progress Tests and their successful passing of a Final test. The basic limit for passing all tests is 70%. In case of passing all class tests, which are obligatory for all students, the basic limit in the Final test is reduced by 10%. Students who score a minimum of 90% in EACH progress test are not obliged to take the credit test. Any copying, recording or leaking tests, use of unauthorized tools, aids and communication devices, or other disruptions of objectivity of exams will be considered non-compliance with the conditions for course completion as well as a severe violation of the study rules. Consequently, the teacher will finish the exam by awarding grade "N" in the Information System, and the Dean will initiate disciplinary proceedings that may result in study termination.

Language of instruction

English

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

Listed among pre-requisites of other courses

- [aVLCJ0686 Czech Language for Foreigners VI - practice \(VSCJ0585| aVLCJ0585\)](#) ([Do I meet enrolment requirements?](#))

Teacher's information

<http://mluvtecesky.net>

Actual information about the subject, consultation hours, etc. is accessible on the notice boards at the Foreign Languages Department. Contact with teachers is provided by the secretary of the department (Kamenice 5, A 15), tel.: 549 498 170.

The course is also listed under the following terms [Accreditation autumn](#).

aVLDI7X1c Diagnostic Imaging Methods - practice ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/4/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Vlastimil Válek, CSc., MBA, EBIR](#) (seminar tutor)

[doc. MUDr. Jarmila Skotáková, CSc.](#) (seminar tutor)

[MUDr. Jiří Vaníček, Ph.D.](#) (seminar tutor)

[MUDr. Tomáš Andrašina, Ph.D.](#) (seminar tutor)

[MUDr. Zuzana Balážová](#) (seminar tutor)

[MUDr. Daniel Bartušek, Ph.D.](#) (seminar tutor)

[Ing. Mgr. Hedvika Bělíková](#) (seminar tutor)

[MUDr. Martin Bulík, Ph.D.](#) (seminar tutor)

[MUDr. Petra Cimřlová](#) (seminar tutor)

[MUDr. Igor Černý, Ph.D.](#) (seminar tutor)

[MUDr. Vladimír Červeňák](#) (seminar tutor)

[MUDr. Ivana Červinková](#) (seminar tutor)

[MUDr. Karel Dvořák, CSc.](#) (seminar tutor)

[MUDr. Jakub Foukal, Ph.D.](#) (seminar tutor)

[MUDr. Jakub Hustý, Ph.D.](#) (seminar tutor)

[MUDr. Marcela Charvátová](#) (seminar tutor)

[MUDr. Miloš Keřkovský, Ph.D.](#) (seminar tutor)

[MUDr. Jan Křístek, Ph.D.](#) (seminar tutor)

[MUDr. Tomáš Křivka](#) (seminar tutor)

[MUDr. Vlastirad Mach](#) (seminar tutor)

[doc. MUDr. Marek Mechl, Ph.D., MBA](#) (seminar tutor)

[MUDr. Iva Mihulová](#) (seminar tutor)

[MUDr. Pavel Ošmera](#) (seminar tutor)

[MUDr. Petr Ouředníček, Ph.D.](#) (seminar tutor)

[MUDr. Jiří Pánek](#) (seminar tutor)

[MUDr. Tamara Pavlíková](#) (seminar tutor)

[MUDr. Denisa Pavlovská](#) (seminar tutor)

[MUDr. Zdenka Povolná](#) (seminar tutor)

[MUDr. Zdeňka Ráčilová](#) (seminar tutor)

[MUDr. Svatopluk Richter](#) (seminar tutor)

[MUDr. Tomáš Rohan](#) (seminar tutor)

[MUDr. Anna Seehofnerová](#) (seminar tutor)
[MUDr. Monika Staňková](#) (seminar tutor)
[MUDr. Jakub Stulík](#) (seminar tutor)
[MUDr. Igor Suškevič](#) (seminar tutor)
[MUDr. Jan Šenkyřík](#) (seminar tutor)
[MUDr. Andrea Šprláková-Puková, Ph.D.](#) (seminar tutor)
[PharmDr. RNDr. Jiří Štěpán, Ph.D.](#) (seminar tutor)
[Iva Čechová](#) (assistant)
[Jitka Halouzková](#) (assistant)
[Dagmar Němečková](#) (assistant)
[Bc. Alena Sajdíová, DiS.](#) (assistant)

Supervisor

[MUDr. Tomáš Andrašina, Ph.D.](#)
[Department of Radiology and Nuclear Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)
Contact Person: [MUDr. Tomáš Andrašina, Ph.D.](#)
Supplier department: [Department of Radiology and Nuclear Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Prerequisites

aVLLP0633c && aVLPF0622c && aVLPA0622c
VLCP0622c Clinical Introduction to Surgery II VSIP0622c Clinical Introduction to Internal Medicine II - practice VSPF0622c Pathological Physiology II VSPA0622c Pathology - practice VLFA0621c Pharmacology I - practice VSNV041p Neuroscience - lecture
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Nuclear medicine: The concept of this course is introduction into the study of nuclear medicine. Students should know basic principles of examination and should be able to select the diagnostic and therapeutic methods of nuclear medicine. Radiodiagnostic: The concept of this course is introduction into the study of radiology and imaging methods, including CT, MR, X-ray, angiography and ultrasound. Students should know basic principle of examination and methods of CT, MR, UZ and X-ray, including technique, anatomy, indications, contraindications and risk factors.

Learning outcomes

Student will have knowledge of the principles of imaging methods, differentiation of individual modalities, appropriate indications and contraindications of methods. Student will be able to indicate correct imaging methods in case of suspicion of specific disease conditions, will know the limitations of imaging methods in specific disease states, will be able to evaluate basic anatomical structures on imaging examinations.

Syllabus

- Nuclear Medicine: Radionuclides, interaction between ionizing radiation and matter, radiation detection, imaging techniques, SPECT, PET, fundamentals of radiopharmacology, biological effects of ionizing radiation, radiation safety. Methods of nuclear medicine used in urology, skeletal and bone marrow scintigraphy, nuclear cardiology. Scintigraphy of CNS, lungs, thyroid gland, gastrointestinal tract, liver and spleen. Examination in hematology, diagnostics of inflammations and tumors. With each examination procedure, the radiopharmaceuticals used, the methods, evaluation, interpretation of the findings, and indications are explained. Principles of radioimmunologic diagnostic procedures. Relations between the methods of nuclear medicine and other imaging methods, role of radionuclide methods in diagnostic algorithms. Fundamentals of therapy of diseases using radiopharmaceuticals. Radiodiagnostic: CT, MR, X-ray, ultrasound, angiography, interventional radiology, indications, contraindication, risk factors, limits, technical aspect, anatomy, interpretations of the findings. Methods of diagnostic imaging used in different subspecializations and areas like pediatric radiology, neuroradiology, interventional radiology, abdominal imaging, imaging in oncology, urology, woman imaging and cardiac imaging are discussed. With each examination procedure and method the contrast agents, indications, contraindications and risk factors as well as limits are explained. Technical principles, standards, protections and “how to do it” are also learned.

Literature

required literature

- HEŘMAN, Miroslav. *Základy radiologie*. 1. vyd. Olomouc: Univerzita Palackého, 2014. 314 s. ISBN 9788024429014. [info](#)
- *Nukleární medicína*. 4. uprav. a dopl. vyd. Jilemnice: Gentiana, 2002. 154 s. ISBN 8086527050. [info](#)
- HERRING, William. *Learning radiology : recognizing the basics*. 3rd edition. Philadelphia: Elsevier, 2015. xvii, 332. ISBN 9780323328074. [info](#)
- ZIESSMAN, Harvey A. and James H THRALL. *Nuclear Medicine: The Requisites, 4th Edition*. 2013. ISBN 978-0-323-08299-0. [info](#)

not specified

- VÁLEK, Vlastimil. *Moderní diagnostické metody*. Edited by Jan Žižka. 1. vyd. Brno: Institut pro další vzdělávání pracovníků ve zdravotnictví, 1996. 43 s., obr. ISBN 80-7013-225-6. [info](#)
- [SVÍŽENSKÁ, Ivana](#) and [Vlastimil VÁLEK](#). *Základy anatomie v zobrazovacích metodách. I. Skiaskopie a skiagrafie (Anatomy in image methods. I. Skiascopy and skiagraphy)*. První. Brno: IDVPZ Brno, MU Brno, Boston Scientific ČR s.r.o., 2001. 72 pp. ISBN 80-7013-334-1. [info](#)
- ELIÁŠ, Pavel, Petr MÁCA, Jiří NEUWIRTH and [Vlastimil VÁLEK](#). *Moderní diagnostické metody. II.díl Výpočetní tomografie*. 1. vyd. Brno: Institut pro další vzdělávání pracovníků ve zdravotnictví, 1998. 84 pp. ISBN 80-7013-294-9. [info](#)

- [BOUDNÝ, Jaroslav](#), Martin KÖCHER, [Jan PEREGRIN](#) and [Vlastimil VÁLEK](#). *Moderní diagnostické metody. IV.díl Instrumentárium k intervenčním výkonům*. 1.vyd. Brno: Institut pro další vzdělávání pracovníků ve zdravotnictví, 2000. 42 pp. ISBN 80-7013-298-1. [info](#)
- KUPKA, Karel, Jozef KUBINYI and Martin ŠÁMAL. *Nukleární medicína*. 1. vyd. [Praha]: P3K, 2007. 185, xiv. ISBN 9788090358492. [info](#)
- VOTRUBOVÁ, Jana. *Klinické PET a PET/CT*. 1. vyd. Praha: Galén, 2009. 207 s. ISBN 9788072626199. [info](#)
- FERDA, Jiří and Hynek MÍRKA. *Základy zobrazovacích metod*. první. Praha: Galén, 2015. 148 pp. ISBN 978-80-7492-164-3. [info](#)

Teaching methods

Seminars and practical and practical training.

Assessment methods

Full attendance and test of radiological anatomy are necessary for giving course-unit credit.

Language of instruction

English

Further Comments

The course can also be completed outside the examination period.

The course is taught each semester.

The course is taught: every week.

Listed among pre-requisites of other courses

- [aVLAM9X1c Intensive Care Medicine - practice](#)
[aVLFA0822c](#) && [aVLCH0832c](#) && [aVLLP0633c](#) && [aVLDI7X1c](#) && [aVLOT7X1c](#) && [aVLIN7X21c](#) ([Do I meet enrolment requirements?](#))
- [aVLAM9X1p Intensive Care Medicine - lecture](#)
[aVLFA0822c](#) && [aVLCH0832c](#) && [aVLLP0633c](#) && [aVLDI7X1c](#) && [aVLOT7X1c](#) && [aVLIN7X21c](#) ([Do I meet enrolment requirements?](#))
- [aVLNE9X1c Neurology - practice](#)
[aVLFA0822p](#) && [aVLLP0633c](#) && [aVLDI7X1c](#) && [aVL0L7X1c](#) && [aVLCH0832c](#) ([Do I meet enrolment requirements?](#))
- [aVLNE9X1p Neurology - lecture](#)
[aVLFA0822p](#) && [aVLLP0633c](#) && [aVLDI7X1c](#) && [aVL0L7X1c](#) && [aVLCH0832c](#) ([Do I meet enrolment requirements?](#))
- [aVLPD0932c Pediatrics II - practice](#)
[aVLFA0822c](#) && [aVLPD7X31c](#) && [aVLOT7X1c](#) && [aVLDI7X1c](#) && [aVLLP0633c](#) && [aVLKG7X1c](#) ([Do I meet enrolment requirements?](#))
- [aVLPD0932p Pediatrics II - lecture](#)
[aVLFA0822c](#) && [aVLPD7X31c](#) && [aVLOT7X1c](#) && [aVLDI7X1c](#) && [aVLLP0633c](#) && [aVLKG7X1c](#) ([Do I meet enrolment requirements?](#))
- [aVLPG0921c Gynecology and obstetrics I - practice](#)
[aVLFA0822c](#) && [aVLCH0832c](#) && [aVLDI7X1c](#) && [aVLLP0633c](#) ([Do I meet enrolment requirements?](#))

- [aVLP0921p Gynecology and Obstetrics I - lecture](#)
[aVLFA0822c](#) && [aVLCH0832c](#) && [aVLDI7X1c](#) && [aVLLP0633c](#) (Do I meet enrolment requirements?)

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

aVLDI7X1p Diagnostic Imaging Methods - lecture *

Faculty of Medicine

Autumn 2019

Extent and Intensity

1/0/0. 3 credit(s). Recommended Type of Completion: zk (examination). Alternate Types of Completion: RZk (examination).

Teacher(s)

[prof. MUDr. Vlastimil Válek, CSc., MBA, EBIR](#) (lecturer)

[doc. MUDr. Jarmila Skotáková, CSc.](#) (lecturer)

[MUDr. Jiří Vaniček, Ph.D.](#) (lecturer)

[doc. MUDr. Marek Mechl, Ph.D., MBA](#) (lecturer)

[MUDr. Ivana Červinková](#) (lecturer)

[MUDr. Igor Šuškevič](#) (lecturer)

[MUDr. Igor Černý, Ph.D.](#) (lecturer)

[PharmDr. RNDr. Jiří Štěpán, Ph.D.](#) (lecturer)

[MUDr. Tomáš Andrašina, Ph.D.](#) (lecturer)

[MUDr. Tomáš Rohan](#) (seminar tutor)

[Iva Čechová](#) (assistant)

[Jitka Halouzková](#) (assistant)

[Dagmar Němečková](#) (assistant)

[Bc. Alena Sajdířová, DiS.](#) (assistant)

Supervisor

[MUDr. Tomáš Andrašina, Ph.D.](#)

[Department of Radiology and Nuclear Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Supplier department: [Department of Radiology and Nuclear Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Prerequisites

[aVLLP0633c](#) && [aVLPF0622c](#) && [aVLPA0622c](#)

[VLCP0622c Clinical Introduction to Surgery II](#) [VSIP0622c Clinical Introduction to](#)

[Internal Medicine II - practice](#) [VSPF0622c Pathological Physiology II](#) [VSPA0622c](#)

[Pathology - practice](#) [VLFA0621c Pharmacology I - practice](#) [VSNV041p Neuroscience - lecture](#)

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Nuclear medicine: The concept of this course is introduction into the study of nuclear medicine. Students should know basic principles of examination and should be able to select the diagnostic and therapeutic methods of nuclear medicine. Radiodiagnostic: The concept of this course is introduction into the study of radiology and imaging methods, including CT, MR, X-ray, angiography and ultrasound. Students should know basic principle of examination and methods of CT, MR, UZ and X-ray, including technique, anatomy, indications, contraindications and risk factors.

Learning outcomes

Student will have knowledge of the principles of imaging methods, differentiation of individual modalities, appropriate indications and contraindications of methods. Student will be able to indicate correct imaging methods in case of suspicion of specific disease conditions, will know the limitations of imaging methods in specific disease states, will be able to evaluate basic anatomical structures on imaging examinations.

Syllabus

- Nuclear Medicine: Radionuclides, interaction between ionizing radiation and matter, radiation detection, imaging techniques, SPECT, PET, fundamentals of radiopharmacology, biological effects of ionizing radiation, radiation safety. Methods of nuclear medicine used in urology, skeletal and bone marrow scintigraphy, nuclear cardiology. Scintigraphy of CNS, lungs, thyroid gland, gastrointestinal tract, liver and spleen. Examination in hematology, diagnostics of inflammations and tumors. With each examination procedure, the radiopharmaceuticals used, the methods, evaluation, interpretation of the findings, and indications are explained. Principles of radioimmunologic diagnostic procedures. Relations between the methods of nuclear medicine and other imaging methods, role of radionuclide methods in diagnostic algorithms. Fundamentals of therapy of diseases using radiopharmaceuticals. Radiodiagnostic: CT, MR, X-ray, ultrasound, angiography, interventional radiology, indications, contraindication, risk factors, limits, technical aspect, anatomy, interpretations of the findings. Methods of diagnostic imaging used in different subspecializations and areas like pediatric radiology, neuroradiology, interventional radiology, abdominal imaging, imaging in oncology, urology, woman imaging and cardiac imaging are discussed. With each examination procedure and method the contrast agents, indications, contraindications and risk factors as well as limits are explained. Technical principles, standards, protections and “how to do it” are also learned.

Literature

required literature

- HEŘMAN, Miroslav. *Základy radiologie*. 1. vyd. Olomouc: Univerzita Palackého, 2014. 314 s. ISBN 9788024429014. [info](#)

- KORANDA, Pavel. *Nukleární medicína*. 1. vyd. Olomouc: Univerzita Palackého v Olomouci, 2014. 201 s. ISBN 9788024440316. [info](#)
- HERRING, William. *Learning radiology : recognizing the basics*. 3rd edition. Philadelphia: Elsevier, 2015. xvii, 332. ISBN 9780323328074. [info](#)
- ZIESSMAN, Harvey A. and James H THRALL. *Nuclear Medicine: The Requisites, 4th Edition*. 2013. ISBN 978-0-323-08299-0. [info](#)

not specified

- VÁLEK, Vlastimil. *Moderní diagnostické metody*. Edited by Jan Žižka. 1. vyd. Brno: Institut pro další vzdělávání pracovníků ve zdravotnictví, 1996. 43 s., obr. ISBN 80-7013-225-6. [info](#)
- [SVÍŽENSKÁ, Ivana](#) and [Vlastimil VÁLEK](#). *Základy anatomie v zobrazovacích metodách. I. Skiaskopie a skiografie (Anatomy in image methods. I. Skiascopy and skiagraphy)*. První. Brno: IDVPZ Brno, MU Brno, Boston Scientific ČR s.r.o., 2001. 72 pp. ISBN 80-7013-334-1. [info](#)
- ELIÁŠ, Pavel, Petr MÁCA, Jiří NEUWIRTH and [Vlastimil VÁLEK](#). *Moderní diagnostické metody. II.díl Výpočetní tomografie*. 1. vyd. Brno: Institut pro další vzdělávání pracovníků ve zdravotnictví, 1998. 84 pp. ISBN 80-7013-294-9. [info](#)
- [BOUDNÝ, Jaroslav](#), Martin KÖCHER, [Jan PEREGRIN](#) and [Vlastimil VÁLEK](#). *Moderní diagnostické metody. IV.díl Instrumentárium k intervenčním výkonům*. 1. vyd. Brno: Institut pro další vzdělávání pracovníků ve zdravotnictví, 2000. 42 pp. ISBN 80-7013-298-1. [info](#)
- KUPKA, Karel, Jozef KUBINYI and Martin ŠÁMAL. *Nukleární medicína*. 1. vyd. [Praha]: P3K, 2007. 185, xiv. ISBN 9788090358492. [info](#)
- VOTRUBOVÁ, Jana. *Klinické PET a PET/CT*. 1. vyd. Praha: Galén, 2009. 207 s. ISBN 9788072626199. [info](#)
- LANG, Otto, Milan KAMÍNEK and Helena TROJANOVÁ. *Nukleární kardiologie*. Praha: Galén, 2008. 130 s. ISBN 9788072624812. [info](#)
- FERDA, Jiří and Hynek MÍRKA. *Základy zobrazovacích metod*. první. Praha: Galén, 2015. 148 pp. ISBN 978-80-7492-164-3. [info](#)

Teaching methods

lecture

Assessment methods

Full attendance is necessary for giving course-unit credit.

Language of instruction

English

Further Comments

The course can also be completed outside the examination period.

The course is taught each semester.

The course is taught: every week.

Listed among pre-requisites of other courses

- [aVLVL101p Internal Medicine - lecture](#)
[aVLFA0822p](#) && [aVLLP0633c](#) && [aVLDI7X1p](#) ([Do I meet enrolment requirements?](#))

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

aVLDV7X1c Dermatovenerology - practice ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2.3/0. 1 credit(s). Type of Completion: z (credit).

Teacher(s)

[doc. MUDr. Hana Jedličková, Ph.D.](#) (seminar tutor)

[Bc. Dagmar Němečková](#) (seminar tutor), [prof. MUDr. Věra Semrádová, CSc.](#) (deputy)

[MUDr. Miroslav Nečas, Ph.D.](#) (seminar tutor), [prof. MUDr. Věra Semrádová, CSc.](#)

(deputy)

[doc. MUDr. Jarmila Rulcová, CSc.](#) (seminar tutor)

[MUDr. Sabina Sellner Švestková, Ph.D.](#) (seminar tutor)

[prof. MUDr. Vladimír Vašků, CSc.](#) (seminar tutor)

[Jana Fišerová](#) (assistant)

[Libuše Darmovzalová](#) (assistant)

[Bc. Dagmar Němečková](#) (assistant)

Supervisor

[prof. MUDr. Vladimír Vašků, CSc.](#)

[First Department of Dermatovenerology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Supplier department: [First Department of Dermatovenerology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Prerequisites

aVLPF0622p && aVLPA0622p && aVLLP0633c && [aVLLM0522p Medical Microbiology II - lect](#)

Essential knowledge of anatomy, physiology, histopathology, biochemistry focused on the skin, ability to work with patient, to work with medical files, good knowledge of differential diagnosis and algorithm in therapy.

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the subject is to introduce students in practical aspects of examination approaches, diagnostics and appropriate treatment choices of dermatoses and venereal diseases. During the first semester the training is focused on understanding and

acquisition of basic principles of skin functions, pathophysiology of the most important skin diseases, morphology as a basic examination paradigm and of the most important aspects of the skin allergology, phototherapy and topical treatment in dermatology.

Learning outcomes

Finally the student will be able to investigate patient including using of basic diagnostic tests in dermatovenerology, to choose appropriate topical therapy, further differential diagnose in principal groups of skin and venereal diseases.

Syllabus

- Ist Day: Morphology.
- IInd Day: Skin Barrier Functions.
- IIIrd Day: Examination of Skin Function and Skin Allergology.
- IVth Day: Phototherapy in Dermatology.
- Vth Day: Topical Therapy. Credit.

Literature

- ARENBERGER, P. and I. OBSTOVÁ. *Obecná dermatovenerologie*. 1. vydání. Praha: Czechopress Agency, 2001. 246 pp. ISBN 80-902632-4-0. [info](#)
- BUCHVALD, J. and BUCHVALD D. *Učebnica dermatovenerologie*. 1. vydání. Bratislava: Slovak Academic Press, 2002. ISBN 80-89104-03-7. [info](#)
- DITRICHOVÁ, Dagmar, Martina JANSOVÁ and Robert OPAVSKÝ. *Repetitorium dermatovenerologie*. 1. vyd. Olomouc: Epava, 2002. 304 s. ISBN 808629708X. [info](#)
- Feit, J. a kol. Hypertextový atlas dermatopatologie. <http://atlases.muni.cz>
- Hunter, J.A.A. *Clinical Dermatology*. 3rd e., Blackwell Pub. 2002, ISBN: 0443071403
- ŠTORK, Jiří. *Dermatovenerologie*. 1. vyd. Praha: Galén, 2008. xv, 502. ISBN 9788072623716. [info](#)
- VLAŠÍN, Zdeněk and Hana a kol. JEDLIČKOVÁ. *Praktická dermatologie v obrazech a schématech*. 1. vydání. Brno: Vladerma, 2001. 251 pp. ISBN 80-238-6966-3. [info](#)
- VOSMÍK, F. a kol. *Dermatovenerologie*. 1. vydání. Praha: Karolinum, 1999. 396 pp. ISBN 80-7184-633-3. [info](#)
- VAŠKŮ, Vladimír. *Psoriáza*. 128 stran. ISBN 9788073454302. [info](#)

Teaching methods

Course is organized as one week internship at dermatovenerological clinics. Course is composed of collective seminars to the given topics and practical bed-side demonstrations in small groups.

Assessment methods

Giving the course-unit credit is conditioned by full (100%) attendance in the lessons and by evaluated knowledge orally by teacher, controls by the head of the department.

Language of instruction

English

Further comments (probably available only in Czech)

Information on completion of the course: 100% účast, prokázání znalostí ústně nebo testem.

The course is taught annually.

The course is taught: in blocks.

Teacher's information

Průběžné doplňování doporučené literatury, konzultace mimo běžnou výuku pověřenými učiteli.

The course is also listed under the following terms [Spring 2018](#), [Accreditation spring](#).

aVLDV7X1c Dermatovenerology - practice ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

0/2.3/0. 1 credit(s). Type of Completion: z (credit).

Teacher(s)

[doc. MUDr. Hana Jedličková, Ph.D.](#) (seminar tutor)

[Bc. Dagmar Němečková](#) (seminar tutor), [prof. MUDr. Věra Semrádová, CSc.](#) (deputy)

[MUDr. Miroslav Nečas, Ph.D.](#) (seminar tutor), [prof. MUDr. Věra Semrádová, CSc.](#)

(deputy)

[doc. MUDr. Jarmila Rulcová, CSc.](#) (seminar tutor)

[MUDr. Sabina Sellner Švestková, Ph.D.](#) (seminar tutor)

[prof. MUDr. Vladimír Vašků, CSc.](#) (seminar tutor)

[Jana Fišerová](#) (assistant)

[Libuše Darmovzalová](#) (assistant)

[Bc. Dagmar Němečková](#) (assistant)

Supervisor

[prof. MUDr. Vladimír Vašků, CSc.](#)

[First Department of Dermatovenerology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Supplier department: [First Department of Dermatovenerology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Prerequisites

[aVLPF0622p Pathological Phys. II - lect.](#) && [aVLPA0622p Pathology II - lecture](#) && [aVLLP0633c Clinical Introduction III - p](#) && [aVLLM0522p Medical Microbiology II - lect](#)

Essential knowledge of anatomy, physiology, histopathology, biochemistry focused on the skin, ability to work with patient, to work with medical files, good knowledge of differential diagnose and algorithm in therapy.

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the subject is to introduce students in practical aspects of examination approaches, diagnostics and appropriate treatment choices of dermatoses and venereal diseases. During the first semester the training is focused on understanding and acquirement of basic principles of skin functions, pathophysiology of the most important skin diseases, morphology as a basic examination paradigm and of the most important aspects of the skin allergology, phototherapy and topical treatment in dermatology.

Learning outcomes

Finally the student will be able to investigate patient including using of basic diagnostic tests in dermatovenereology, to choose appropriate topical therapy, further differential diagnose in principal groups of skin and venereal diseases.

Syllabus

- Ist Day: Morphology.
- IInd Day: Skin Barrier Functions.
- IIIrd Day: Examination of Skin Function and Skin Allergology.
- IVth Day: Phototherapy in Dermatology.
- Vth Day: Topical Therapy. Credit.

Literature

- ARENBERGER, P. and I. OBSTOVÁ. *Obecná dermatovenerologie*. 1. vydání. Praha: Czechopress Agency, 2001. 246 pp. ISBN 80-902632-4-0. [info](#)
- BUCHVALD, J. and BUCHVALD D. *Učebnica dermatovenerológie*. 1. vydání. Bratislava: Slovak Academic Press, 2002. ISBN 80-89104-03-7. [info](#)
- DITRICHOVÁ, Dagmar, Martina JANSOVÁ and Robert OPAVSKÝ. *Repetitorium dermatovenerologie*. 1. vyd. Olomouc: Epava, 2002. 304 s. ISBN 808629708X. [info](#)
- Feit, J. a kol. Hypertextový atlas dermatopatologie. <http://atlases.muni.cz>
- Hunter, J.A.A. *Clinical Dermatology*. 3rd e., Blackwell Pub. 2002, ISBN: 0443071403
- ŠTORK, Jiří. *Dermatovenerologie*. 1. vyd. Praha: Galén, 2008. xv, 502. ISBN 9788072623716. [info](#)
- VLAŠÍN, Zdeněk and Hana a kol. JEDLIČKOVÁ. *Praktická dermatologie v obrazech a schématech*. 1. vydání. Brno: Vladerma, 2001. 251 pp. ISBN 80-238-6966-3. [info](#)
- VOSMÍK, F. a kol. *Dermatovenerologie*. 1. vydání. Praha: Karolinum, 1999. 396 pp. ISBN 80-7184-633-3. [info](#)
- VAŠKŮ, Vladimír. *Psoriáza*. 128 stran. ISBN 9788073454302. [info](#)

Teaching methods

Course is organized as one week intership at dermatovenerological clinics. Course is composed of collective seminars to the given topics and practical bed-side demonstrations in small groups.

Assessment methods

Giving the course-unit credit is conditioned by full (100%) attendance in the lessons and by evaluated knowledge orally by teacher, controls by the head of the department.

Language of instruction

English

Further comments (probably available only in Czech)

Information on completion of the course: 100% účast, prokázání znalostí ústně nebo testem.

The course is taught annually.

The course is taught: in blocks.

Teacher's information

Průběžné doplňování doporučené literatury, konzultace mimo běžnou výuku pověřenými učiteli.

The course is also listed under the following terms [Autumn 2019](#), [Accreditation spring](#).

aVLDV7X1p Dermatovenerology - lecture ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0.3/0/0. 2 credit(s). Type of Completion: zk (examination).

Teacher(s)

[doc. MUDr. Eliška Dastychová, CSc.](#) (lecturer), [prof. MUDr. Věra Semrádová, CSc.](#) (deputy)

[MUDr. Miroslav Nečas, Ph.D.](#) (lecturer)

[prof. MUDr. Alena Pospíšilová, CSc.](#) (lecturer)

[doc. MUDr. Jarmila Rulcová, CSc.](#) (lecturer)

[MUDr. Sabina Sellner Švestková, Ph.D.](#) (lecturer)

[prof. MUDr. Věra Semrádová, CSc.](#) (lecturer)

[prof. MUDr. Vladimír Vašků, CSc.](#) (lecturer)

[Jana Fišerová](#) (assistant)

[Bc. Dagmar Němečková](#) (assistant), [prof. MUDr. Věra Semrádová, CSc.](#) (deputy)

Supervisor

[prof. MUDr. Vladimír Vašků, CSc.](#)

[First Department of Dermatovenerology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Supplier department: [First Department of Dermatovenerology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Prerequisites

[aVLPF0622p](#) && [aVLPA0622p](#) && [aVLLP0633c](#) && [aVLLM0522p Medical Microbiology II - lect](#)

Very good knowledge of theory in modern medicine.

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the subject is to give a actual theoretic base and recent clinical knowledge to chosen problems in dermatovenerology. Special attendance is given to problems of protective functions of the skin realised by different skin barrier systems, skin immunology, teoretical base of light interactions with the skin, phototherapy indications and contraindications, basic allergic reaction and different types of topical treatment.

Learning outcomes

Finally the student will be able to describe and to differentiate pathological findings in common skin diseases to interpret it with basical differential diagnose, with ability to propose investigation and treatment, with the background of knowledge of skin physiology and pathophysiological mechanisms.

Syllabus

- 1.den: Morphology.
- 2.den: Skin Barrier Function.
- 3.den: Examination of the Skin Function and Allergology.
- 4.den: Phototherapy in Dermatology.
- 5.den: Topical Therapy.

Literature

- ARENBERGER, P. and I. OBSTOVÁ. *Obecná dermatovenerologie*. 1. vydání. Praha: Czechopress Agency, 2001. 246 pp. ISBN 80-902632-4-0. [info](#)
- BUCHVALD, J. and BUCHVALD D. *Učebnica dermatovenerológie*. 1. vydání. Bratislava: Slovak Academic Press, 2002. ISBN 80-89104-03-7. [info](#)
- DITRICHOVÁ, Dagmar, Martina JANSOVÁ and Robert OPAVSKÝ. *Repetitorium dermatovenerologie*. 1. vyd. Olomouc: Epava, 2002. 304 s. ISBN 808629708X. [info](#)
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- Hunter, J.A.A. *Clinical Dermatology*. 3rd e., Blackwell Pub. 2002, ISBN: 0443071403
- ŠTORK, Jiří. *Dermatovenerologie*. 1. vyd. Praha: Galén, 2008. xv, 502. ISBN 9788072623716. [info](#)
- VLAŠÍN, Zdeněk and Hana a kol. *JEDLIČKOVÁ. Praktická dermatologie v obrazech a schématech*. 1. vydání. Brno: Vladerma, 2001. 251 pp. ISBN 80-238-6966-3. [info](#)
- VOSMÍK, F. a kol. *Dermatovenerologie*. 1. vydání. Praha: Karolinum, 1999. 396 pp. ISBN 80-7184-633-3. [info](#)
- VAŠKŮ, Vladimír. *Psoriáza*. 128 stran. ISBN 9788073454302. [info](#)

Teaching methods

Lecture, interactive dialog in seminars, study of theoretical background simultaneously.

Assessment methods

Giving the course-unit credit is conditioned by 100% attendance and current examination of knowledge. Evaluation of acquired knowledge in clinical dermatology by work with in patient, orally evaluation of basic knowledge of dermatovenereology by teacher during the practicals, possible control by supervisor/head of the department.

Language of instruction

English

Further comments (probably available only in Czech)

The course is taught each semester.

The course is taught: in blocks.

Teacher's information

Průběžná aktualizace doporučené literatury, při detailním zájmu studentů o určitou oblast oboru doporučení literatury, příp. jiných zdrojů mimo základní seznam. Konzultace mimo vlastní výuku u pověřených učitelů možné.

The course is also listed under the following terms [Spring 2018](#), [Accreditation spring](#).

aVLFA0822c Pharmacology II - practice *

Faculty of Medicine

Spring 2018

Extent and Intensity

0/3/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[doc. MUDr. Regina Demlová, Ph.D.](#) (seminar tutor)

[PharmDr. Ondřej Zendulka, Ph.D.](#) (seminar tutor)

[Renata Blábllová](#) (assistant)

Supervisor

[doc. MUDr. Regina Demlová, Ph.D.](#)

[Department of Pharmacology - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [PharmDr. Ondřej Zendulka, Ph.D.](#)

Supplier department: [Department of Pharmacology - Theoretical Departments - Faculty of Medicine](#)

Prerequisites (in Czech)

[aVLFA0721p Pharmacology I - lecture](#)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the course is to acquaint the students with drugs from selected pharmacotherapeutic groups and to learn them how to use the drugs rationally with respect to their mode of action, indications and contraindications. Moreover, students will be shown, where to find relevant data on drugs and how to work with it.

Learning outcomes

At the end of the course student should be able to prescribe representatives of individual drug classes in the form of individually prepared pharmaceutical preparation and bulk drugs. The student should be familiar with pharmacological profiles of therapeutic and adverse effects of particular drugs with an attention paid to common drug-drug interactions.

Syllabus

- **VLFA08222c Pharmacology II- practicals**

Spring semester

- **Week 1**
- **Introduction, instructions.** Distribution of co-talks.
- **ANALGESICS.**
- Opioid analgesics. Pharmacotherapy of pain. Opioid addiction therapy. Prescription and practical use of analgesic preparations.
-
- **Week 2**
- **NON-STEROIDAL ANTIINFLAMMATORY DRUGS, DRUGS USED IN GOUT, ANTIPYRETICS.**
- Mechanisms of action and classification of anti-inflammatory drugs. Drugs used in therapy of gout.
- **Getting ready for the next lesson:** *Central neurotransmitters and sites of drug effects in CNS. Basic psychical functions.*
-
- **Week 3**
- **ANTIDEPRESSANTS.**
- Classification and terminology of antidepressants. Review of their mechanisms of action, adverse effects, interactions.
- **Co-talks.**
-
- **Week 4**
- **THERAPY OF ANXIETY, HYPNOSEDATIVES.**
- Classification and terminology of psychotropics. Review of their mechanisms of action. Pharmacology of anxiolytics and hypno sedatives. Mechanism of action of benzodiazepines. Prescription of hypno sedatives and psychostimulants.
- **Co-talks.**
-
- **Week 5**
- **REVISING TEST I (Revision test with subsequent discussion) Lesson 1 – 4.**
- **5/CASE REPORTS I.**

- Selected case reports on drugs from previous lessons. (including Pharmacology I lessons).
- **Getting ready for the next lesson:** *Pathophysiology of cancer disease*
-
- **Week 6**
- **PHARMACOLOGY OF ANTICANCER DRUGS.**
- Classification, mechanisms of action, side effects.
- **Co-talks.**
- **Getting ready for the next lesson:** *Structure of bacterial cell, basis of antimicrobial therapy.*
-
- **Week 7**
- **ANTIMICROBIAL AGENTS I.**
- Classification, mechanisms of action, combinations of antibiotics and chemotherapeutics.
- **Co-talks.**
-
- **Week 8**
- **ANTIMICROBIAL AGENTS II., THERAPY OF INFECTIOUS DIARRHEAS AND UROINFECTIONS.**
- Drugs for the treatment of intestinal and urinary infections.
- **Co-talks.**
-
- **Week 9**
- **REVISING TEST II (Overhead-test with subsequent discussion). Lessons 5 - 8.**
- **CASE REPORTS II.**
- Selected case reports on drugs from previous lessons. (including Pharmacology I lessons).
- **Co-talks.**
- **Getting ready for the next lesson:** *Autonomic nervous system – catecholamines, atropine. Muscle relaxants.*
-
- **Week 10**
- **GENERAL AND LOCAL ANAESTHETICS**
- Combined and balanced anaesthesia. Signs and stages of general anaesthesia. Inhaled and injected anaesthetics - classification and characteristics. Review of drugs used in premedication.
- **Co-talks.**
- **Getting ready for the next lesson:** *: Revision of blood coagulation.*
-
- **Week 11**
- **ANTICOAGULANTS AND THROMBOLYTICS.**
- Fibrinolytics, haemostatics.
- **Co-talks.**
- **Getting ready for the next lesson:** *: Allergic reactions – causes and mechanisms. Revision of PNS pharmacology - β_2 mimetics, parasympatholytics.*

-
- **Week 12**
- **H₁ ANTIHISTAMINES, TREATMENT OF BRONCHIAL OBSTRUCTION.**
- Classification and clinical use of H₁ antihistamines. Sites of action and review of drugs of bronchial obstruction and other drugs acting in respiratory tract.
- **Co-talks.**
- **Getting ready for the next lesson:** : *Drug dosage forms and external routes of drug administration, revision of drug prescription. Revision of prescription of drug dosage forms for external use.*
-
- **Week 13**
- **FINAL PRESCRIPTION TEST (includes dermatology).**
- **HYPOLIPIDEMICS, THERAPY OF OBESITY.**
- Therapy of hyperlipoproteinaemia and hypercholesterolaemia, review of drugs and their mechanism of action.
- **Getting ready for the next lesson:** : *Physiology of blood pressure regulation. Revision of PNS pharmacology- α_1 sympatholytics, α_2 sympathomimetics, β sympatholytics.*
-
- **Week 14**
- **ANTIHYPERTENSIVE AGENTS.**
- Introduction, classification, diuretics, beta blockers, ACE inhibitors, Ca²⁺ blockers, and other hypertensives.
- **Co-talks.**
- **Getting ready for the next lesson:** *Revision of lessons 9-14.*
-
- **Week 15**
- **REVISING TEST III (Overhead-test with subsequent discussion). Lessons 9 - 14.**
- **CASE REPORTS III.**
- Selected case reports on drugs from previous lessons. (including Pharmacology I lessons).
-
- **CREDITS.**

Literature

required literature

- RANG, H. P. *Rang & Dale's pharmacology*. 8th ed. [Edinburgh]: Churchill Livingstone, 2016. xv, 760. ISBN 9780702053627. [info](#)
- <http://portal.med.muni.cz/clanek-461-farmakovigilance-a-propagace-leciv.html>
- <http://portal.med.muni.cz/clanek-367-vyzkum-novych-leciv-od-zrodu-k-registraci.html>

recommended literature

- LINCOVÁ, Dagmar and Hassan FARGHALI. *Základní a aplikovaná farmakologie*. 2., dopl. a přeprac. vyd. Praha: Galén, 2007. xxiv, 672. ISBN 9788072623730. [info](#)
- [HADAŠOVÁ, Eva](#), [Jana NOVÁKOVÁ](#), [Jana PISTOVČÁKOVÁ](#), [Jana VINKLEROVÁ](#), [Alexandra ŠULCOVÁ](#) and Olga STAROBOVÁ. *Praktická cvičení z farmakologie (Practical lessons on pharmacology)*. 2. opravené a doplněné vyd. Brno: Vydavatelství MU Brno-Kraví Hora, 2003. 110 pp. Skripta. ISBN 80-210-2694-4. [info](#)
- **Practicals in Pharmacology** <http://portal.med.muni.cz/discipline-13-pharmacology>
- WHALEN, Karen. *Lippincott illustrated reviews : Pharmacology*. Edited by Richard Finkel - Thomas A. Panavelil. 6th ed. Philadelphia, Pa.: Lippincott Williams & Wilkins, 2015. xi, 664. ISBN 9781451191776. [info](#)

not specified

- <http://portal.med.muni.cz/disciplina-13-farmakologie>
- https://is.muni.cz/auth/el/1411/podzim2008/VLFA0722p/um/Zasady_antibioticke_lecby.pdf?fakulta=1411;obdobi=4343;kod=VLFA0722p
- Vybrané kapitoly z učebnice:
http://books.google.cz/books?id=7INQpLuETq4C&printsec=frontcover&dq=farmakologie&lr=&as_brr=3#PPA4,M1
- Pharmaceutical Practice. Winfield, A.J. & Richards, R.M.E., eds. Churchill Livingstone. , 3rd Ed. 2004. ISBN 0443 07206 X
- <http://portal.med.muni.cz/modules.php?name=News&file=article&sid=367>
- Vybrané kapitoly z učebnice:
http://books.google.cz/books?ct=result&q=farmakologie&lr=&as_brr=3&sa=N&start=0
- Ritter, James M. - Lewis, Lionel D. - Mant, Timothy G.K. - Ferro, Albert. A Textbook of Clinical Pharmacology and Therapeutics, 5th Ed., Hodder Arnold, 2008. 465 s. ISBN 978-0-340-90046-8
- MARTÍNKOVÁ, Jiřina. *Farmakologie pro studenty zdravotnických oborů*. 2., zcela přeprac. a doplň. Praha: Grada, 2014. ISBN 9788024713564. [info](#)
- [DOSTÁLEK, Miroslav](#), [Jan JUŘICA](#), Eva JANOŠTÍKOVÁ and [Lucia ZAHRADNÍKOVÁ](#). *Farmakokinetika (Pharmacokinetics)*. ČR: Grada, 2006. 220 pp. Farmacie a farmakologie. ISBN 80-247-1464-7. [info](#)

Teaching methods

Drug classes specifics from the Syllabus are firstly briefly reviewed by the teacher, the discussion on possible ambiguities are discussed and learned knowledge is practised in case reports from real clinical practice. The training of drug prescription with the use of drug compendia and the computer database of the preparations registered in the Czech Republic (AISLP) follows. Each student prepares a co-talk for specific pharmacological topic.

Assessment methods

The participation in practicals is obligatory and registered. To get credits a student has to pass 4 written tests: a) 1 on special drug prescriptions (assessed individually by the

teacher), b) 3 x multiple-choice test on knowledge of topics taught (15 questions, number of correct answers indicated). The credits will be given to students who: passed the prescription test and scored at least 6 points from each of multiple-choice tests and their total score from these tests is higher than 20.

Language of instruction

English

Further Comments

The course is taught annually.

Listed among pre-requisites of other courses

- [aVLAL091 Anaesthesiology and Treatment of Pain](#)
[aVLFA0822c](#) ([Do I meet enrolment requirements?](#))
- [aVLMAM9X1c Intensive Care Medicine - practice](#)
[aVLFA0822c](#) && [aVLCH0832c](#) && [aVLLP0633c](#) && [aVLDI7X1c](#) && [aVLOT7X1c](#) && [aVLIN7X21c](#) ([Do I meet enrolment requirements?](#))
- [aVLMAM9X1p Intensive Care Medicine - lecture](#)
[aVLFA0822c](#) && [aVLCH0832c](#) && [aVLLP0633c](#) && [aVLDI7X1c](#) && [aVLOT7X1c](#) && [aVLIN7X21c](#) ([Do I meet enrolment requirements?](#))
- [aVLPD0932c Pediatrics II - practice](#)
[aVLFA0822c](#) && [aVLPD7X31c](#) && [aVLOT7X1c](#) && [aVLDI7X1c](#) && [aVLLP0633c](#) && [aVLKG7X1c](#) ([Do I meet enrolment requirements?](#))
- [aVLPD0932p Pediatrics II - lecture](#)
[aVLFA0822c](#) && [aVLPD7X31c](#) && [aVLOT7X1c](#) && [aVLDI7X1c](#) && [aVLLP0633c](#) && [aVLKG7X1c](#) ([Do I meet enrolment requirements?](#))
- [aVLPG0921c Gynecology and obstetrics I - practice](#)
[aVLFA0822c](#) && [aVLCH0832c](#) && [aVLDI7X1c](#) && [aVLLP0633c](#) ([Do I meet enrolment requirements?](#))
- [aVLPG0921p Gynecology and Obstetrics I - lecture](#)
[aVLFA0822c](#) && [aVLCH0832c](#) && [aVLDI7X1c](#) && [aVLLP0633c](#) ([Do I meet enrolment requirements?](#))

The course is also listed under the following terms [Accreditation spring](#).

aVLFY0321c Physiology I - practice ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/3/0. 5 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Mohamed Al-Kubati, CSc.](#) (seminar tutor)

[prof. PharmDr. Petr Babula, Ph.D.](#) (seminar tutor)

[doc. MUDr. Markéta Bébarová, Ph.D.](#) (seminar tutor)

[Ksenia Budinskaya](#) (seminar tutor)

[MUDr. Michal Hendrych](#) (seminar tutor)

[MUDr. Jan Novák](#) (seminar tutor)
[prof. MUDr. Marie Nováková, Ph.D.](#) (seminar tutor)
[MUDr. Zuzana Nováková, Ph.D.](#) (seminar tutor)
[doc. Ing. Michal Pásek, Ph.D.](#) (seminar tutor)
[MUDr. Tibor Stračina](#) (seminar tutor)
[MUDr. Ivan Szadvári](#) (seminar tutor)
[Mírka Hanousková](#) (assistant)
[Peter Matejovič](#) (assistant)

Supervisor

[prof. MUDr. Marie Nováková, Ph.D.](#)
[Department of Physiology - Theoretical Departments - Faculty of Medicine](#)
Contact Person: [MUDr. Zuzana Nováková, Ph.D.](#)
Supplier department: [Department of Physiology - Theoretical Departments - Faculty of Medicine](#)

Timetable of Seminar Groups

aVLFY0321c/30: Thu 10:30–13:00 [A20/113](#)
aVLFY0321c/31: Wed 16:00–18:30 [A20/113](#)
aVLFY0321c/32: Thu 10:30–13:00 [A20/114](#)
aVLFY0321c/33: Thu 10:30–13:00 [A20/115](#)
aVLFY0321c/34: Wed 16:00–18:30 [A20/114](#)
aVLFY0321c/35: Wed 16:00–18:30 [A20/115](#)
aVLFY0321c/36: Fri 8:15–10:45 [A20/115](#)
aVLFY0321c/37: Fri 8:15–10:45 [A20/114](#)
aVLFY0321c/38: Fri 8:15–10:45 [A20/113](#)

Prerequisites

([aVLBI0222p Biology II - lect.](#) || [VSBI0222p Biology II-lect.](#)) && ([aVLBF011p Biophysics -lect.](#) || [VSBF011p Biophysics](#)) && ([aVLAN0222s Anatomy II - sem.](#) || [VSAN0232s Anatomy II s](#))

Knowledge of medical biology and biophysics in the extent of subjects taught at Faculty of Medicine, Masaryk University.

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

To teach student clinically relevant examination methods and interpretation of their results in the context of physiology.

Learning outcomes

At the end of the course, students should be able to apply practically the methods used for examination of the functions of human organ systems. Students will be capable of interpreting the acquired records with respect to physiological processes taking place in human organisms. Next, the students will derive and calculate other parameters and

indices routinely used in clinical practice. Students will be able to evaluate the results acquired both by measurement and by calculation, and to explain possible deviations.

Syllabus

- Erect posture examination. Estimation of reaction time using computer. Examination of reflexes in man. Recording of Achilles' tendon reflex. Skin sensation and general physiology of the skin. Cutaneous sense organs. Signal detection by PowerLab system – instructions. EOG - electrooculography. Vertigo and nystagmus. EEG - electroencephalography. Evoked potentials. Estimation of visual acuity. Accommodation. Scheiner's experiment. Visual field and blind spot. Examination of color blindness. Astigmatism. Higher cognitive functions – reading. Pneumography. Spirometric examination. Recording of forced vital capacity. Red blood cell count. Estimation of hemoglobin concentration and mean corpuscular hemoglobin. Calculated parameters of red blood cells. Estimation of blood group by slide method. Pneumography. Estimation of airway resistance. Erythrocyte sedimentation rate. Estimation of osmotic resistance of red blood cells.

Literature

required literature

- [NOVÁKOVÁ, Marie](#). *Physiology and neuroscience practicals*. 1. dotisk 1. vyd. Brno: Masarykova univerzita, 2019. 149 pp. ISBN 978-80-210-6369-3. [info](#)

Teaching methods

The course is organized in the form of laboratory practices where students examine each other by given method, and they prepare the report from measured data.

Assessment methods

Credits are given on the basis of full attendance in practices, handling of all laboratory reports and passing the credit test. Students can be examined (oral or written form) during the semester from current topics.

Language of instruction

English

Further comments (probably available only in Czech)

[Study Materials](#)

Information on completion of the course: Nutno absolvovat všechna praktická cvičení, absence nahradit v nahrazovacím týdnu. Zápočtový test napsat na více jak 60%.

The course is taught annually.

Listed among pre-requisites of other courses

- [aVLBC0422c Biochemistry II - practice](#)
[aVLBI0222p](#) && [aVLBF011p](#) && [aVLBC0321s](#) && [aVLBC0321c](#) && [aVLFY0321c](#) && [aVLFY0321s](#) ([Do I meet enrolment requirements?](#))
- [aVLBC0422p Biochemistry II - lecture](#)
[aVLBI0222p](#) && [aVLBF011p](#) && [aVLBC0321s](#) && [aVLBC0321c](#) && [aVLFY0321c](#) && [aVLFY0321s](#) ([Do I meet enrolment requirements?](#))

- [aVLBC0422s Biochemistry II - seminar](#)
[aVLBI0222p](#) && [aVLBF011p](#) && [aVLBC0321s](#) && [aVLBC0321c](#) &&
[aVLFY0321c](#) && [aVLFY0321s](#) (Do I meet enrolment requirements?)
- [aVLFY0422c Physiology II - practice](#)
([aVLFY0321c](#) || [VLFY0321c](#)) && ([aVLFY0321s](#) || [VLFY0321s](#)) (Do I meet enrolment requirements?)
- [aVLFY0422p Physiology II - lecture](#)
([aVLFY0321c](#) || [VLFY0321c](#)) && ([aVLFY0321s](#) || [VLFY0321s](#)) (Do I meet enrolment requirements?)
- [aVLFY0422s Physiology II - seminar](#)
([aVLFY0321c](#) || [VLFY0321c](#)) && ([aVLFY0321s](#) || [VLFY0321s](#)) (Do I meet enrolment requirements?)
- [aVLFZ041 Selected Lessons from Physiology](#)
([aVLBI0222p](#)|| [aZLBI0222p](#)) && ([aVLFY0321c](#) || [aZLFY0321c](#)) (Do I meet enrolment requirements?)
- [aVLLP0431c Clinical Introduction I - practice](#)
[aVLFY0321c](#) && [aVLFY0321s](#) && [aVLBC0321s](#) && [aVLBC0321c](#) &&
[aVLAN0222c](#) && [aVLAN0222s](#) (Do I meet enrolment requirements?)
- [aVLLP0431p Clinical Introduction I - lecture](#)
[aVLFY0321c](#) && [aVLFY0321s](#) && [aVLBC0321s](#) && [aVLBC0321c](#) &&
[aVLAN0222c](#) && [aVLAN0222s](#) (Do I meet enrolment requirements?)

[Zobrazit další předměty](#)

Teacher's information

<http://www.med.muni.cz/fyziol>

A list of all laboratory practice topics is placed on notice board of the Department of Physiology, on its website and in IS MUNI. Consultations are possible after personal arrangement with the teacher.

The course is also listed under the following terms [Autumn 2016](#), [Accreditation autumn](#).

aVLFY0321p Physiology I - lecture *

Faculty of Medicine

Autumn 2019

Extent and Intensity

3/0/0. 0 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. PharmDr. Petr Babula, Ph.D.](#) (lecturer)
[doc. MUDr. Markéta Bébarová, Ph.D.](#) (lecturer)
[MUDr. Kamil Ďuriš, Ph.D.](#) (lecturer)
[prof. MUDr. Marie Nováková, Ph.D.](#) (lecturer)
[MUDr. Zuzana Nováková, Ph.D.](#) (lecturer)
[doc. Ing. Michal Pásek, Ph.D.](#) (lecturer)
[doc. MUDr. Milena Šimurdová, CSc.](#) (lecturer)

[Mirka Hanousková](#) (assistant)
[Peter Matejovič](#) (assistant)
[Ing. Jiří Moudr](#) (assistant)
[MUDr. Tibor Stračina](#) (assistant)
[MUDr. Ivan Szadvári](#) (assistant)
[Branislava Vyoralová](#) (assistant)

Supervisor

[prof. MUDr. Marie Nováková, Ph.D.](#)
[Department of Physiology - Theoretical Departments - Faculty of Medicine](#)
Contact Person: [MUDr. Zuzana Nováková, Ph.D.](#)
Supplier department: [Department of Physiology - Theoretical Departments - Faculty of Medicine](#)

Timetable

Mon 18. 9. to Fri 13. 10. Wed 11:10–12:00 [A11/234](#), Mon 23. 10. to Fri 22. 12. Tue 15:40–16:30 [A11/114](#), Mon 11:00–12:40 [A11/234](#); and Tue 17. 10. 15:40–16:30 [N02008](#)

Prerequisites

([aVLBI0222p Biology II - lect.](#) || [VSBI0222p Biology II-lect.](#)) && ([aVLBF011p Biophysics -lect.](#) || [VSBF011p Biophysics](#)) && ([aVLAN0222s Anatomy II - sem.](#) || [VSAN0232s Anatomy II s](#))

Knowledge of medical biology and biophysics in the extent of subjects taught at Faculty of Medicine, Masaryk University.

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

To teach students to understand and interpret various functions of human body.

Learning outcomes

At the end of the course, students will have sufficient theoretical background required for profession of physician. Student should be able to recall principles of human body functions in detail - from a cell level, across particular organs to a complex human organism. Students will be able to explain relationships among chemical, physical and biological factors of living processes. An essential aim is that students acquire critical scientific thinking, ability of independent text analysis and fundamental information selection.

Syllabus

- Introduction to study. Structural and functional organization of the living systems. Internal environment (homeostasis). Physiology of cell membranes. Excitable tissues. Introduction to neuroscience - the regulatory role of nervous system (NS). Cellular base of NS. Synapse and integration of information at the synaptic level. Hierarchy and evolution of NS. Somatosensitivity, viscerosensitivity,

proprioception and pain. Olfactory and gustatory systems. Auditory and vestibular systems. Vision. Motor system. Autonomic nervous system. Limbic system. Neocortex. The highest functions of nervous system. General principles of endocrine functions. Hypothalamus. Adenohypophysis. Thyroid gland. Regulation of calcium metabolism. Regulation of endocrine pancreas. Adrenal gland. Stress. Physiology of reproduction. Physiology of pregnancy. Physiology of parturition and lactation. Physiology of blood. Blood clotting. Blood types (groups). Plasma proteins. Immune system.

Literature

required literature

- BORON, Walter a Emile L. BOULPAEP. Medical Physiology. 3rd edition. Elsevier 2016. ISBN 9781455743773

recommended literature

- BARRETT, Kim E., Scott BOITANO, Susan M. BARMAN and Heddwen L. BROOKS. *Ganong's review of medical physiology*. Twenty-fifth edition. Chicago: McGraw-Hill, 2016. xi, 750. ISBN 9780071825108. [info](#)
- HALL, John E. *Guyton and Hall textbook of medical physiology*. 13th edition. Philadelphia, PA: Elsevier, 2016. xix, 1145. ISBN 9781455770052. [info](#)
- SILBERNAGL, Stefan and Agamemnon DESPOPOULOS. *Color atlas of physiology*. 6th ed., completely rev. and. New York: Thieme, 2009. xiii, 441. ISBN 9783135450063. [info](#)

Teaching methods

Lessons are led in the form of lectures.

Assessment methods

Students pass to continuing education in next semester without any duty of knowledge checking in this semester.

Language of instruction

English

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

Teacher's information

<http://www.med.muni.cz/fyziol>

A list of all lecture topics is placed on notice board of Department of Physiology and in IS MUNI.

The course is also listed under the following terms [Autumn 2016](#), [Accreditation autumn](#).

aVLFY0321s Physiology I - seminar ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/1/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Mohamed Al-Kubati, CSc.](#) (seminar tutor)
[prof. PharmDr. Petr Babula, Ph.D.](#) (seminar tutor)
[doc. MUDr. Markéta Bébarová, Ph.D.](#) (seminar tutor)
[MUDr. Kamil Ďuriš, Ph.D.](#) (seminar tutor)
[MUDr. Jan Novák](#) (seminar tutor)
[prof. MUDr. Marie Nováková, Ph.D.](#) (seminar tutor)
[MUDr. Zuzana Nováková, Ph.D.](#) (seminar tutor)
[doc. Ing. Michal Pásek, Ph.D.](#) (seminar tutor)
[MUDr. Tibor Stračina](#) (seminar tutor)
[Mirka Hanousková](#) (assistant)
[Peter Matejovič](#) (assistant)

Supervisor

[prof. MUDr. Marie Nováková, Ph.D.](#)
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Supplier department: [Department of Physiology - Theoretical Departments - Faculty of Medicine](#)

Timetable of Seminar Groups

aVLFY0321s/30: Mon 2. 10. to Fri 22. 12. each even Monday 13:30–15:10 [A20/207](#)
aVLFY0321s/31: each even Wednesday 13:30–15:10 [A20/207](#)
aVLFY0321s/32: Mon 2. 10. to Fri 22. 12. each even Monday 16:00–17:40 [A20/114](#)
aVLFY0321s/33: each even Tuesday 17:00–18:40 [A20/207](#)
aVLFY0321s/34: Mon 9. 10. to Fri 22. 12. each odd Wednesday 13:30–15:10 [A20/207](#)
aVLFY0321s/35: Mon 9. 10. to Fri 22. 12. each odd Monday 13:30–15:10 [A20/207](#)
aVLFY0321s/36: Mon 9. 10. to Fri 22. 12. each odd Monday 16:00–17:40 [A20/114](#)
aVLFY0321s/37: each odd Tuesday 17:00–18:40 [A20/207](#)
aVLFY0321s/38: Mon 9. 10. to Fri 22. 12. Wed 16:00–17:40 [A20/115](#)

Prerequisites

([aVLBI0222p Biology II - lect.](#) || [VSBI0222p Biology II-lect.](#)) && ([aVLBF011p Biophysics -lect.](#) || [VSBF011p Biophysics](#)) && ([aVLAN0222s Anatomy II - sem.](#) || [VSAN0232s Anatomy II s](#))

Knowledge of medical biology and biophysics in the extent of subjects taught at Faculty of Medicine, Masaryk University.

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

To teach students to understand and interpret various functions of human body.

Learning outcomes

After finishing the course, students will be able to understand the terms used in general and systemic physiology of man. Students will acquire knowledge necessary for analysis and subsequent interpretation of phenomena taking place on cell, tissue and organ levels as well as on the level of whole human organism.

Syllabus

- I. Intercellular contact. Resting membrane potential. Action potential. II. Nerve as an excitable tissue. Glial cells. Synapses. Neuromuscular junction. III. Autonomic nervous system (ANS) – overview. ANS - the roles and divisions. ANS regulation in organs - the principles of regulation. IV. General principles of endocrine physiology. Humoral regulation of mineral and water metabolism. Regulation of glycemia. Humoral regulation of energy production. Endocrine component of the stress response. V. General principals of endocrine physiology - related to reproduction. Cyclic changes in reproductive system. Pregnancy. Physiology of parturition. Lactation. VI. Circulation and hemostasis. Primary hemostasis and platelets. Hemocoagulation. Regulation of hemostasis. Clinical applications.

Literature

required literature

- BORON, Walter F. and Emile L. BOULPAEP. *Medical physiology*. 3rd edition. Philadelphia: Elsevier, 2016. xii, 1297. ISBN 9781455743773. [info](#)

recommended literature

- HALL, John E. and Arthur C. GUYTON. *Guyton and Hall textbook of medical physiology*. 12th ed. Philadelphia, Pa.: Saunders/Elsevier, 2011. xix, 1091. ISBN 9781416045748. [info](#)
- BARRETT, Kim E. *Ganong's review of medical physiology*. 23rd ed. Maidenhead: McGraw-Hill, 2010. ix, 714. ISBN 9780071270663. [info](#)
- SILBERNAGL, Stefan and Agamemnon DESPOPOULOS. *Color atlas of physiology*. 6th ed., completely rev. and. New York: Thieme, 2009. xiii, 441. ISBN 9783135450063. [info](#)

Teaching methods

Tuition is done in the form of seminar. Students must read the literature of particular area of physiology in advance and they intensify their knowledge in discussion with the teacher.

Assessment methods

The course-unit credit is conditioned by full attendance and 60% control of preparedness in the seminars (control test at the beginning of seminar - 6 and more points).

Language of instruction

English

Further comments (probably available only in Czech)

Study Materials

Information on completion of the course: Absolvování seminářů je podmínkou k udělení zápočtu.

The course is taught annually.

Listed among pre-requisites of other courses

- [aVLBC0422c Biochemistry II - practice](#)
[aVLBI0222p](#) && [aVLBF011p](#) && [aVLBC0321s](#) && [aVLBC0321c](#) && [aVLFY0321c](#) && [aVLFY0321s](#) (Do I meet enrolment requirements?)
- [aVLBC0422p Biochemistry II - lecture](#)
[aVLBI0222p](#) && [aVLBF011p](#) && [aVLBC0321s](#) && [aVLBC0321c](#) && [aVLFY0321c](#) && [aVLFY0321s](#) (Do I meet enrolment requirements?)
- [aVLBC0422s Biochemistry II - seminar](#)
[aVLBI0222p](#) && [aVLBF011p](#) && [aVLBC0321s](#) && [aVLBC0321c](#) && [aVLFY0321c](#) && [aVLFY0321s](#) (Do I meet enrolment requirements?)
- [aVLFY0422c Physiology II - practice](#)
([aVLFY0321c](#) || [VLFY0321c](#)) && ([aVLFY0321s](#) || [VLFY0321s](#)) (Do I meet enrolment requirements?)
- [aVLFY0422p Physiology II - lecture](#)
([aVLFY0321c](#) || [VLFY0321c](#)) && ([aVLFY0321s](#) || [VLFY0321s](#)) (Do I meet enrolment requirements?)
- [aVLFY0422s Physiology II - seminar](#)
([aVLFY0321c](#) || [VLFY0321c](#)) && ([aVLFY0321s](#) || [VLFY0321s](#)) (Do I meet enrolment requirements?)
- [aVLLP0431c Clinical Introduction I - practice](#)
[aVLFY0321c](#) && [aVLFY0321s](#) && [aVLBC0321s](#) && [aVLBC0321c](#) && [aVLAN0222c](#) && [aVLAN0222s](#) (Do I meet enrolment requirements?)
- [aVLLP0431p Clinical Introduction I - lecture](#)
[aVLFY0321c](#) && [aVLFY0321s](#) && [aVLBC0321s](#) && [aVLBC0321c](#) && [aVLAN0222c](#) && [aVLAN0222s](#) (Do I meet enrolment requirements?)
- [aVLTZ0451 Theoretical Bases of Clinical Medicine I - seminar](#)
[aVLFY0321c](#) && [aVLFY0321s](#) && [aVLBC0321s](#) && [aVLBC0321c](#) && [aVLBI0222p](#) && [aVLAN0222c](#) && [aVLAN0222s](#) (Do I meet enrolment requirements?)

Teacher's information

<http://www.med.muni.cz/fyziol>

A list of all seminary topics is placed on notice board of Department of Physiology and in IS MUNI. Consultations are possible after personal arrangement with the teacher.

The course is also listed under the following terms [Autumn 2016](#), [Accreditation autumn](#).

aVLHE0221c Histology and Embryology I - practice ✳

Faculty of Medicine

Spring 2018

Extent and Intensity

0/3/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[MVDr. Martin Anger, CSc.](#) (seminar tutor)
[MUDr. Ivana Baltasová](#) (seminar tutor)
[prof. MUDr. RNDr. Svatopluk Čech, DrSc.](#) (seminar tutor)
[MUDr. Jana Dumková](#) (seminar tutor)
[doc. MVDr. Aleš Hampl, CSc.](#) (seminar tutor)
[Mgr. Michaela Kloučková](#) (seminar tutor)
[Mgr. Hana Kotasová, Ph.D.](#) (seminar tutor)
[doc. RNDr. Irena Krontorád Koutná, Ph.D.](#) (seminar tutor)
[MUDr. Irena Lauschová, Ph.D.](#) (seminar tutor)
[MVDr. Anna Mac Gillavry Danylevska, Ph.D.](#) (seminar tutor)
[MUDr. Eva Mecová](#) (seminar tutor)
[doc. MUDr. Miroslava Sedláčková, CSc.](#) (seminar tutor)
[MUDr. Veronika Sedláková](#) (seminar tutor)
[RNDr. Petr Vaňhara, Ph.D.](#) (seminar tutor)

Supervisor

[doc. MVDr. Aleš Hampl, CSc.](#)
[Department of Histology and Embryology - Theoretical Departments - Faculty of Medicine](#)
Contact Person: [doc. MUDr. Miroslava Sedláčková, CSc.](#)
Supplier department: [Department of Histology and Embryology - Theoretical Departments - Faculty of Medicine](#)

Prerequisites (in Czech)

[aVLAN0121s Anatomy I -sem.](#) && [aVLBI0121c Biology I - pract.](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

Course objectives

At the end of the course students should be able to:

1. Describe tissue processing for light and electron microscopy.
2. Understand and explain the structure of a cell, basic structural principles and function of connective tissues, features of epithelial tissue, structure of different types of muscle tissue, structure and function of nervous tissue.
3. Identify tissue types in histologic slides.
4. Characterize microscopic structure of some organs of human body and explain correlations of tissues within organs.
5. Describe gamete development, explain principle of meiosis and regulation of gametogenesis.

6. Define the early embryonic development as well as development of fetal membranes, placenta and umbilical cord.
7. Characterize stages of embryonic development.

Learning outcomes

At the end of the course students should be able to:

1. Describe tissue processing for light and electron microscopy.
2. Understand and explain the structure of a cell, basic structural principles and function of connective tissues, features of epithelial tissue, structure of different types of muscle tissue, structure and function of nervous tissue.
3. Identify tissue types in histologic slides.
4. Characterize microscopic structure of some organs of human body and explain correlations of tissues within organs.
5. Describe gamete development, explain principle of meiosis and regulation of gametogenesis.
6. Define the early embryonic development as well as development of fetal membranes, placenta and umbilical cord.
7. Characterize stages of embryonic development.

Syllabus

- 1. Introduction, organization of practicals, teaching aids. **Overview of histological methods.** Tissue processing for light and electron microscopy - explanation and film. Basic histochemistry and immunocytochemistry.
- 2. **Cytology:** Ultrastructure of the cell nucleus during interphase. Ultrastructure of cell organelles I (mitochondria, the Golgi apparatus, the endoplasmic reticulum, ribosomes, lysosomes).
- 3. Ultrastructure of cell organelles II (peroxisomes, and the centriol). Cell inclusions. The arrangement of cell surfaces: apical, lateral, and basal ones. Intercellular junctions: adhering, occluding, and communicating ones.
- 4. General embryology I. Aids: Set of embryological schemes and pictures (I).
- 5. General embryology II. Aids: Set of embryological schemes and pictures (II).
- 6. **General histology:** Use of the light microscope, common faults in microscopy. Results of basic staining methods in histology: Hematoxylin-eosine /HE/ (hepar), hematoxylin-eosine-saffron /HES/ (esophagus), AZAN (prostate), impregnation (cerebellum). Connective tissue proper - classification and examples. Slides: Funiculus umbilicalis, Esophagus, Posterior segment of the eye, Lien, Aorta.
- 7. Supporting tissues: cartilage and bone. Histogenesis of the bone tissue (ossification). Slides: Trachea, Auricula, Elastic cartilage, Lamellar bone, Chondrogenic ossification.
- 8. Epithelial tissue: epithelial membranes (covering epithelia) and glandular epithelium. Slides: Ren, Vesica fellea, Trachea, Esophagus, Ureter, Palpebra, Skin from the finger tip.
- 9. Glandular epithelium. Slides: Intestinum tenue, Glandula parotis, Glandula submandibularis.
- 10. Nerve tissue. Slides: Cortex cerebri, Cerebellum, Medulla spinalis, Ganglion spinale, Peripheral nerve, Motor end plate.
- 11. Muscle tissue. Slides: Apex linguae, Cardiac muscle tissue Intestinum tenue.

- 12. Blood cells: Preparation of blood smears and their staining. Cytology of formed elements of blood. Differential white cell count (dWCC) - average values, abnormalities and terminology of dWCC. Slide: A smear of peripheral blood stained by Pappenheim's method. Credits.

Literature

recommended literature

- [VAŇHARA, Petr](#), [Miroslava SEDLÁČKOVÁ](#), [Irena LAUSCHOVÁ](#), [Svatopluk ČECH](#) and [Aleš HAMPL](#). *Guide to General Histology and Microscopic Anatomy*. 1. vyd. Brno: Masarykova univerzita, 2019. ISBN 978-80-210-8453-7. [info](#)
- MESCHER, Anthony L. *Junqueira's basic histology : text and atlas*. 13th ed. New York: McGraw-Hill Medical, 2013. xi, 544. ISBN 9781259072321. [info](#)

not specified

- *Di Fiore's atlas of histology with functional correlations*. Edited by Victor P. Eroschenko. 9th ed. Philadelphia: Lippincott Williams-Wilkins, 2000. xv, 363. ISBN 078172676X. [info](#)

Teaching methods

Content of this course includes study of slides and electron micrographs in microscopic hall as well as class discussion on the base of materials in the text book. Electronic textbooks are presented also in: <http://www.med.muni.cz/histol/atlas.htm>

Assessment methods

Testing of knowledge: Student must prove sufficient level of knowledge by written test examination. Each student completes 4 partial tests during semester. Tests are evaluated by point for correct answer. More than half number of correct answers (points) is evaluated as "Passed". All of these tests must be successful. In case of failure, only 1 resit is possible. There is condition 4 from 4 (ie. 4 P / 4 regular tests) or 4 from 5 (ie. 3 P / 4 regular tests + 1 P / 1 resit). If student does not fulfill this condition, credit test follows in the relevant exam period. This test covers all topics studied during semester. In case of failure in credit test, credit will not be given and student **must enroll the course again**.

Conditions for obtaining credit: 1. Attendance at all practical exercises (100% participation, all absences must be regularly excused (in IS) and substituted).

2. Successful completion of all tests.

3. Submission of all protocols (correctly completed forms of protocols signed by teacher).

Language of instruction

English

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

Listed among pre-requisites of other courses

- [aVLHE0322c Histology and Embryology II - practice](#) ([aVLHE0221c](#) || [VSHE0221c](#)) && ([aVLBI0222c](#) || [VSBI0222c](#)) ([Do I meet enrolment requirements?](#))

- [aVLHE0322p Histology and Embryology II - lecture](#) ([aVLHE0221c](#) || [VSHE0221c](#)) && ([aVLBI0222c](#) || [VSBI0222c](#)) ([Do I meet enrolment requirements?](#))

Teacher's information

Veškeré informace o výuce jsou pravidelně zveřejňovány na vývěsce před mikroskopickým sálem a webových stránkách Ústavu <http://www.med.muni.cz/histology/education>.

Information about HE teaching is available on the Department poster in front of the Microscopic Hall and on the web site <http://www.med.muni.cz/histology/education>.

The course is also listed under the following terms [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

aVLHE0221p Histology and Embryology I - lecture ✱

Faculty of Medicine

Spring 2018

Extent and Intensity

2/0/0. 0 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. RNDr. Svatopluk Čech, DrSc.](#) (lecturer)

[doc. MUDr. Aleš Hampl, CSc.](#) (lecturer)

[MUDr. Irena Lauschová, Ph.D.](#) (lecturer)

[doc. MUDr. Miroslava Sedláčková, CSc.](#) (lecturer)

[RNDr. Petr Vaňhara, Ph.D.](#) (lecturer)

[MUDr. Ivana Baltasová](#) (assistant)

[MUDr. Jana Dumková](#) (assistant)

[Mgr. Hana Kotasová, Ph.D.](#) (assistant)

[MUDr. Eva Mecová](#) (assistant)

Supervisor

[doc. MUDr. Aleš Hampl, CSc.](#)

[Department of Histology and Embryology - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [doc. MUDr. Miroslava Sedláčková, CSc.](#)

Supplier department: [Department of Histology and Embryology - Theoretical Departments - Faculty of Medicine](#)

Prerequisites (in Czech)

[aVLAN0121s Anatomy I -sem.](#) && [aVLBI0121c Biology I - pract.](#)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

Course objectives

At the end of the course students should be able to:

1. Understand and explain the structure of a cell, basic structural principles and function of connective tissues, features of epithelial tissue, structure of different types of muscle tissue, structure and function of nervous tissue.
2. Identify tissue types in histologic slides.
3. Characterize microscopic structure of individual organs of human body and explain correlations of tissues within organs.
4. Describe gamete development, explain principle of meiosis and regulation of gametogenesis.
5. Define the early embryonic development as well as development of fetal membranes, placenta and umbilical cord.
6. Characterize stages of embryonic development, describe the development of individual organ systems of human body.
7. Explain the mechanism of the origin of some developmental anomalies.

Learning outcomes

At the end of the course students should be able to:

1. Describe tissue processing for light and electron microscopy.
2. Understand and explain the structure of a cell, basic structural principles and function of connective tissues, features of epithelial tissue, structure of different types of muscle tissue, structure and function of nervous tissue.
3. Identify tissue types in histologic slides.
4. Characterize microscopic structure of some organs of human body and explain correlations of tissues within organs.
5. Describe gamete development, explain principle of meiosis and regulation of gametogenesis.
6. Define the early embryonic development as well as development of fetal membranes, placenta and umbilical cord.
7. Characterize stages of embryonic development.

Syllabus

- 1. Introduction. The object and significance of histology. Relevance of histology to other biomedical disciplines. History, current state, and future of histology. Methodologies to study a structure of cells and tissues. **Cytology:** The cell - definition, characteristics, compartmentalization. Cell nucleus - ultrastructure and function, chromosomes, nucleolus. Introduction
- 2. Organelles - structure, localization, and function. Cell inclusions and pigments. Cytoskeleton - microfilaments, intermediate filaments and microtubules. Cell surface structures and intercellular bonds. Cell division cycle. Cell differentiation, cell migration, organization of cells into tissues and organs - general aspects.
- 3. **General embryology.** Definition. The object and significance of embryology. Overview of the early human development: The phases of the human ontogeny. Human gametes - their structure, physiology and origin (gametogenesis).

Differences between spermatogenesis and oogenesis. Transport of gametes. Sperm capacitation. Fertilization and cleavage. Activation of the embryonal genome. Nuclear transfer. Morula and blastocyst. Embryonic stem cells. Outline of the implantation. Abnormal sites of implantation (extrauterine pregnancies).

- 4. The development of the germ disc: origin of the intraembryonic mesoderm and notogenesis (development of the chorda dorsalis). Somites and their derivatives. Outline of the development of fetal membranes: amniotic sac, chorion, and placenta. Function of the placenta. The umbilical cord. Anomalies of the placenta and umbilical cord. Development of external shape of the embryo and fetus. The rule of Hasse. Uterine growth during pregnancy. Parturition. Marks of the mature and full-term fetus. Position, posture and presentation of the fetus. Multiple pregnancy: mono- and dizygotic twins; arrangement of fetal membranes in twins.
- 5. **General histology.** Tissues - definition, their origin, and classification. Connective and supporting tissue - general characteristics, their components and classification. The connective tissue proper - types, main distribution, and function.
- 6. Supporting tissues - cartilage and bone - types, main distribution, and function. Histogenesis and regeneration of connective tissues.
- 7. Epithelial tissue - definition, classification, and histogenesis. Epithelial membranes and glandular epithelium - an overview. Characteristics of glandular cells. Absorptive, respiratory, and sensory epithelia.
- 8. Neural tissue - general characteristics and classification. Neurons – structure and function. Synapse. Neuroglial cells - types and function. Sheaths of nerve fibres. Conduction of nerve impulses. Histogenesis and regeneration of the neural tissue.
- 9. Muscle tissue - general characteristics and classification. Smooth muscle tissue. Skeletal muscle tissue. Ultrastructure of the myofibrils. Mechanism of the muscle contraction. Cardiac muscle tissue. Inervation and vascularization of the muscle. Muscle histogenesis and regeneration.
- 10. Blood cell morphology: Erythrocytes, leukocytes and thrombocytes. Differential white cell count. Prenatal and postnatal hematopoiesis. Erythropoiesis, granulopoiesis, thrombopoiesis.
- 11. **Microscopic anatomy and special embryology.** Cardiovascular system. Microscopic structure of the heart, excitomotoric system - its structural peculiarities. Blood vessels - arteries and veins - structural differences. Capillary bed. Lymph vessels and capillaries.
- 12. Development of the heart. Primitive blood circulation in the embryo. Fetal blood circulation.

Literature

recommended literature

- MESCHER, Anthony L. *Junqueira's basic histology : text and atlas*. 13th ed. New York: McGraw-Hill Medical, 2013. xi, 544. ISBN 9781259072321. [info](#)
- MOORE, Keith L., T. V. N. PERSAUD and Mark G. TORCHIA. *Before we are born : essentials of embryology and birth defects*. 9th edition. Philadelphia: Elsevier, 2016. xix, 361. ISBN 9780323313377. [info](#)

not specified

- LOWE, James S. and Peter G. ANDERSON. *Stevens and Lowe's Human Histology*. 4th. : Elsevier, 2015. ISBN 978-0-7234-3502-0. [info](#)
- OVALLE, William K., Patrick C. NAHIRNEY and Frank H. NETTER. *Netter's essential histology*. 2nd ed. Philadelphia, PA: Elsevier/Saunders, 2013. xv, 517. ISBN 9781455706310. [info](#)
- MOORE, Keith L., T. V. N. PERSAUD and Mark G. TORCHIA. *The developing human : clinically oriented embryology*. 9th ed. Philadelphia, PA: Saunders/Elsevier, 2013. xix, 540. ISBN 9781437720020. [info](#)
- SADLER, T. W. *Langman's medical embryology*. 12th ed. Philadelphia: Wolters Kluwer Health/Lippincott Williams & Wilkins, 2012. xiii, 384. ISBN 9781451144611. [info](#)

Teaching methods

lecture

Assessment methods

Students will pass examination after finishing Histology and Embryology II - lecture. All informations about required knowledge and the course of examination are on web site:
<http://www.med.muni.cz/histology/education>

Language of instruction

English

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

Information on course enrolment limitations: Mimo studenty LF jen se souhlasem garanta oboru.

Teacher's information

Information about HE teaching is available on the Department board in front of the Microscopic Hall and on the web site <http://www.med.muni.cz/histology/education>

The course is also listed under the following terms [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

aVLHE0322c Histology and Embryology II - practice ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/3/0. 5 credit(s). Type of Completion: z (credit).

Teacher(s)

[MVDr. Martin Anger, CSc.](#) (seminar tutor)

[MUDr. Ivana Baltasová](#) (seminar tutor)

[prof. MUDr. RNDr. Svatopluk Čech, DrSc.](#) (seminar tutor)

[MUDr. Jana Dumková](#) (seminar tutor)

[doc. MVDr. Aleš Hampl, CSc.](#) (seminar tutor)

[Mgr. Michaela Kloučková](#) (seminar tutor)
[Mgr. Hana Kotasová, Ph.D.](#) (seminar tutor)
[doc. RNDr. Irena Krontorád Koutná, Ph.D.](#) (seminar tutor)
[MUDr. Irena Lauschová, Ph.D.](#) (seminar tutor)
[MVDr. Anna Mac Gillavry Danylevska, Ph.D.](#) (seminar tutor)
[MUDr. Eva Mecová](#) (seminar tutor)
[doc. MUDr. Miroslava Sedláčková, CSc.](#) (seminar tutor)
[MUDr. Veronika Sedláková](#) (seminar tutor)
[RNDr. Petr Vaňhara, Ph.D.](#) (seminar tutor)
[Manlio Vinciguerra, PhD.](#) (seminar tutor)
[Mgr. Zuzana Koledová, Ph.D.](#) (assistant)

Supervisor

[doc. MVDr. Aleš Hampl, CSc.](#)
[Department of Histology and Embryology - Theoretical Departments - Faculty of Medicine](#)
Contact Person: [doc. MUDr. Miroslava Sedláčková, CSc.](#)
Supplier department: [Department of Histology and Embryology - Theoretical Departments - Faculty of Medicine](#)

Timetable of Seminar Groups

aVLHE0322c/30: Fri 10:15–12:45 [N01026/26](#)
aVLHE0322c/31: Fri 10:15–12:45 [N01026/26](#)
aVLHE0322c/32: Tue 10:30–13:00 [N01026/26](#)
aVLHE0322c/33: Fri 10:15–12:45 [N01026/26](#)
aVLHE0322c/34: Tue 7:30–10:00 [N01026/26](#)
aVLHE0322c/35: Tue 10:30–13:00 [N01026/26](#)
aVLHE0322c/36: Tue 7:30–10:00 [N01026/26](#)
aVLHE0322c/37: Tue 10:30–13:00 [N01026/26](#)
aVLHE0322c/38: Tue 7:30–10:00 [N01026/26](#)

Prerequisites (in Czech)

([aVLHE0221c Histology and Embryology I-pr](#) || [VSHE0221c Histology and Embryology I-p](#)) && ([aVLBI0222c Biology II - pract.](#) || [VSBI0222c Biology II-pract.](#))
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Course objectives

At the end of the course students should be able to:

1. Understand and explain the structure of a cell, basic structural principles and function of connective tissues, features of epithelial tissue, structure of different types of muscle tissue, structure and function of nervous tissue.
2. Identify tissue types in histologic slides.

3. Characterize microscopic structure of individual organs of human body and explain correlations of tissues within organs.
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7. Explain the mechanism of the origin of some developmental anomalies.

Learning outcomes

Course objectives

At the end of the course students should be able to:

1. Understand and explain the structure of a cell, basic structural principles and function of connective tissues, features of epithelial tissue, structure of different types of muscle tissue, structure and function of nervous tissue.
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4. Describe gamete development, explain principle of meiosis and regulation of gametogenesis.
5. Define the early embryonic development as well as development of fetal membranes, placenta and umbilical cord.
6. Characterize stages of embryonic development, describe the development of individual organ systems of human body.
7. Explain the mechanism of the origin of some developmental anomalies.

Syllabus

- 1. Microscopic structure of the digestive system I. Slides: labium oris, apex linguae, papilla vallata, palatum molle, glandula parotis, gl. submandibularis, gl. sublingualis.
- 2. Microscopic structure of the digestive system II. Slides: tooth, oesophagus, cardia, fundus ventriculi, pylorus, duodenum, intestinum tenue.
- 3. Microscopic structure of the digestive system III. Slides: intestinum crassum, appendix, anus, hepar, vesica fellea, pancreas.
- 4. Microscopic structure of the urinary system. Slides: ren, calyx renalis, ureter, vesica urinialis, urethra feminina, pars cavernosa urethrae masculinae.
- 5. Microscopic structure of the male reproductive system. Slides: testis, epididymis, funiculus spermaticus, gl. vesiculosa, prostata, penis.
- 6. Microscopic structure of the female reproductive system. Slides: ovarium, corpus luteum, tuba uterina - ampulla, tuba uterina - isthmus, uterus - proliferative and secretory phases.
- 7. Microscopic structure of the female reproductive system. Slides: vagina, labium minus, placenta, funiculus umbilicalis.
- 8. Microscopic structure of endocrine glands. Slides: hypophysis cerebri, epiphysis, gl. thyreoidea, gl. parathyreoidea, gl. suprarenalis, islets of Langerhans.

- 9. Microscopic structure of the central and peripheral nervous system. Slides: cortex cerebri, cerebellum, medulla spinalis, ganglion spinale, ganglion vegetativum, peripheral nerves.
- 10. Microscopic structure of the organ of vision. Slides: anterior eye segment, posterior eye segment, fasciculus opticus, palpebra, gl. lacrimalis.
- 11. Microscopic structure of the ear (vestibulocochlear organ). Slides: cochlea, auricula.
- 12. Microscopic structure of the skin and skin derivatives. Slides: skin from the tips of the finger, skin from the axilla, skin with hairs, nail, mamma non lactans, mamma lactans.

Literature

recommended literature

- [ČECH, Svatopluk](#), [Drahomír HORKÝ](#), [Irena LAUSCHOVÁ](#), [Miroslava SEDLÁČKOVÁ](#) and [Jitka ŠŤASTNÁ](#). *Histologická praktika a metody vyšetřování tkání a orgánů (Histological practicals and methods of investigation of tissues and organs)*. 1. dotisk 1. vydání. Brno: Vydavatelství MU Brno-Kraví hora, 2002. 162 pp. ISBN 80-210-1774-0. [info](#)

Teaching methods

Content of this course includes study of slides and electron micrographs in microscopic hall as well as class discussion on the base of materials in the text book.

Assessment methods

Testing of knowledge: Student must prove sufficient level of knowledge by written test examination. Each student completes 4 partial tests during semester. Tests are evaluated by point for correct answer. More than half number of correct answers (points) is evaluated as "YES". All of these tests must be successful. In case of failure, only 1 resit is possible. There is condition 4 from 4 (ie. 4 YES / 4 regular tests) or 4 from 5 (ie. 3 YES / 4 regular tests + 1 YES / 1 resit). If student does not fulfill this condition, credit test follows in the relevant exam period. This test covers all topics studied during semester. In case of failure in credit test, credit will not be given and student **must enroll the course again**.

Conditions for obtaining credit: 1. Attendance at all practical exercises (100% participation, all absences must be regularly excused (in IS) and substituted).

2. Successful completion of all tests.

3. Submission of all protocols (correctly completed forms of protocols signed by teacher).

Language of instruction

English

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

General note: Mimo studenty LF jen po dohodě s vedoucím ústavu.

Listed among pre-requisites of other courses

- [aVLET041 Selected Lectures from Embryology and Teratology](#)
[aVLHE0322c](#) || [aZLHE0322c](#) ([Do I meet enrolment requirements?](#))

- [aVLLP0532c Clinical Introduction II - practice](#)
[aVLLP0431c](#) && ([aVLAN0222p](#) || [VSAN0333p](#)) && ([aVLHE0322c](#) || [VSHE0322c](#))&& ([aVLBC0422c](#) || [VSBC041c](#))&& [aVLFY0422c](#) ([Do I meet enrolment requirements?](#))

Teacher's information

<http://www.med.muni.cz/histology/education>

Veškeré informace o výuce včetně zkušebních termínů jsou zveřejněny na vývěsce Ústavu histologie a embryologie, Kamenice 3 před mikroskopickým sálem a rovněž na www stránkách ústavu.

Information about HE teaching is available on the Department poster in front of the Microscopic Hall and on the web site <http://www.med.muni.cz/histology/education>

The course is also listed under the following terms [Autumn 2016](#), [Accreditation autumn](#).

aVLHE0322p Histology and Embryology II - lecture ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

2/0/0. 7 credit(s). Recommended Type of Completion: zk (examination). Alternate Types of Completion: RZk (examination).

Teacher(s)

[prof. MUDr. RNDr. Svatopluk Čech, DrSc.](#) (lecturer)

[doc. MVDr. Aleš Hampl, CSc.](#) (lecturer)

[MUDr. Irena Lauschová, Ph.D.](#) (lecturer)

[doc. MUDr. Miroslava Sedláčková, CSc.](#) (lecturer)

[RNDr. Petr Vaňhara, Ph.D.](#) (lecturer)

[MUDr. Ivana Baltasová](#) (assistant)

[MUDr. Jana Dumková](#) (assistant)

[Mgr. Hana Kotasová, Ph.D.](#) (assistant)

[MUDr. Eva Mecová](#) (assistant)

[MUDr. Veronika Sedláková](#) (assistant)

Supervisor

[doc. MVDr. Aleš Hampl, CSc.](#)

[Department of Histology and Embryology - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [doc. MUDr. Miroslava Sedláčková, CSc.](#)

Supplier department: [Department of Histology and Embryology - Theoretical Departments - Faculty of Medicine](#)

Timetable

Mon 9:00–10:40 [A11/234](#)

Prerequisites (in Czech)

([aVLHE0221c Histology and Embryology I -pr](#) || [VSHE0221c Histology and Embryology I -p](#)) && ([aVLBI0222c Biology II - pract.](#) || [VSBI0222c Biology II-pract.](#))
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Course objectives.

At the end of the course students should be able to:

1. Understand and explain the structure of a cell, basic structural principles and function of connective tissues, features of epithelial tissue, structure of different types of muscle tissue, structure and function of nervous tissue.
2. Identify tissue types in histologic slides.
3. Characterize microscopic structure of individual organs of human body and explain correlations of tissues within organs.
4. Describe gamete development, explain principle of meiosis and regulation of gametogenesis.
5. Define the early embryonic development as well as development of fetal membranes, placenta and umbilical cord.
6. Characterize stages of embryonic development, describe the development of individual organ systems of human body.
7. Explain the mechanism of the origin of some developmental anomalies.

Learning outcomes

Course objectives.

At the end of the course students should be able to:

1. Understand and explain the structure of a cell, basic structural principles and function of connective tissues, features of epithelial tissue, structure of different types of muscle tissue, structure and function of nervous tissue.
2. Identify tissue types in histologic slides.
3. Characterize microscopic structure of individual organs of human body and explain correlations of tissues within organs.
4. Describe gamete development, explain principle of meiosis and regulation of gametogenesis.
5. Define the early embryonic development as well as development of fetal membranes, placenta and umbilical cord.
6. Characterize stages of embryonic development, describe the development of individual organ systems of human body.
7. Explain the mechanism of the origin of some developmental anomalies.

Syllabus

- 1. Microscopic structure of the lymphatic system.
- 2. Microscopic structure and development of the respiratory system.

- 3. Microscopic structure of the oesophagus, stomach, and small and large intestine. Histophysiology of the intestine and blood circulation.
- 4. Microscopic structure of the liver, gallbladder, gall ducts, and pancreas. Overview of development of the gut.
- 5. Microscopic structure and development of the urinary system: Nephron - its structure, histotopography, and function. Blood circulation of kidneys. Urinary passages. Stages in development of kidneys (pro-, meso-, and metanephros).
- 6. Microscopic structure of the male reproductive system: Testis, excretory genital ducts, accessory genital glands, and penis. Spermato- and spermiogenesis. Composition of the sperm (ejaculate).
- 7. Microscopic structure of the female reproductive system: Ovary, oviduct, uterus, vagina, and external genitalia. Ovarian cycle, ovulation, and atresia. Oogenesis. Menstrual cycle. Relations between the menstrual and ovarian cycle.
- 8. Development of internal and external sexual organs. General characteristics of the indifferent stage.
- 9. Microscopic structure, histophysiology and development of endocrine glands: Hypophysis, epiphysis, thyroid gland, parathyroid glands, adrenal gland, islets of Langerhans. Principles of humoral regulation.
- 10. Microscopic structure and development of the central and peripheral nervous system. Structure of gray matter in the CNS: Iso- and allocortex, cerebellar cortex, spinal cord. Meninges. Ganglia and peripheral nerves. Overview of development of the brain and spinal cord including histogenesis of the neural tube.
- 11. Microscopic structure of the organ of vision: The eye and its refractive (dioptric) media. Accessory structures of the eye. Microscopic structure of the ear (vestibulocochlear organ). Major structural differences between the statokinetic and acoustic compartments. Overview of development of the eye and vestibulocochlear organ.
- 12. Microscopic structure and development of the skin and skin derivatives. Mammary gland.
- 13. Development of body cavities and mesenteries. Development of the diaphragm. Development of the spleen.
- 14. Development of the skull and vertebrate column. Congenital malformations of genital organs. Congenital malformations of the CNS.
- Consultations.

Literature

recommended literature

- ČECH, Svatopluk and Drahomír HORKÝ. *Přehled obecné histologie*. 1. vyd. Brno: Masarykova univerzita, 2005. 140 s. ISBN 8021038543. [info](#)
- HORKÝ, Drahomír and Svatopluk ČECH. *Mikroskopická anatomie*. 2. nezm. vyd. Brno: Masarykova univerzita, 2005. 353 s. ISBN 802103775X. [info](#)
- ČECH, Svatopluk, Drahomír HORKÝ and Miroslava SEDLÁČKOVÁ. *Přehled embryologie člověka*. 1. vyd. Brno: Masarykova univerzita, 2011. 187 pp. ISBN 978-80-210-5414-1. [info](#)
- MESCHER, Anthony L. *Junqueira's basic histology : text and atlas*. 13th ed. New York: McGraw-Hill Medical, 2013. xi, 544. ISBN 9781259072321. [info](#)

- MOORE, Keith L., T. V. N. PERSAUD and Mark G. TORCHIA. *The developing human : clinically oriented embryology*. 9th ed. Philadelphia, PA: Saunders/Elsevier, 2013. xix, 540. ISBN 9781437720020. [info](#)

not specified

- VACEK, Zdeněk. *Embryologie : učebnice pro studenty lékařství a oborů všeobecná sestra a porodní aistentka*. 1. vyd. Praha: Grada, 2006. 255 s. ISBN 9788024712673. [info](#)
- SADLER, T. W. *Langmanova lékařská embryologie*. 1. české vyd. Praha: Grada, 2011. xviii, 414. ISBN 9788024726403. [info](#)
- KAPELLEK, Karol and Viera POSPÍŠILOVÁ. *Embryológia človeka: učebnica pre lekárske fakulty*. Martin: Osveta, 2001. 370 pp. ISBN 80-8063-072-0. [info](#)
- LÜLLMANN-RAUCH, Renate. *Histologie*. Translated by Radomír Čihák. 1. české vyd. Praha: Grada, 2012. xx, 556. ISBN 9788024737294. [info](#)
- OVALLE, William K., Patrick C. NAHIRNEY and Frank H. NETTER. *Netter's essential histology*. 2nd ed. Philadelphia, PA: Elsevier/Saunders, 2013. xv, 517. ISBN 9781455706310. [info](#)
- YOUNG, Barbara. *Wheater's functional histology : a text and colour atlas*. 5th ed. [Oxford]: Churchill Livingstone, 2006. x, 437. ISBN 044306850X. [info](#)
- SADLER, T. W. and Jan LANGMAN. *Langman's medical embryology*. Illustrated by Jill Leland. 11th ed. Baltimore, Md.: Lippincott William & Wilkins, 2010. ix, 385. ISBN 9781605476568. [info](#)
- LOWE, James S. and Peter G. ANDERSON. *Stevens and Lowe's Human Histology*. 4th. : Elsevier, 2015. ISBN 978-0-7234-3502-0. [info](#)

Teaching methods

lectures

Assessment methods

Final examination is composed of the practical part (slide test) and the theoretical part that includes written test and oral exam. In practical part, student should identify minimally 7 out of 10 slides. Oral exam includes 2 questions (1 histology, 1 embryology). Rules and conditions applicable for practical training and for examining in Histology and Embryology can be found on the website of Department of Histology and Embryology (<http://www.med.muni.cz/histology/education>).

A necessary condition for admission to exam is to obtain credit from the Histology and Embryology II-practice.

Language of instruction

English

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

Listed among pre-requisites of other courses

- [aVLLP0633c Clinical Introduction III - practice](#)
[aVLLP0532c](#) && ([aVLAN0222p](#) || [VSAN0333p](#)) && [aVLHE0322p](#) &&
[aVLBC0422p](#) && [aVLFY0422p](#) ([Do I meet enrolment requirements?](#))

- [aVLPA0521c Pathology I - practice](#)
([aVLAN0222p](#) || [VSAN0333p](#)) && ([aVLHE0322p](#) || [VSHE0322p](#)) &&
([aVLLM0421c](#) || [VLLM0421c](#)) ([Do I meet enrolment requirements?](#))
- [aVLPA0521p Pathology I - lecture](#)
([aVLAN0222p](#) || [VSAN0333p](#)) && ([aVLHE0322p](#) || [VSHE0322p](#)) &&
([aVLLM0421c](#) || [VLLM0421c](#)) ([Do I meet enrolment requirements?](#))

Teacher's information

<http://www.med.muni.cz/histology/education>

Veškeré informace o výuce včetně zkušebních termínů jsou zveřejněny na vývěsce Ústavu histologie a embryologie, Kamenice 3 před mikroskopickým sálem a rovněž na www. stránkách ústavu. Studenti mohou pro přípravu ke zkoušce využívat elektronické atlasy na adrese <http://www.med.muni.cz/histology/atlasy.htm>

Zkoušku může student skládat až po získání zápočtu z~předmětu Histologie a embryologie II - cvičení.

Information about HE teaching is available on the Department poster in front of the Microscopic Hall and on the web site <http://www.med.muni.cz/histology/education>.

A necessary condition for admission to exam is to obtain credit from the Histology and Embryology II-practice.

The course is also listed under the following terms [Autumn 2016](#), [Accreditation autumn](#).

aVLHZ021p Medical Humanities - lecture *

Faculty of Medicine

Spring 2018

Extent and Intensity

2/0/0. 3 credit(s). Type of Completion: k (colloquium).

Teacher(s)

[doc. Mgr. Josef Kuře, Dr. phil.](#) (lecturer)

[Mgr. Michaela Vaňharová, Ph.D.](#) (assistant)

Supervisor

[doc. Mgr. Josef Kuře, Dr. phil.](#)

[Department of Medical Ethics - Theoretical Departments - Faculty of Medicine](#)

Supplier department: [Department of Medical Ethics - Theoretical Departments - Faculty of Medicine](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

there are 23 fields of study the course is directly associated with, [display](#)

Course objectives

The course introduces to medical humanities, medical anthropology and foundations of medical ethics.

Learning outcomes

after completing the course, the student will acquire the basics of medical humanities

Syllabus

- 1. Homo sapiens patiens: antropological foundations of medicine 2. Illness and ill person: hermeneutics of health and disease 3. Soma and psyche (Psychosomatics): body and mind in medicine 4. Cure and healing: the nature of medical therapeutical procedure 5. Medical ontology: medicine - art and science, Evidence Based Medicine 6. Medical epistemology: medical knowledge and thinking 7. Goals of medicine 8. Between power and sickness (authority, authenticity, and power in medicine) 9. Medicine and existential experience 10. Freedom, action, moral action 11. Moral norm and its justification 12. Consciousness and conscience 13. Moral normativity in medicine 14. Relationships and their changes in medicine 15. Biomedicine - challenge and subject of reflection

Literature

- *A reader in medical anthropology : theoretical trajectories, emergent realities.* Edited by Byron Good. Malden, Mass.: Wiley-Blackwell, 2010. xiv, 559. ISBN 9781405183147. [info](#)
- *Methods in medical ethics.* Edited by Jeremy Sugarman - Daniel P. Sulmasy. 2nd ed. Washington, D.C.: Georgetown University Press, 2010. xiii, 353. ISBN 9781589017016. [info](#)
- *The taste for knowledge : medical anthropology facing medical realities.* Edited by Sylvie Fainzang - Hans Einar Hem - Mette Bech Risr. Aarhus: Aarhus University Press, 2010. 258 p. ISBN 9788779345157. [info](#)
- *Understanding and applying medical anthropology.* Edited by Peter J. Brown - Ronald L. Barrett. 2nd ed. New York: McGraw-Hill Higher Education, 2010. xii, 468. ISBN 9780073405384. [info](#)
- *The Oxford handbook of bioethics.* Edited by Bonnie Steinbock. 1st pub. in pbk. Oxford: Oxford University Press, 2007. xviii, 747. ISBN 9780199562411. [info](#)
- *Medical anthropology.* Edited by Robert Pool - Wenzel Geissler. Maidenhead: Open University Press, 2005. viii, 172. ISBN 0335218504. [info](#)
- O'NEILL, Onora. *Autonomy and trust in bioethics.* New York: Cambridge University Press, 2002. xi, 213. ISBN 0521894530. [info](#)
- BLACKBURN, Simon. *Being Good : a short introduction to ethics.* 1st pub. as an Oxford Univer. Oxford: Oxford University, 2002. x, 162. ISBN 9780192853776. [info](#)
- *Medical humanities.* Edited by Martyn Evans - Ilora G. Finlay. London: BMJ, 2001. xi, 312 p. ISBN 0727916106. [info](#)
- JONSEN, Albert R. *A short history of medical ethics.* New York: Oxford University Press, 2000. xi, 153. ISBN 0195134559. [info](#)
- JONAS, Hans. *Princip odpovědnosti :pokus o etiku pro technologickou civilizaci.* Translated by Břetislav Horyna - Zdeněk Bígl. Vyd. 1. Praha: Oikoymenh, 1997. 318 s. ISBN 80-86005-06-2. [info](#)

Teaching methods

lecture

Assessment methods

written test

Language of instruction

English

Further Comments

The course is taught annually.

The course is taught: every week.

The course is also listed under the following terms [Accreditation spring](#).

aVLHZ021s Medical Humanities - seminar ✳**Faculty of Medicine**

Spring 2018

Extent and Intensity

0/2/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[doc. Mgr. Josef Kuře, Dr. phil.](#) (seminar tutor)

[Mgr. Michaela Vaňharová, Ph.D.](#) (seminar tutor)

Supervisor

[doc. Mgr. Josef Kuře, Dr. phil.](#)

[Department of Medical Ethics - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [doc. Mgr. Josef Kuře, Dr. phil.](#)

Supplier department: [Department of Medical Ethics - Theoretical Departments - Faculty of Medicine](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

The capacity limit for the course is 15 student(s).

Current registration and enrolment status: enrolled: 0/15, only registered: 0/15, only registered with preference (fields directly associated with the programme): 0/15

Fields of study the course is directly associated with

there are 6 fields of study the course is directly associated with, [display](#)

Course objectives

The goal of the subject is to deepen the topics of the lectures in a seminar, based on the texts and their analysis.

Learning outcomes

the student will develop comparative, analytic and argumentative abilities for medical humanities

Syllabus

- 1. Homo sapiens patiens: antropological foundations of medicine 2. Illness and ill person: hermeneutics of health and disease 3. Soma and psyche (Psychosomatics): body and mind in medicine 4. Cure and healing: the nature of medical

therapeutical procedure 5. Medical ontology: medicine - art and science, Evidence Based Medicine 6. Medical epistemology: medical knowledge and thinking 7. Goals of medicine 8. Between power and sickness (authority, authenticity, and power in medicine) 9. Medicine and existential experience 10. Freedom, action, moral action 11. Moral norm and its justification 12. Consciousness and conscience 13. Moral normativity in medicine 14. Relationships and their changes in medicine 15. Biomedicine - challenge and subject of reflection

Literature

- *A reader in medical anthropology : theoretical trajectories, emergent realities.* Edited by Byron Good. Malden, Mass.: Wiley-Blackwell, 2010. xiv, 559. ISBN 9781405183147. [info](#)
- *Methods in medical ethics.* Edited by Jeremy Sugarman - Daniel P. Sulmasy. 2nd ed. Washington, D.C.: Georgetown University Press, 2010. xiii, 353. ISBN 9781589017016. [info](#)
- *The taste for knowledge : medical anthropology facing medical realities.* Edited by Sylvie Fainzang - Hans Einar Hem - Mette Bech Risr. Aarhus: Aarhus University Press, 2010. 258 p. ISBN 9788779345157. [info](#)
- *Understanding and applying medical anthropology.* Edited by Peter J. Brown - Ronald L. Barrett. 2nd ed. New York: McGraw-Hill Higher Education, 2010. xii, 468. ISBN 9780073405384. [info](#)
- *The Oxford handbook of bioethics.* Edited by Bonnie Steinbock. 1st pub. in pbk. Oxford: Oxford University Press, 2007. xviii, 747. ISBN 9780199562411. [info](#)
- *Medical anthropology.* Edited by Robert Pool - Wenzel Geissler. Maidenhead: Open University Press, 2005. viii, 172. ISBN 0335218504. [info](#)
- *Medical humanities.* Edited by Martyn Evans - Ilora G. Finlay. London: BMJ, 2001. xi, 312 p. ISBN 0727916106. [info](#)
- JONSEN, Albert R. *A short history of medical ethics.* New York: Oxford University Press, 2000. xi, 153. ISBN 0195134559. [info](#)

Teaching methods

seminar

Assessment methods

texts' analysis, essay

Language of instruction

English

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

General note: Při zápisu předmětu mají přednost studenti vyšších ročníků.

Information on course enrolment limitations: Předmět si lze zapsat pouze při souběžném zapsání přednášky VLHZ021p nebo při předchozím absolvování přednášky téhož předmětu (VLHZ021p).

Teacher's information

Každý účastník semináře písemně zpracuje analýzu vybraného textu relevantního pro dané téma. Tu následně v semináři prezentuje a diskutuje.

The course is also listed under the following terms [Accreditation spring](#).

aVLCH0731c Surgery I - practice ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/4/0. 4 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Ivan Čapov, CSc.](#) (lecturer)
[MUDr. Vladimír Bartl, CSc.](#) (seminar tutor)
[Mgr. MUDr. Štěpánka Bibrová, Ph.D.](#) (seminar tutor)
[MUDr. Ernest Biroš](#) (seminar tutor)
[doc. MUDr. Eva Brichtová, Ph.D.](#) (seminar tutor)
[prof. MUDr. Pavel Brychta, CSc.](#) (seminar tutor)
[MUDr. Jan Buček](#) (seminar tutor)
[MUDr. Martin Dvořák, Ph.D.](#) (seminar tutor)
[prof. MUDr. Petr Gál, Ph.D.](#) (seminar tutor)
[doc. MUDr. Zdeněk Gregor, CSc.](#) (seminar tutor)
[prof. MUDr. Miloš Janeček, CSc.](#) (seminar tutor)
[doc. MUDr. Pavel Janíček, CSc.](#) (seminar tutor)
[doc. MUDr. Václav Jedlička, Ph.D.](#) (seminar tutor)
[MUDr. Jiří Jochymek, Ph.D.](#) (seminar tutor)
[prof. MUDr. Zdeněk Kala, CSc.](#) (seminar tutor)
[MUDr. Petra Kocourková](#) (seminar tutor)
[doc. MUDr. Ján Kočiš, Ph.D.](#) (seminar tutor)
[MUDr. Jan Konečný, Ph.D.](#) (seminar tutor)
[MUDr. Zdeněk Konečný](#) (seminar tutor)
[MUDr. Miroslav Krejčí, Ph.D.](#) (seminar tutor)
[doc. MUDr. Jindřich Leypold, CSc.](#) (seminar tutor)
[MUDr. Pavel Mach, Ph.D.](#) (seminar tutor)
[doc. MUDr. Michal Mašek, CSc.](#) (seminar tutor)
[doc. MUDr. Ivan Müller, CSc.](#) (seminar tutor)
[MUDr. Tomáš Novotný, Ph.D.](#) (seminar tutor)
[doc. MUDr. Libor Paša, Ph.D.](#) (seminar tutor)
Doc. Paša (seminar tutor), [doc. MUDr. Libor Paša, Ph.D.](#) (deputy)
[doc. MUDr. Petr Piskač, CSc.](#) (seminar tutor)
[prof. MUDr. Ladislav Plánka, Ph.D.](#) (seminar tutor)
[doc. MUDr. Jiří Podlaha, CSc.](#) (seminar tutor)
[MUDr. Vladimír Procházka, Ph.D.](#) (seminar tutor)
[doc. MUDr. Zbyněk Rozkydal, Ph.D.](#) (seminar tutor)
[prof. MUDr. Robert Staffa, Ph.D.](#) (seminar tutor)
[MUDr. Andrea Suchomelová](#) (seminar tutor)
[MUDr. Otakar Teyschl, CSc.](#) (seminar tutor)
[MUDr. Richard Veselý](#) (seminar tutor)

[doc. MUDr. Lenka Veverková, Ph.D.](#) (seminar tutor)
[MUDr. Robert Vlachovský, Ph.D.](#) (seminar tutor)
[MUDr. Petr Vlček, Ph.D.](#) (seminar tutor)
[prof. MUDr. Jindřich Vomela, CSc., LL.M.](#) (seminar tutor)
[prof. MUDr. Peter Wendsche, CSc.](#) (seminar tutor)
[MUDr. Jan Žák, Ph.D.](#) (seminar tutor)
[prof. MUDr. Jan Žaloudík, CSc.](#) (seminar tutor)
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[Veronika Bradáčková](#) (assistant)
[Lucie Kučerová](#) (assistant)
[Lea Müllerová](#) (assistant)
[Ivana Ondrášová](#) (assistant)
[Barbora Staňková](#) (assistant)

Supervisor

[MUDr. Vladimír Procházka, Ph.D.](#)
[Department of Surgery - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)
Contact Person: [Iveta Mášová](#)
Supplier department: [Department of Surgery - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Prerequisites (in Czech)

aVLPF0622p && aVLPA0622p && aVLLP0633c
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The tuition in the 7th term is focused on the general surgery in its whole extent, supplemented with the lessons from orthopaedy, traumatology, surgery of burns and children surgery.

Syllabus

- Head and neck surgery
- Chest wall, trauma of the chest, breast
- Surgery of the lungs and mediastinum
- Oesophageal surgery
- Vascular surgery: arteries
- Vascular surgery: veins
- Metabolism and critical care in surgery
- General traumatology
- Clavicle, scapula, humeroscapular joint
- Humerus, elbow joint

- Forearm, wrist, hand
- Revision lesson
- Traumatology: polytrauma, spinal cord trauma
- Children surgery: Abdominal children surgery including acute abdomen
- Congenital defects and its surgical treatment
- Children traumatology
- Children orthopedy
- Surgical oncology
- Burns: introduction, intensive care in the burn shock, skin replacement, plastic and reconstructive surgery in burns

Literature

- L.W. Way, Současná chirurgická diagnostika a léčba, 1998, Grada Publ., ISBN 80-7169/397/9, Sabiston- Textbook of Surgery, ISBN 0-7216-1259-8. Doplňky: Ján Černý, Špeciálna chirurgia, Osveta 1996, S. Schwartz: Textbook of Surgery, L.W. Way: Current Surg.
- [GÁL, Petr](#) and [František TECL](#). *Compartment syndrom - závažná komplikace chirurgie a traumatologie (Compartment syndrome - consequential complication of surgery and traumatology)*. 1. vyd. Brno: Masarykova univerzita, 1999. 41 pp. Edice kontinuálního vzdělávání v medicíně. ISBN 80-210-2152-7. [info](#)
- [PODLAHA, Jiří](#), [Zdeněk GREGOR](#), [Jindřich LEYPOLD](#) and [Petr ROUBAL](#). *Chirurgie bifurkace aorty (Surgery of aorta bifurcation)*. *Praktická flebologie*, Praha: Phlebomedica, 1998, vol. 7, 4-5, p. 99. ISSN 1210-5406. [info](#)
- [ŽALOUDÍK, Jan](#). *Chirurgie v paliativní onkologické léčbě (Surgery in palliative oncology treatment)*. In *Paliativní medicína*. Praha: Grada Publishing, 1998. p. 165-182. ISBN 80-7169-437-1. [info](#)
- *Digestivní endoskopie a laparoskopická chirurgie*. Edited by Přemysl Frič - Miroslav Ryska. 1. vyd. Praha: Praha Publishing, 1996. 345 s. ISBN 80-902140-0-2. [info](#)
- DUDA, Miloslav and Stanislav CZUDEK. *Miniinvazivní chirurgie*. 1. vyd. Třinec: Nemocnice Podlesí, 1996. 231 s. : o. [info](#)
- *Úvod do miniinvazivní chirurgie*. Edited by Jiří Vokurka. 1. vyd. Brno: Institut pro další vzdělávání pracovníků ve zdravotnictví, 1996. 46 s. ISBN 80-7013-228-0. [info](#)
- LEYPOLD, Jindřich. *Chirurgie neúrazových ložiskových lézí jater*. [1. vyd.]. Brno: II. chirurgická klinika LF MU v Brně, 1995. 125 s. : b. [info](#)
- KUBÁČEK, Vojtěch. *Vybrané kapitoly z plastické chirurgie*. 2. vyd. Brno: Masarykova univerzita, 1992. 66 s. [info](#)
- [STAFFA, Robert](#). *Záchrana kriticky ischemické končetiny - pedální bypass (Salvage of critically ischemic limb - pedal bypass grafting)*. 1. vyd. Praha: Grada Publishing, a.s., 2005. 112 pp. Grada Publishing Avicenum 2090. ISBN 80-247-0957-0. [info](#)
- ZEMAN, Miroslav. *Speciální chirurgie*. 2. vyd. Praha: Galén, 2004. xxiii, 575. ISBN 8072622609. [info](#)
- FIRT, Pavel. *Cévní chirurgie*. Praha: Avicenum, 1991. ISBN 80-201-0047-4. [info](#)
- SABISTON, David C. *Textbook of Surgery*. 1991. ISBN 0-7216-3492-3. [info](#)

Teaching methods

Classwork is provided by the combined way through presentations, bedside teaching, seminars with the discussion.

Assessment methods

The lessons attendance is obligatory, credits are given during the termination of the each semester. The tuition in surgery is finished with the State Exam of Surgery in the 6th year of tuition.

Language of instruction

English

Further comments (probably available only in Czech)

Information on completion of the course: Předložení prezentace na téma probírané v daném semestru. Nutná 100% účast. Nahrazování možné pouze po domluvě se zást. pro školství MUDr.V.Procházkou, PhD-vprochazka@fnbrno.cz

The course is taught annually.

The course is taught: in blocks.

General note: Pro výuku ve FN Brno Bohunice: nutné převlékání (bílý plášť a přezůvky) v šatně pro mediky v -1.NP lůžkového traktu; výuka probíhá i v posluchárnách jiných klinik ve FN Brno. Aktuální rozpis je zveřejněn na vývěsce pro studenty na CHK v 7.NP.

Listed among pre-requisites of other courses

- [aVLCH0832c Surgery II - practice](#)
[aVLCH0731c \(Do I meet enrolment requirements?\)](#)
- [aVLCH0832p Surgery II - lecture](#)
[aVLCH0731c \(Do I meet enrolment requirements?\)](#)

Teacher's information

Výuka probíhá na pracovištích I, II, chirurgické kliniky FN u sv. Anny, Chirurgické kliniky FN Brno-Bohunice Chirurgické kliniky FDN Černopolní, Ortopedické kliniky nemocnice u sv. Anny a Ortopedické kliniky FN Brno Bohunice, ARK kliniky FN u sv. Anny a KARIM FN Brno-Bohunice, Kliniky Plastické chirurgie FN: Berkova ul., Kliniky popáleninové medicíny FN Brno-Bohunice Kontaktní osoby pro jednotlivé předměty: I. chir: Doc. Veverková II.chir: prof. Staffa Chir.klinika Bohunice: prof. Kala Dětská ortopedie : Dr. Jochymek Dětská chirurgie: Dr. Teyschl Ortopedie FN u sv. Anny: Doc. Rozkydal Ortopedie FN Bohunice: Doc. Muller ARK: Dr. Dadák KARIM: prof. Ševčík Plastická chirurgie: Dr. Dražan Medicína popálenin: Dr. Vokurková Další informace na vývěskách a sekretariátech příslušných pracovišť.

The course is also listed under the following terms [Accreditation autumn](#).

aVLCH0731p Surgery I - lecture ✳**Faculty of Medicine**

Autumn 2019

Extent and Intensity

1/0/0. 0 credit(s). Type of Completion: z (credit).

Teacher(s)

[Mgr. MUDr. Štěpánka Bibrová, Ph.D.](#) (lecturer)
[doc. MUDr. Eva Brichtová, Ph.D.](#) (lecturer)
[prof. MUDr. Ivan Čapov, CSc.](#) (lecturer)
[doc. MUDr. Jindřich Leypold, CSc.](#) (lecturer)
[prof. MUDr. Ladislav Plánka, Ph.D.](#) (lecturer)
[MUDr. Vladimír Procházka, Ph.D.](#) (lecturer)
[doc. MUDr. Lenka Veverková, Ph.D.](#) (lecturer)
[prof. MUDr. Jindřich Vomela, CSc., LL.M.](#) (lecturer)
[prof. MUDr. Jan Žaloudík, CSc.](#) (lecturer)
[Hana Baráčková](#) (assistant)
[Lucie Kučerová](#) (assistant)

Supervisor

[MUDr. Vladimír Procházka, Ph.D.](#)
[Second Department of Surgery - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Supplier department: [Second Department of Surgery - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Prerequisites (in Czech)

aVLPF0622p && aVLPA0622p && aVLLP0633c
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Main objectives of this lecture is to introduce the basic information about head, neck, thoracic (mediastinum, gullet, lungs) and abdominal (stomach, duodenum, small intestine, colon, rectum, pancreas, liver, biliary system, abdominal wall hernia) surgery - incidence rate, etiology, patogenesis, diagnosis, treatment, prognosis.

Syllabus

- Head and neck surgery
- Surgery of the breast, trauma of the chest wall
- Lung surgery, mediastinum, oesophagus
- Hernias of the abdomen, diaphragma
- Surgery of the spleen and pancreas
- Stomach, duodenum, intestinal surgery
- Colon, rectum and anus

Literature

- Náhradní obsah: L.W. Way, Současná chirurgická diagnostika a léčba, 1998, Grada Publ., ISBN 80-7169/397/9, Sabiston- Textbook of Surgery, ISBN 0-7216-

1259-8. Doplnky: Ján Černý, Špeciálna chirurgia, Osveta 1996, S. Schwartz: Textbook of Surgery, L.W. Way

- ŠNAJDAUF, Jiří and Richard ŠKÁBA. *Dětská chirurgie*. 1. vyd. Praha: Galén, 2005. 395 s. ISBN 807262329X. [info](#)
- [STAFFA, Robert](#). *Záchrana kriticky ischemické končetiny -pedální bypass (Salvage of critically ischemic limb - pedal bypass grafting)*. 1. vyd. Praha: Grada Publishing, a.s., 2005. 112 pp. Grada Publishing Avicenum 2090. ISBN 80-247-0957-0. [info](#)
- ZEMAN, Miroslav. *Speciální chirurgie*. 2. vyd. Praha: Galén, 2004. xxiii, 575. ISBN 8072622609. [info](#)
- ŠNAJDAUF, Jiří, Karel CVACHOVEC and Tomáš TRČ. *Dětská traumatologie*. 1. vyd. Praha: Galén, 2002. xv, 180. ISBN 8072621521. [info](#)
- FIRT, Pavel. *Cévní chirurgie*. Praha: Avicenum, 1991. ISBN 80-201-0047-4. [info](#)
- SABISTON, David C. *Textbook of Surgery*. 1991. ISBN 0-7216-3492-3. [info](#)

Teaching methods

lecture

Assessment methods

This lecture is not credited, it is a part of continual preparation for state final examination in surgery at the end of the education.

Language of instruction

English

Further comments (probably available only in Czech)

Information on completion of the course: Předložení prezentace na téma probírané v daném semestru. Nutná 100% účast na stážích.

The course is taught annually.

The course is taught: in blocks.

Note related to how often the course is taught: 8 týdnů po 2 hodinách.

General note: Pro výuku ve FN Brno Bohunice: nutné převlékání (bílý plášť a přezůvky) v šatně pro mediky v -1.NP lůžkového traktu; výuka probíhá i v posluchárnách jiných klinik ve FN Brno. Aktuální rozpis je zveřejněn na vývěsce pro studenty na CHK v 7.NP.

Teacher's information

Výuka probíhá na pracovištích I, II, chirurgické kliniky FN u sv. Anny, Chirurgické kliniky FN Brno-Bohunice Chirurgické kliniky a Ortopedické kliniky FDN Černopolní, Ortopedické kliniky nemocnice u sv. Anny a Ortopedické kliniky FN Brno Bohunice, ARK kliniky FN u sv. Anny, Kliniky Plastické chirurgie FN: Berkova ul. Kontaktní osoby pro jednotlivé předměty: I. chir: Doc. Vokurka II.chir: Dr Piskač Chir.klinika Bohunice: Dr. Kala Dětská ortopedie: Dr. Jochymek Dětská chirurgie: Dr. Teyschl Ortopedie FN u sv. Anny: Dr. Rozkydal Ortopedie FN Bohunice: Doc. Muller ARK: Dr. Veselý Plastická chirurgie: Dr. Dražan Další informace na vývěskách a sekretariátech příslušných pracovišť

The course is also listed under the following terms [Accreditation autumn](#).

Faculty of Medicine

Spring 2018

Extent and Intensity

0/4/0. 4 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Vladimír Bartl, CSc.](#) (seminar tutor)
[Mgr. MUDr. Štěpánka Bibrová, Ph.D.](#) (seminar tutor)
[MUDr. Ernest Biroš](#) (seminar tutor)
[doc. MUDr. Eva Brichtová, Ph.D.](#) (seminar tutor)
[prof. MUDr. Pavel Brychta, CSc.](#) (seminar tutor)
[MUDr. Jan Buček](#) (seminar tutor)
[prof. MUDr. Ivan Čapov, CSc.](#) (seminar tutor)
[MUDr. Jan Doležel, Ph.D.](#) (seminar tutor)
[MUDr. Martin Dvořák, Ph.D.](#) (seminar tutor)
[prof. MUDr. Petr Gál, Ph.D.](#) (seminar tutor)
[doc. MUDr. Zdeněk Gregor, CSc.](#) (seminar tutor)
[prof. MUDr. Miloš Janeček, CSc.](#) (seminar tutor)
[doc. MUDr. Pavel Janíček, CSc.](#) (seminar tutor)
[MUDr. Jiří Jeřábek, Ph.D.](#) (seminar tutor)
[MUDr. Jiří Jochymek, Ph.D.](#) (seminar tutor)
[prof. MUDr. Zdeněk Kala, CSc.](#) (seminar tutor)
[MUDr. Petra Kocourková](#) (seminar tutor)
[MUDr. Jan Konečný, Ph.D.](#) (seminar tutor)
[MUDr. Zdeněk Konečný](#) (seminar tutor)
[MUDr. Miroslav Krejčí, Ph.D.](#) (seminar tutor)
[doc. MUDr. Jindřich Leypold, CSc.](#) (seminar tutor)
[MUDr. Pavel Mach, Ph.D.](#) (seminar tutor)
[doc. MUDr. Michal Mašek, CSc.](#) (seminar tutor)
[doc. MUDr. Ivan Müller, CSc.](#) (seminar tutor)
[MUDr. Tomáš Novotný, Ph.D.](#) (seminar tutor)
[doc. MUDr. Igor Penka, CSc.](#) (seminar tutor)
[doc. MUDr. Petr Piskač, CSc.](#) (seminar tutor)
[prof. MUDr. Ladislav Plánka, Ph.D.](#) (seminar tutor)
[doc. MUDr. Jiří Podlaha, CSc.](#) (seminar tutor)
[MUDr. Vladimír Procházka, Ph.D.](#) (seminar tutor)
[MUDr. Ivo Rovný](#) (seminar tutor)
[doc. MUDr. Zbyněk Rozkydal, Ph.D.](#) (seminar tutor)
[prof. MUDr. Robert Staffa, Ph.D.](#) (seminar tutor)
[MUDr. Andrea Suchomelová](#) (seminar tutor)
[prof. MUDr. Pavel Ševčík, CSc.](#) (seminar tutor)
[MUDr. Zdeněk Šilhart](#) (seminar tutor)
[MUDr. Otakar Teyschl, CSc.](#) (seminar tutor)
[MUDr. Richard Veselý](#) (seminar tutor)
[doc. MUDr. Lenka Veverková, Ph.D.](#) (seminar tutor)
[MUDr. Robert Vlachovský, Ph.D.](#) (seminar tutor)
[MUDr. Petr Vlček, Ph.D.](#) (seminar tutor)
[prof. MUDr. Jindřich Vomela, CSc., LL.M.](#) (seminar tutor)

[prof. MUDr. Peter Wendsche, CSc.](#) (seminar tutor)

[MUDr. Jan Žák, Ph.D.](#) (seminar tutor)

[prof. MUDr. Jan Žaloudík, CSc.](#) (seminar tutor)

[Hana Baráčková](#) (assistant)

[Lucie Kučerová](#) (assistant)

[Lea Müllerová](#) (assistant)

[Ivana Ondrášová](#) (assistant)

[Barbora Staňková](#) (assistant)

[Věra Stejskalová](#) (assistant)

Supervisor

[prof. MUDr. Ladislav Plánka, Ph.D.](#)

[Department of Pediatric Surgery, Orthopedics and Traumatology - Institutions shared with the Faculty Hospital Brno \(paediatric medicine\) - Faculty of Medicine](#)

Contact Person: [doc. MUDr. Lenka Veverková, Ph.D.](#)

Supplier department: [Department of Pediatric Surgery, Orthopedics and Traumatology - Institutions shared with the Faculty Hospital Brno \(paediatric medicine\) - Faculty of Medicine](#)

Prerequisites (in Czech)

[aVLCH0731c Surgery I - practice](#)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The tuition in the 8th term is focused on the general surgery in its whole extent, supplemented with the lessons from orthopaedy, traumatology, surgery of burns and children surgery. Classwork is provided by the combined way through presentations, bedside teaching, seminars with the discussion.

Syllabus

- Hernias
- Stomach and Duodenum
- Liver and biliary system
- Pancreas, Spleen
- Small intestine
- Colon, rectum & anus
- Acute Abdomen
- Traumatology (spine, pelvis)
- Coxa, proximal femur
- Diaphysis, distal femur
- Knee, leg shin and calf)
- Ankle, foot

- Traumatology: polytrauma, spinal cord trauma
- Children surgery: Abdominal children surgery including acute abdomen
Congenital defects and its surgical treatment Children traumatology Children orthopedy
- Surgical oncology
- Burns: introduction, intensive care in the burn shock, skin replacement, plastic and reconstructive surgery in burns.

Literature

recommended literature

- ZEMAN, Miroslav and Zdeněk KRŠKA. *Speciální chirurgie*. 3., dopl. a přeprac. vyd. Praha: Galén, 2014. xviii, 511. ISBN 9788074921285. [info](#)
- FERKO, Alexander, Zdeněk ŠUBRT and Tomáš DĚDEK. *Chirurgie v kostce*. 2., doplněné a přepracova. Praha: Grada, 2015. 511 stran. ISBN 9788024710051. [info](#)
- Clinical Surgery: With Student Consult Access, 3e Paperback – 13 Feb 2012

Teaching methods

Class discussion on the base of materials in the textbook.

Assessment methods

Giving the course-unit credit is conditioned by full attendance in the lessons.

Language of instruction

English

Further comments (probably available only in Czech)

Information on completion of the course: Předložení prezentace, vypracování chorobopisu, 100% účast na stážích

The course is taught annually.

The course is taught: in blocks.

General note: Pro výuku ve FN Brno Bohunice: nutné převlékání (bílý plášť a přezůvky) v šatně pro mediky v -1.NP lůžkového traktu; výuka probíhá i v posluchárnách jiných klinik ve FN Brno. Aktuální rozpis je zveřejněn na vývěsce pro studenty na CHK v 7.NP.

Listed among pre-requisites of other courses

- [aVLAM9X1c Intensive Care Medicine - practice](#)
[aVLFA0822c](#) && [aVLCH0832c](#) && [aVLLP0633c](#) && [aVLDI7X1c](#) && [aVLOT7X1c](#) && [aVLIN7X21c](#) (Do I meet enrolment requirements?)
- [aVLAM9X1p Intensive Care Medicine - lecture](#)
[aVLFA0822c](#) && [aVLCH0832c](#) && [aVLLP0633c](#) && [aVLDI7X1c](#) && [aVLOT7X1c](#) && [aVLIN7X21c](#) (Do I meet enrolment requirements?)
- [aVLCH9X33c Surgery III - practice](#)
[aVLFA0822p](#) && [aVLCH0832c](#) && [aVLOR7X1](#) (Do I meet enrolment requirements?)
- [aVLNE9X1c Neurology - practice](#)
[aVLFA0822p](#) && [aVLLP0633c](#) && [aVLDI7X1c](#) && [aVLLO7X1c](#) && [aVLCH0832c](#) (Do I meet enrolment requirements?)

- [aVLNE9X1p Neurology - lecture](#)
[aVLFA0822p](#) && [aVLLP0633c](#) && [aVLDI7X1c](#) && [aVLLO7X1c](#) && [aVLCH0832c](#) (Do I meet enrolment requirements?)
- [aVLON091c Clinical Oncology - practice](#)
[aVLFA0822p](#) && [aVLLP0633c](#) && [aVLCH0832c](#) && [aVLOT7X1c](#) (Do I meet enrolment requirements?)
- [aVLON091p Clinical oncology - lecture](#)
[aVLFA0822p](#) && [aVLLP0633c](#) && [aVLCH0832c](#) && [aVLOT7X1c](#) (Do I meet enrolment requirements?)
- [aVLPG0921c Gynecology and obstetrics I - practice](#)
[aVLFA0822c](#) && [aVLCH0832c](#) && [aVLDI7X1c](#) && [aVLLP0633c](#) (Do I meet enrolment requirements?)
- [aVLPG0921p Gynecology and Obstetrics I - lecture](#)
[aVLFA0822c](#) && [aVLCH0832c](#) && [aVLDI7X1c](#) && [aVLLP0633c](#) (Do I meet enrolment requirements?)

[Zobrazit další předměty](#)

Teacher's information

Výuka probíhá na pracovištích I, II, chirurgické kliniky FN u sv. Anny, Chirurgické kliniky FN Brno-Bohunice Chirurgické kliniky FDN Černopolní, Ortopedické kliniky nemocnice u sv. Anny a Ortopedické kliniky FN Brno Bohunice, ARK kliniky FN u sv. Anny a KARIM FN Brno-Bohunice, Kliniky Plastické chirurgie FN: Berkova ul., Kliniky popáleninové medicíny FN Brno-Bohunice.

Kontaktní osoby pro jednotlivé předměty: I. chir: Doc. Veverková

II.chir: prof. Staffa

Chir.klinika Bohunice: prof. Kala

Dětská ortopedie : Dr. Jochymek Dětská chirurgie: doc. Brichtová

Ortopedie FN u sv. Anny: Doc. Rozkydal

Ortopedie FN Bohunice: Doc. Muller ARK FN u sv. Anny: Dr. Dadák

KARIMFN Bohunice: prof. Ševčík

Plastická chirurgie: Dr. Dražan

Medicína popálenin: Dr. Vokurková

Další informace na vývěškách a sekretariátech příslušných pracovišť. Úprava doplňujících údajů předmětu

https://is.muni.cz/auth/predmety/sylaby_plneni.pl?kod=VLCH0731c;fak... 6 KDCHOT -

studenti jsou očekáváni v 7:45 před knihovnou kliniky ve spojovacím krčku mezi pavilony B a C ve 2. patře, před tím je třeba se převléci v šatně mediků u hlavní vřátnice (přezůvky, plášť). Výuka nepediatrických kruhů probíhá na KDCHOT 3 dny vždy 7:45 - 12:20 v šesti základních blocích, kdy je vždy vysvětlena teorie, poté se učivo demonstruje u lůžka pacienta. Peditrické kruhy jsou na KDCHOT 9 dnů dle každodenního rozpisu (7:45 - 10:30 v klinickém provozu - ambulance, sály; 11:00 - 12:20 přednáška).

The course is also listed under the following terms [Accreditation spring](#).

aVLCH0832p Surgery II - lecture ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

1/0/0. 0 credit(s). Type of Completion: z (credit).

Teacher(s)

[doc. MUDr. Eva Brichtová, Ph.D.](#) (lecturer)
[prof. MUDr. Ivan Čapov, CSc.](#) (lecturer)
[doc. MUDr. Jindřich Leypold, CSc.](#) (lecturer)
[doc. MUDr. Igor Penka, CSc.](#) (lecturer)
[prof. MUDr. Ladislav Plánka, Ph.D.](#) (lecturer)
[MUDr. Vladimír Procházka, Ph.D.](#) (lecturer)
[doc. MUDr. Lenka Veverková, Ph.D.](#) (lecturer)
[prof. MUDr. Jindřich Vomela, CSc., LL.M.](#) (lecturer)
[prof. MUDr. Jan Žaloudík, CSc.](#) (lecturer)
[Mgr. MUDr. Štěpánka Bibrová, Ph.D.](#) (seminar tutor)
[Lucie Kučerová](#) (assistant)
[Barbora Staňková](#) (assistant)

Supervisor

[MUDr. Vladimír Procházka, Ph.D.](#)
[Second Department of Surgery - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)
Contact Person: [doc. MUDr. Lenka Veverková, Ph.D.](#)
Supplier department: [Second Department of Surgery - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Prerequisites (in Czech)

[aVLCH0731c Surgery I - practice](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Main objectives of this lecture is to introduce the basic information about acute abdomen, vascular surgery and complete traumatology - incidence rate, etiology, patogenesis, diagnosis, treatment, prognosis.

Syllabus

- Acute abdomen I
- Acute abdomen II
- Cardiovascular surgery I
- Cardiovascular surgery II
- Traumatology I-IV

Literature

- ZEMAN, Miroslav and Zdeněk KRŠKA. *Speciální chirurgie*. 3., dopl. a přeprac. vyd. Praha: Galén, 2014. xviii, 511. ISBN 9788074921285. [info](#)
- FERKO, Alexander, Zdeněk ŠUBRT and Tomáš DĚDEK. *Chirurgie v kostce*. 2., doplněná a přepracována. Praha: Grada, 2015. 511 stran. ISBN 9788024710051. [info](#)
- Clinical Surgery: With Student Consult Access, 3e Paperback – 13 Feb 2012

Teaching methods

Lecture

Assessment methods

This lecture is not credited, it is a part of continual preparation for state final examination in surgery at the end of the education.

Language of instruction

English

Further comments (probably available only in Czech)

Information on completion of the course: Předložení prezentace na téma probírané v daném semestru, vypracování chorobopisu, 100% účast na stážích.

The course is taught annually.

Note related to how often the course is taught: 8 týdnů po 2 hodinách.

General note: Pro výuku ve FN Brno Bohunice: nutné převlékání (bílý plášť a přezůvky) v šatně pro mediky v -1.NP lůžkového traktu; výuka probíhá i v posluchárnách jiných klinik ve FN Brno. Aktuální rozpis je zveřejněn na vývěsce pro studenty na CHK v 7.NP.

Teacher's information

Výuka probíhá na pracovištích I, II, chirurgické kliniky FN u sv. Anny, Chirurgické kliniky FN Brno-Bohunice Chirurgické kliniky FDN Černopolní, Ortopedické kliniky nemocnice u sv. Anny a Ortopedické kliniky FN Brno Bohunice, ARK kliniky FN u sv. Anny a KARIM FN Brno-Bohunice, Kliniky Plastické chirurgie FN: Berkova ul., Kliniky popáleninové medicíny FN Brno-Bohunice Kontaktní osoby pro jednotlivé předměty: I. chir: Doc. Veverková II.chir: prof. Staffa Chir.klinika Bohunice: prof. Kala Dětská ortopedie : Dr. Jochymek Dětská chirurgie: Dr. Teyschl Ortopedie FN u sv. Anny: Doc. Rozkydal Ortopedie FN Bohunice: Doc. Muller ARK: Dr. Dadák KARIM: prof. Ševčík Plastická chirurgie: Dr. Dražan Medicína popálenin: Dr. Vokurková Další informace na vývěskách a sekretariátech příslušných pracovišť. Úprava doplňujících údajů předmětu https://is.muni.cz/auth/predmety/sylaby_plneni.pl?kod=VLCH0731c;fak... 6

The course is also listed under the following terms [Accreditation spring](#).

aVLCH11Xpp Surgery - pregraduation practice *

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/10/0. 14 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Ivan Čapov, CSc.](#) (lecturer)
[MUDr. Vladimír Bartl, CSc.](#) (seminar tutor)
[Mgr. MUDr. Štěpánka Bibrová, Ph.D.](#) (seminar tutor)
[doc. MUDr. Eva Brichtová, Ph.D.](#) (seminar tutor)
[prof. MUDr. Petr Gál, Ph.D.](#) (seminar tutor)
[MUDr. Pavel Gladiš, CSc.](#) (seminar tutor)
[Pavla Hanková](#) (seminar tutor)
[MUDr. Jaroslav Ivičič](#) (seminar tutor)
[prof. MUDr. Miloš Janeček, CSc.](#) (seminar tutor)
[doc. MUDr. Václav Jedlička, Ph.D.](#) (seminar tutor)
[prof. MUDr. Zdeněk Kala, CSc.](#) (seminar tutor)
[MUDr. Jan Konečný, Ph.D.](#) (seminar tutor)
[MUDr. Zdeněk Kříž](#) (seminar tutor)
[doc. MUDr. Jindřich Leypold, CSc.](#) (seminar tutor)
[MUDr. Pavel Mach, Ph.D.](#) (seminar tutor)
[MUDr. Filip Marek, Ph.D.](#) (seminar tutor)
[doc. MUDr. Michal Mašek, CSc.](#) (seminar tutor)
[doc. MUDr. Libor Paša, Ph.D.](#) (seminar tutor)
[doc. MUDr. Petr Piskač, CSc.](#) (seminar tutor)
[prof. MUDr. Ladislav Plánka, Ph.D.](#) (seminar tutor)
[doc. MUDr. Jiří Podlaha, CSc.](#) (seminar tutor)
[MUDr. Mojmír Přivara](#) (seminar tutor)
[MUDr. Petr Roubal, CSc.](#) (seminar tutor)
[prof. MUDr. Robert Staffa, Ph.D.](#) (seminar tutor)
[MUDr. Roman Svatoň](#) (seminar tutor)
[MUDr. Otakar Teyschl, CSc.](#) (seminar tutor)
[doc. MUDr. Lenka Veverková, Ph.D.](#) (seminar tutor)
[MUDr. Petr Vlček, Ph.D.](#) (seminar tutor)
[prof. MUDr. Jindřich Vomela, CSc., LL.M.](#) (seminar tutor)
[MUDr. Jan Žák, Ph.D.](#) (seminar tutor)
[prof. MUDr. Jan Žaloudík, CSc.](#) (seminar tutor)
[Hana Baráčková](#) (assistant)
[Pavla Hanková](#) (assistant)
[Lenka Chrástová](#) (assistant)
[Lucie Kučerová](#) (assistant)
[Iveta Mášová](#) (assistant)

[Lea Müllerová](#) (assistant)
[Barbora Staňková](#) (assistant)
[prof. MUDr. Peter Wendsche, CSc.](#) (assistant)

Supervisor

[MUDr. Vladimír Procházka, Ph.D.](#)
[Second Department of Surgery - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)
Supplier department: [Second Department of Surgery - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The principle purpose of this lecture is to engage the medical students in daily condition of surgery department.

Syllabus

- The participation in morning visits
- polyclinic
- operating
- afternoon presentation
- special lectures and seminars

Literature

- ŠNAJDAUF, Jiří and Richard ŠKÁBA. *Dětská chirurgie*. 1. vyd. Praha: Galén, 2005. 395 s. ISBN 807262329X. [info](#)
- ZEMAN, Miroslav. *Speciální chirurgie*. 2. vyd. Praha: Galén, 2004. xxiii, 575. ISBN 8072622609. [info](#)

Teaching methods

practical training at the clinic

Assessment methods

State final examination - 5 theoretical questions (case report - diagnosis, differential diagnostics, treatment proposal - bandage, surgical instruments, X- ray imaging).

Language of instruction

English

Further comments (probably available only in Czech)

Information on completion of the course: Komise pro SRZ je studentovi přidělena

The course can also be completed outside the examination period.

The course is taught annually.

The course is taught: in blocks.

Note related to how often the course is taught: souvilsý blok 5 týdnů. Studentu jsou vypsáni na předpromoční praxi dle termínů a pracovišť.

Information on the extent and intensity of the course: 150 hours/ 5 weeks.

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

aVLCH11XX Surgery - State Exam *

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/0/0. 0 credit(s). Type of Completion: SRZK (closing examination).

Teacher(s)

[Hana Baráčková](#) (seminar tutor)
[MUDr. Vladimír Bartl, CSc.](#) (seminar tutor)
[prof. MUDr. Ivan Čapov, CSc.](#) (seminar tutor)
[MUDr. Jan Doležel, Ph.D.](#) (seminar tutor)
[prof. MUDr. Petr Gál, Ph.D.](#) (seminar tutor)
[MUDr. Pavel Gladiš, CSc.](#) (seminar tutor)
[prof. MUDr. Miloš Janeček, CSc.](#) (seminar tutor)
[doc. MUDr. Václav Jedlička, Ph.D.](#) (seminar tutor)
[MUDr. Jiří Jeřábek](#) (seminar tutor)
[prof. MUDr. Zdeněk Kala, CSc.](#) (seminar tutor)
[MUDr. Jan Konečný, Ph.D.](#) (seminar tutor)
[MUDr. Zdeněk Kříž](#) (seminar tutor)
[doc. MUDr. Jindřich Leypold, CSc.](#) (seminar tutor)
[MUDr. Pavel Mach, Ph.D.](#) (seminar tutor)
[doc. MUDr. Michal Mašek, CSc.](#) (seminar tutor)
[doc. MUDr. Petr Piskač, CSc.](#) (seminar tutor)
[doc. MUDr. Jiří Podlaha, CSc.](#) (seminar tutor)
[MUDr. Mojmír Přivara](#) (seminar tutor)
[MUDr. Ivo Rovný](#) (seminar tutor)
[prof. MUDr. Robert Staffa, Ph.D.](#) (seminar tutor)
[MUDr. Otakar Teyschl, CSc.](#) (seminar tutor)
[doc. MUDr. Lenka Veverková, Ph.D.](#) (seminar tutor)
[MUDr. Petr Vlček, Ph.D.](#) (seminar tutor)
[doc. MUDr. Jiří Vokurka, CSc.](#) (seminar tutor)
[prof. MUDr. Jindřich Vomela, CSc., LL.M.](#) (seminar tutor)
[prof. MUDr. Jan Wechsler, CSc.](#) (seminar tutor)
[MUDr. Jan Žák, Ph.D.](#) (seminar tutor)
[prof. MUDr. Jan Žaloudík, CSc.](#) (seminar tutor)
[Lucie Kučerová](#) (assistant)

Supervisor

[MUDr. Vladimír Procházka, Ph.D.](#)
[Second Department of Surgery - Institutions shared with St. Anne's Faculty Hospital -](#)

Faculty of Medicine

Contact Person: [doc. MUDr. Lenka Veverková, Ph.D.](#)

Supplier department: [Second Department of Surgery - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Prerequisites (in Czech)

[aVLFA0822p](#) && [aVLNE9X1p Neurology - lecture](#) && [aVLPY9X1p Psychiatry - lect.](#)
&& [aVLDV7X21p](#) && [aVLAM9X1p Intensive care med. - lect.](#) &&
[aVLVL7X61c Internal medicine - part 1 -pr](#) && [aVLVL9X62c Internal medicine part 2](#)
&& [aVLVL9X63c Internal medicine part 3](#) && [aVLVL9X64c Internal medicine part 4](#)
&& [aVLVL9X65c Internal medicine part 5](#) && [aVLIN9X22 Infectious diseases II](#) &&
[aVLON091p Clinical oncology - lec.](#) && VYCET (1 , [aVLAL091 Anaesthes. and Treat. of Pain](#) , [aVLDO091 Paediatric Oncology](#) , [aVLKF101](#) , [aVLKB091 Clinical Biochemistry](#) , [aVLFP091 Physiology and path.of newborn](#)) && [aVLCH9X33c Surgery III - practice](#) && [aVLCJ0888](#) && [VSSP03X Individual project](#)
(Do I meet enrolment requirements?)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the state exam of surgery is to verify the students knowledge of the general and special surgery in a full scale. Student has to be able to make clinical examination of the patient, differential diagnostics assessment and to propose next treatment. Student should be familiar with the acute surgical illness and its general treatment algorithm.

Syllabus

- State surgery exam
- general surgery
- special surgery
- clinical examination
- differential diagnostics assessment
- treatment proposition
- acute surgical illness

Literature

- PAFKO, Pavel. *Základy speciální chirurgie*. 1. vyd. Praha: Galén, 2008. 385 s. ISBN 9788072624027. [info](#)
- ŠNAJDAUF, Jiří and Richard ŠKÁBA. *Dětská chirurgie*. 1. vyd. Praha: Galén, 2005. 395 s. ISBN 807262329X. [info](#)
- HOCH, Jiří and Jan LEFFLER. *Speciální chirurgie : učebnice pro lékařské fakulty*. 2. vyd. Praha: Maxdorf, 2003. 224 s. ISBN 8085912066. [info](#)

- MARKO, Lubomír and Peter KOTHAJ. *Atlas miniinvazívnej chirurgie a chirurgickej endoskopie*. 1. vyd. Banská Bystrica: Marko, 1998. 156 s. ISBN 8096807609. [info](#)
- KABELKA, Miroslav. *Dětská chirurgie : učebnice pro lékařské fakulty*. 1. vyd. Praha: Karolinum, 1992. 320 s. ISBN 8070665610. [info](#)

Teaching methods

preparing for state examination

Assessment methods

State Exam of Surgery has a practical and a theoretical part. In the practical part the complete clinical examination including the elaboration of the clinical record is needed. Student must prove ability of the decision-making and orientation in the differential diagnostics. Theoretical part consists of 3 questions: one from general surgery and 2 from special surgery.

Language of instruction

English

Further comments (probably available only in Czech)

Information on completion of the course: Komise pro SRZ je studentovi přidělena

The course can also be completed outside the examination period.

The course is taught annually.

The course is taught: in blocks.

Note related to how often the course is taught: souvilsý blok 5 týdnů. Studentu jsou vypsáni na předpromoční praxi dle termínů a pracovišť.

Teacher's information

Rozpisy studentů do jednotlivých termínů SRZ a komisí jsou k dispozici na webových stránkách LF (studium-užitečné informace) The list of students for the state exam of surgery is available in the web of the medical faculty

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

aVLCH9X33c Surgery III - practice ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/6/0. 5 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Olusegun Babajide Adedokun](#) (seminar tutor)

[doc. MUDr. Eva Brichtová, Ph.D.](#) (seminar tutor)

[MUDr. Aleš Čermák, Ph.D.](#) (seminar tutor)

[doc. MUDr. Luboš Dražan, Ph.D.](#) (seminar tutor)

[MUDr. Zdeněk Dvořák, Ph.D.](#) (seminar tutor)

[MUDr. Pavel Fadrus, Ph.D.](#) (seminar tutor)

[MUDr. Michal Fedorko, Ph.D., FEBU](#) (seminar tutor)

[MUDr. Petr Fila, Ph.D.](#) (seminar tutor)

[MUDr. Motasem Ghazal](#) (seminar tutor)
[MUDr. Michaela Heroutová](#) (seminar tutor)
[doc. MUDr. Jan Chrastina, Ph.D.](#) (seminar tutor)
[doc. MUDr. Radim Jančálek, Ph.D.](#) (seminar tutor)
[MUDr. Martin Knoz](#) (seminar tutor)
[MUDr. Tomáš Kubek, Ph.D.](#) (seminar tutor)
[MUDr. Mohamed Ismail Abdo Nussir, Ph.D.](#) (seminar tutor)
[prof. MUDr. Dalibor Pacík, CSc.](#) (seminar tutor)
[prof. MUDr. Martin Smrčka, Ph.D., MBA](#) (seminar tutor)
[MUDr. Šárka Stiborová](#) (seminar tutor)
[MUDr. Gabriel Varga, Ph.D.](#) (seminar tutor)
[prof. MUDr. Jiří Veselý, CSc.](#) (seminar tutor)
[MUDr. Vítězslav Vít](#) (seminar tutor)
[Hana Baráčková](#) (assistant)
[Iveta Králíková](#) (assistant)
[Magda Krčmářová](#) (assistant)
[Lea Müllerová](#) (assistant)
[Olga Pazderková](#) (assistant)
[Zdeňka Štikarová](#) (assistant)

Supervisor

[MUDr. Tomáš Novotný, Ph.D.](#)
[Second Department of Surgery - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)
Supplier department: [Second Department of Surgery - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Prerequisites (in Czech)

aVLFA0822p && aVLCH0832c && [aVLOR7X1 Orthopaedics - practice](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The tuition in the 5th year takes its course in the fourteen days block. It includes 10 teaching hours of neurosurgery and plastic surgery, 8 hours of urology and 2 hours of cardiac surgery. Students should acquire basic knowledge and general view of mentioned surgical specialities.

Syllabus

- Neurosurgery: Introduction, wards and outpatients clinic, craniotomy, endoscopy, gamma knife, unconsciousness, intracranial hypertension, cerebral trauma, surgical neurooncology, vascular brain disease, surgery of epilepsy, hydrocephalus,

degenerative backbone disease, surgery of the peripheral nerves , pain surgery, intracranial inflammatory disease.

- Urology: Introduction, wards and outpatients clinic, clinical investigation in urology, uroinfection, urolithiasis, renal colic, traumatology in urology, benign prostatic hyperplasia, urethral stricture, urinary incontinence, urooncology, erectile dysfunction.
- Plastic surgery: Introduction, wards and outpatients clinic, skin and musculocutaneous flaps, replantation, microsurgery, craniofacial surgery, hand surgery, children plastic surgery, congenital defects, reconstructive plastic in oncologic surgery, aesthetic surgery, breast reconstructive surgery.
- Cardiac surgery: Introduction, extracorporeal circuit, valvular defects, CABG, heart transplantation, surgery of the thoracic aorta, congenital defects of the heart and major vessels.

Literature

- HANUŠ, Tomáš and Petr MACEK. *Urologie pro mediky*. Vydání první. Praha: Galén, 2015. 305 stran. ISBN 9788024630083. [info](#)
- VESELÝ, Jiří. *Plastická chirurgie (Plastic surgery)*. Brno, 2007. [info](#)
- SMRČKA, Martin and Vladimír PŘIBÁŇ. *Vybrané kapitoly z neurochirurgie : pro studenty lékařské fakulty*. 1. vyd. Brno: Masarykova univerzita, 2005. 98 s. ISBN 8021037881. [info](#)
- ZEMAN, Miroslav. *Speciální chirurgie*. 2. vyd. Praha: Galén, 2004. xxiii, 575. ISBN 8072622609. [info](#)

Teaching methods

The tuition is provided in seminars with discussion, students are present during the surgical procedures in the operating room, bedside procedures and also in outpatient clinic.

Assessment methods

The written test in the end of the particular speciality is highly recommended. The credits are given on condition of the full training attendance and successful test results.

Language of instruction

English

Further comments (probably available only in Czech)

The course is taught each semester.

The course is taught: in blocks.

Listed among pre-requisites of other courses

- [aVLCH11XX Surgery - state exam](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && [VYCET\(1,aVLAL091,aVLDO091,aVLKF101,aVLKB091,aVLFP091\)](#) && [aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) (Do I meet enrolment requirements?)

- [**aVLPD11XX** Pediatrics - state exam](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) &&
[aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) &&
[aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) &&
VYCET(1,[aVLAL091](#),[aVLDO091](#),[aVLKF101](#),[aVLKB091](#),[aVLFP091](#)) &&
[aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [**aVLPG11XX** Obstetrics and Gynaecology - State Exam](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) &&
[aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) &&
[aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) &&
VYCET(1,[aVLAL091](#),[aVLDO091](#),[aVLKF101](#),[aVLKB091](#),[aVLFP091](#)) &&
[aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [**aVLPL11XX** General Medicine Practice and Geriatrics](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) &&
[aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) &&
[aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) &&
VYCET(1,[aVLAL091](#),[aVLDO091](#),[aVLKF101](#),[aVLKB091](#),[aVLFP091](#)) &&
[aVLCH9X33c](#) && [aVLCJ0888](#) (Do I meet enrolment requirements?)
- [**aVLVL11XX** Internal Medicine - State Exam](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) &&
[aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) &&
[aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) &&
VYCET(1,[aVLAL091](#),[aVLDO091](#),[aVLKF101](#),[aVLKB091](#),[aVLFP091](#)) &&
[aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [**aVLZP11XX** Public Health - State exam](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) &&
[aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) &&
[aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) &&
VYCET(1,[aVLAL091](#),[aVLDO091](#),[aVLKF101](#),[aVLKB091](#),[aVLFP091](#)) &&
[aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) (Do I meet enrolment requirements?)

Teacher's information

Programy jednotlivých stáží jsou uvedeny na vývěškách jednotlivých pracovišť. Stáže se odehrávají dle rozpisu na Klinice plastické a estetické chirurgie FN u sv. Anny (ul. Berkova), na Neurochirurgické klinice FN Brno a FN u sv. Anny, Urologické klinice FN Brno-Bohunice a v Centru kardiochirurgie a transplantační chirurgie FN u sv. Anny.

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

aVLIN7X21c Infectious diseases I - practice ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Petr Husa, CSc.](#) (seminar tutor)
[doc. MUDr. Lenka Krbková, CSc.](#) (seminar tutor)
[MUDr. Alena Holčíková, Ph.D.](#) (seminar tutor)
[MUDr. Svatava Snopková, Ph.D.](#) (seminar tutor)
[MUDr. Zuzana Rundesová](#) (seminar tutor)
[MUDr. Matúš Mihalčín](#) (seminar tutor)
[MUDr. Petr Husa](#) (seminar tutor)
[MUDr. Lukáš Homola, Ph.D.](#) (seminar tutor)
[MUDr. Tomáš Gergel](#) (seminar tutor)
[MUDr. Roman Stebel](#) (seminar tutor)
[MUDr. Lenka Vojtilová, Ph.D.](#) (seminar tutor)
[MUDr. Evelína Kováčsová](#) (seminar tutor)
[MUDr. Radek Svačinka](#) (seminar tutor)
[Markéta Pospíšilová](#) (assistant)

Supervisor

[prof. MUDr. Petr Husa, CSc.](#)
[Department of Infectious Diseases - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)
Supplier department: [Department of Infectious Diseases - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Prerequisites (in Czech)

[aVLPA0622p](#) && [aVLPA0622p](#) && [aVLLP0633c](#) && [aVLLM0522p Medical Microbiology II - lect](#) && [aVLIM051p Immunology - lecture](#)
(Do I meet enrolment requirements?)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The concept of this course is introduction into the study of infectious disease. The aim of this course is to obtain basic information about infectious diseases - bacterial, viral, and parasitic, including travel-related disease. The stress is put on practical education with the patients. This practical course is combined with tutorials stressed on the most important infectious diseases.

Syllabus

- New infectious diseases. Viral hepatitis A,B,C,D,E,G; aetiology, pathology, epidemiology, clinical features including prodromal state, dynamic of the

biochemical findings, aetiologic diagnostics direct and indirect (serology), treatment, sequelae, carrier state of the virus of hepatitis B and C, chronic hepatitis, treatment of them.

- GIT infections; pathology of the infectious diarrhoeas; salmonellosis, campylobacteriosis; clinical features, treatment.
- HIV/AIDS infection - stage, treatment, the principles of them.
- Respiratory infections, infectious mononucleosis, tonsillitis. Erysipellas, herpes zoster, infectious exanthema.
- Toxoplasmosis, tularemia.
- Infectious children`s ailments.
- The first information in neuroinfections.
- The antibiotic therapy by the infectious disease, antibiotic resistance, antibiotic policy.
- Antivirotic therapy.
- The strategy of vaccination - the present-day situation, the preview.
- Clinical demonstration of the patients.

Literature

required literature

- [HUSA, Petr](#), [Lenka KRBKOVÁ](#), [Drahomíra BARTOŠOVÁ](#), [Svatava SNOPKOVÁ](#), [Alena HOLČÍKOVÁ](#), [Pavel POLÁK](#), [Radek SVOBODA](#) and [Kateřina HAVLÍČKOVÁ](#). *Infekční lékařství. Učební text pro studenty všeobecného lékařství (Infectious Diseases. Textbook for students of general medicine.)*. 1. vyd. Brno: Masarykova univerzita, 2011. 159 pp. ISBN 978-80-210-5660-2. [info](#)

recommended literature

- *Infectious diseases for foreign students*. Edited by Petr Husa - Lenka Krbková. 1st ed. Brno: Masaryk University, 2013. 144 s. ISBN 9788021066304. [info](#)
- BENEŠ, Jiří. *Infekční lékařství*. 1. vyd. Praha: Galén, 2009. xxv, 651. ISBN 9788072626441. [info](#)

Teaching methods

The stress is put on practical examination of the patients combined with lectures.

Assessment methods

Full attendance is necessary for giving course-unit credit.

Language of instruction

English

Further comments (probably available only in Czech)

The course is taught each semester.

The course is taught: in blocks.

Information on the extent and intensity of the course: týdenní blok 5x6 hodin.

Listed among pre-requisites of other courses

- [aVLAM9X1c Intensive Care Medicine - practice](#)
[aVLFA0822c](#) && [aVLCH0832c](#) && [aVLLP0633c](#) && [aVLDI7X1c](#) &&
[aVLOT7X1c](#) && [aVLIN7X21c](#) (Do I meet enrolment requirements?)
- [aVLAM9X1p Intensive Care Medicine - lecture](#)
[aVLFA0822c](#) && [aVLCH0832c](#) && [aVLLP0633c](#) && [aVLDI7X1c](#) &&
[aVLOT7X1c](#) && [aVLIN7X21c](#) (Do I meet enrolment requirements?)
- [aVLIN9X22 Infectious Diseases II](#)
[aVLIN7X21c](#) && [aVLLP0633c](#) (Do I meet enrolment requirements?)
- [aVLIN9X22c Infectious diseases II - practice](#)
[aVLIN7X21c](#) && [aVLLP0633c](#) (Do I meet enrolment requirements?)

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#),
[Accreditation spring](#).

aVLIN9X22 Infectious Diseases II ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/0/0. 1 credit(s). Type of Completion: zk (examination).

Teacher(s)

[prof. MUDr. Petr Husa, CSc.](#) (seminar tutor)
[doc. MUDr. Lenka Krbková, CSc.](#) (seminar tutor)
[MUDr. Alena Holčíková, Ph.D.](#) (seminar tutor)
[MUDr. Svatava Snopková, Ph.D.](#) (seminar tutor)
[MUDr. Zuzana Rundesová](#) (seminar tutor)
[MUDr. Matúš Mihalčín](#) (seminar tutor)
[MUDr. Petr Husa](#) (seminar tutor)
[MUDr. Lukáš Homola, Ph.D.](#) (seminar tutor)
[MUDr. Tomáš Gergel](#) (seminar tutor)
[MUDr. Roman Stebel](#) (seminar tutor)
[MUDr. Lenka Vojtilová, Ph.D.](#) (seminar tutor)
[MUDr. Radek Svačinka](#) (seminar tutor)
[MUDr. Evelína Kováčsová](#) (seminar tutor)
[Markéta Pospíšilová](#) (assistant)

Supervisor

[prof. MUDr. Petr Husa, CSc.](#)
[Department of Infectious Diseases - Institutions shared with the Faculty Hospital Brno -
 Adult Age Medicine - Faculty of Medicine](#)
 Supplier department: [Department of Infectious Diseases - Institutions shared with the
 Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Prerequisites (in Czech)

[aVLIN7X21c Infectious diseases I - prac.](#) && [aVLLP0633c](#)
 (Do I meet enrolment requirements?)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The programme is the continuation of the lessons of INF 1 and enriches them; it is the preparation to the examination, too. The aim of this course is to spread the information about infectious diseases obtained during course VLIN7X21. The main stress is put on viral hepatitis, infectious of nervous and alimentary systems, Lyme diseases, sepsis, and differential diagnosis of infectious diseases.

Syllabus

- The carrier state (*Salmonella typhi abdominalis*, *Salmonella paratyphi B*, *Streptococcus pyogenes*, enteric salmonellae - aetiology, treatment, regimen measures), viral carrier state, prion infections.
- Differential diagnosis of viral hepatitis, diarrhoeas, tonsillitis, lymphadenopathy, infectious exanthema, fever.
- Neuroinfections; bacterial meningitis - aetiology, clinical features, treatment. The problem of the bacterial meningitis in the newborns, little babies and in the elderly.
- Serous meningitis. Tickborne encephalitis. Lyme boreliosis - stage, clinical features, treatment. The examination of the cerebrospinal fluid; differential diagnosis of meningitis.
- The infectious diseases in the pregnancy. The infectious disease and the corticosteroid therapy.
- Anthroozoonoses. Anaerobic infections, tetanus.
- The introduction to the problem of the geographic and travel medicine. Malaria, leishmaniosis, typhoid fever.
- Clinical demonstration of the patients.

Literature

required literature

- [HUSA, Petr](#), [Lenka KRBKOVÁ](#), [Drahomíra BARTOŠOVÁ](#), [Svatava SNOPKOVÁ](#), [Alena HOLČÍKOVÁ](#), [Pavel POLÁK](#), [Radek SVOBODA](#) and [Kateřina HAVLÍČKOVÁ](#). *Infekční lékařství. Učební text pro studenty všeobecného lékařství (Infectious Diseases. Textbook for students of general medicine.)*. 1. vyd. Brno: Masarykova univerzita, 2011. 159 pp. ISBN 978-80-210-5660-2. [info](#)

recommended literature

- Beneš, Jiří, hlavní autor a pořadatel. *Infekční lékařství*. 1. vyd. Praha: Galén 2009, 651 s. ISBN 978-80-7262-644-1

not specified

- *Infectious diseases for foreign students*. Edited by Petr Husa - Lenka Krbková. 1st ed. Brno: Masaryk University, 2013. 144 s. ISBN 9788021066304. [info](#)

Teaching methods

Seminar, clinical demonstrations of patients.

Assessment methods

For credit is necessary full presence. Before passing of oral examination is necessary to have credit.

Language of instruction

English

Further comments (probably available only in Czech)

Information on completion of the course: předmět lze ukončit po absolvování stáží I a II

The course can also be completed outside the examination period.

The course is taught each semester.

The course is taught: in blocks.

Listed among pre-requisites of other courses

- [aVLCH11XX Surgery - state exam](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && VYCET(1,[aVLAL091](#),[aVLDO091](#),[aVLKF101](#),[aVLKB091](#),[aVLFP091](#)) && [aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [aVLPD11XX Pediatrics - state exam](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && VYCET(1,[aVLAL091](#),[aVLDO091](#),[aVLKF101](#),[aVLKB091](#),[aVLFP091](#)) && [aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [aVLPG11XX Obstetrics and Gynaecology - State Exam](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && VYCET(1,[aVLAL091](#),[aVLDO091](#),[aVLKF101](#),[aVLKB091](#),[aVLFP091](#)) && [aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [aVLPL11XX General Medicine Practice and Geriatrics](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && VYCET(1,[aVLAL091](#),[aVLDO091](#),[aVLKF101](#),[aVLKB091](#),[aVLFP091](#)) && [aVLCH9X33c](#) && [aVLCJ0888](#) (Do I meet enrolment requirements?)

- [aVLVL11XX Internal Medicine - State Exam](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) &&
[aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) &&
[aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) &&
VYCET(1,[aVLAL091](#),[aVLDO091](#),[aVLKF101](#),[aVLKB091](#),[aVLFP091](#)) &&
[aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [aVLZP11XX Public Health - State exam](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) &&
[aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) &&
[aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) &&
VYCET(1,[aVLAL091](#),[aVLDO091](#),[aVLKF101](#),[aVLKB091](#),[aVLFP091](#)) &&
[aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) (Do I meet enrolment requirements?)

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

aVLIN9X22c Infectious diseases II - practice *

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2/0. 1 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Petr Husa, CSc.](#) (seminar tutor)
[doc. MUDr. Lenka Krbková, CSc.](#) (seminar tutor)
[MUDr. Alena Holčíková, Ph.D.](#) (seminar tutor)
[MUDr. Svatava Snopková, Ph.D.](#) (seminar tutor)
[MUDr. Matúš Mihalčín](#) (seminar tutor)
[MUDr. Zuzana Rundesová](#) (seminar tutor)
[MUDr. Petr Husa](#) (seminar tutor)
[MUDr. Lukáš Homola, Ph.D.](#) (seminar tutor)
[MUDr. Tomáš Gergel](#) (seminar tutor)
[MUDr. Roman Stebel](#) (seminar tutor)
[MUDr. Lenka Vojtilová, Ph.D.](#) (seminar tutor)
[MUDr. Evelína Kováčsová](#) (seminar tutor)
[MUDr. Radek Svačinka](#) (seminar tutor)
[Markéta Pospíšilová](#) (assistant)

Supervisor

[prof. MUDr. Petr Husa, CSc.](#)
[Department of Infectious Diseases - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)
Supplier department: [Department of Infectious Diseases - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Prerequisites (in Czech)

[aVLIN7X21c Infectious diseases I - prac.](#) && aVLLP0633c

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The programme is the continuation of the lessons of INF 1 and enriches them; it is the preparation to the examination, too. The aim of this course is to spread the information about infectious diseases obtained during course VLIN7X21. The main stress is put on viral hepatitis, infectious of nervous and alimentary systems, Lyme diseases, sepsis, and differential diagnosis of infectious diseases.

Syllabus

- The carrier state (*Salmonella typhi abdominalis*, *Salmonella paratyphi B*, *Streptococcus pyogenes*, enteritic salmonellae - aetiology, treatment, regimen measures), viral carrier state, prion infections.
- Differential diagnosis of viral hepatitis, diarrhoeas, tonsillitis, lymphadenopathy, infectious exanthema, fever.
- Neuroinfections; bacterial meningitis - aetiology, clinical features, treatment. The problem of the bacterial meningitis in the newborns, little babies and in the elderly.
- Serous meningitis. Tickborne encephalitis. Lyme boreliosis - stage, clinical features, treatment. The examination of the cerebrospinal fluid; differential diagnosis of meningitis.
- The infectious diseases in the pregnancy. The infectious disease and the corticosteroid therapy.
- Anthropozoonoses. Anaerobic infections, tetanus.
- The introduction to the problem of the geographic and travel medicine. Malaria, leishmaniosis, typhoid fever.
- Clinical demonstration of the patients.

Literature

required literature

- [HUSA, Petr](#), [Lenka KRBKOVÁ](#), [Drahomíra BARTOŠOVÁ](#), [Svatava SNOPKOVÁ](#), [Alena HOLČÍKOVÁ](#), [Pavel POLÁK](#), [Radek SVOBODA](#) and [Kateřina HAVLÍČKOVÁ](#). *Infekční lékařství. Učební text pro studenty všeobecného lékařství (Infectious Diseases. Textbook for students of general medicine.)*. 1. vyd. Brno: Masarykova univerzita, 2011. 159 pp. ISBN 978-80-210-5660-2. [info](#)

recommended literature

- Beneš Jiří, hlavní autor a pořadatel. Infekční lékařství. 1. vyd. Praha: Galén 2009. ISBN 978-80-7262-644-1

not specified

- *Infectious diseases for foreign students*. Edited by Petr Husa - Lenka Krbková. 1st ed. Brno: Masaryk University, 2013. 144 s. ISBN 9788021066304. [info](#)

Teaching methods

The stress is put on practical examination of the patients combined with lectures.

Assessment methods

Full attendance is necessary for giving course-unit credit.

Language of instruction

English

Further comments (probably available only in Czech)

The course is taught each semester.

The course is taught: in blocks.

Information on the extent and intensity of the course: týdenní blok 5x6 hodin.

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

aVLKB091 Clinical Biochemistry ✱

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2/0. 3 credit(s). Type of Completion: k (colloquium).

Teacher(s)

[MUDr. Dana Bučková, Ph.D.](#) (lecturer)

[MUDr. Zdeňka Čermáková, Ph.D.](#) (lecturer)

[MUDr. Milan Dastych](#) (lecturer)

[doc. MUDr. Milan Dastych, CSc., MBA](#) (lecturer)

[MUDr. Miroslava Hlaváčová](#) (lecturer)

[MUDr. Michaela Králíková, Ph.D.](#) (lecturer)

[prof. MUDr. Vladimír Soška, CSc.](#) (lecturer)

[prof. RNDr. Eva Táborská, CSc.](#) (lecturer)

[doc. RNDr. Josef Tomandl, Ph.D.](#) (lecturer)

[MUDr. Hana Vinohradská](#) (lecturer)

[Mgr. Radomíra Bednářová](#) (assistant)

[doc. RNDr. Jiří Dostál, CSc.](#) (assistant)

[Mgr. Miroslav Fiala](#) (assistant)

[Mgr. et Mgr. Zuzana Handlová](#) (assistant)

[Lenka Nerudová](#) (assistant)
[Mgr. Ladislav Václavík, Ph.D.](#) (assistant)

Supervisor

[doc. MUDr. Milan Dastych, CSc., MBA](#)
[Department of Biochemistry - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [Lenka Nerudová](#)

Supplier department: [Department of Biochemistry - Theoretical Departments - Faculty of Medicine](#)

Prerequisites (in Czech)

aVLFA0822p

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

After this course the participant should be able to: - choose biochemical tests suitable for diagnostics of diseases - know the basic problems of common biochemical diagnostic tests - know how to collect biological material and how to treat it to prevent false results - to assess reliability of laboratory results.

Learning outcomes

Student will be able to:

purposefully indicate laboratory biochemical tests

correctly interpret laboratory results

evaluate laboratory tests with regard to their sensitivity and specificity

use knowledge of the uncertainty of the evaluated parameter

to focus on possible pre-analytical influences and interferences

Syllabus

- Analytical sources of variation, accuracy and precision. Diagnostic accuracy, sensitivity, specificity, and efficiency of diagnostic tests. Reference ranges, decision values. Collection and processing of specimens, special requirements, general safety rules.
- Assessment and monitoring of nutritional status. Blood plasma proteins. Acute-phase reactants. Principles of nutritional support, enteral and parenteral nutrition. Dietary constituents providing a sufficient energy intake.
- Energy output, nitrogen balance. Indications for nutritional support. Oxygen, transport and metabolism, tissue hypoxia.
- Disorders of lipid and lipoprotein metabolism.
- Ischemic heart disease, congestive cardiac failure. Potassium and magnesium homeostasis.
- Iron and essential microelements metabolism.

- Disturbances of water and sodium balance. Plasma and urine osmolality. Plasma electrolytes in acid-base disorders.
- Assessment of acid-base balance. Investigating an acid-base status, indications for blood acid-base and oxygen measurements, interpretation of results.
- Laboratory evaluation of kidney function. Biochemical monitoring of acute and chronic renal failure, and of patients receiving haemodialysis. Urine sediment.
- Investigation of liver and biliary tract diseases. Signs of the liver injury, differentiating of hyperbilirubinaemias, syndrome of biliary obstruction.
- Clinical biochemistry of the GIT. Gastric acid secretion, maldigestion and malabsorption, assessment of pancreatic function.
- Disorders of saccharide metabolism, diabetes mellitus.
- Calcium and phosphate metabolism. Biochemical markers of bone metabolism (in the assessment of osteoporosis).
- Uric acid, hyperuricaemia. Renal tract stones.
- Laboratory assessment of thyroid and adrenal functions.
- Tumour markers. Biological causes of variation of test results, effects of drugs on chemical tests.

Literature

required literature

- RACEK, Jaroslav. *Klinická biochemie. 2.*, přeprac. vyd. Praha: Galén, 2006. 329 s. ISBN 8072623249. [info](#)

recommended literature

- SCHNEIDERKA, Petr. *Kapitoly z klinické biochemie. 1.* vyd. V Praze: Karolinum, 2000. 284 s. ISBN 8024601400. [info](#)
- JABOR, A. *Vnitřní prostředí. 1.* vyd. Praha: Grada Publishing,a.s., 2008, 2009. 560 pp. ISBN 978-80-247-1221-5. [info](#)
- MASOPUST, Jaroslav. *Klinická biochemie. Požadování a hodnocení biochemických vyšetření. (Clinical chemistry).* 1. vyd. Praha: Karolinum, 1998. 832 pp. část I. a část II. ISBN 80-7184-649-3. [info](#)
- *Tietz fundamentals of clinical chemistry.* Edited by Carl A. Burtis - Edward R. Ashwood - David E. Bruns - Barbara G. Sawye. 6th ed. St. Louis, Mo.: Saunders/Elsevier, 2008. xx, 952. ISBN 9780721638652. [info](#)
- *Clinical chemistry : techniques, principles, correlations.* Edited by Michael L. Bishop - Edward P. Fody - Larry E. Schoeff. 6th ed. Philadelphia: Wolters Kluwer Health/Lippincott Williams & Wilkins, 2010. xx, 732. ISBN 9780781790451. [info](#)

Teaching methods

lectures, audio-visual study materials, pp-presentations,commentated videos, interactive inputs

Assessment methods

written test, the test consists of 40 questions,25 correct answers is needed to pass;
colloquium

Language of instruction

English

Further comments (probably available only in Czech)

Study Materials

The course is taught annually.

The course is taught: in blocks.

Information on course enrolment limitations: kromě studentů LF maximálně 3 studenti MU v jednom běhu

Listed among pre-requisites of other courses

- [**aVLCH11XX** Surgery - state exam](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && [VYCET\(1,aVLAL091,aVLDO091,aVLKF101,aVLKB091,aVLFP091\)](#) && [aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [**aVLPD11XX** Pediatrics - state exam](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && [VYCET\(1,aVLAL091,aVLDO091,aVLKF101,aVLKB091,aVLFP091\)](#) && [aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [**aVLPG11XX** Obstetrics and Gynaecology - State Exam](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && [VYCET\(1,aVLAL091,aVLDO091,aVLKF101,aVLKB091,aVLFP091\)](#) && [aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [**aVLPL11XX** General Medicine Practice and Geriatrics](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && [VYCET\(1,aVLAL091,aVLDO091,aVLKF101,aVLKB091,aVLFP091\)](#) && [aVLCH9X33c](#) && [aVLCJ0888](#) (Do I meet enrolment requirements?)
- [**aVLVL11XX** Internal Medicine - State Exam](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && [VYCET\(1,aVLAL091,aVLDO091,aVLKF101,aVLKB091,aVLFP091\)](#) && [aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [**aVLZP11XX** Public Health - State exam](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) &&

VYCET(1,[aVLAL091](#),[aVLDO091](#),[aVLKF101](#),[aVLKB091](#),[aVLFP091](#)) &&
[aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) ([Do I meet enrolment requirements?](#))

The course is also listed under the following terms [Accreditation autumn](#).

aVLKG7X1c Clinical Genetics - practice *

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/1/0. 1 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Renata Gaillyová, Ph.D.](#) (lecturer)
[MUDr. Šárka Prášilová](#) (seminar tutor)
[MUDr. Jana Šoukalová](#) (seminar tutor)
[RNDr. Iveta Valášková, Ph.D.](#) (seminar tutor)
[Mgr. Marta Hanáková](#) (seminar tutor)
[Mgr. Hana Filková](#) (seminar tutor)
[Mgr. Silvie Dudová](#) (seminar tutor)
[Mgr. Kateřina Kašíková, Ph.D.](#) (seminar tutor)
[Mgr. Martina Vráblíková](#) (assistant)
[Mgr. Kateřina Vopěnková, Ph.D.](#) (assistant)
[prof. MUDr. Michael Doubek, Ph.D.](#) (seminar tutor)

Supervisor

[prof. MUDr. Michael Doubek, Ph.D.](#)
[Department of Internal Medicine, Hematology and Oncology - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)
Supplier department: [Department of Internal Medicine, Hematology and Oncology - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Prerequisites (in Czech)

[aVLLM0522p Medical Microbiology II - lect](#) && [aVLIM051p Immunology - lecture](#)
&& [aVLLP0633c](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The course provides an overview of the methods used in laboratories of clinical genetics including prenatal cytogenetics, postnatal cytogenetics, cytogenetics in oncology, molecular cytogenetics and modern DNA and RNA diagnostic methods. In addition, genetic counseling and selected model case reports are presented to students. The subject matter presented in this course will help to better understand other medical subjects including internal medicine, neurology, surgery etc. Visit to Mendel's museum in Brno.

Syllabus

- Principles of clinical genetics - standard karyotype and its abnormalities - indication criteria for prenatal and postnatal karyotype examination - prenatal cytogenetic methods - prenatal screening examinations – chromosomal aberrations – chromosome instability – principles of DNA diagnostics - prenatal diagnostics using methods of molecular genetics – gene therapy and mapping of the human genome – principles of oncocytogenetics – genetic counseling - case reports.

Literature

- Základem studia je látka přednášená na přednáškách a probíraná na seminářích a stážích z klinické genetiky a materiály v IS.
- D.J.Pritchard, B.R.Korf: *Základy lékařské genetiky*, Galén 2007
- Nussbaum, Mc Illnes, :Thompson & Thompson: *Klinická genetiky*, 2004
- SRŠEŇ, Štefan and Klára SRŠŇOVÁ. *Základy klinickej genetiky*. 2. preprac. a rozš. vyd. Martin: Vydavateľstvo Osveta, 1995. 259 s. ISBN 8021704772. [info](#)
- KUČEROVÁ, Maria. *Vrozené a získané poruchy lidských chromosomů [Kučerová, 1988]*. Praha: Avicenum, 1988. [info](#)
- HYÁNEK, Josef. *Klinické a biochemické aspekty vrozených metabolických poruch*. 1. vyd. Praha: Avicenum, 1980. 280 s. [info](#)
- MICHALOVÁ, Kyra. *Úvod do lidské cytogenetiky*. Vyd. 1. V Brně: Institut pro další vzdělávání pracovníků ve zdravotnictví v Brně, 1999. 172 s. ISBN 8070132817. [info](#)
- Vojtíšková M.: *Klinická molekulární genetiky*, IDVPZ Brno, 1999
- [ŠMARDA, Jan](#). *Člověk v proudu dědičnosti (Geny v lidském zdraví a nemoci) (Man in the stream of heredity)*. Praha: Grada-Avicenum, 1999. 136 pp. ISBN 80-7169-768-0. [info](#)
- *Pokroky v lékařské genetice*. Edited by Jan Kapras. 1. vyd. Praha: Avicenum, 1992. 141 s. ISBN 80-85047-10-1. [info](#)
- ŽIŽKA, Jan. *Diagnostika syndromů a malformací*. 1. vyd. Praha: Galén, 1994. 414 s. ISBN 80-85824-04-3. [info](#)
- *Practical genetic counselling*. Edited by Peter S. Harper. 4th ed. Oxford: Butterworth-Heinemann, 1993. 348 s. ISBN 0-7506-0928-1. [info](#)
- *Atlas klinických syndromů :pro kliniku a praxi*. Edited by H.-R Wiedemann - J. Kunze - F.-R Grosse, Translated by Miloslav Navrá. 1. vyd. Martin: Osveta, 1996. xxvii, 684. ISBN 80-217-0517-5. [info](#)
- George H. Sack, Jr. : *Medical Genetics*

Teaching methods practice

Assessment methods

for giving of course-unit credit is necessary full attendance in the lessons

Language of instruction

English

Listed among pre-requisites of other courses

- [aVLPD0932c Pediatrics II - practice](#)
[aVLFA0822c](#) && [aVLPD7X31c](#) && [aVLOT7X1c](#) && [aVLDI7X1c](#) &&
[aVLLP0633c](#) && [aVLKG7X1c](#) ([Do I meet enrolment requirements?](#))
- [aVLPD0932p Pediatrics II - lecture](#)
[aVLFA0822c](#) && [aVLPD7X31c](#) && [aVLOT7X1c](#) && [aVLDI7X1c](#) &&
[aVLLP0633c](#) && [aVLKG7X1c](#) ([Do I meet enrolment requirements?](#))

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#),
[Accreditation spring](#).

aVLKG7X1p Clinical Genetics - lecture ✱

Faculty of Medicine

Autumn 2019

Extent and Intensity

1/0/0. 1 credit(s). Type of Completion: k (colloquium).

Teacher(s)

[MUDr. Renata Gaillyová, Ph.D.](#) (lecturer)
[MUDr. Šárka Prášilová](#) (seminar tutor)
[MUDr. Jana Šoukalová](#) (seminar tutor)
[RNDr. Iveta Valášková, Ph.D.](#) (seminar tutor)
[Mgr. Marta Hanáková](#) (seminar tutor)
[Mgr. Hana Filková](#) (seminar tutor)
[Mgr. Silvie Dudová](#) (seminar tutor)
[Mgr. Kateřina Kašíková, Ph.D.](#) (seminar tutor)
[Mgr. Martina Vráblíková](#) (assistant)
[Mgr. Kateřina Vopěnková, Ph.D.](#) (assistant)
[prof. MUDr. Michael Doubek, Ph.D.](#) (lecturer)
[doc. RNDr. Lenka Fajkusová, CSc.](#) (lecturer)
[doc. MUDr. Lenka Foretová, Ph.D.](#) (lecturer)
[prof. MVDr. RNDr. Petr Hořín, CSc.](#) (lecturer)
MUDr. Věra Hořínová (lecturer)
[doc. MUDr. Hana Ošlejšková, Ph.D.](#) (lecturer)
[doc. MUDr. Marek Svoboda, Ph.D.](#) (lecturer)
[doc. Mgr. Martin Trbušek, Dr.](#) (lecturer)

Supervisor

[prof. MUDr. Michael Doubek, Ph.D.](#)
[Department of Internal Medicine, Hematology and Oncology - Institutions shared with
the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Supplier department: [Department of Internal Medicine, Hematology and Oncology - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Prerequisites (in Czech)

[aVLLM0522p Medical Microbiology II - lect](#) && [aVLIM051p Immunology - lecture](#)
&& aVLLP0633c

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The course provides an overview of the current knowledge of clinical genetics and its interdisciplinary character. Recent and modern concepts of genetic disorders, prevention of genetic diseases and congenital defects and relevant modern diagnostic methods are presented to students. As an extension of these topics, ethical, juridical and psychosocial issues are discussed. The subject matter presented in this course will help to better understand other medical subjects including internal medicine, neurology, surgery etc.

Syllabus

- Principles of clinical genetics - standard karyotype and its abnormalities - indication criteria for prenatal and postnatal karyotype examination - prenatal cytogenetic methods - prenatal screening examinations – chromosomal aberrations – chromosome instability – principles of DNA diagnostics - prenatal diagnostics using methods of molecular genetics – gene therapy and mapping of the human genome – principles of oncocytogenetics – genetic counseling - case reports.

Literature

- Základem studia je látka přednášená na přednáškách a probíraná na seminářích a stážích z klinické genetiky a materiály v IS.
- D.J.Pritchard, B.R.Korf: *Základy lékařské genetiky*, Galén 2007
- Nussbaum, Mc Illnes, :Thompson & Thompson: *Klinická genetiky*, 2004
- SRŠEŇ, Štefan and Klára SRŠŇOVÁ. *Základy klinickej genetiky*. 2. preprac. a rozš. vyd. Martin: Vydavateľstvo Osveta, 1995. 259 s. ISBN 8021704772. [info](#)
- KUČEROVÁ, Maria. *Vrozené a získané poruchy lidských chromosomů [Kučerová, 1988]*. Praha: Avicenum, 1988. [info](#)
- HYÁNEK, Josef. *Klinické a biochemické aspekty vrozených metabolických poruch*. 1. vyd. Praha: Avicenum, 1980. 280 s. [info](#)
- MICHALOVÁ, Kyra. *Úvod do lidské cytogenetiky*. Vyd. 1. V Brně: Institut pro další vzdělávání pracovníků ve zdravotnictví v Brně, 1999. 172 s. ISBN 8070132817. [info](#)
- Vojtíšková M.: *Klinická molekulární genetiky*, IDVPZ Brno, 1999

- [ŠMARDA, Jan](#). *Člověk v proudu dědičnosti (Geny v lidském zdraví a nemoci) (Man in the stream of heredity)*. Praha: Grada-Avicenum, 1999. 136 pp. ISBN 80-7169-768-0. [info](#)
- *Pokroky v lékařské genetice*. Edited by Jan Kapras. 1. vyd. Praha: Avicenum, 1992. 141 s. ISBN 80-85047-10-1. [info](#)
- ŽIŽKA, Jan. *Diagnostika syndromů a malformací*. 1. vyd. Praha: Galén, 1994. 414 s. ISBN 80-85824-04-3. [info](#)
- *Practical genetic counselling*. Edited by Peter S. Harper. 4th ed. Oxford: Butterworth-Heinemann, 1993. 348 s. ISBN 0-7506-0928-1. [info](#)
- *Atlas klinických syndromů :pro kliniku a praxi*. Edited by H.-R Wiedemann - J. Kunze - F.-R Grosse, Translated by Miloslav Navrá. 1. vyd. Martin: Osveta, 1996. xxvii, 684. ISBN 80-217-0517-5. [info](#)
- George H. Sack, Jr. : Medical Genetics

Teaching methods

one-hour lecture per week

Assessment methods

written colloquium, for giving of course-unit credit is necessary full attendance in the lessons

Language of instruction

English

Further Comments

The course is taught: every week.

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

aVLLM0421c Medical Microbiology I - practice ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

0/3/0. 4 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Ondřej Zahradníček](#) (lecturer)

[MUDr. Lenka Černohorská, Ph.D.](#) (seminar tutor)

[Mgr. Milada Dvořáčková](#) (seminar tutor)

[Mgr. Monika Dvořáková Heroldová, Ph.D.](#) (seminar tutor)

[Ing. Veronika Holá, Ph.D.](#) (seminar tutor)

[Mgr. Ing. Veronika Lýčková](#) (seminar tutor)

[Mgr. Martina Mahelová, Ph.D.](#) (seminar tutor)

[Mgr. Katarína Rebrošová](#) (seminar tutor)

[doc. MUDr. Filip Růžička, Ph.D.](#) (seminar tutor)

[Mgr. Lukáš Vacek](#) (seminar tutor)

Supervisor

[doc. MUDr. Filip Růžička, Ph.D.](#)

[Department of Microbiology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Contact Person: [MUDr. Ondřej Zahradníček](#)

Supplier department: [Department of Microbiology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Prerequisites

([VSBI0222p Biology II-lect.](#) || [aVLBI0222p Biology II - lect.](#)) && ([VLBF011p Biophysics-lect.](#) || [aVLBF011p Biophysics -lect.](#))

Students are supposed to have considerable knowledge of anatomy, histology, biology, biochemistry and physiology.

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

At the end of this course, students should be able:

to prepare wet mount, Gram stained preparation, to observe the results in a microscope, to list other staining methods

to list culture media, their use, differences between them, to reinoculate a strain/specimen to a culture medium

to identify bacteria and yeasts by means of various methods of biochemical identification and other identification methods

to describe antibiotic susceptibility/resistance testing methods and to read their results

to describe animal experiment (only basically)

to read results of nucleic acid detection in microbiology (only basically)

to describe methods detecting antigens or antibodies, their use for antibody

detection/antigen detection in specimen/antigen analysis of a strain; to read the results of these methods including titers, titer dynamics, detection of IgM/IgA/IgG; to interpret the results; to describe precipitation, agglutination, agglutination on carriers,

complementfixing test, neutralisation reaction, immunofluorescence, radioimmunoassay, ELISA, Western blotting

Besides that, students will be able to describe the basic of medical virology

Syllabus

- J01 Safety in laboratory, technique of work with loop, wet mount. Gram staining, demonstration of more staining methods. Demonstration of pictures of various organisms and structures in Gram staining.
- J02 Bacterial culture
- J03 Physiology of bacteria, identification according to biochemical activity and virulence factor determination
- J04 Microbes and outer influences, decontamination methods

- J05 Testing of bacterial susceptibility to antimicrobial drugs, detection of resistance factors
- J06 Introduction to serology, agglutination and precipitation, dilution and measuring titres
- J07 Following dynamics of titres, complement fixing test, neutralisation
- J08 Reactions with labelled components (IMF, RIA, ELISA) including immunoblotting
- J09 Molecular methods in microbiology
- J10 Medical virology I (influenza, respiratory viruses, tick-borne encephalitis)
- J11 Medical virology II (hepatitis and HIV)
- J12 Medical parasitology (basics)
- J13 Medical mycology (basics)
- J14 Biofilm infections
- J15 No practical sessions (only exceptionally individual substitutions)

Literature

required literature

- *Medical microbiology : a guide to microbial infections : pathogenesis, immunity, laboratory diagnosis and control.* Edited by David Greenwood. 18th ed. Edinburgh: Churchill Livingstone, 2012. xvi, 778. ISBN 9780702040900. [info](#)

recommended literature

- *Mims' medical microbiology.* Edited by Richard V. Goering - Cedric A. Mims. 4th ed. Philadelphia, PA: Mosby Elsevier, 2008. xi, 656. ISBN 9780808923725. [info](#)
- *Manual of clinical microbiology.* Edited by James Versalovic. 10th ed. Washington: ASM Press, 2011. xxiii, 126. ISBN 9781555814632. [info](#)
- BJARNSHOLT, Thomas, Claus MOSER and Niels HØIBY. *Biofilm Infections.* : Springer, 2011. ISBN 978-1-4419-6084-9. [e-book](#) [info](#)

not specified

- Book No 1 + lectures + all materials from practical sessions are basic for the examination. Other books are recommended.

Teaching methods

practical training in lab

self-study with use of e-learning materials

Assessment methods

Conditions for credits:

(1) absolving all practicals, with following notes:

- two justified absences or absences approved by teacher are allowed; students are obliged to show that they completed the knowledge (in laboratory reports and in their heads)

- more absences than two require a substitution

- not justified absences are not allowed (**EXTRA PAYMENT IS REQUIRED FOR EVENTUAL SUBSTITUTION!!!**)

- (2) complete laboratory report (signature of teacher is not necessary)
- (3) successfully written final test (usually 10 multiple choice questions, each for one point; 7 points needed)
- (4) all ROPOT questionnaires completed successfully; if they are always fulfilled in time (prior to particular lab session), the student has a bonus of one point for final test

Language of instruction

English

Follow-Up Courses

- [VLLM0522p Medical Microbiology II - lecture](#)

Further comments (probably available only in Czech)

Information on completion of the course: Podmínky udělení zápočtu viz Doplnkové údaje o předmětu

The course is taught annually.

The course is taught: every week.

Listed among pre-requisites of other courses

- [aVLLM0522c Medical Microbiology II - practice](#)
([VLLM0421c](#) || [aVLLM0421c](#)) && ([aVLBC0422c](#) || [VSBC041c](#)) &&
([aVLBC0422s](#) || [VSBC041s](#)) ([Do I meet enrolment requirements?](#))
- [aVLLM0522p Medical Microbiology II - lecture](#)
([VLLM0421c](#) || [aVLLM0421c](#)) && ([aVLBC0422p](#) || [VSBC041p](#)) ([Do I meet enrolment requirements?](#))
- [aVLPA0521c Pathology I - practice](#)
([aVLAN0222p](#) || [VSAN0333p](#)) && ([aVLHE0322p](#) || [VSHE0322p](#)) &&
([aVLLM0421c](#) || [VLLM0421c](#)) ([Do I meet enrolment requirements?](#))
- [aVLPA0521p Pathology I - lecture](#)
([aVLAN0222p](#) || [VSAN0333p](#)) && ([aVLHE0322p](#) || [VSHE0322p](#)) &&
([aVLLM0421c](#) || [VLLM0421c](#)) ([Do I meet enrolment requirements?](#))
- [aVLPF0521c Pathological physiology I - practice](#)
([aVLFY0422p](#) || [VSFY0422p](#)) && ([VSBC041p](#) || [aVLBC0422p](#)) &&
([VLLM0421c](#) || [aVLLM0421c](#)) ([Do I meet enrolment requirements?](#))
- [aVLPF0521p Pathological Physiology I - lecture](#)
([aVLFY0422p](#) || [VSFY0422p](#)) && ([VSBC041p](#) || [aVLBC0422p](#)) &&
([VLLM0421c](#) || [aVLLM0421c](#)) ([Do I meet enrolment requirements?](#))

Teacher's information

E-mail and phone contact:

Assoc. prof. Filip Růžička, MD, PhD: fruzic@fnusa.cz, phone: +420 543 183 090, (head)

Secretary: +420 543 183 091

Ondřej Zahradníček, MD: zahradnicek@fnusa.cz, +420 543 183 113

Lenka Černohorská, MD, PhD.: lenka.cernohorska@fnusa.cz, +420 543 183 092

Monika Dvořáková Heroldová, MSc, PhD: monika.heroldova@fnusa.cz

Veronika Holá, MSc, PhD.: veronika.hola@fnusa.cz

Milada Dvořáčková, MSc: milada.dvorackova@fnusa.cz

Lukáš Vacek, MSc: vacek.lukas.88@gmail.com

Veronika Lýčková, MSc: 324090@mail.muni.cz

More information in Practical Sessions Hall.

The course is also listed under the following terms [Spring 2019](#), [Accreditation spring](#).

aVLLM0421p Medical Microbiology I - lecture ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

1/0/0. 0 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Lenka Černohorská, Ph.D.](#) (lecturer)

[Mgr. Monika Dvořáková Heroldová, Ph.D.](#) (lecturer)

[Ing. Veronika Holá, Ph.D.](#) (lecturer)

[doc. MUDr. Filip Růžička, Ph.D.](#) (lecturer)

[prof. MUDr. Miroslav Votava, CSc.](#) (lecturer)

[doc. MUDr. Vladana Woznicová, Ph.D.](#) (lecturer)

[MUDr. Ondřej Zahradníček](#) (seminar tutor)

[Ing. Magdalena Flasarová](#) (assistant)

Supervisor

[doc. MUDr. Filip Růžička, Ph.D.](#)

[Department of Microbiology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Contact Person: [MUDr. Ondřej Zahradníček](#)

Supplier department: [Department of Microbiology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Prerequisites

([VSBI0222p Biology II-lect.](#) || [aVLBI0222p Biology II - lect.](#)) && (

[VLBF011p Biophysics-lect.](#) || [aVLBF011p Biophysics -lect.](#))

Students are supposed to have considerable knowledge of anatomy, histology, biology, biochemistry and physiology.

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

At the end of the course student should be able to:
define microbial morphology and physiology, basics of microbial genetics
describe microbial biofilm and its properties
define pathogenicity and virulence, factors of pathogenicity and virulence, pathogenesis and course of infection
discuss antimicrobial immunity, active and passive immunisation
describe tenacity of microorganisms, basic principles and practical use of decontamination methods

Syllabus

1. Introduction to microbiology
2. Bacterial cell and growth
3. Microbes and environment
4. Pathogenicity and virulence
5. Microbial biofilm
6. Microbes and the host
7. Microbes and host immunity
8. Antibiotics I.
9. Antibiotics II.
10. Antibiotics III.
11. Other antimicrobials
12. Principles of antimicrobial treatment
13. Notes to special microbiology I.
14. Notes to special microbiology II.

Literature

required literature

- *Medical microbiology : a guide to microbial infections : pathogenesis, immunity, laboratory diagnosis and control.* Edited by David Greenwood. 18th ed. Edinburgh: Churchill Livingstone, 2012. xvi, 778. ISBN 9780702040900. [info](#)

recommended literature

- *Mims' medical microbiology.* Edited by Richard V. Goering - Cedric A. Mims. 4th ed. Philadelphia, PA: Mosby Elsevier, 2008. xi, 656. ISBN 9780808923725. [info](#)
- MURRAY, Patrick R., Ken S. ROSENTHAL and George S., et al. KOBAYASHI. *Medical microbiology.* 6th ed. St. Louis: Mosby, 2008. 960 pp. ISBN 0-323-05470-6. [info](#)
- BJARNSHOLT, Thomas, Claus MOSER and Niels HØIBY. *Biofilm Infections.* : Springer, 2011. ISBN 978-1-4419-6084-9. [e-book info](#)

- Book No 1 + lectures + all materials from practical sessions are basic for the examination. Other books are recommended.

Teaching methods

lecture

Assessment methods

This is the first part of lectures, no specific end. After the second block of lectures (aVLLM0522p) there is the practical and theoretical examination.

Language of instruction

English

Follow-Up Courses

- [VLLM0522p Medical Microbiology II - lecture](#)

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

Teacher's information

E-mail and phone contact:

Assoc. prof. Filip Růžička, MD, PhD: fruzic@fnusa.cz, phone: +420 543 183 090, (head)

Secretary: +420 543 183 091

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Lukáš Vacek, MSc: vacek.lukas.88@gmail.com

Veronika Lýčková, MSc: 324090@mail.muni.cz

More information in Practical Sessions Hall.

The course is also listed under the following terms [Spring 2019](#), [Accreditation spring](#).

aVLLP7X1 Medical Psychology and Psychosomatics ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/0/0. 2 credit(s). Type of Completion: zk (examination).

Teacher(s)

[Mgr. Terézia Knejzlíková](#) (lecturer)

Mgr. Irena Komárková, Ph.D. (lecturer)

[PhDr. Hana Neudertová, Ph.D.](#) (lecturer)

[Mgr. Ivana Rosi](#) (lecturer)

[PhDr. Jana Severová, CSc.](#) (lecturer)

[Mgr. Lucie Strachotová](#) (lecturer)

[PhDr. Miroslav Světlák, Ph.D.](#) (lecturer)

Supervisor

[prof. MUDr. Tomáš Kašpárek, Ph.D.](#)

[Department of Psychology and Psychosomatics - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [Vlasta Břicháčková](#)

Supplier department: [Department of Psychology and Psychosomatics - Theoretical Departments - Faculty of Medicine](#)

Prerequisites (in Czech)

aVLPF0622c && aVLPA0622c

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The main objectives are as follows: Understanding basic problems in medical psychology, psychosomatic medicine, psychotherapy – biopsychosocial approach towards health and illness. Main psychological terminology. Doctor patient relationship, basic communication skills. Experiencing position of patient, doctor. Meanings of symptoms, approach to illness, illness perception. Understanding Burn-out syndrome, its prevention . Ego defense mechanisms, developmental stages. Psychological approaches in different medical fields. Long term ill and dying patients. Pain and anxiety.

Syllabus

- Integral concept of a disease. Relation between physical symptoms and psychic state. Psychosocial approach.
- The importance of relationship between physician and patient. Forms of communication. Variables modifying physician-patient relationship on conscious and unconscious level.
- Role of patient, experiencing disease, attitude to disease, meaning of the symptom.
- Role of therapist, adaptive and maladaptive realization and attitudes.

- Burn-out syndrome, its prevention, supervision of therapist's work (Balint's groups).
- Unconscious defensive psychic mechanisms (of patient and of therapist). Work with transference and countertransference phenomena.
- Introduction into psychotherapy, basic psychotherapeutic approaches. Principles of intervention during acute psychic crisis.
- Psychological problems of each developmental period.
- Role of psychologist in medical team, psychodiagnostic methods.
- Psychological specificity of medical care in individual branches, care of long-term patients and dying patient, work with pain, anxiety.
- Relationships and forms of communication in a team of therapists.

Literature

required literature

- AYERS, Susan and Richard DE VISSER. *Psychologie v medicíně*. Translated by Helena Hartlová. Vydání 1. Praha: Grada Publishing, 2015. xiv, 552. ISBN 9788024752303. [info](#)
- TRESS, Wolfgang, Johannes KRUSSE and Jürgen OTT. *Základní psychosomatická péče*. Translated by Lubor Špís. Vydání první. Praha: Portál, 2008. 394 stran. ISBN 9788073673093. [info](#)

recommended literature

- Danzer, G. Psychosomatika. Praha: Portál, 2001. 244 s.
- VYMĚTAL, Jan. *Lékařská psychologie*. 3. aktualiz. vyd. Praha: Portál, 2003. 397 s. ISBN 80-7178-740-X. [info](#)
- HONZÁK, Radkin. *Komunikační pasti v medicíně : praktický manuál komunikace lékaře s pacientem*. 2. dopl. vyd. Praha: Galén, 1999. 165 s. ISBN 8072620320. [info](#)
- BAŠTECKÝ, Jaroslav, Jiří ŠAVLÍK and Jiří ŠIMEK. *Psychosomatická medicína*. 1. vyd. Praha: Grada, Avicenum, 1993. 363 s. ISBN 8071690317. [info](#)

Teaching methods

Lessons are interactive.

Assessment methods

Full attendance is required. Exam is written and oral.

Language of instruction

English

Further comments (probably available only in Czech)

The course can also be completed outside the examination period.

The course is taught each semester.

The course is taught: in blocks.

Listed among pre-requisites of other courses

- [aVLOZ0943c Public Health III - practice](#)
[aVLOZ0642p](#) && [aVLPF0622p](#) && [aVLFA0822p](#) && [aVLLP7X1](#) && [aVLLE7x1s](#) (Do I meet enrolment requirements?)
- [aVLOZ0943p Public Health III - lecture](#)
[aVLOZ0642p](#) && [aVLPF0622p](#) && [aVLFA0822p](#) && [aVLLP7X1](#) && [aVLLE7x1s](#) (Do I meet enrolment requirements?)

Teacher's information

Další informace vyvěšujeme na nástěnce Ústavu psychologie a psychosomatiky, Campus, budova A1,4. poschodí

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

aVLLP7X1c Medical Psychology and Psychosomatics - practice ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/4/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[Mgr. Terézia Knejzlíková](#) (seminar tutor)
[Mgr. Irena Komárková, Ph.D.](#) (seminar tutor)
[PhDr. Hana Neudertová, Ph.D.](#) (seminar tutor)
[Mgr. Ivana Rosi](#) (seminar tutor)
[PhDr. Jana Severová, CSc.](#) (seminar tutor)
[Mgr. Lucie Strachotová](#) (seminar tutor)
[PhDr. Miroslav Světlák, Ph.D.](#) (seminar tutor)

Supervisor

[prof. MUDr. Tomáš Kašpárek, Ph.D.](#)
[Faculty of Medicine](#)
 Contact Person: [Vlasta Břicháčková](#)
 Supplier department: [Faculty of Medicine](#)

Prerequisites (in Czech)

[aVLPF0622c](#) && [aVLLP0633c](#)
[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The main objectives are as follows: Understanding basic problems in medical psychology, psychosomatic medicine, psychotherapy – biopsychosocial approach towards health and illness. Main psychological terminology. Doctor patient relationship, basic communication skills. Experiencing position of patient, doctor. Meanings of symptoms, approach to illness, illness perception. Understanding Burn-out syndrome, its prevention . Ego defense mechanisms, developmental stages. Psychological approaches in different medical fields. Long term ill and dying patients. Pain and anxiety.

Syllabus

- Integral concept of a disease. Relation between physical symptoms and psychic state. Psychosocial approach.
- The importance of relationship between physician and patient. Forms of communication. Variables modifying physician-patient relationship on conscious and unconscious level.
- Role of patient, experiencing disease, attitude to disease, meaning of the symptom.
- Role of therapist, adaptive and maladaptive realization and attitudes.
- Burn-out syndrome, its prevention, supervision of therapist's work (Balint's groups).
- Unconscious defensive psychic mechanisms (of patient and of therapist). Work with transference and countertransference phenomena.
- Introduction into psychotherapy, basic psychotherapeutical approaches. Principles of intervention during acute psychic crisis.
- Psychological problems of each developmental period.
- Role of psychologist in medical team, psychodiagnostic methods.
- Psychological specificity of medical care in individual branches, care of long-term patients and dying patient, work with pain, anxiety.
- Relationships and forms of communication in a team of therapists.

Literature

required literature

- AYERS, Susan and Richard DE VISSER. *Psychologie v medicíně*. Translated by Helena Hartlová. Vydání 1. Praha: Grada Publishing, 2015. xiv, 552. ISBN 9788024752303. [info](#)
- TRESS, Wolfgang, Johannes KRUSSE and Jürgen OTT. *Základní psychosomatická péče*. Translated by Lubor Špís. Vydání první. Praha: Portál, 2008. 394 stran. ISBN 9788073673093. [info](#)

recommended literature

- BOUČEK, Jaroslav. *Lékařská psychologie*. 1. vyd. Olomouc: Univerzita Palackého, 2006. 141 s. ISBN 8024415011. [info](#)
- VYMĚTAL, Jan. *Lékařská psychologie*. 3. aktualiz. vyd. Praha: Portál, 2003. 397 s. ISBN 80-7178-740-X. [info](#)
- HONZÁK, Radkin. *Komunikační pasti v medicíně : praktický manuál komunikace lékaře s pacientem*. 2. dopl. vyd. Praha: Galén, 1999. 165 s. ISBN 8072620320. [info](#)

- BAŠTECKÝ, Jaroslav, Jiří ŠAVLÍK and Jiří ŠIMEK. *Psychosomatická medicína*. 1. vyd. Praha: Grada, Avicenum, 1993. 363 s. ISBN 8071690317. [info](#)

Teaching methods

Lessons are interactive.

Assessment methods

Full attendance is required for credit. Final exam is written and oral.

Language of instruction

English

Further comments (probably available only in Czech)

The course can also be completed outside the examination period.

The course is taught each semester.

The course is taught: in blocks.

Teacher's information

Změny a informace uveřejňujeme na nástěnce Ústavu psychologie a psychosomatiky, Campus, budova A1/4. patro

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

aVLLT0121c Basic Medical Terminology - practice ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/1/0. 1 credit(s). Type of Completion: z (credit).

Teacher(s)

[Mgr. Natália Gachallová](#) (seminar tutor)

[Mgr. Marie Okáčová, Ph.D.](#) (seminar tutor)

[Mgr. Andrea Salayová](#) (seminar tutor)

[Mgr. Tereza Ševčíková](#) (seminar tutor)

[Mgr. Kateřina Pořízková, Ph.D.](#) (assistant)

[Mgr. Libor Švanda, Ph.D.](#) (assistant)

[Mgr. Veronika Tománková, Ph.D.](#) (assistant)

[PhDr. Jana Vyorálková](#) (assistant)

[PhDr. Renata Prucklová](#) (alternate examiner)

Supervisor

[Mgr. Natália Gachallová](#)

[Language Centre, Faculty of Medicine Division - Faculty Branches of University](#)

[Departments - Faculty of Medicine](#)

Contact Person: [Mgr. Libor Švanda, Ph.D.](#)

Supplier department: [Language Centre, Faculty of Medicine Division - Language Centre](#)

Timetable of Seminar Groups

aVLLT0121c/30: No timetable has been entered into IS.

aVLLT0121c/31: No timetable has been entered into IS.

aVLLT0121c/32: No timetable has been entered into IS.

aVLLT0121c/33: No timetable has been entered into IS.
aVLLT0121c/34: No timetable has been entered into IS.
aVLLT0121c/35: No timetable has been entered into IS.
aVLLT0121c/36: No timetable has been entered into IS.
aVLLT0121c/37: No timetable has been entered into IS.
aVLLT0121c/38: No timetable has been entered into IS.
aVLLT0121c/39: No timetable has been entered into IS.

Prerequisites

No previous knowledge of Latin/Greek is required.

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

Greek-Latin medical terminology is essential means for understanding the professional medical terminology. The curriculum conveys both theoretical and practical concepts used in medical documentation and is conceived as a preparatory course sui generis, introducing the students into the study of medicine by means of its language. In the first semester, the focus is put on the understanding of anatomical nomenclature and simple authentic diagnoses, mostly from traumatology.

The content of the course is fully derived from the actual needs of the professional practice. In the first place, it provides students with instruction on how to apply Latin and/or Greek quickly and purposefully, i.e. the students are required to master the semantic aspect of terms, the grammatical forms and their functions. It also systematically develops student's ability to analyze medical terms independently, solve terminological problems, and form medical terms. Last but not least, the course also introduces the wider historical and linguistic foundations of medical terminology as well as its general theoretical concepts.

Learning outcomes

At the end of the course students will be able to:

- apply relevant Latin (and Greek) medical terms and expressions correctly and with understanding;
- recognize and explain grammatical concepts and categories relevant to the acquisition of Greek-Latin medical terminology;
- explain syntactic structure of complex terms;
- recognize the semantic structure of selected anatomical and clinical one-word terms;
- derive adjectives from nouns and vice-versa using common suffixes;
- form simple compound words denoting inflammatory and non-inflammatory diseases, as well as the basic types of tumors (-itis, -osis, -oma)
- translate anatomical terms and simple clinical diagnoses (with focus put on fractures and basic types of injuries, i.e. traumatology).

Syllabus

- **BASIC MEDICAL TERMINOLOGY - practice.** Syllabus.
- An obligatory part of each class is practice and testing of knowledge acquired during the seminars.
-
- *1st week:* Guarantee's instructions. Checking the level of initial knowledge. Pronunciation. Introduction to basic grammatical concepts of a flective language (case system, declension chart, understanding the dictionary entry - Genitive stem).
- *2nd week:* 1st declension. Function of Genitive in anatomical terms - nouns in apposition. Basic prepositions.
- *3rd week:* Adjectives of 1st and 2nd declension. Agreement of noun and adjective.
- *4th week:* 2nd declension - Latin paradigms.
- *5th week:* 2nd declension - Greek paradigms.
- *6th week:* 1st progress test. Introduction to nouns of 3rd declension.
- *7th week:* Consonant and i-stems.
- *8th week:* Revision of the nouns of first three declensions.
- *9th week:* Progress test 2. Introduction to 4th and 5th declension.
- *10th week:* 4th and 5th declension.
- *11th week:* Adjectives of 3rd declension.
- *12th week:* Forming adjectives from nouns and vice-versa.
- *13th week:* Final revision.
- *14th week:* Dissections.

Literature

required literature

- PRUCKLOVÁ, Renata a Marta SEVEROVÁ. Introduction to Latin and Greek Terminology in Medicine. 4th rev. ed. Praha: KLP, 2016. x, 117. ISBN9788087773413.

recommended literature

- EHRLICH, Ann and Carol L. SCHROEDER. *Medical terminology for health professions*. 6th ed. Clifton Park, NY: Delmar, Cengage Learning, 2009. xxvi, 582. ISBN 9781418072520. [info](#)

Teaching methods

lectures, presentations, translation and grammar exercises, drills, group activities, authentic diagnoses

Assessment methods

Requirements for gaining the credit: regular class attendance, active participation in class, preparation for classes, passing the credit test (60-70% based on the passing/failing the progress tests) - see the guarantee's instructions. Only one unexcused absence will be tolerated; further absences must be properly excused via the Study Department of the Faculty of Medicine.

Language of instruction

Czech

Follow-Up Courses

- [aVLLT0222c Basic Medical Terminology II - practice](#)

Further comments (probably available only in Czech)

The course is taught annually.

Information on the extent and intensity of the course: cvičení.

Listed among pre-requisites of other courses

- [aVLLT0222c Basic Medical Terminology II - practice](#)
[aVLLT0121c \(Do I meet enrolment requirements?\)](#)
- [aVLLT0222s Basic Medical Terminology II - seminar](#)
[aVLLT0121c \(Do I meet enrolment requirements?\)](#)

Teacher's information

For the up-to-date information on the course, office hours of the teachers, etc., see IS MU.

Contact person: Mgr. Natálie Gachallová (campus, A15/118, office phone: 549497997);
for consulting hours, see IS MU.

Secretary of the Language Centre (UKB, Kamenice 5, Pavilion A15), phone: 549498170;
office hours: Monday 10.00-12.00, Wednesday 10.00-12.00, Friday 9.00-11.00.

Individual lecturers can also be contacted via e-mail.

The course is also listed under the following terms [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

aVLLT0121s Basic Medical Terminology I - seminar ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/0/1. 1 credit(s). Type of Completion: z (credit).

Teacher(s)

[Mgr. Natálie Gachallová](#) (seminar tutor)
[Mgr. Marie Okáčová, Ph.D.](#) (seminar tutor)
[Mgr. Andrea Salayová](#) (seminar tutor)
[Mgr. Tereza Ševčíková](#) (seminar tutor)
[Mgr. Kateřina Pořízková, Ph.D.](#) (assistant)
[Mgr. Libor Švanda, Ph.D.](#) (assistant)
[Mgr. Veronika Tománková, Ph.D.](#) (assistant)
[PhDr. Jana Vyorálková](#) (assistant)
[PhDr. Renata Prucklová](#) (alternate examiner)

Supervisor

[Mgr. Natália Gachallová](#)
[Language Centre, Faculty of Medicine Division - Faculty Branches of University](#)
[Departments - Faculty of Medicine](#)

Contact Person: [Mgr. Libor Švanda, Ph.D.](#)

Supplier department: [Language Centre, Faculty of Medicine Division - Language Centre](#)

Timetable of Seminar Groups

aVLLT0121s/30: Mon 11:40–13:20 [A11/228](#), *N. Gachallová*

aVLLT0121s/31: Mon 25. 9. to Fri 22. 12. Tue 10:10–11:50 [A11/228](#), *M. Okáčová*

aVLLT0121s/32: Mon 9:50–11:30 [A11/228](#), *M. Okáčová*

aVLLT0121s/33: Mon 12:00–13:40 [KOM S116](#), *A. Salayová*

aVLLT0121s/34: Mon 13:30–15:10 [A11/228](#), *N. Gachallová*

aVLLT0121s/35: Fri 7:30–9:10 [KOM 409](#), *N. Gachallová*

aVLLT0121s/36: Mon 7:50–9:30 [KOM 409](#), *N. Gachallová*

aVLLT0121s/37: Mon 8:00–9:40 [A11/228](#), *M. Okáčová*

aVLLT0121s/38: Fri 10:00–11:40 [A11/211](#), *N. Gachallová*

aVLLT0121s/39: Fri 11:50–13:30 [A11/211](#), *N. Gachallová*

Prerequisites

No previous knowledge of Latin/Greek is required.

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

Greek-Latin medical terminology is essential means for understanding the professional medical terminology. The curriculum conveys both theoretical and practical concepts used in medical documentation and is conceived as a preparatory course sui generis, introducing the students into the study of medicine by means of its language. In the first semester, the focus is put on the understanding of anatomical nomenclature and simple authentic diagnoses, mostly from traumatology.

The content of the course is fully derived from the actual needs of the professional practice. In the first place, it provides students with instruction on how to apply Latin and/or Greek quickly and purposefully, ie. the student are required to master the semantic aspect of terms, the grammatical forms and their functions. It also systematically develops student's ability to independently analyze medical terms, solve terminological problems, and form medical terms. Last but not least, the course also introduces the wider historical and linguistic foundations of medical terminology as well as its general theoretical contexts.

Learning outcomes

At the end of the course students will be able to:

- apply relevant Latin (and Greek) medical terms and expressions correctly and with understanding;

- recognize and explain grammatical concepts and categories relevant to the acquisition of Greek-Latin medical terminology;
- explain syntactic structure of complex terms;
- recognize the semantic structure of selected anatomical and clinical one-word terms;
- derive adjectives from nouns and vice-versa using common suffixes;
- form simple compound words denoting inflammatory and non-inflammatory diseases, as well as the basic types of tumours (-itis, -osis, -oma)
- translate anatomical terms and simple clinical diagnoses (with focus put on fractures and basic types of injuries, ie. traumatology).

Syllabus

- **BASIC MEDICAL TERMINOLOGY - seminar.** Syllabus.
-
- *1st week:* Introduction to the study of the subject. Specifics of Latin pronunciation.
- *2nd week:* Using the Latin terms denoting basic body parts, bones and organs in context. The basic forms of anatomical terms - focus on the use of Genitive and 1st declension nouns. Syntactic relations among constituents of multiple terms : noun in apposition and prepositional phrase.
- *3rd week:* Noun + adjective terms in anatomy: agreed attribute. Focus on skeletal system.
- *4th week:* Latin terms of 2nd declension. Focus on muscular system.
- *5th week:* Specifics of Greek terms of 2nd declension. Latin in medical documentation, basic structure of a medical diagnose.
- *6th week:* Progress test I. Specifics of the consonant stems of Latin 3rd declension - recognizing Genitive stem and its importance. Agreed attribute of Latin nouns of 3rd declension and Adjectives of 1st and 2nd declensions.
- *7th week:* Discussing common mistakes in the progress test I. Specifics of the i-stems of Latin 3rd declension. Medical terms denoting most common types of injuries (vulnus ---; -io).
- *8th week:* Greek terms of 3rd declension: paradigm dosis. Analysis of authentic medical reports from traumatology.
- *9th week:* Progress test II. Specifics of 4th and 5th declension. Differentiating the declension of -us ending nouns.
- *10th week:* The most frequently used medical terms of 4th and 5th declension. Common features of particular cases throughout all declensions.
- *11th week:* Introduction to adjectives of 3rd declension and their specifics: three types of adjectives based on the number of endings in Nominative. Basic types of fractures. How to write a medical report - order of information according to their importance, locating the fracture properly.
- *12th week:* Adjective-forming suffixes: -alis, e; -aris, e; -icus, a, um; eus, a, um. The parallels between Latin and English adjectives used in medical terminology.
- *13th week:* Final revision. Working with authentic medical material.
- *14th week:* Dissections.

Literature

required literature

- PRUCKLOVÁ, Renata a Marta SEVEROVÁ. Introduction to Latin and Greek Terminology in Medicine. 4th rev. ed. Praha: KLP, 2016. x, 117. ISBN9788087773413.

recommended literature

- EHRLICH, Ann and Carol L. SCHROEDER. *Medical terminology for health professions*. 6th ed. Clifton Park, NY: Delmar, Cengage Learning, 2009. xxvi, 582. ISBN 9781418072520. [info](#)

Teaching methods

lectures, presentations, translation and grammar exercises, drills, group activities, authentic diagnoses

Assessment methods

Requirements for gaining the credit: regular class attendance, active participation in class, preparation for classes, passing the credit test (60-70% based on the passing/failing the progress tests) - see the guarantee's instructions. Only one unexcused absence will be tolerated; further absences must be properly excused (i.e. via the Study Department of the Faculty of Medicine).

Language of instruction

English

Follow-Up Courses

- [aVLLT0222s Basic Medical Terminology II - seminar](#)

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

Information on the extent and intensity of the course: seminář.

Teacher's information

For the up-to-date information on the course, office hours of the teachers, etc., see IS MU.

Contact person: Mgr. Natálie Gachallová (campus, A15/118, office phone: 549497997); for consulting hours, see IS MU.

Secretary of the Language Centre (UKB, Kamenice 5, Pavilion A15), phone: 549498170; office hours: Monday 10.00-12.00, Wednesday 10.00-12.00, Friday 9.00-11.00.

Individual lecturers can also be contacted via e-mail.

The course is also listed under the following terms [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

aVLLT0222c Basic Medical Terminology II - practice ✳

Faculty of Medicine

Spring 2018

Extent and Intensity

0/1/0. 1 credit(s). Type of Completion: z (credit).

Teacher(s)

[Mgr. Natália Gachallová](#) (seminar tutor)

[Mgr. Kateřina Pořízková, Ph.D.](#) (seminar tutor)

[PhDr. Renata Prucklová](#) (seminar tutor)

[Mgr. Tereza Ševčíková](#) (seminar tutor)

[Mgr. Libor Švanda, Ph.D.](#) (seminar tutor)

[Mgr. Veronika Tománková, Ph.D.](#) (assistant)

[PhDr. Jana Vyorálková](#) (assistant)

Supervisor

[Mgr. Natália Gachallová](#)

[Language Centre, Faculty of Medicine Division - Language Centre](#)

Contact Person: [Mgr. Libor Švanda, Ph.D.](#)

Supplier department: [Language Centre, Faculty of Medicine Division - Language Centre](#)

Prerequisites

[aVLLT0121c Basic Med. Terminology -p](#)

Passing the course Basic medical Terminology I

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

Greek-Latin medical terminology is essential means for understanding the professional medical terminology. The curriculum conveys both theoretical and practical concepts used in medical documentation and is conceived as a preparatory course sui generis, introducing the students into the study of medicine by means of its language. In the first semester, the focus is put on the understanding of anatomical nomenclature and simple authentic diagnoses, mostly from traumatology.

The content of the course is fully derived from the actual needs of the professional practice. In the first place, it provides students with instruction on how to apply Latin and/or Greek quickly and purposefully, ie. the student are required to master the semantic aspect of terms, the grammatical forms and their functions. It also systematically develops student's ability to independently analyze medical terms, solve terminological problems, and form medical terms. Last but not least, the course also introduces the wider historical and linguistic foundations of medical terminology as well as its general theoretical contexts.

Learning outcomes

At the end of the course students will be able to:

apply relevant Latin (and Greek) medical terms and expressions correctly and with

understanding;
recognize and explain grammatical concepts and categories relevant to the acquisition of Greek-Latin medical terminology;
explain syntactic structure of complex terms;
recognize the semantic structure of selected anatomical and clinical compound terms;
form compound words applying the most used word-formation principles and guess the meanings of unknown terms based on the semantic, grammatical, and logical relations;
understand complex anatomical terms and clinical diagnoses;
write a medical report using common abbreviations and following the conventional structure;
write a medical prescription using conventional formulae, understand the function of basic types of medications based on the terminology.

Syllabus

- **Basic medical terminology - practice.** Syllabus.
- *1st week:* Revision of the 1st semester's curriculum with focus on the adjectives of 3rd declension.
- *2nd week:* Comparison of adjectives. Diminutive forms.
- *3rd week:* Basic word-formation principles. Expressing position in medical terminology.
- *4th week:* Numerals in clinical diagnose. Latin and Greek prefixes derived from prepositions.
- *5th week:* Greek roots referring to anatomical structures and bodily liquids.
- *6th week:* Progress test I. Greek roots referring to pathological states and diseases.
- *7th week:* Greek roots referring to medical interventions and examinations.
- *8th week:* Revision of compound words using Greek roots.
- *9th week:* Progress test II. Specific pathological states and terms related to them.
- *10th week:* Structure of Czech medical prescription. Most common formulae used in pharmacology.
- *11th week:* Revision of medical prescriptions. Forms of medications.
- *12th week:* Structure of a dissection protocol. Final revision.
- *13th week:* Dissections.
- *14th week:* Dissections.

Literature

required literature

- PRUCKLOVÁ, Renata and Marta SEVEROVÁ. *Introduction to Latin and Greek terminology in medicine*. 3rd, rev. ed. Praha: KLP, 2012. xii, 115. ISBN 9788086791241. [info](#)

recommended literature

- EHRLICH, Ann and Carol L. SCHROEDER. *Medical terminology for health professions*. 6th ed. Clifton Park, NY: Delmar, Cengage Learning, 2009. xxvi, 582. ISBN 9781418072520. [info](#)

Teaching methods

lectures, presentations, translation and grammar exercises, drills, group activities, authentic diagnoses

Assessment methods

Requirements for gaining the credit: regular class attendance, active participation in class, preparation for classes, passing the credit test (60-70% based on the passing/failing the progress tests) - see the guarantee's instructions. Only one unexcused absence will be tolerated; further absences must be properly excused (i.e. via the Study Department of the Faculty of Medicine). Participating in student presentation is welcome.

Language of instruction

English

Further comments (probably available only in Czech)

The course can also be completed outside the examination period.

The course is taught annually.

The course is taught: every week.

Information on the extent and intensity of the course: cvičení.

Teacher's information

For the up-to-date information on the course, office hours of the teachers, etc., see IS MU.

Contact person: Mgr. Natálie Gachallová (campus, A15/118, office phone: 549497997); for consulting hours, see IS MU.

Secretary of the Language Centre (UKB, Kamenice 5, Pavilion A15), phone: 549498170; office hours: Monday 10.00-12.00, Wednesday 10.00-12.00, Friday 9.00-11.00.

Individual lecturers can also be contacted via e-mail.

The course is also listed under the following terms [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

aVLLT0222s Basic Medical Terminology II - seminar ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

0/1/0. 2 credit(s). Type of Completion: zk (examination).

Teacher(s)

[Mgr. Natálie Gachallová](#) (seminar tutor)

[Mgr. Kateřina Pořízková, Ph.D.](#) (seminar tutor)

[PhDr. Renata Prucklová](#) (seminar tutor)

[Mgr. Tereza Ševčíková](#) (seminar tutor)

[Mgr. Libor Švanda, Ph.D.](#) (seminar tutor)

[Mgr. Veronika Tománková, Ph.D.](#) (assistant)

[PhDr. Jana Vyorálková](#) (assistant)

Supervisor

[Mgr. Natálie Gachallová](#)

[Language Centre, Faculty of Medicine Division - Language Centre](#)

Contact Person: [Mgr. Libor Švanda, Ph.D.](#)

Supplier department: [Language Centre, Faculty of Medicine Division - Language Centre](#)

Prerequisites

[aVLLT0121c Basic Med. Terminology -p](#)

Passing the course Basic medical Terminology I

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

Greek-Latin medical terminology is one of the relevant means for acquisition of the target knowledge of medical students. The tuition is of both theoretic and practical character, conceived as a preparatory course sui generis, introducing the students into the study of medicine by means of its language.

The content of tuition is, like the set of knowledge postulated in the examination, exclusively determined by the needs of the discipline and medical practice. In the first place it provides such knowledge of Latin and/or Greek as enables the student to master quickly and purposefully the semantic aspect of terms, their grammatical form, and word-forming structure. Simultaneously it provides systematic instruction to independent solution of current terminological problems consisting in understanding of the technical content of the terms and in the formation of medical terms. Besides this it opens a view of the wider historical and linguistic fundamentals of medical terminology as well as its general theoretical contexts.

Learning outcomes

At the end of the course students should be able to:

use Latin and Greek-Latin medical terminology and expressions correctly and understand them;

explain and apply grammatical devices and rules relevant for acquisition of Greek-Latin medical terminology;

recognize the syntactic structure of complex terms;

describe the semantic structure of one-word terms;

form compound words applying the most used word-formation principles;

translate selected expressions from anatomy, pre-clinical and clinical fields of study, medical prescriptions, and pharmacology;

guess the meanings of unknown terms on the basis of semantic, grammatical and logical relations.

Syllabus

- **BASIC MEDICAL TERMINOLOGY - seminar.** Syllabus.

- *1st week:* Discussing common mistakes in the credit test. Practicing problematic issues.
- *2nd week:* Comparatives, superlatives, and diminutive forms in anatomical nomenclature. Authentic diagnoses focused on fractures.
- *3rd week:* Medical terms referring to position: adjectives, Latin and Greek prefixes and suffixes, Latin comparatives and superlatives. Student presentation on position terminology.
- *4th week:* Muscle nomenclature. Student presentation on terms denoting facial expressions.
- *5th week:* Expressing resemblance in shape and form in anatomical nomenclature. Student presentation on colours in medical terminology.
- *6th week:* Progress test I. Terms specifying the progress of a disease. Student presentation on colours in medical terminology.
- *7th week:* Diseases and the relevant medical interventions and examinations. Student presentation on the terms denoting inflammations and types of fever.
- *8th week:* Expressing extent and degree in medical terminology. Student presentation on terms related to particular ages of human life.
- *9th week:* Progress test II. Working with authentic medical reports containing compound words.
- *10th week:* How to write a medical prescription. Basic types of medications and their functions.
- *11th week:* Expressing quality and quantity in medical terminology. Student presentation on terms specifying types of pulses.
- *12th week:* Working with an authentic dissection protocol. Student presentation on terms related to death.
- *13th week:* Dissections.
- *14th week:* Dissections.

Literature

required literature

- PRUCKLOVÁ, Renata and Marta SEVEROVÁ. *Introduction to Latin and Greek terminology in medicine*. 3rd, rev. ed. Praha: KLP, 2012. xii, 115. ISBN 9788086791241. [info](#)

recommended literature

- EHRLICH, Ann and Carol L. SCHROEDER. *Medical terminology for health professions*. 6th ed. Clifton Park, NY: Delmar, Cengage Learning, 2009. xxvi, 582. ISBN 9781418072520. [info](#)

Teaching methods

lectures, presentations, translation and grammar exercises, drills, group activities, authentic diagnoses

Assessment methods

Requirements for gaining the credit: regular class attendance, active participation in class, preparation for classes, passing the credit test (60-70% based on the passing/failing the

progress tests) - see the guarantee's instructions. Only one unexcused absence will be tolerated; further absences must be properly excused (i.e. via the Study Department of the Faculty of Medicine). Participating in student presentation is welcome.

Language of instruction

English

Further comments (probably available only in Czech)

The course can also be completed outside the examination period.

The course is taught annually.

The course is taught: every week.

Information on the extent and intensity of the course: seminář.

Listed among pre-requisites of other courses

- [aVLPX042t](#) [Vacational Training in Nursing](#)
([VLBF011p](#) || [aVLBF011p](#)) && ([VSPO011p](#)||[aVLPO011p](#)) && ([VSLT0221s](#)||[aVLLT0222s](#)) ([Do I meet enrolment requirements?](#))

Teacher's information

For the up-to-date information on the course, office hours of the teachers, etc., see IS MU.

Contact person: Mgr. Natália Gachallová (campus, A15/118, office phone: 549497997); for consulting hours, see IS MU.

Secretary of the Language Centre (UKB, Kamenice 5, Pavilion A15), phone: 549498170; office hours: Monday 10.00-12.00, Wednesday 10.00-12.00, Friday 9.00-11.00.

Individual lecturers can also be contacted via e-mail.

The course is also listed under the following terms [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

aVLNE9X1c Neurology - practice ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/6/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Martin Bareš, Ph.D.](#) (lecturer)

[prof. MUDr. Josef Bednařík, CSc.](#) (lecturer)

[prof. MUDr. Ivan Rektor, CSc.](#) (lecturer)

[prof. MUDr. Zdeněk Kadaňka, CSc.](#) (lecturer)

[prof. MUDr. Milan Brázdil, Ph.D.](#) (lecturer)

[prof. MUDr. Irena Rektorová, Ph.D.](#) (lecturer)

[doc. MUDr. Pavel Štourač, Ph.D.](#) (lecturer)

[doc. MUDr. Blanka Adamová, Ph.D.](#) (seminar tutor)

[MUDr. Eva Vlčková, Ph.D.](#) (seminar tutor)

[MUDr. Stanislav Vohánka, CSc., MBA](#) (seminar tutor)

[PhDr. Mgr. Milena Košťálová, Ph.D.](#) (seminar tutor)

[Hana Božková](#) (assistant)

[Jitka Smejkalová](#) (assistant)

[doc. MUDr. Marek Baláž, Ph.D.](#) (seminar tutor)

[MUDr. Yvonne Benešová, Ph.D.](#) (seminar tutor)

[Mgr. Zuzana Hummelová, Ph.D.](#) (seminar tutor)

[Dana Chalupová, DiS.](#) (seminar tutor)

[Jana Aberlová](#) (assistant)

Dana Chalupová (assistant)

[Klára Marečková, Ph.D., M.Sc.](#) (assistant)

[Jaromíra Saláková](#) (assistant)

Supervisor

[prof. MUDr. Irena Rektorová, Ph.D.](#)

[Department of Neurology - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Supplier department: [Department of Neurology - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Prerequisites (in Czech)

aVLFA0822p && aVLLP0633c && [aVLDI7X1c Diagn.imaging methods- pr.](#) &&

[aVL0L7X1c Ophthalmology - practice](#) && aVLCH0832c

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

At the end of the course students should be able to: understand and explain the basics and principles of neurology; work with information on the neurological examination to create the symptoms, syndromes of the neurological disorders; make reasoned decisions about the topical diagnosis and differential diagnosis based on the symptomatology. make deductions based on acquired knowledge in the field of neurology interpret paraclinical examinations.

Learning outcomes

At the end of the course students should be able to: understand and explain the basics and principles of neurology; work with information on the neurological examination to create the symptoms, syndromes of the neurological disorders; make reasoned decisions about the topical diagnosis and differential diagnosis based on the symptomatology. make deductions based on acquired knowledge in the field of neurology interpret paraclinical examinations.

Syllabus

- General neurology Neurological syndromology and neurological evaluation. The practical lectures in the lecture hall and bedside examination of the patients. Day 1. neurological history taking. Reflexology. Palsies, pyramidal signs. Day 2. Cranial nerves examination. Sensitivity and its affections. Day 3. Extrapyramidal and cerebellar signs. Spine examination. Disorders of the stance and walking. Meningeal syndrome. Uncsciousness. Day 4. aphasias, alexia, agraphia and other higher central nervous system disorders Day 5. neurological paraclinical examinations, Neurological examination and notes. Neurological diagnosis. Days 6-7. Pediatric neurology, the principles. Special Neurology Day 3-5. Focus on main nosological units and syndromes in neurology. The practical lectures in the lecture hall and bedside examination of the patients. Day 8. stroke, multiple sclerosis. Day 9. Epilepsy, tumors, vertebrogenic disorders, movement disorders, headache, dementias. Day 10. Neuromuscular disorders, critical illness patient. Classified credit (practical exam with written neurological examination of the patient).

Literature

required literature

- ŠPINAR, Jindřich and Ondřej LUDKA. *Propedeutika a vyšetřovací metody vnitřních nemocí*. 2., přeprac. a dopl. vyd. Praha: Grada, 2013. 336 s. ISBN 9788024743561. [info](#)
- ŠTOURAC, Pavel, Josef BEDNAŘÍK, Milan BRÁZDIL, Zdeněk KADAŇKA, Petr KAŇOVSKÝ, Marek MECHL, Jiří PRÁŠEK, Ivan REKTOR, Irena REKTOROVÁ and Radomír ŠLAPAL. *Učebnice obecné neurologie (Textbook of General Neurology)*. 2., přepracované. Brno: Masarykova universita v Brně, 2003. 197 pp. ISBN 80-210-3309-6. [info](#)

recommended literature

- *Učebnice speciální neurologie*. Edited by Zdeněk Kadaňka. 3., přeprac. vyd. Brno: Masarykova univerzita, 2010. 302 s. ISBN 9788021053205. [info](#)
- *Učebnice speciální dětské neurologie : pro studenty 4. a 5. ročníku LF MU s rozšířenou výukou pediatrie (Special Pediatric Neurology for students of the 4th and 5th years, Medical Faculty, Masaryk University, with extended education in pediatrics)*. Edited by Hana Ošlejšková. 1. vyd. Brno: Masarykova univerzita, 2011. 123 s. ISBN 9788021056596. [info](#)
- John Morris, Joseph Jankovic: *Neurological Clinical Examination*, Hodler Arnold Co, 2012
- *International Neurology: A clinical approach*: by Robert P. Lisak, Daniel D Truong, William M Carroll, Roongroj Bhidayasiri, Blackwell Publishing Ltd 2010, ISBN 9781444317008

not specified

- Merritt's Neurology, 13th Edition is edited by by Elan D. Louis MD MS (Author), Stephan A. Mayer MD (Author), Lewis P. Rowland MD (Author) ISBN-13: 978-1451193367, ISBN-10: 145119336X

Teaching methods

seminary lectures, internship

Assessment methods

credit, classified, ongoing written tests final oral exam

Language of instruction

English

Further comments (probably available only in Czech)

Information on completion of the course: po blokové atáži praktická zkouška, po úspěšném složení zápočet

The course is taught each semester.

The course is taught: in blocks.

Teacher's information

Informace jsou vyvěšeny na nástěnkách I., II. a dětské neurologické kliniky LFMU

Kontaktní osoby:

1.neurologická klinika LF MU (FN u sv. Anny, Pekařská): Prof. MUDr. Irena Rektorová, irena.rektorova@fnusa.cz 2.neurologická klinika LF MU (FN Brno, Jihlavská): Prof. MUDr. Josef Bednařík, CSc., jbednar@fnbrno.cz Dětská neurologická klinika LF MU a FN Brno (FN Černopolní): Doc. MUDr. Hana Ošlejšková, hoslej@fnbrno.cz

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

aVLNE9X1p Neurology - lecture ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

2/0/0. 4 credit(s). Recommended Type of Completion: zk (examination). Alternate Types of Completion: RZk (examination).

Teacher(s)

[prof. MUDr. Martin Bareš, Ph.D.](#) (lecturer)

[prof. MUDr. Josef Bednařík, CSc.](#) (lecturer)

[prof. MUDr. Milan Brázdil, Ph.D.](#) (lecturer)

[prof. MUDr. Zdeněk Kadaňka, CSc.](#) (lecturer)

[doc. MUDr. Hana Ošlejšková, Ph.D.](#) (lecturer)

[prof. MUDr. Ivan Rektor, CSc.](#) (lecturer)

[prof. MUDr. Irena Rektorová, Ph.D.](#) (lecturer)

[doc. MUDr. Marek Baláž, Ph.D.](#) (seminar tutor)

[Dana Chalupová, DiS.](#) (seminar tutor)

[Jitka Smejkalová](#) (seminar tutor)

[Jana Aberlová](#) (assistant)
Dana Chalupová (assistant)
[Klára Marečková, Ph.D., M.Sc.](#) (assistant)
[Jaromíra Saláková](#) (assistant)
[Hana Božková](#) (alternate examiner)

Supervisor

[prof. MUDr. Irena Rektorová, Ph.D.](#)
[Department of Neurology - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)
Contact Person: [doc. MUDr. Hana Ošlejšková, Ph.D.](#)
Supplier department: [Department of Neurology - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Prerequisites (in Czech)

aVLFA0822p && aVLLP0633c && [aVLDI7X1c Diagn.imaging methods- pr.](#) &&
[aVL0L7X1c Ophthalmology - practice](#) && aVLCH0832c
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

At the end of the course students should be able to: understand and explain modern diagnosis and treatment of different neurological conditions. work with information on special neurology to make correct diagnosis; create differential diagnosis; make reasoned decisions about diagnosis and treatment plans; make deductions based on acquired knowledge in the field of neurology.

Learning outcomes

At the end of the course students should be able to: understand and explain modern diagnosis and treatment of different neurological conditions. work with information on special neurology to make correct diagnosis; create differential diagnosis; make reasoned decisions about diagnosis and treatment plans; make deductions based on acquired knowledge in the field of neurology.

Syllabus

- Oral lectures on different and updated topics in neurology: Neurological complications of spondylosis Epilepsy Subarachnoid hemorrhage Behavioral Neurology Stroke Parkinsons disease Migraine Myasthenia gravis Autoimmune neuropathies Multiple sclerosis Developmental Neurology Dementia Brain Tumors Pain

Literature

required literature

- [ŠTOURAC, Pavel](#), [Josef BEDNAŘÍK](#), [Milan BRÁZDIL](#), [Zdeněk KADAŇKA](#), [Petr KAŇOVSKÝ](#), [Marek MECHL](#), [Jiří PRÁŠEK](#), [Ivan REKTOR](#), [Irena REKTOROVÁ](#) and [Radomír ŠLAPAL](#). *Učebnice obecné neurologie (Textbook of General Neurology)*. 2., přepracované. Brno: Masarykova universita v Brně, 2003. 197 pp. ISBN 80-210-3309-6. [info](#)
- ŠPINAR, Jindřich and Ondřej LUDKA. *Propedeutika a vyšetřovací metody vnitřních nemocí*. 2., přeprac. a dopl. vyd. Praha: Grada, 2013. 336 s. ISBN 9788024743561. [info](#)

recommended literature

- Kolektiv autorů Kliniky děské neurologie a dalších pracovišť LF and Kolektiv autorů Kliniky děské neurologie a dalších pracovišť LF. *Učebnice speciální děské neurologie pro studenty 4. a 5.ročníku LF MU s rozšířenou výukou pediatrie (Textbook of Pediatric Neurology for special students of the 4th LF MU and 5th year with extended teaching of pediatrics)*. 1. vydání. Brno: Masarykova univerzita Brno, 2011. 123 pp. ISBN 978-80-210-5659-6. [info](#)
- John Morris, Joseph Jankovic: *Neurological Clinical Examination*, Hodler Arnold Co, 2012
- *International Neurology: A clinical approach*: by Robert P. Lisak, Daniel D Truong, William M Carroll, Roongroj Bhidayasiri, Blackwell Publishing Ltd 2010, ISBN 9781444317008
- *Merritt's Neurology*, 13th Edition is edited by by Elan D. Louis MD MS (Author), Stephan A. Mayer MD (Author), Lewis P. Rowland MD (Author) ISBN-13: 978-1451193367, ISBN-10: 145119336X
- *Child neurology*. Edited by John H. Menkes - Harvey B. Sarnat - Bernard L. Maria. Seventh edition. Philadelphia: Lippincott Williams & Wilkins, 2006. xiii, 1186. ISBN 9780781751049. [info](#)

not specified

- *Učebnice speciální neurologie*. Edited by Zdeněk Kadaňka. 3., přeprac. vyd. Brno: Masarykova univerzita, 2010. 302 s. ISBN 9788021053205. [info](#)
- HOFFMANN, Georg Friedrich. *Dědičné metabolické poruchy*. Vyd. 1. Praha: Grada, 2006. 416 s. ISBN 8024708310. [info](#)

Teaching methods

Oral lectures on different and updated topics in neurology. Presentations by professionals in neurology

Assessment methods

Graded credit. Ongoing written tests. The course is finished by oral examination.

Language of instruction

English

Further comments (probably available only in Czech)

The course can also be completed outside the examination period.

The course is taught annually.

Information on the per-term frequency of the course: jenom v podzimním semestru.
The course is taught: every week.

Listed among pre-requisites of other courses

- [**aVLCH11XX** Surgery - state exam](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && [VYCET\(1,aVLAL091,aVLDO091,aVLKF101,aVLKB091,aVLFP091\)](#) && [aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [**aVLPD11XX** Pediatrics - state exam](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && [VYCET\(1,aVLAL091,aVLDO091,aVLKF101,aVLKB091,aVLFP091\)](#) && [aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [**aVLPG11XX** Obstetrics and Gynaecology - State Exam](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && [VYCET\(1,aVLAL091,aVLDO091,aVLKF101,aVLKB091,aVLFP091\)](#) && [aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [**aVLPL11XX** General Medicine Practice and Geriatrics](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && [VYCET\(1,aVLAL091,aVLDO091,aVLKF101,aVLKB091,aVLFP091\)](#) && [aVLCH9X33c](#) && [aVLCJ0888](#) (Do I meet enrolment requirements?)
- [**aVLVL11XX** Internal Medicine - State Exam](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && [VYCET\(1,aVLAL091,aVLDO091,aVLKF101,aVLKB091,aVLFP091\)](#) && [aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [**aVLZP11XX** Public Health - State exam](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && [VYCET\(1,aVLAL091,aVLDO091,aVLKF101,aVLKB091,aVLFP091\)](#) && [aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) (Do I meet enrolment requirements?)

Teacher's information

Informace jsou vyvěšeny na nástěnkách I., II. a dětské neurologické kliniky LFMU
Kontaktní osoby:

1.neurologická klinika LF MU (FN u sv. Anny, Pekařská): Prof. MUDr. Irena Rektorová,
irena.rektorova@fnusa.cz 2.neurologická klinika LF MU (FN Brno, Jihlavská): Prof.
MUDr. Josef Bednařík, CSc., jbednar@fnbrno.cz Dětská neurologická klinika LF MU a
FN Brno (FN Černopolní): Doc. MUDr. Hana Ošlejšková, hoslej@fnbrno.cz

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#),
[Accreditation spring](#).

aVL0L7X1 Ophthalmology ✱

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/0/0. 2 credit(s). Recommended Type of Completion: zk (examination). Alternate Types
of Completion: RZk (examination).

Teacher(s)

[prof. MUDr. Rudolf Autrata, CSc., MBA](#) (lecturer)
[MUDr. Hana Došková, Ph.D.](#) (lecturer)
[MUDr. Radek Girgle](#) (lecturer)
[doc. MUDr. Zuzana Hlinomazová, Ph.D.](#) (lecturer)
[MUDr. Michala Karkanová, Ph.D.](#) (lecturer)
[doc. MUDr. Petr Kolář, Ph.D.](#) (lecturer)
[MUDr. Veronika Matušková, Ph.D., FEBO](#) (lecturer)
[doc. MUDr. Šárka Pitrová, CSc.](#) (lecturer)
[prof. MUDr. Eva Vlčková, CSc.](#) (lecturer)
[MUDr. Daniela Vysloužilová, Ph.D.](#) (lecturer)
[Jaroslava Bukačová](#) (assistant)

Supervisor

[MUDr. Daniela Vysloužilová, Ph.D.](#)
[Department of Ophthalmology - Institutions shared with the Faculty Hospital Brno -
Adult Age Medicine - Faculty of Medicine](#)
Contact Person: [MUDr. Veronika Matušková, Ph.D., FEBO](#)
Supplier department: [Department of Ophthalmology - Institutions shared with the Faculty
Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Prerequisites (in Czech)

aVLPF0622p && aVLPA0622p && aVLLP0633c && [aVLLM0522p Medical
Microbiology II - lect](#) && [aVLIM051p Immunology - lecture](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly
associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Annotation: the aim of subject is to inform the students about ocular diseases on the basis of their previous knowledge of anatomy and physiology of the eye, and to give the review of diagnostic and therapeutical methods in ophthalmology essential for the doctor of general medicine.

Syllabus

- The 1 day Introduction in ophthalmology, history of ophthalmology, and the relation of ophthalmology to other medical fields, the review of anatomy and physiology of the visual system, practical lesson in ophthalmic examination (Úvod do stáží, organizace výuky, historie očního lékařství a vztah k ostatním medicinským oborům, přehled anatomie a fyziologie oka, praktická cvičení- základní vyšetřovací metody) The 2 day The diseases of the orbit nad anterior segment of the eye, cataract surgery, implantation of intraocular lenses, practical lesson- ophthalmoscopy, slit lamp examination, demonstration of the patients (Onemocnění předního segmentu oka, problematika transplantace rohovky, chirurgie katarakty, implantologie, praktická cvičení- keratometrie, topografie rohovky, oftalmoskopie přímá a nepřímá, demonstrace nemocných) The 3 day Glaucoma- definition, diagnosis and therapy, practical lesson- intraocular pressure measurement, gonioscopy, perimetry, demonstration of the patients (Glaukom- diagnostika, terapie, dispenzarizace, praktická cvičení- měření nitroočního tlaku, gonioskopie, perimetrie, demonstrace nemocných) The 4 day The lesson of pediatric ophthalmology- ocular diseases in the childhood (Stáž ve FDN, brno, Černopolní ul.- problematika dětské oftalmologie) The 5 day The diseases of the retina and uvea, eye and systemic diseases, vitreoretinal surgery, practical lesson- diagnostic imaging methods in ophthalmology, demonstration of the patients (Onemocnění sítnice a uvey, oko a celkové choroby, vitreoretinální chirurgie, praktická cvičení- diagnostické zobrazovací metody v oftalmologii, demonstrace nemocných) The 6 day Refractive errors, diagnosis and therapy, modern refractive surgery, blindness and purblindness, practical lesson- lasers in ophthalmology, demonstration of patients. (Refrakční vady, výskyt v populaci, diagnostika a léčba, současný stav refrakční chirurgie, slepota a slabozrakost, praktická cvičení- lasery v oftalmologii, demonstrace nemocných) The 7 day Ocular trauma, the causes of the red eye, neuroophthalmology, practical lesson- color vision, contrast sensitivity, electrophysiology of the eye, demonstration of patients The 8 day Examination of the patients, tutorials, final test, course-unit credit.

Literature

- KRAUS, Hanuš. *Kompendium očního lékařství*. Vyd. 1. Praha: Grada, 1997. 341 s. ISBN 8071690791. [info](#)
- ROZSÍVAL, Pavel. *Oční lékařství*. Vyd. 2. Praha: Karolinum, 2006. 373 s. ISBN 8024612135.

Teaching methods

Class discussion on the base of materials in the textbook.

Assessment methods

Giving the course-unit credit is conditioned by full attendance in the lessons. The lessons in ophthalmology will be finished with exam.

Language of instruction

English

Further comments (probably available only in Czech)

The course can also be completed outside the examination period.

The course is taught each semester.

The course is taught: in blocks.

Teacher's information

Studenti se dostaví v 8 hod do výukové místnosti Oční kliniky FN Brno, 16. patro. Ve čtvrtek probíhá výuka na Oční klinice ve Fakultní dětské nemocnici. Od 8- do 9:30 hod je teoretická část, následuje do 12:30 část praktická, kromě prvního pondělí stáže a pátku, kdy je teoretická část od 8-12 hod. S sebou přezůvky, plášť. Převlečení je možné ve výukové místnosti.

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

aVL0L7X1c Ophthalmology - practice ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/3/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Rudolf Autrata, CSc., MBA](#) (seminar tutor)

[MUDr. Hana Došková, Ph.D.](#) (seminar tutor)

[MUDr. Radek Girgle](#) (seminar tutor)

[doc. MUDr. Zuzana Hlinomazová, Ph.D.](#) (seminar tutor)

[MUDr. Michala Karkanová, Ph.D.](#) (seminar tutor)

[doc. MUDr. Petr Kolář, Ph.D.](#) (seminar tutor)

[MUDr. Veronika Matušková, Ph.D., FEBO](#) (seminar tutor)

[prof. MUDr. Eva Vlková, CSc.](#) (seminar tutor)

[MUDr. Daniela Vysloužilová, Ph.D.](#) (seminar tutor)

[Jaroslava Bukačová](#) (assistant)

Supervisor

[MUDr. Daniela Vysloužilová, Ph.D.](#)

[Department of Ophthalmology - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Contact Person: [MUDr. Veronika Matušková, Ph.D., FEBO](#)

Supplier department: [Department of Ophthalmology - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Prerequisites (in Czech)

aVLPA0622p && aVLPA0622p && aVLLP0633c && [aVLLM0522p Medical Microbiology II - lect](#) && [aVLIM051p Immunology - lecture](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of subject is the understanding and application of diagnostic examination methods in ophthalmology and the understanding of treatment procedures.

Syllabus

- The 1 day Introduction in ophthalmology, history of ophthalmology, and the relation of ophthalmology to other medical fields, the review of anatomy and physiology of the visual system, practical lesson in ophthalmic examination The 2 day The diseases of the orbit and anterior segment of the eye, cataract surgery, implantation of intraocular lenses, practical lesson- ophthalmoscopy, slit lamp examination, demonstration of the patients The 3 day Glaucoma- definition, diagnosis and therapy, practical lesson- intraocular pressure measurement, gonioscopy, perimetry, demonstration of the patients The 4 day The lesson of pediatric ophthalmology- ocular diseases in the childhood The 5 day The diseases of the retina and uvea, eye and systemic diseases, vitreoretinal surgery, practical lesson- diagnostic imaging methods in ophthalmology, demonstration of the patients The 6 day Refractive errors, diagnosis and therapy, modern refractive surgery, blindness and purblindness, practical lesson- lasers in ophthalmology, demonstration of patients. The 7 day Ocular trauma, the causes of the red eye, neuroophthalmology, practical lesson- color vision, contrast sensitivity, electrophysiology of the eye, demonstration of patients The 8 day Examination of the patients, tutorials, final test, course-unit credit.

Literature

- ROZSÍVAL, Pavel. *Oční lékařství*. Vyd. 1. Praha: Karolinum, 2006. 373 s. ISBN 8024612135. [info](#)
- KRAUS, Hanuš. *Kompendium očního lékařství*. Vyd. 1. Praha: Grada, 1997. 341 s. ISBN 8071690791. [info](#)

Teaching methods

practice

Assessment methods

Class discussion on the base of materials in the textbook. Giving the course-unit credit is conditioned by full attendance in the lessons. The lessons in ophthalmology will be finished with exam.

Language of instruction

English

Further Comments

The course can also be completed outside the examination period.

The course is taught each semester.

The course is taught: in blocks.

Listed among pre-requisites of other courses

- [aVLNE9X1c Neurology - practice](#)
[aVLFA0822p](#) && [aVLLP0633c](#) && [aVLDI7X1c](#) && [aVLLO7X1c](#) && [aVLCH0832c](#) (Do I meet enrolment requirements?)
- [aVLNE9X1p Neurology - lecture](#)
[aVLFA0822p](#) && [aVLLP0633c](#) && [aVLDI7X1c](#) && [aVLLO7X1c](#) && [aVLCH0832c](#) (Do I meet enrolment requirements?)

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

aVLON091c Clinical Oncology - practice ✱

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/4/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Zdeněk Adam, CSc.](#) (seminar tutor)
[MUDr. Otakar Bednařík](#) (seminar tutor)
[MUDr. Dagmar Brančíková, Ph.D.](#) (seminar tutor)
[doc. MUDr. Oldřich Coufal, Ph.D.](#) (seminar tutor)
[doc. MUDr. Jan Doležel, Ph.D.](#) (seminar tutor)
[Ing. Dana Dvořáková, CSc.](#) (seminar tutor)
[MUDr. Zdeněk Eber](#) (seminar tutor)
[doc. MUDr. Vuk Fait, CSc.](#) (seminar tutor)
[doc. MUDr. Lenka Foretová, Ph.D.](#) (seminar tutor)
[MUDr. Peter Grell, Ph.D.](#) (seminar tutor)
[MUDr. Jana Halámková, Ph.D.](#) (seminar tutor)
[MUDr. Josef Chovanec, Ph.D.](#) (seminar tutor)
[doc. MUDr. Andrea Janíková, Ph.D.](#) (seminar tutor)
[doc. MUDr. Igor Kiss, Ph.D.](#) (seminar tutor)
[MUDr. Jarmila Kissová, Ph.D.](#) (seminar tutor)
[MUDr. Ivo Kocák, Ph.D.](#) (seminar tutor)
[doc. MUDr. Ilona Kocáková, Ph.D.](#) (seminar tutor)
[MUDr. Radek Lakomý, Ph.D.](#) (seminar tutor)
[MUDr. Radim Němeček, Ph.D.](#) (seminar tutor)
[MUDr. Ivo Novotný, CSc.](#) (seminar tutor)

[MUDr. Radka Obermannová, Ph.D.](#) (seminar tutor)

[MUDr. Lenka Ostřížková](#) (seminar tutor)

[MUDr. Martina Palacková](#) (seminar tutor)

[MUDr. Katarína Petráková, Ph.D.](#) (seminar tutor)

[MUDr. Markéta Protivánková](#) (seminar tutor)

[prof. MUDr. Jana Skříčková, CSc.](#) (seminar tutor)

[MUDr. Ondřej Sláma, Ph.D.](#) (seminar tutor)

[doc. MUDr. Marek Svoboda, Ph.D.](#) (seminar tutor)

[prof. MUDr. Jaroslav Štěrba, Ph.D.](#) (seminar tutor)

[MUDr. Jiří Tomášek, Ph.D.](#) (seminar tutor)

[MUDr. Štěpán Tuček, Ph.D.](#) (seminar tutor)

[prof. MUDr. Jiří Vorlíček, CSc.](#) (seminar tutor)

[prof. MUDr. Rostislav Vyzula, CSc.](#) (seminar tutor)

[prof. MUDr. Jan Žaloudík, CSc.](#) (seminar tutor)

[Eva Čechmanová](#) (assistant)

[Jitka Firešová](#) (assistant)

[Ing. Daniela Kodytková](#) (assistant)

[Hana Novotná](#) (assistant)

Supervisor

[prof. MUDr. Zdeněk Adam, CSc.](#)

[Department of Internal Medicine, Hematology and Oncology - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Contact Person: [Eva Čechmanová](#)

Supplier department: [Department of Internal Medicine, Hematology and Oncology - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Prerequisites (in Czech)

aVLFA0822p && aVLLP0633c && aVLCH0832c &&

[aVLOT7X1c Otorhinolaryngology - practice](#)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Main objective of Oncology can be summarized as follow: to learn, how is possible to avoid development of cancer, To learn all, what is necessary for early detection of every malignant disease in early stage and early refer the patients to the specialised oncologic therapy. All doctors has to know, how to treat usually and anusually complication of malignant disease and complication of therapy. Therefore great attention is given to the supportive, symptomatic and paliative therapy.

Learning outcomes

Main outcome of Oncology can be summarized as follow: to learn, how is possible to avoid development of cancer, To learn all, what is necessary for early detection of every malignant disease in early stage and early refer the patients to the specialised oncologic therapy. All doctors has to know, how to treat usually and anusually complication of malignant disease and complication of therapy. Therefore great attention is given to the supportive, symptomatic and paliative therapy.

Syllabus

- Pathogenesis of malignant disease. Chemotherapy, biotherapy and hormonotherapy. Radiotherapy. Histological and clinical staging. Bone marrow transplantation. Psychological problems of cancer patient. Basic information about the most frequent cancer: Breast cancer and other gynecological cancer, lung cancer, gastrointestinal tumors, cancer of kidney and bladder. Malignant hematological diseases.

Literature

- [DOUBEK, Michael](#), [Zdeněk ADAM](#), [Zdeňka ČERMÁKOVÁ](#), [Libor ČERVINEK](#), [Martina DOUBKOVÁ](#), [František FOLBER](#), [Markéta HADRABOVÁ](#), [Andrea JANÍKOVÁ](#), [Jarmila KISSOVÁ](#), [Marta KREJČÍ](#), Daniel LYSÁK, Miloslava MATÝŠKOVÁ, Tomáš NEBESKÝ, [Luděk POUR](#) and [Daniela ŽÁČKOVÁ](#). *Hematologie. Pomocník ke stáží na hematologických pracovištích*. 1. vyd. Brno: Masarykova univerzita, 2019. ISBN 978-80-210-8776-7. [info](#)
- [ADAM, Zdeněk](#), [Marta KREJČÍ](#), [Jiří VORLÍČEK](#), Zuzana ADAMOVÁ, Jaroslav BAČOVSKÝ, [Viera BAJČIOVÁ](#), [Otakar BEDNARÍK](#), [Jan BLATNÝ](#), Tomáš BÜCHLER, [Igor CRHA](#), [Aleš ČERMÁK](#), [Hana DOLEŽELOVÁ](#), [Ladislav DUŠEK](#), [Karel DVORÁK](#), [Pavel FABIAN](#), [Vuk FAIT](#), [Antonín FASSMANN](#), [Jindřich FIALA](#), Lukáš FIALA, Jindřich FÍNEK, [Lenka FORETOVÁ](#), [Radim GROSMAN](#), [Jana HALÁMKOVÁ](#), Miroslav HEŘMAN, [Martin HUSER](#), [Ludmila HYNKOVÁ](#), [Richard CHALOUPKA](#), [Libuše KALVODOVÁ](#), [Igor KISS](#), [Iva KOCMANOVÁ](#), [Martin KOMENDA](#), [Jana KOPTÍKOVÁ](#), [Zdeněk KOŘÍSTEK](#), Renata KOUKALOVÁ, [Zdeněk KRÁL](#), [Eva LÉTALOVÁ](#), [Milan MACHÁLKA](#), Josef MALIŠ, [Miloslava MATÝŠKOVÁ](#), [Jiří MAYER](#), [Vojtěch MORNSTEIN](#), [Mojmír MOULIS](#), [Jan MUŽÍK](#), Miroslav MYSLIVEČEK, Milan NAVRÁTIL, Tomáš NEBESKÝ, [Miroslav NEČAS](#), [Rudolf NENUTIL](#), [Jiří NEUBAUER](#), Martin ONDRÁK, [Zdeněk PAVELKA](#), [Miroslav PENKA](#), [Vojtěch PEŘINA](#), [Katarína PETRÁKOVÁ](#), [Petr POKORNÝ](#), [Luděk POUR](#), [Jiří PRÁŠEK](#), [Zdeněk RÁČIL](#), [Martin REPKO](#), Zdeněk ŘEHÁK, Jiří SCHOVANEK, [Ondřej SLÁMA](#), Petr SMÍŠEK, Jan STARÝ, [Petr SZTURZ](#), [Marek SVOBODA](#), Vlastimil ŠČUDLA, [Roman ŠEFR](#), [Pavel ŠEVČÍK](#), [Pavel ŠLAMPÁ](#), [Lenka ŠMARDOVÁ](#), Jiří ŠNAJDAUF, [Jaroslav ŠTĚRBA](#), Michal TICHÝ, [Jiří TOMÁŠEK](#), [Miroslav TOMIŠKA](#), [Marcela TOMIŠKOVÁ](#), [Vít UNZEITIG](#), [Jiří VANÍČEK](#), [Vladimír VAŠKŮ](#), [Rostislav VYZULA](#), Barbora WEINBERGEROVÁ, Marie ZÍTKOVÁ and [Karel ZITTERBART](#). *Obecná onkologie (General oncology)*. První vydání. Praha: Galén, 2011. 394 pp. ISBN 978-80-7262-715-8. [URL info](#)

- [ADAM, Zdeněk](#), [Marta KREJČÍ](#) and [Jiří VORLÍČEK](#). *Speciální onkologie. Příznaky, diagnostika a léčba maligních chorob (Special oncology. Symptoms, diagnostics and therapy of malignant disease)*. 1. vyd. Praha: Galén, 2010. 418 pp. Med. ISBN 978-80-7262-648-9. [info](#)

Teaching methods

practical training at the clinic

Assessment methods

Credit

Language of instruction

English

Further comments (probably available only in Czech)

The course can also be completed outside the examination period.

The course is taught annually.

The course is taught: in blocks.

Teacher's information

Výuka v posledních letech probíhá v posluchárně Masarykova onkologického ústavu na Žlutém kompci (MOU), nutno sledovat aktuální rozvrh, plantý pro aktuální semestr nebo se informovat na sekretariátě na MOU 54313-1111.

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

aVLON091p Clinical oncology - lecture ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

1/0/0. 3 credit(s). Type of Completion: zk (examination).

Teacher(s)

[prof. MUDr. Zdeněk Adam, CSc.](#) (lecturer)

[MUDr. Otakar Bednařík](#) (lecturer)

[MUDr. Dagmar Brančíková, Ph.D.](#) (lecturer)

[Mgr. Petra Bučková](#) (lecturer)

[prof. MUDr. Michael Doubek, Ph.D.](#) (lecturer)

[doc. MUDr. Vuk Fait, CSc.](#) (lecturer)

[doc. MUDr. Lenka Foretová, Ph.D.](#) (lecturer)

[MUDr. Peter Grell, Ph.D.](#) (lecturer)

[MUDr. Jana Halámková, Ph.D.](#) (lecturer)

[MUDr. Josef Chovanec, Ph.D.](#) (lecturer)

[MUDr. Lenka Jakubíková, Ph.D.](#) (lecturer)

[doc. MUDr. Andrea Janíková, Ph.D.](#) (lecturer)

[doc. MUDr. Igor Kiss, Ph.D.](#) (lecturer)

[doc. MUDr. Ilona Kocáková, Ph.D.](#) (lecturer)

[MUDr. Radek Lakomý, Ph.D.](#) (lecturer)

[MUDr. Radim Němeček, Ph.D.](#) (lecturer)

[MUDr. Lenka Ostřížková](#) (lecturer)
[MUDr. Katarína Petránková, Ph.D.](#) (lecturer)
[prof. MUDr. Jana Skříčková, CSc.](#) (lecturer)
[MUDr. Ondřej Sláma, Ph.D.](#) (lecturer)
[doc. MUDr. Marek Svoboda, Ph.D.](#) (lecturer)
[doc. MUDr. Petr Szturz, Ph.D.](#) (lecturer)
[prof. MUDr. Pavel Šlampa, CSc.](#) (lecturer)
[prof. MUDr. Jaroslav Štěrba, Ph.D.](#) (lecturer)
[MUDr. Jiří Tomášek, Ph.D.](#) (lecturer)
[MUDr. Štěpán Tuček, Ph.D.](#) (lecturer)
[prof. MUDr. Rostislav Vyzula, CSc.](#) (lecturer)

Supervisor

[prof. MUDr. Zdeněk Adam, CSc.](#)
[Department of Internal Medicine, Hematology and Oncology - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)
Contact Person: [Eva Čechmanová](#)
Supplier department: [Department of Internal Medicine, Hematology and Oncology - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Prerequisites (in Czech)

aVLFA0822p && aVLLP0633c && aVLCH0832c &&
[aVLOT7X1c Otorhinolaryngology - practice](#)
(Do I meet enrolment requirements?)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The main objectives can be summarized as follow: to understand the basis teaching of oncology, supportive care and treatment of all frequent oncologic diseases

Learning outcomes

The main objectives can be summarized as follow: to understand the basis teaching of oncology, supportive care and treatment of all frequent oncologic diseases

Syllabus

- **General oncology**
- Tumor development. Nutritional factors in tumor development. Nutritional issues in cancer patients. Morphological and clinical classifications. Anticancer chemotherapy, hormonotherapy and biotherapy. Radiotherapy. Oncological surgery. Use of radionuclides in diagnostics and therapy. Infectious complications in immunocompromised hosts, treatment of febrile neutropenia and sepsis. Palliative, supportive and analgesic care. Acute complications in oncological patients. Thrombophilia, coagulopathies, hypercalcemia, malignant osteolysis,

hyperleukocytosis and hyperviscosity syndrome. Psychological support for cancer patients, their relatives and nursing staff. Hematopoietic stem cell transplantation.

- **Special oncology**
- Head and neck cancer. Skin tumors. Breast cancer. Digestive tract cancers. Urinary tract tumors. Tumors of the pleura, mediastinum and lungs. Malignant hematological diseases.

Literature

- [ADAM, Zdeněk](#), [Marta KREJČÍ](#), [Jiří VORLÍČEK](#), Zuzana ADAMOVÁ, Jaroslav BAČOVSKÝ, [Viera BAJČIOVÁ](#), [Otakar BEDNAŘÍK](#), [Jan BLATNÝ](#), Tomáš BÜCHLER, [Igor CRHA](#), [Aleš ČERMAK](#), [Hana DOLEŽELOVÁ](#), [Ladislav DUŠEK](#), [Karel DVOŘÁK](#), [Pavel FABIAN](#), [Vuk FAIT](#), [Antonín FASSMANN](#), [Jindřich FIALA](#), Lukáš FIALA, Jindřich FÍNEK, [Lenka FORETOVÁ](#), [Radim GROSMAN](#), [Jana HALÁMKOVÁ](#), Miroslav HEŘMAN, [Martin HUSER](#), [Ludmila HYNKOVÁ](#), [Richard CHALOUPKA](#), [Libuše KALVODOVÁ](#), [Igor KISS](#), [Iva KOCMANOVÁ](#), [Martin KOMENDA](#), [Jana KOPTÍKOVÁ](#), [Zdeněk KORÍSTEK](#), Renata KOUKALOVÁ, [Zdeněk KRÁL](#), [Eva LÉTALOVÁ](#), [Milan MACHÁLKA](#), Josef MALIŠ, [Miloslava MATÝŠKOVÁ](#), [Jiří MAYER](#), [Vojtěch MORNSTEIN](#), [Mojmír MOULIS](#), [Jan MUŽÍK](#), Miroslav MYSLIVEČEK, Milan NAVRÁTIL, Tomáš NEBESKÝ, [Miroslav NEČAS](#), [Rudolf NENUTIL](#), [Jiří NEUBAUER](#), Martin ONDRÁK, [Zdeněk PAVELKA](#), [Miroslav PENKA](#), [Vojtěch PEŘINA](#), [Katarína PETRÁKOVÁ](#), [Petr POKORNÝ](#), [Luděk POUR](#), [Jiří PRÁŠEK](#), [Zdeněk RÁČIL](#), [Martin REPKO](#), Zdeněk ŘEHÁK, Jiří SCHOVANEK, [Ondřej SLÁMA](#), Petr SMÍŠEK, Jan STARÝ, [Petr SZTURZ](#), [Marek SVOBODA](#), Vlastimil ŠČUDLA, [Roman ŠEFR](#), [Pavel ŠEVČÍK](#), [Pavel ŠLAMPA](#), [Lenka ŠMARDOVÁ](#), Jiří ŠNAJDAUF, [Jaroslav ŠTĚRBA](#), Michal TICHÝ, [Jiří TOMÁŠEK](#), [Miroslav TOMIŠKA](#), [Marcela TOMIŠKOVÁ](#), [Vít UNZEITIG](#), [Jiří VANÍČEK](#), [Vladimír VAŠKŮ](#), [Rostislav VYZULA](#), Barbora WEINBERGEROVÁ, Marie ZÍTKOVÁ and [Karel ZITTERBART](#). *Obecná onkologie (General oncology)*. První vydání. Praha: Galén, 2011. 394 pp. ISBN 978-80-7262-715-8. [URL info](#)
- [ADAM, Zdeněk](#), [Marta KREJČÍ](#) and [Jiří VORLÍČEK](#). *Speciální onkologie. Příznaky, diagnostika a léčba maligních chorob (Special oncology. Symptoms, diagnostics and therapy of malignant disease)*. 1. vyd. Praha: Galén, 2010. 418 pp. Med. ISBN 978-80-7262-648-9. [info](#)

Teaching methods

lecture

Assessment methods

Oncology for students of general medicine ends with oral examination.

Language of instruction

English

Further comments (probably available only in Czech)

The course can also be completed outside the examination period.

The course is taught annually.

The course is taught: every week.

Listed among pre-requisites of other courses

- [**aVLCH11XX** Surgery - state exam](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && VYCET(1,[aVLAL091](#),[aVLDO091](#),[aVLKF101](#),[aVLKB091](#),[aVLFP091](#)) && [aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [**aVLPD11XX** Pediatrics - state exam](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && VYCET(1,[aVLAL091](#),[aVLDO091](#),[aVLKF101](#),[aVLKB091](#),[aVLFP091](#)) && [aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [**aVLPG11XX** Obstetrics and Gynaecology - State Exam](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && VYCET(1,[aVLAL091](#),[aVLDO091](#),[aVLKF101](#),[aVLKB091](#),[aVLFP091](#)) && [aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [**aVLPL11XX** General Medicine Practice and Geriatrics](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && VYCET(1,[aVLAL091](#),[aVLDO091](#),[aVLKF101](#),[aVLKB091](#),[aVLFP091](#)) && [aVLCH9X33c](#) && [aVLCJ0888](#) (Do I meet enrolment requirements?)
- [**aVLVL11XX** Internal Medicine - State Exam](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && VYCET(1,[aVLAL091](#),[aVLDO091](#),[aVLKF101](#),[aVLKB091](#),[aVLFP091](#)) && [aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [**aVLZP11XX** Public Health - State exam](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && VYCET(1,[aVLAL091](#),[aVLDO091](#),[aVLKF101](#),[aVLKB091](#),[aVLFP091](#)) && [aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) (Do I meet enrolment requirements?)

Teacher's information

Přednášky probíhají v Masarykově onkologickém ústavu.

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

aVLOR7X1 Orthopaedics and Rehabilitation - practice ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[doc. MUDr. Richard Chaloupka, CSc.](#) (lecturer)

[MUDr. Jiří Jochymek, Ph.D.](#) (lecturer)

[doc. MUDr. Ivan Müller, CSc.](#) (lecturer)

[doc. MUDr. Zbyněk Rozkydal, Ph.D.](#) (lecturer)

[MUDr. Bořek Crha](#) (seminar tutor), [prof. MUDr. Jan Poul, CSc.](#) (deputy)

[MUDr. Jan Emmer](#) (seminar tutor), [doc. MUDr. Martin Repko, Ph.D.](#) (deputy)

[MUDr. Jaroslav Motyčka](#) (seminar tutor)

[MUDr. Miroslav Nýdrle](#) (seminar tutor)

[MUDr. Jakub Rapi](#) (seminar tutor), [doc. MUDr. Pavel Janíček, CSc.](#) (deputy)

[doc. MUDr. Martin Repko, Ph.D.](#) (seminar tutor)

[MUDr. Luděk Ryba, Ph.D.](#) (seminar tutor)

[MUDr. Miroslav Straka](#) (seminar tutor)

[MUDr. Tomáš Tomáš, Ph.D.](#) (seminar tutor)

[Veronika Bradáčková](#) (assistant), [MUDr. Tomáš Kovanda](#) (deputy)

[Barbora Staňková](#) (assistant), [MUDr. Lukáš Pazourek](#) (deputy)

Supervisor

[doc. MUDr. Martin Repko, Ph.D.](#)

[Department of Orthopedic Surgery - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Contact Person: [doc. MUDr. Zbyněk Rozkydal, Ph.D.](#)

Supplier department: [Department of Orthopedic Surgery - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Prerequisites

aVLPF0622p && aVLPA0622p && aVLLP0633c

Prerequisites is knowledge of anatomy and physiology of locomotor apparatus.

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

At the end of the course students should be able to understand how to examine the orthopaedic patient (history, objective examination of the locomotor apparatus), should be able to apply imaging methods and laboratory tests leading to establishing of the diagnosis, should be able to distinguish among other conditions and to suggest the management of the condition. The student would be able to assess the prognosis of the condition.

Learning outcomes

The student will be able to examine orthopaedic patient, to perform clinical examination, to use laboratory test and to advise imaging methods, to establish diagnosis and to suggest the therapy.

Syllabus

- Programme of the course: Orthopaedics and rehabilitation The fourth school year of the general medicine, VLOR7X1. The course is divided into a theoretical introduction and to presentation of cases in the ward.
- Clinical methods - history (family, personal) symptoms of the disease, analysis of the pain, mechanism of injury, any treatment of the disease, the effect of drugs. Impairment of the function, deformity, analysis of the gait.
- objective examination: inspection, palpation, percussion, auscultation, range of motion, examination of the spine, of upper and lower extremity. - additional examination methods (X-ray, radiological stress tests, arthrography, fistulography, myelography, angiography, CT, MRI, scintigraphy, ultrasonography, densitometry etc). Laboratory methods: aspiration of the joint fluid, blood tests. Electromyography. Topics:
- Degenerative diseases (osteoarthritis, pathological anatomy, clinical symptoms and findings, radiological examination). Conservative and operative treatment.
- Malalignment of extremities (coxa valga, coxa vara, anteverta, genua vara, valga). Static deformities of foot (flat foot, talipes calcaneus, equinovarus, excavatus). Deformity of upper extremity (cubitus varus, valgus, Madelung deformity, etc).
- Artificial joints. Hip arthroplasty (materials, bone cement, types, procedures, physiotherapy after the operation, complications). Knee arthroplasty. Arthroplasty in other joints.
- Musculoskeletal tumors. Methods of examination, biopsy. Staging and grading. Benign and malignant tumors. Operative treatment, chemotherapy, radiotherapy. Treatment of bone metastase.
- Bone and joint infections. Acute osteomyelitis (symptoms, examination, treatment). Chronic osteomyelitis. Acute arthritis (symptoms, examination, treatment). Chronic arthritis. TB osteomyelitis and arthritis, actinomycosis).
- Deformities of the spine. Scoliosis (types, Cobb measurement, methods of examination), conservative and operative treatment. Kyphosis (types, treatment). Lordosis (types, treatment). Spondylolysis and spondylolisthesis (symptoms, types, management).
- Low back pain (types, sciatica, spinal stenosis, failed back surgery syndrom etc.). Ankylosing spondylitis. Pain in cervical spine.
- Injury of the spine (fractures of thoracolumbar spine, fractures of cervical spine). Conservative and operative management. - Congenital diseases (types, symptoms,

management). Developmental dislocation of the hip joint (types, symptoms, management, consequences). Club foot deformity, torticollis muscularis etc..

Literature

required literature

- JANÍČEK, Pavel. *Ortopedie (Orthopedics)*. 3., přeprac. vyd. Brno: Masarykova univerzita, 2012. 112 s. ISBN 9788021059719. [info](#)
- CHALOUPKA, Richard. *Vyšetřovací metody v ortopedii (Methods of diagnosis in orthopaedics)*. Edited by Zbyněk Rozkydal. 2. vyd. Brno: Masarykova univerzita, 2012. 70 s. ISBN 9788021059023. [info](#)

recommended literature

- GALLO, Jiří. *Ortopedie pro studenty lékařských a zdravotnických fakult*. 1. vyd. Olomouc: Univerzita Palackého v Olomouci, 2011. 211 s. ISBN 9788024424866. [info](#)
- Willmott, H.: *Trauma and Orthopaedics at a glance*. Willy -Blackwell, 2015, ISBN 978-1-118-80249-6, s144

not specified

- Solomon, L.: *Apley's concise system of Orthopaedics and fractures*, third Edition, ISBN 978-0-340-80984-6, 2005, s.1-406

Teaching methods

The course is divided into a theoretical introduction with case reports and into presentation of the patients in the wards focused on the use of examination methods, on establishing of the diagnosis and the management of the conditions.

Assessment methods

The students are examined from this subject at the rigorous examination from surgery in the sixth school year. The knowledge of recommended literature and power point presentations on IS portal are required.

Language of instruction

English

Further comments (probably available only in Czech)

[Study Materials](#)

Information on completion of the course: Zápočet bude udělen po absolvování blokové stáže a po splnění písemného testu.

The course can also be completed outside the examination period.

The course is taught each semester.

The course is taught: in blocks.

Listed among pre-requisites of other courses

- [aVLCH9X33c Surgery III - practice](#)
[aVLFA0822p](#) && [aVLCH0832c](#) && [aVLOR7X1](#) ([Do I meet enrolment requirements?](#))

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

aVLOT7X1c Otorhinolaryngology - practice ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/3/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Hana Binková, Ph.D.](#) (seminar tutor)

[Jaroslava Kamenická](#) (seminar tutor)

[MUDr. Michaela Máchalová, Ph.D.](#) (seminar tutor)

[MUDr. Jan Rottenberg, Ph.D.](#) (seminar tutor)

[doc. MUDr. Pavel Smilek, Ph.D.](#) (seminar tutor)

[prof. MUDr. Ivo Šlapák, CSc.](#) (seminar tutor)

[MUDr. Pavla Urbánková, Ph.D.](#) (seminar tutor)

[Eva Podborská](#) (assistant)

[Bc. Ing. Martina Zatloukalová](#) (assistant)

Supervisor

[MUDr. Břetislav Gál, Ph.D.](#)

[Department of Otorhinolaryngology and Head and Neck Surgery - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Contact Person: [Eva Podborská](#)

Supplier department: [Department of Otorhinolaryngology and Head and Neck Surgery - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Prerequisites

[aVLPF0622p](#) && [aVLPA0622p](#) && [aVLIM051p Immunology - lecture](#) &&

[aVLLM0522p Medical Microbiology II - lect](#) && [aVLLP0633c](#)

Knowledge of theoretical discipline, especially anatomy and physiology.

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Otorhinolaryngology and head and neck surgery deals with region of head, neck and partially thorax. Technical development of recent years allowed impressive development both as regards diagnosis and treatment. In basic evaluation methods Otorhinolaryngology remains very demanding as for time and technical skillfulness. Very deeply placed spaces of ear, nose, epipharynx, larynx, trachea, oesophagus and region of skull base demand by

evaluation and surgery extraordinary ability of orientation, skillfulness, patients and fineness. ENT organs are also very sensitive for perception of pain and abundant reflexes. It all is necessary to respect in training evaluating skill in scholarship.

Otorhinolaryngology was one of the first disciplines which use in surgery microscope. Disease of ENT organs is very frequent and ENT used to be placed on third place (behind internal medicine and surgery) as for number of patients. For general practitioner is ENT region very important, because it creates about 30 % of his patients in out patient room. In pediatric out patient room is this percentage even higher. In Otorhinolaryngology there is also a big amount of emergency and first aid diagnosis which are a threat do death (Bleeding, dyspnea, foreign bodies, corrosions and scalds, sudden hearing loss, acute vertigo etc). Every physician should to be informed about their urgent treatment.

Syllabus

- 1st day (Monday, FNUSA) The hearing and balance system, applied anatomy and physiology, methods of investigation, inspection, palpation, otoscopy - practical training. The basic pathological finding on the ear drum I. - slides, demonstrations of patients. Video - function of hearing system, otoacoustic emissions (OAE). 2nd day (Tuesday, FNUSA) Radiography of the temporal bone (Schueller's view, Stenvers' view, CT), surgical treatment of acute and chronic Otitis Media, reconstructive surgery. Practical course and operating theatre. Stapedotomy - video demonstration. Video: FESS, slides: Ear II, Nose. Nose and paranasal sinuses, applied anatomy and physiology, external inspection and palpation, anterior rhinoscopy - practical course, radiology of the sinuses, classical radical treatment and functional endoscopic sinus surgery (FESS) - video demonstration. Pathologic findings - slides. 3rd day (Wednesday, FNUSA) Nasopharynx and oropharynx - applied anatomy and physiology, posterior rhinoscopy - practical training, investigation of the oral cavity and salivary glands, Waldayer's lymphoepithelial ring, functional assessment of the Eustachian tube. Pathologic findings - slides. The correction of saddle nose - videodemonstration 4th day (Thursday, FDN) Congenital anomalies of the ear, types of disorder, possibilities of treatment, slides. Otitis media acuta – etiology, otoscopy, diagnosis, therapy – slides, pathologic findings, video demonstration – paracentesis. Complications of middle ear inflammation, therapy, video demonstration – antromastoidectomy. Chronic inflammation of the middle ear – focused on children's age – etiology, diagnosis, therapy, video demonstration – implantation of pressure equalizing tube, myringoplasty. Practical training – otoscopy, presence in evaluation of children patient in outpatient room, presence in operating theathre. 5th day (Friday, FDN) Nasopharynx and oropharynx - applied anatomy and physiology, posterior rhinoscopy - practical training, Waldayer's lymphoepithelial ring, - focused on children's age. Acute and chronic inflammations in tonsil's region, obstructive sleep apnoe syndrome, evaluation, therapy. Video demonstration – tonsilotomy. Practical training – evaluation of nasopharynx and oropharynx. 6th day (Monday, FNUSA) Hypopharynx and Larynx - applied anatomy and physiology, methods of investigation - indirect laryngoscopy and hypopharyngoscopy – practical training, functional disorders of the larynx. Dyspnoe, tracheotomy – video demonstration. 7th day (Tuesday, FDN) Functional endoscopic sinus surgery (FESS) focused on children's age, surgery of choanal

atresia, dacryocystorhinostomy. Development of paranasal sinuses, acute and chronic inflammations, complications and their resolution - video demonstrations. Pathologic findings - slides. Foreign bodies in otorhinolaryngology – evaluation, methods of extraction, bronchoscopy. Practical training – evaluation of larynx, hypopharynx, rhinoscopy, external neck. 8th day (Wednesday, FNUSA) Cervical lymphatic system - applied anatomy and physiology, methods of investigation - practical training. Differential diagnosis of tumors of neck. Head and neck cancer - strategy of treatment. Endoscopy (Microlaryngoscopy and bronchoscopy) - in Otolaryngology. Video demonstration - Restoration of the voice by endolaryngeal surgery.

Literature

required literature

- KLOZAR, Jan. *Speciální otorinolaryngologie*. 1. vyd. Praha: Karolinum, 2005. 224 s. ISBN 8024611252. [info](#)
- UCHYTIL, Bořivoj, [Pavel SMILEK](#), [Rom KOSTŘICA](#) and [Miroslav NOVOTNÝ](#). *Vyšetřovací metody a základní diagnostika v otorinolaryngologii (Methods of investigation and basic diagnosis in otorhinolaryngology)*. 1. vyd. Praha: Triton, 2002. 254 pp. Edice Levou zadní. ISBN 80-7254-190-0. [info](#)

recommended literature

- ČADA, Karel. *Základy otorinolaryngologie*. 2. podstatně přeprac. vyd. Brno: Masarykova univerzita, 1996. 250 s. ISBN 80-210-1342-7. [info](#)
- [SMILEK, Pavel](#), [Rom KOSTŘICA](#), Zdenek MECHL and [Vladimír SPURNÝ](#). Maligní nádory hlavy a krku (Head and neck malignant tumors). In *Diagnostické a léčebné postupy u maligních chorob*. 1. vyd. Praha: Grada Publishing, spol. s r.o., 2002. p. 21-31. ISBN 80-7169-792-3. [info](#)
- Hybášek Ivan: Ušní, nosní a krční lékařství
- ŠLAPÁK, Ivo. *Dětská otorinolaryngologie*. 1. vyd. Praha: Mladá fronta, 2013. 333 s. ISBN 9788020429001. [info](#)
- UCHYTIL, Bořivoj. *Vyšetřovací metody a základní diagnostika v otorinolaryngologii*. 1. vyd. Praha: Triton, 2002. 254 s. ISBN 8072541900. [info](#)
- ČADA, Karel. *Základy otorinolaryngologie*. 2. podstatně přeprac. vyd. Brno: Masarykova univerzita, 1996. 250 s. ISBN 80-210-1342-7. [info](#)
- *Colour atlas of otorhinolaryngology :slide collection : The ear*. Edited by Bruce Benjamin. 1st ed. London: Martin Dunitz, 1995. 200 diapoz. ISBN 1-85317-278-2. [info](#)
- *Manual of middle ear surgery :mastoid surgery and reconstructive procedures*. Edited by Mirko Tos. [1st ed.]. Stuttgart: Georg Thieme Verlag, 1995. xii, 432 p. ISBN 3-13-114901-9. [info](#)
- BECKER, Walter, Hans Heinz NAUMANN, Carl Rudolf PFALTZ and Richard A. BUCKINGHAM. *Ear, nose and throat diseases : a pocket reference*. 2nd rev. ed. Stuttgart: Thieme, 1994. xiv, 583. ISBN 3136712021. [info](#)

Teaching methods

Lectures, practical training of basic ENT evaluation, video sessions, presentations by professionals in the inpatient ward and operating theatre.

Assessment methods

Attendance in practices and seminars is compulsory; the presence of students is recorded. Teaching methods: lectures, discussion, practical training in ENT evaluation, presentation of individual cases – videos, pictures, watching surgery in operating theatre. Final appreciation- student will prove his ability to provide ENT examination and recognize normal ENT finding.

Language of instruction

English

Further comments (probably available only in Czech)

The course can also be completed outside the examination period.

The course is taught each semester.

The course is taught: in blocks.

Listed among pre-requisites of other courses

- [aVLAM9X1c Intensive Care Medicine - practice](#)
[aVLFA0822c](#) && [aVLCH0832c](#) && [aVLLP0633c](#) && [aVLDI7X1c](#) && [aVLOT7X1c](#) && [aVLIN7X21c](#) (Do I meet enrolment requirements?)
- [aVLAM9X1p Intensive Care Medicine - lecture](#)
[aVLFA0822c](#) && [aVLCH0832c](#) && [aVLLP0633c](#) && [aVLDI7X1c](#) && [aVLOT7X1c](#) && [aVLIN7X21c](#) (Do I meet enrolment requirements?)
- [aVLON091c Clinical Oncology - practice](#)
[aVLFA0822p](#) && [aVLLP0633c](#) && [aVLCH0832c](#) && [aVLOT7X1c](#) (Do I meet enrolment requirements?)
- [aVLON091p Clinical oncology - lecture](#)
[aVLFA0822p](#) && [aVLLP0633c](#) && [aVLCH0832c](#) && [aVLOT7X1c](#) (Do I meet enrolment requirements?)
- [aVLPD0932c Pediatrics II - practice](#)
[aVLFA0822c](#) && [aVLPD7X31c](#) && [aVLOT7X1c](#) && [aVLDI7X1c](#) && [aVLLP0633c](#) && [aVLKG7X1c](#) (Do I meet enrolment requirements?)
- [aVLPD0932p Pediatrics II - lecture](#)
[aVLFA0822c](#) && [aVLPD7X31c](#) && [aVLOT7X1c](#) && [aVLDI7X1c](#) && [aVLLP0633c](#) && [aVLKG7X1c](#) (Do I meet enrolment requirements?)

Teacher's information

K výuce je zapotřebí plášť, přezůvky. Výuka probíhá v posluchárně v budově A - hlavní budova z Pekařské ulice, ve 2. patře. Začátek stáží ve FNUSA je vždy v 7:30hod. V případě absence se nahrazuje stáž po domluvě s vyučujícím.

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

aVLOT7X1p Otorhinolaryngology - lecture ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

1/0/0. 2 credit(s). Recommended Type of Completion: zk (examination). Alternate Types of Completion: RZk (examination).

Teacher(s)

[MUDr. Hana Binková, Ph.D.](#) (lecturer)
[prof. MUDr. Rom Kostřica, CSc.](#) (lecturer)
[MUDr. Michaela Máchalová, Ph.D.](#) (lecturer)
[MUDr. Jan Rottenberg, Ph.D.](#) (lecturer)
[doc. MUDr. Pavel Smilek, Ph.D.](#) (lecturer)
[prof. MUDr. Ivo Šlapák, CSc.](#) (lecturer)
[MUDr. Pavla Urbánková, Ph.D.](#) (lecturer)
[Jaroslava Kamenická](#) (assistant)
[Eva Podborská](#) (assistant)
[Bc. Ing. Martina Zatloukalová](#) (assistant)

Supervisor

[MUDr. Břetislav Gál, Ph.D.](#)
[Department of Otorhinolaryngology and Head and Neck Surgery - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)
Contact Person: [Eva Podborská](#)
Supplier department: [Department of Otorhinolaryngology and Head and Neck Surgery - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Prerequisites (in Czech)

aVLPF0622p && aVLPA0622p && [aVLIM051p Immunology - lecture](#) &&
[aVLLM0522p Medical Microbiology II - lect](#) && aVLLP0633c
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Main objectives of otorhinolaryngologic course are to give information about applied anatomy and physiology of head and neck and to teach students basic principles of diagnosis and treatment of head and neck diseases.

Syllabus

- AS.MUDr. Jan Rottenberg, Phd.: Basic principles of Audiology Hearing disorder; audiometry – fundamental physical and acoustic concepts; Pure-Tone Audiometry, Speech audiometry, Electric response audiometry, Otoacoustic emissions; hearing aids; cochlear implant. As. MUDr. Rottenberg Jan, PhD.: Basics of neurotology
- The lecture summarizes basic methods of investigation in neurotology. It is divided into the four basic themes:

- 1. Olfactometry - investigation of smell, differential diagnosis of smell disorders
- 2. Gustometry - investigation of taste, hypogeusia and ageusia as a symptom, diagnostic consequences
- 3. Audiometry - summary of methods (this theme is a subject of other lecture)
- 4. Equilibriometry - investigation of vestibular organs, differential diagnosis of vestibular disorders.
- The lecturer supposes a basic knowledge from anatomy and physiology of sensory organs and basic knowledge of neurology (vestibular disorders)
- As. MUDr. Rottenberg Jan, PhD.: Clinical anatomy of anterior and lateral skull base
- The lecture summarizes important data of topographical anatomy of the skull base from clinical point of view and its practical consequences to clinical symptomatology of skull base diseases, operation techniques and approaches and its complications:
 - 1. Anatomy, development and variability of paranasal sinuses, functional endoscopic sinus surgery and its complications
 - 2. Neural syndroms of the anterior skull base
 - 3. Neural syndrom of the lateral skull base
 - 4. The most frequent tumours of the lateral skull base and its clinical symptomatology
 - 5. Types of facial nerve palsy and their topodiagnosics
 - 6. The subject of skull base surgery
- The lecturer supposes a basic anatomical knowledge and basic orientation in otolaryngology.
- Ass. prof. MUDr. P. Smilek, PhD., Odb. as. MUDr. H.Binková, Ph.D.: Emergency and First Aid Procedures
 - 1. Bleeding (nasal, form larynx, trachea, oesophagus and ear)
 - 2. Dyspnea(differential diagnosis, tracheotomy, intubation, care of tracheostomy)
 - 3. Foreign bodies (in the hypopharynx, esophagus, larynx, trachea,bronchi, nose and ear)
 - 4. Corrosion and scalds (in the mouth and oesophagus)
- Ass. prof. MUDr. P. Smilek, PhD.: Basics principles in ENT Oncology
 - 1. Etiology
 - 2. Prognosis of Head and Neck cancer
 - 3. Basic strategy of treatment
 - 4. Treatment of lymphnode metastasis
 - 5. Cancer of the nose and paranasal sinuses
 - 6. Cancer of the epipharynx
 - 7. Cancer of the Oropharynx
 - 8. Cancer of the Larynx
- 9. Follow up - very important Prof. MUDr. Rom Kostřica, PhD., As. MUDr. Pavla Urbánková, PhD. Serious complications of inflammatory disease in ENT; Uniqueness of inflammatory disease in ENT; Primary sources of inflammation; Mastoiditis acuta; Otogenic infective complications; Intracranial complications of I. phase and II. phase; Primary source: Nose – Sinusitis; Nasal furuncle; Orbital sinusitis complications; Possible intracranial complications of sinusitis; Primary source: Oral cavity Base of oral cavity; Cheilitis; Primary source: pharynx;

Abscessus et phlegmona peritonsillaris; Abscessus et phlegmona parapharyngealis; Sepsis tonsillogenes (angina septica, sepsis post anginam, trombophlebitis v. jug. int.); Mediastinal complications of deep neck inflammation

Literature

- [SMILEK, Pavel](#), [Rom KOSTŘICA](#), Zdenek MECHL and [Vladimír SPURNÝ](#). Maligní nádory hlavy a krku (Head and neck malignant tumors). In *Diagnostické a léčebné postupy u maligních chorob*. 1. vyd. Praha: Grada Publishing, spol. s r.o., 2002. p. 21-31. ISBN 80-7169-792-3. [info](#)
- UCHYTIL, Bořivoj, [Pavel SMILEK](#), [Rom KOSTŘICA](#) and [Miroslav NOVOTNÝ](#). *Výšetrovací metody a základní diagnostika v otorinolaryngologii (Methods of investigation and basic diagnosis in otorhinolaryngology)*. 1. vyd. Praha: Triton, 2002. 254 pp. Edice Levou zadní. ISBN 80-7254-190-0. [info](#)
- [HYBÁŠEK, Ivan](#). *Ušní, nosní a krční lékařství (Ear, nose and throat medicine)*. 1. vyd. Praha: Galén, Karolinum, 1999. 220 pp. 1. ISBN 80-7262-017-7. [info](#)
- NOVOTNÝ, Miroslav, Alaš HAHN, [Zdeněk BOLELOUCKÝ](#) and Helena VAVERKOVÁ. *Závratě, diagnostika a léčba (Dizziness, diagnostics and treatment)*. Stuttgart: Aesopus Verlag, 1997. p. 158. ISBN 3-7773-1744-6. [info](#)
- ČADA, Karel. *Základy otorinolaryngologie*. 2. podstatně přeprac. vyd. Brno: Masarykova univerzita, 1996. 250 s. ISBN 80-210-1342-7. [info](#)
- *Kryoterapie v medicíně*. Edited by Rom Kostřica. 1. vyd. Brno: Vydavatelství Masarykovy univerzity, 1995. 124 s. ISBN 80-210-1249-8. [info](#)
- BECKER, Walter, Hans Heinz NAUMANN, Carl Rudolf PFALTZ and Richard A. BUCKINGHAM. *Ear, nose and throat diseases : a pocket reference*. 2nd rev. ed. Stuttgart: Thieme, 1994. xiv, 583. ISBN 3136712021. [info](#)

Teaching methods

Lecture

Assessment methods

Attendance in practices and seminars is compulsory, the presence of students is recorded. Teaching methods: lectures, discussion, practical training in ENT evaluation, presentation of individual cases – videos, pictures. Final grade: oral examination The students are expected to come to the Practice properly prepared, including the corresponding theoretical backgrounds.

Language of instruction

English

Further comments (probably available only in Czech)

The course can also be completed outside the examination period.

The course is taught each semester.

The course is taught: in blocks.

Teacher's information

Přednášky jsou koncipovány tak, že je přednášena látka, která není obsažena v učebnicích, a obsah přednášek bude součástí zkoušky z otolaryngologie. Vzhledem k velmi omezenému rozsahu výuky otorinolaryngologie není akceptována žádná absence. Stáže začínají v 7:30, končí v 12:20, přestávka je v době od 9:45 do 10:05 hod. Stáže probíhají dle následujícího rozpisu: 1. den (pondělí) FN u sv. Anny v Brně, Pekařská 2.

den (úterý) FN u sv. Anny v Brně, Pekařská 3. den (středa) FN u sv. Anny v Brně, Pekařská 4. den (čtvrtek) FDN Černopolní 5. den (pátek) FDN Černopolní 6. den (pondělí) FN u sv. Anny v Brně, Pekařská 7. den (úterý) FDN Černopolní 8. den (středa) FN u sv. Anny v Brně, Pekařská Výjimku představuje výuka dvou studijních skupin zároveň v jednom stážovacím termínu, kdy na obou pracovištích probíhá výuka denně, studenti docházejí střídavě na obě pracoviště. Pro praktickou výuku je třeba mít s sebou přezůvky a pláště.

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

aVLPD0932c Pediatrics II - practice ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Milan Bajer, Ph.D.](#) (seminar tutor)

[MUDr. Milena Burianová, Ph.D.](#) (seminar tutor)

[prof. MUDr. Zdeněk Doležel, CSc.](#) (seminar tutor)

[MUDr. Lenka Dostalová Kopečná, Ph.D.](#) (seminar tutor)

[MUDr. Petr Jabandžiev, Ph.D.](#) (seminar tutor)

[MUDr. Jan Papež](#) (seminar tutor)

[MUDr. Magdalena Rohanová](#) (seminar tutor)

[MUDr. Jana Šťastná, Ph.D.](#) (seminar tutor)

[Libuše Darmovzalová](#) (assistant)

Supervisor

[MUDr. Petr Jabandžiev, Ph.D.](#)

[Department of Pediatrics - Institutions shared with the Faculty Hospital Brno \(paediatric medicine\) - Faculty of Medicine](#)

Contact Person: [MUDr. Milena Burianová, Ph.D.](#)

Supplier department: [Department of Pediatrics - Institutions shared with the Faculty Hospital Brno \(paediatric medicine\) - Faculty of Medicine](#)

Prerequisites (in Czech)

aVLFA0822c && [aVLPD7X31c Pediatrics I - practice](#) &&

[aVLOT7X1c Otorhinolaryngology - practice](#) && [aVLDI7X1c Diagn.imaging methods-pr.](#) && aVLLP0633c && [aVLKG7X1c Clinical Genetics - practice](#)

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The goal of practical lessons in pediatry is to acquaint the students with problematics of treatment and prevention nursing in the field. By the end of the course the student will understand the particularities of care of children in illness. The student understands specifics of communication with children. The student acquires and implements theoretical knowledge in taking intensive care of sick children. The student will be acquainted with problems of most frequent diseases in childhood. The student knows standard diagnostic procedures and tests for individual clinical conditions of the child and is able to apply them in practice. The student will know clinical manifestations of urgent conditions in paediatrics. After the participation in the course students will be able to recognize and evaluate the state of the newborn after the delivery and during the transitional period, understand the impact of congenital and inherited diseases on children and their family. The student will acquire basic knowledge of the issue of alimentary disorders. By the end of the course students should be able to perform physical examination.

Learning outcomes

After completing of the course, students will have basic overview of diagnostic, therapeutic and preventive methods of pediatrics - medical history, physical examination, laboratory methods, imaging methods, basic information about patient nutrition and basics of psychological approach to the patient. The student knows the most common childhood illnesses. The student knows standard diagnostic procedures and tests for individual clinical conditions in pediatrics.

Syllabus

- Practical training with tutor. Examination children in age specific categories – newborn, infant, toddlers, preschool, school children and adolescent. Assessment of growth and development. Examination children with typical diseases in childhood.

Literature

recommended literature

- KLIEGMAN, Robert, Bonita F. STANTON, Joseph W. ST GEME III and Nina F. SCHOR. *Nelson textbook of pediatrics. Volume 2*. Edited by Robert Kliegman. 20th edition. Philadelphia: Elsevier, 2016. lxviii, 17. ISBN 9781455775668. [info](#)
- LEBL, Jan. *Klinická pediatrie*. 1. vyd. Praha: Galén, 2012. xix, 698. ISBN 9788072627721. [info](#)
- [MICHÁLEK, Jaroslav](#), [Lenka DOSTALOVÁ KOPEČNÁ](#) and [Milena BURIANOVÁ](#). *Pediatrická propedeutika (Pediatrics)*. 2008. vyd. Brno: Masarykova univerzita, 2008. 159 pp. ISBN 978-80-210-4695-5. [info](#)
- ŠAŠINKA, Miroslav, Tibor ŠAGÁT and László KOVÁCS. *Pediatrics*. 2., dopl. a aktualiz. vyd. Bratislava: HERBA, 2007. 740 s. ISBN 9788089171491. [info](#)

not specified

- *Praktická pediatrie : obvyklé diagnostické a léčebné postupy na Pediatrické klinice v Motole*. Edited by Jan Lebl - Jan Janda - Petr Pohunek. 1. vyd. Praha: Galén, 2008. 189 s. ISBN 9788072625789. [info](#)

- MUNTAU, Ania Carolina. *Pediatric (Pediatrics)*. 1st. Praha: Grada Publishing a.s., 2009. 608 pp. ISBN 978-80-247-2525-3. [info](#)

Teaching methods

practical training,

Assessment methods

To get the credit, presence in 90% of seminars with active participation in discussions is required

Language of instruction

English

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: in blocks.

Listed among pre-requisites of other courses

- [aVLPD1033c Pediatrics III - practice](#)
[aVLFA0822p](#) && [aVLPD0932c](#) ([Do I meet enrolment requirements?](#))

Teacher's information

* Informace o rozdělení studentů do skupin najdete na nástěnce u sekretariátu Pediatrické kliniky, pavilon C, 4. podlaží. Praktická výuka probíhá na odděleních: Pediatrická klinika FN Brno, Černopolní 9, oddělení 46,67,48,69,56. Klinika dětské onkologie, (pavilon G, 2. podlaží). Novorozenecké oddělení Obilní trh, budova A1. 3. podlaží, odd JIP. Začátek v 8:00 hodin na odděleních kliniky, pozdní příchod nebude akceptován. Nepřítomnost na stážích pro zkoušku z jiného předmětu je nutno nahradit. Účast na stážích 90%, (tj. toleruje se půldenní nepřítomnost). Na novorozeneckém oddělení je začátek v 10:00 hodin, pozdní příchod nebude akceptován. * Semináře zpravidla začínají v 10 hodin: Studovna Pek 1, pavilon G, 3. podlaží, Studovna Pek2, pavilon C, 4. podlaží. * Pomůcky: plášť, přezuvky, fonendoskop (bez pomůcek nelze stáž absolvovat) * Šatny: pavilon A dětské nemocnice (naproti vratek, kde jsou k vyzvednutí klíče. Skřínky v šatně je nutno každý den uvolnit. ***** Actual information and schedule could be found on the pinboard next to the headquarters of the Department of Pediatrics, Building C, 4th floor. Practical education is carried out on the wards of Department of Pediatrics, University Hospital Brno, Černopolní 9, at the wards 46, 67, 48, 69 and 56, at the Department of Pediatric Oncology (building G, 2nd floor) and at The Dept. of Neonatology, Obilní Trh 11 (Building A1, 3rd floor, NICU) Practical education starts at 8:00 (10:00 at Dept. of Neonatology), coming late will not be accepted Lectures: Study Room PeK1 (Building G, 3rd floor) Study Room PeK2 (Building C, 4th floor) Tools, necessary to attend Practical education: official university ID card, coat, slippers, stethoscope (without tools can not student attend practical education an internship) Closets: Building A (at the opposite of the gatehouse – where is possible to pick up keys). Lockers must stay free every day. In accordance to The MU Study and Examination Regulations all practical education and lectures are obligatory. Substitution is allowed in the Substitution week at end of semester. To get credit one half of day absence is allowed. Exam or test is NO excuse. To get credit passing of credit test is required.

The course is also listed under the following terms [Accreditation autumn](#).

aVLPD0932p Pediatrics II - lecture ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

1/0/0. 0 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Milan Bajer, Ph.D.](#) (lecturer)

[MUDr. Milena Burianová, Ph.D.](#) (lecturer)

[prof. MUDr. Zdeněk Doležel, CSc.](#) (lecturer)

[MUDr. Lenka Dostalová Kopečná, Ph.D.](#) (lecturer)

[prof. MUDr. Hana Hrstková, CSc.](#) (lecturer)

[MUDr. Petr Jabandžiev, Ph.D.](#) (lecturer)

[doc. MUDr. Dagmar Procházková, Ph.D.](#) (lecturer)

[doc. MUDr. Ondřej Rybníček, Ph.D.](#) (lecturer)

Supervisor

[MUDr. Petr Jabandžiev, Ph.D.](#)

[Department of Pediatrics - Institutions shared with the Faculty Hospital Brno \(paediatric medicine\) - Faculty of Medicine](#)

Contact Person: [MUDr. Milena Burianová, Ph.D.](#)

Supplier department: [Department of Pediatrics - Institutions shared with the Faculty Hospital Brno \(paediatric medicine\) - Faculty of Medicine](#)

Prerequisites (in Czech)

aVLFA0822c && [aVLPD7X31c Pediatrics I - practice](#) &&

[aVLOT7X1c Otorhinolaryngology - practice](#) && [aVLDI7X1c Diagn.imaging methods-pr.](#) && aVLLP0633c && [aVLKG7X1c Clinical Genetics - practice](#)

(Do I meet enrolment requirements?)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of lessons is to acquaint students with the issues of therapeutic and preventive care in pediatrics. The student will be acquainted with principal concepts and tasks of paediatrics. The student will be acquainted with prevention, diagnostics and basic therapy of diseases in the childhood. The student knows the system and contents of preventive examinations, vaccination. The student is able to define risk factors endangering healthy development of child and adolescent.

Learning outcomes

Student has knowledge about the origin, course of treatment and prognosis of basic nosological units

Syllabus

- The field of pediatrics, child care management: out-patient, in-patient care of sick children, preventive measures in pediatrics. Age categories, growth and development during childhood. Social issues in pediatrics. New-born infant, general assessment of the normal new-born, problem with adaptation. Premature infant, sick new-born. Prenatal care, genetic abnormalities, chromosomal aberrations. Nutrition during childhood, feeding of infants - breast feeding, formula feeding. Nutritional disorders. Inborn errors of metabolism. Diseases of GIT, liver, biliary system and pancreas. Diseases of red blood cells, white blood cells. Haemorrhagic diseases. Neoplasms in childhood.

Literature

recommended literature

- KLIEGMAN, Robert, Bonita F. STANTON, Joseph W. ST GEME III and Nina F. SCHOR. *Nelson textbook of pediatrics. Volume 2*. Edited by Robert Kliegman. 20th edition. Philadelphia: Elsevier, 2016. lxviii, 17. ISBN 9781455775668. [info](#)
- LEBL, Jan. *Klinická pediatrie*. 1. vyd. Praha: Galén, 2012. xix, 698. ISBN 9788072627721. [info](#)
- ŠAŠINKA, Miroslav, Tibor ŠAGÁT and László KOVÁCS. *Pediatrics*. 2., dopl. a aktualiz. vyd. Bratislava: HERBA, 2007. 740 s. ISBN 9788089171491. [info](#)

not specified

- MICHÁLEK, Jaroslav. *Pediatrická propedeutika : vybrané kapitoly*. 1. vyd. Brno: Masarykova univerzita, 2008. 159 s. ISBN 9788021046955. [info](#)
- LEBL, Jan, Kamil PROVAZNÍK and Ludmila HEJCMANOVÁ. *Preklinická pediatrie*. 2., přeprac. vyd. Praha: Galén, 2007. 248 s. ISBN 9788072624386. [info](#)
- NOVÁK, Ivan. *Intenzivní péče v pediatrii*. 1. vyd. Praha: Karolinum, 2008. 579 s. ISBN 9788024614748. [info](#)
- MUNTAU, Ania Carolina. *Pediatric (Pediatrics)*. 1st. Praha: Grada Publishing a.s., 2009. 608 pp. ISBN 978-80-247-2525-3. [info](#)

Teaching methods

lectures

Assessment methods

credit

Language of instruction

English

Further Comments

The course is taught annually.

The course is taught: every week.

The course is also listed under the following terms [Accreditation autumn](#).

aVLPD1033c Pediatrics III - practice *

Faculty of Medicine

Spring 2018

Extent and Intensity

0/2/0. 4 credit(s). Type of Completion: zk (examination).

Teacher(s)

[MUDr. Milan Bajer, Ph.D.](#) (seminar tutor)

[MUDr. Milena Burianová, Ph.D.](#) (seminar tutor)

[prof. MUDr. Zdeněk Doležel, CSc.](#) (seminar tutor)

[MUDr. Lenka Dostalová Kopečná, Ph.D.](#) (seminar tutor)

[MUDr. Eliška Hloušková](#) (seminar tutor)

MUDr Petr Jabandžiev (seminar tutor)

MUDr Magdalena Rohanová (seminar tutor)

[MUDr. Jana Šťastná, Ph.D.](#) (seminar tutor)

[MUDr. Dan Wechsler](#) (seminar tutor)

[Libuše Darmovzalová](#) (assistant)

Supervisor

[MUDr. Petr Jabandžiev, Ph.D.](#)

[Department of Pediatrics - Institutions shared with the Faculty Hospital Brno \(paediatric medicine\) - Faculty of Medicine](#)

Contact Person: [MUDr. Lenka Dostalová Kopečná, Ph.D.](#)

Supplier department: [Department of Pediatrics - Institutions shared with the Faculty Hospital Brno \(paediatric medicine\) - Faculty of Medicine](#)

Prerequisites (in Czech)

[aVLEFA0822p Pharmacology II - lec.](#) && [aVLPD0932c Pediatrics II - practice](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The goal of practical lessons is to acquaint the students with problematics of treatment and prevention nursing in the field. By the end of the course the student will understand the particularities of care of children in illness. The student understands specifics of communication with children. The student acquires and implements theoretical knowledge in taking intensive care of sick children. The student will be acquainted with problems of most frequent diseases in childhood. The student knows standard diagnostic procedures and tests for individual clinical conditions of the child and is able to apply them in practice. The student will know clinical manifestations of urgent conditions in paediatrics. After the participation in the course students will be able to recognize and evaluate the state of the newborn after the delivery and during the transitional period, understand the impact of congenital and inherited diseases on children and their family. The student will acquire basic knowledge of the issue of alimentary disorders. By the end of the course

student should be able to perform physical examination. In the end of course student should be able to set diagnosis and to treat different pediatric conditions

Learning outcomes

Students will be able to perform a qualified and independent examination of a child or an adolescent and to assess his or her development in all aspects, to recognize pathological symptoms in physical examination, to indicate laboratory and other complementary exams and to interpret their results. They will understand general principles as well as specifics of paediatric pharmacotherapy, rehabilitation care and psychological support.

Syllabus

- Practical training with tutor. Self examination of children in typical age categories. The basic differential diagnosis. Typical examination methods in pulmonology, gastroenterology, hematology, oncology, endocrinology and inherited diseases. Basic therapy in childhood.

Literature

recommended literature

- KLIEGMAN, Robert, Bonita F. STANTON, Joseph W. ST GEME III and Nina F. SCHOR. *Nelson textbook of pediatrics. Volume 2*. Edited by Robert Kliegman. 20th edition. Philadelphia: Elsevier, 2016. Ixviii, 17. ISBN 9781455775668. [info](#)
- LEBL, Jan, Kamil PROVAZNÍK and Ludmila HEJCMANOVÁ. *Preklinická pediatrie*. 2., přeprac. vyd. Praha: Galén, 2007. 248 s. ISBN 9788072624386. [info](#)

not specified

- NEVORAL, Jiří. *Praktická pediatrická gastroenterologie, hepatologie a výživa*. První vydání. Praha: Mladá fronta, 2013. 677 stran. ISBN 9788020428639. [info](#)
- LEBL, Jan. *Klinická pediatrie*. 1. vyd. Praha: Galén, 2012. xix, 698. ISBN 9788072627721. [info](#)
- MICHÁLEK, Jaroslav. *Pediatrická propedeutika : vybrané kapitoly*. 1. vyd. Brno: Masarykova univerzita, 2008. 159 s. ISBN 9788021046955. [info](#)
- CHALOUPECKÝ, Václav. *Dětská kardiologie*. 1. vyd. Praha: Galén, 2007. 444 s. ISBN 8072624067. [info](#)
- JANDA, Jan. *Dětská nefrologie*. 1. vyd. Praha: Galén, 2006. 261 s. ISBN 8072623788. [info](#)

Teaching methods

Practical training with tutor

Assessment methods

Credit, attendance at practical training 90 %

Language of instruction

English

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: in blocks.

Teacher's information

Praktická výuka probíhá na odděleních: - Pediatrická klinika FN Brno, Černopolní 9, oddělení 46,67,48,69,56. Klinika dětské onkologie, (pavilon G, 2.podlaží. Začátek v 8:00 hodin zpravidla na odděleních kliniky, pozdní příchod nebude akceptován. - Novorozenecké oddělení Obilní trh, budova A1. 3.podlaží, odd JIP. Na novorozeneckém oddělení je začátek v 10:00 hodin, pozdní příchod nebude akceptován. * Nepřítomnost na stážích pro zkoušku z jiného předmětu je nutno nahradit (v náhradním týdnu na konci semestru). Účast na stážích 90%,(tj. toleruje se půldenní nepřítomnost).* Semináře zpravidla od 10 hodin: Studovna Pek1, pavilon G, 3.podlaží, Studovna Pek2, pavilon C, 4. podlaží. * Pomůcky: plášť, přezuvky, fonendoskop (bez pomůcek nelze stáž absolvovat) * Šatny: pavilon A dětské nemocnice (naproti vřátnice, kde jsou k vyzvednutí klíče. Skřínky v šatně je nutno každý den uvolnit. * Další informace na nástěnce u sekretariátu Pediatrické kliniky, pavilon C, 4.podlaží . Practical education is carried out on the wards of Department of Pediatrics, University Hospital Brno, Černopolní 9, at the wards 46, 67, 48, 69 and 56, at the Department of Pediatric Oncology (building G, 2nd floor) and at The Dept.of Neonatology, Obilní Trh 11 (Building A1, 3rd floor, NICU) Practical education starts at 8:00 (10:00 at Dept. of Neonatology), coming late will not be accepted Lectures: Study Room PeK1 (Building G, 3rd floor) Study Room PeK2 (Building C, 4th floor) Tools, necessary to attend Practical education: official university ID card, coat, slippers, stethoscope (without tools can not student attend practical education an internship) Closets: Building A (at the opposite of the gatehouse – where is possible to pick up keys). Lockers must stay free every day. Actual information and schedule could be found on the pinboard next to the headquarters of the Departement of Pediatrics, Building C, 4th floor In accordance to The MU Study and Examination Regulations all practical education and lectures are obligatory. Substitution is allowed in the Substitution week at end of semester. To get credit one half of day absence is allowed. Exam or test is NO excuse. ****It is the duty of every student at 7.50h to find out the allocation of students into groups and particular wards. Schedule of wards and lectures, including the allocation of students into groups is posted on the pinboard in front of the secretary of Department of Pediatrics (Building C 4th floor). Students are not allowed to change specified group. Student who will come more than 15 minutes later is not allowed to participate in lesson.

The course is also listed under the following terms [Accreditation spring](#).

aVLPD11Xpp Pediatrics - pregraduation practice ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/6/0. 8 credit(s) (plus extra credits for completion). Type of Completion: z (credit).

Teacher(s)

[MUDr. Milena Burianová, Ph.D.](#) (lecturer)

[prof. MUDr. Zdeněk Doležel, CSc.](#) (lecturer)

[MUDr. Milan Bajer, Ph.D.](#) (seminar tutor)

[MUDr. Lenka Dostalová Kopečná, Ph.D.](#) (seminar tutor)

[MUDr. Petr Jabandžiev, Ph.D.](#) (seminar tutor)

[doc. MUDr. Dagmar Procházková, Ph.D.](#) (seminar tutor)

[MUDr. Magdalena Rohanová](#) (seminar tutor)

[doc. MUDr. Ondřej Rybníček, Ph.D.](#) (seminar tutor)

[MUDr. Jana Šťastná, Ph.D.](#) (seminar tutor)

[Libuše Darmovzalová](#) (assistant)

Supervisor

[prof. MUDr. Zdeněk Doležel, CSc.](#)

[Department of Pediatrics - Institutions shared with the Faculty Hospital Brno \(paediatric medicine\) - Faculty of Medicine](#)

Contact Person: [MUDr. Milena Burianová, Ph.D.](#)

Supplier department: [Institutions shared with the Faculty Hospital Brno \(paediatric medicine\) - Faculty of Medicine](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The goal of the practical lessons in paediatrics is to acquaint students with different areas of treatment and preventive nursing in paediatrics. Student shall acquire and implement theoretical knowledge in taking intensive care of sick children. Student shall summarise her/his knowledge in diagnostics, therapy and prevention of paediatric diseases in different age periods, according to particular physiological systems. By the end of the course students should be able to perform physical examination of the patient. They should be able to assess physical findings and distinguish them from pathological ones. Students shall know standard diagnostic procedures and tests for individual clinical conditions of the child and shall be able to apply them in practice. Students shall also be able to indicate and substantiate basic laboratory and examination methods for specific disease groups. Students will learn about work organization in different departments. Students will gain practical experience how to work with medical records and other relevant documentation. In the end of the course students shall be able to set up the diagnosis and to treat different paediatric diseases and conditions

Syllabus:

- Individual practical training.
- Examination of sick children.
- Examination of new-born children, infants, toddlers, pre and school children as well as adolescents.
- Special laboratory and diagnostic methods in different types/groups of illness in childhood.
- Differential diagnosis, including pharmacotherapy in paediatrics.

Learning outcomes

Students will be able to perform a qualified and independent examination of a child or an adolescent and to assess his or her development in all aspects, to recognize pathological symptoms in physical examination, to indicate laboratory and other complementary exams and to interpret their results. They will understand general principles as well as specifics of paediatric pharmacotherapy, rehabilitation care and psychological support,

Syllabus

- Individual practical training over tutor supervisor. Examination of sick children. Examination newborn children, infants, toddlers, pre and school children and adolescents. Special methods in all illness in childhood. Differential diagnosis, speciality in pharmacotherapy in pediatrics.

Literature

- LEBL, Jan, Kamil PROVAZNÍK and Ludmila HEJCMANOVÁ. *Preklinická pediatrie*. 2., přeprac. vyd. Praha: Galén, 2007. 248 s. ISBN 9788072624386. [info](#)
- LEBL, Jan. *Klinická pediatrie*. 1. vyd. Praha: Galén, 2012. xix, 698. ISBN 9788072627721. [info](#)
- HRODEK, Otto and Jan VAVŘINEC. *Pediatrie*. 1. vyd. Praha: Galén, 2002. xxxii, 767. ISBN 8072621785. [info](#)
- ŠAŠINKA, Miroslav and Tibor ŠAGÁT. *Pediatrics*. 1. vyd. Košice: SATUS, 1998. 620 s. ISBN 8096796305. [info](#)
- MICHÁLEK, Jaroslav. *Pediatrická propedeutika : vybrané kapitoly*. 1. vyd. Brno: Masarykova univerzita, 2008. 159 s. ISBN 9788021046955. [info](#)
- NOVÁK, Ivan. *Intenzivní péče v pediatrii*. 1. vyd. Praha: Karolinum, 2008. 579 s. ISBN 9788024614748. [info](#)
- *Praktická pediatrie : obvyklé diagnostické a léčebné postupy na Pediatrické klinice v Motole*. Edited by Jan Lebl - Jan Janda - Petr Pohunek. 1. vyd. Praha: Galén, 2008. 189 s. ISBN 9788072625789. [info](#)
- [KOPEČNÁ, Lenka](#) and [Milena BURIANOVÁ](#). *Pediatrie - kontrolní otázky (Pediatrics - questions)*. 1. vyd. Brno: LF MU, 2000. 55 pp. ISBN 80-210-2432-1. [info](#)
- *Nelson textbook of pediatrics : text with continually update online references*. Edited by Robert Kliegman. 18th ed. Philadelphia: Saunders, 2007. lii, 3147. ISBN 9781416040040. [info](#)
- CHALOUPECKÝ, Václav. *Dětská kardiologie*. 1. vyd. Praha: Galén, 2007. 444 s. ISBN 8072624067. [info](#)
- MUNTAU, Ania Carolina. *Pediatrie (Pediatrics)*. 1st. Praha: Grada Publishing a.s., 2009. 608 pp. ISBN 978-80-247-2525-3. [info](#)

Teaching methods

Individual study in department under the teacher supervision. /history, examination of the patient on admission to hospital/. Daily ward round.

Assessment methods

To get the credit, presence in 90% of seminars with active participation in discussions is required. Case report - Written and oral presentation of case report

Language of instruction

English

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: in blocks.

Information on the extent and intensity of the course: 90 hours/ 3 weeks practice.

Teacher's information

*Informace a rozpis studentů do skupin na nástěnce u sekretariátu Pediatrické kliniky, pavilon B, 4. patro. První den praxe organizační schůzka v 7.45 hod Pavilon G, 3. patro studovna Pek 1. * Praktická výuka probíhá týden na odděleních Pediatrické kliniky FN Brno, Černopolní 9, týden v ambulancích nemocnice, z toho jeden den na lékařské službě první pomoci (nutná vizitka studenta) * Pomůcky: plášť, přezuvky, fonendoskop (bez pomůcek nelze stáž absolvovat) * Nepřítomnost pro zkoušku z jiného předmětu je nutno nahradit. * Šatny: pavilon A (naproti vřátnice, kde jsou k vyzvednutí klíče. Skřínky v šatně je nutno každý den uvolnit. * Další informace a rozpis studentů do skupin na nástěnce u sekretariátu Pediatrické kliniky, pavilon C, 4.podlaží***** Actual information and schedule could be found on the pinboard next to the headquarters of the Departement of Pediatrics, Building C, 4th floor Training is carried out for one week on the wards of Department of Pediatrics, University Hospital Brno, Černopolní 9, at the wards 46, 67, 48, 69 and 56, for one week at the outpatient part of hospital, one day of „outpatient week“ can be during afternoon or evening in time of Medical first aid service. Training starts at 8:00, coming late will not be accepted. Tools, necessary to attend training: official university ID card, coat, slippers, stethoscope (without tools can not student attend practical education an internship) Closets: Building A (at the opposite of the gatehouse – where is possible to pick up keys). Lockers must stay free every day. In accordance to The MU Study and Examination Regulations all practical education and lectures are obligatory. To get credit one day absence is allowed. Exam or test is NO excuse. To get credit writing of case report of selected patient is required.

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

aVLPD11XX Pediatrics - State Exam ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/0/0. 0 credit(s) (plus extra credits for completion). Type of Completion: SRZK (closing examination).

Teacher(s)

[MUDr. Milan Bajer, Ph.D.](#) (lecturer)

[MUDr. Jan Blatný, Ph.D.](#) (lecturer)

[MUDr. Milena Burianová, Ph.D.](#) (lecturer)

[prof. MUDr. Zdeněk Doležel, CSc.](#) (lecturer)

[MUDr. Petr Dominik](#) (lecturer)

[MUDr. Lenka Dostalová Kopečná, Ph.D.](#) (lecturer)

[MUDr. Karel Goldemund, CSc.](#) (lecturer)

Doc MUDr Michal Hladík, PhD (lecturer)

[prof. MUDr. Hana Hrstková, CSc.](#) (lecturer)

[doc. MUDr. Lenka Krbková, CSc.](#) (lecturer)

[doc. MUDr. Lubomír Kukla, CSc.](#) (lecturer)

[MUDr. Dana Novotná, Ph.D.](#) (lecturer)

[doc. MUDr. Dagmar Procházková, Ph.D.](#) (lecturer)

[doc. MUDr. Ondřej Rybníček, Ph.D.](#) (lecturer)

[prof. MUDr. Jaroslav Štěrba, Ph.D.](#) (lecturer)

[doc. MUDr. Petr Štourač, Ph.D.](#) (lecturer)

[Libuše Darmovzalová](#) (assistant)

Supervisor

[prof. MUDr. Zdeněk Doležel, CSc.](#)

[First Department Pediatric Internal Medicine - Institutions shared with the Faculty Hospital Brno \(paediatric medicine\) - Faculty of Medicine](#)

Contact Person: [Libuše Darmovzalová](#)

Supplier department: [First Department Pediatric Internal Medicine - Institutions shared with the Faculty Hospital Brno \(paediatric medicine\) - Faculty of Medicine](#)

Prerequisites (in Czech)

[aVLFA0822p](#) && [aVLNE9X1p Neurology - lecture](#) && [aVLPY9X1p Psychiatry - lect.](#)

&& [aVLDV7X21p](#) && [aVLAM9X1p Intensive care med. - lect.](#) &&

[aVLVL7X61c Internal medicine - part 1 -pr](#) && [aVLVL9X62c Internal medicine part 2](#)

&& [aVLVL9X63c Internal medicine part 3](#) && [aVLVL9X64c Internal medicine part 4](#)

&& [aVLVL9X65c Internal medicine part 5](#) && [aVLIN9X22 Infectious diseases II](#) &&

[aVLON091p Clinical oncology - lec.](#) && VYCET (1 , [aVLAL091 Anaesthes. and](#)

[Treat. of Pain](#) , [aVLDO091 Paediatric Oncology](#) , [aVLKF101](#) , [aVLKB091 Clinical](#)

[Biochemistry](#) , [aVLFP091 Physiology and path.of newborn](#)) && [aVLCH9X33c Surgery](#)

[III - practice](#) && [aVLCJ0888](#) && [VSSP03X Individual project](#)

(Do I meet enrolment requirements?)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of state examination is to confirm basic knowledge in epidemiology, pathogenesis, diagnosis, treatment and prevention of the most common pediatric diseases.

Learning outcomes

Student knows standard diagnostic procedures and tests for individual clinical conditions of the child and is able to apply in practice. At the end of the course, students should be able to diagnose and treat various pediatric conditions

Syllabus

- During the 3-week practice, students work independently from departments and outpatients. Seminars are part of the course. After completing the internship, the practice is completed by state rigorous examination.

Literature

- LEBL, Jan, Kamil PROVAZNÍK and Ludmila HEJCMANOVÁ. *Preklinická pediatrie*. 2., přeprac. vyd. Praha: Galén, 2007. 248 s. ISBN 9788072624386. [info](#)

- LEBL, Jan. *Klinická pediatrie*. 1. vyd. Praha: Galén, 2012. xix, 698. ISBN 9788072627721. [info](#)
- HRODEK, Otto and Jan VAVŘINEC. *Pediatrie*. 1. vyd. Praha: Galén, 2002. xxxii, 767. ISBN 8072621785. [info](#)
- MICHÁLEK, Jaroslav. *Pediatrická propedeutika : vybrané kapitoly*. 1. vyd. Brno: Masarykova univerzita, 2008. 159 s. ISBN 9788021046955. [info](#)
- ŠAŠINKA, Miroslav and Tibor ŠAGÁT. *Pediatrics*. 1. vyd. Košice: SATUS, 1998. 620 s. ISBN 8096796305. [info](#)
- CHALOUPECKÝ, Václav. *Dětská kardiologie*. 1. vyd. Praha: Galén, 2007. 444 s. ISBN 8072624067. [info](#)
- *Nelson textbook of pediatrics : text with continually update online references*. Edited by Robert Kliegman. 18th ed. Philadelphia: Saunders, 2007. lii, 3147. ISBN 9781416040040. [info](#)

Teaching methods

preparing for state examination

Assessment methods

State Exam of pediatrics has practical and theoretical part. Practical part – case report.

Theoretical part consists of 3 questions.

Language of instruction

English

Further comments (probably available only in Czech)

The course can also be completed outside the examination period.

The course is taught annually.

Teacher's information

Doporučená literatura 1. . Lebl J, Provazník K, Hejčmanová L a kol.: Preklinická pediatrie. Galén 2007. 2. Lebl J, Janda J, Pohunek P, Starý J a kol.: Klinická pediatrie. Galén 2012. Rozsah textu obou učebnic je zcela odpovídající pro znalosti požadované u SZZ z pediatrie. Přitom první učebnice uvádí především vývojové aspekty dětského věku a zásady preventivních opatření, logicky na tuto učebnici pak navazuje text učebnice druhé, která uvádí podrobný přehled patologie jednotlivých tělních systémů u dětí. ----- Pro studium lze s určitým omezením využít také dvou níže uvedených titulů, jejichž textový rozsah je však omezený a mnohá problematika je uvedena pouze ve strukturované podobě: 1. Kovács L a kol.: *Pediatrics*. Arete s.r.o. 2010 2. Muntau AC. *Pediatrics*. Grada 2009 ***** Recommended textbooks 1. K. Duderstadt: *Pediatric Physical Examination: An Illustrated Handbook*, 2nd edition; Elsevier 2. Karen Marcante et al.: *Nelson Essentials of Pediatrics*, 6th edition; SAUNDERS 3. G. Clayden, T. Lissauer: *Illustrated Textbook of Paediatrics*, 4th edition; Elsevier 4. William W. Hay Jr et al.: *Current Diagnosis and Treatment Pediatrics*, 23rd edition; LANGE Textbook No 1 is the most practical, up-to-date, well referenced guide to the diagnosis and treatment of the medical problems of children – from birth to adolescence. Other textbooks are classic textbooks for students and for pediatric residencies. These textbooks provide comprehensive, yet concise and accessible guidance on normal childhood growth and development, as well as the diagnosis, management, and prevention of common pediatric diseases and disorders.

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

aVLPD7X31c Pediatrics I - practice *

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/3/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Milan Bajer, Ph.D.](#) (seminar tutor)
[MUDr. Milena Burianová, Ph.D.](#) (seminar tutor)
[MUDr. Lenka Dostalová Kopečná, Ph.D.](#) (seminar tutor)
[MUDr. Veronika Fiamoli, Ph.D.](#) (seminar tutor)
[MUDr. Petr Jabandžiev, Ph.D.](#) (seminar tutor)
[MUDr. Jan Papež](#) (seminar tutor)
[MUDr. Magdalena Rohanová](#) (seminar tutor)
[MUDr. Jana Šťastná, Ph.D.](#) (seminar tutor)
[Libuše Darmovzalová](#) (assistant)

Supervisor

[MUDr. Petr Jabandžiev, Ph.D.](#)
[Department of Pediatrics - Institutions shared with the Faculty Hospital Brno \(paediatric medicine\) - Faculty of Medicine](#)
Contact Person: [MUDr. Petr Jabandžiev, Ph.D.](#)
Supplier department: [Department of Pediatrics - Institutions shared with the Faculty Hospital Brno \(paediatric medicine\) - Faculty of Medicine](#)

Prerequisites (in Czech)

[aVLPA0622p](#) && [aVLPA0622p](#) && [aVLLP0633c](#) && [aVLLM0522p Medical Microbiology II - lect](#) && [aVLIM051p Immunology - lecture](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The goal of practical lessons is to acquaint the students with problematics of treatment and prevention nursing in the field. By the end of the course the student will understand the particularities of care of children in illness. The student understands specifics of communication with children. By the end of the course student should be able to take anamnestic data from parents, to perform physical examination /sight, palpation, auscultation, percussion/, to propose scheme of baby formula. By the end of the course student should be able to describe normal growth and development during infancy, childhood and adolescence.

Learning outcomes

After completing of the practicals the student will be able to take medical history from parents, to perform a general objective physical examination of patients, to propose infant nutrition. The student knows laboratory and diagnostic tests in individual diseases. The student understands specifics of communication with children

Syllabus

- Growth and development during childhood. Age groups. Clinical examination of children. Basic examination of infants. Psychomotoric development during infancy. Examination of new-born, resuscitation of new-born. Examination of the respiratory tract, CV system, GIT, urinary tract, genitals. Nutrition in childhood. Breast feeding, formula feeding.

Literature

recommended literature

- MICHÁLEK, Jaroslav. *Pediatrická propedeutika : vybrané kapitoly*. 1. vyd. Brno: Masarykova univerzita, 2008. 159 s. ISBN 9788021046955. [info](#)
- *Preklinická pediatrie*. Edited by Jan Lebl - Kamil Provazník - Ludmila Hejčmanová. 1. vyd. Praha: Galén, 2003. xiv, 248. ISBN 8072622072. [info](#)

not specified

- LEBL, Jan. *Klinická pediatrie*. 1. vyd. Praha: Galén, 2012. xix, 698. ISBN 9788072627721. [info](#)
- MUNTAU, Ania Carolina. *Pediatric (Pediatrics)*. 1st. Praha: Grada Publishing a.s., 2009. 608 pp. ISBN 978-80-247-2525-3. [info](#)

Teaching methods

practical training, seminar

Assessment methods

90% attendance at practical training. A short presentation/Power point/ on a given topic.
Written test. Credit.

Language of instruction

English

Further comments (probably available only in Czech)

The course is taught each semester.

The course is taught: in blocks.

Listed among pre-requisites of other courses

- [aVLDO091 Clinical Training in Paediatric Oncology](#)
[aVLPD7X31c](#) && [aVLFA0822p](#) (Do I meet enrolment requirements?)
- [aVLFP091 Physiology and Pathology of Newborn](#)
[aVLPD7X31c](#) (Do I meet enrolment requirements?)
- [aVLPD0932c Pediatrics II - practice](#)
[aVLFA0822c](#) && [aVLPD7X31c](#) && [aVLOT7X1c](#) && [aVLDI7X1c](#) &&
[aVLLP0633c](#) && [aVLKG7X1c](#) (Do I meet enrolment requirements?)

- [aVLPD0932p Pediatrics II - lecture](#)
[aVLFA0822c](#) && [aVLPD7X31c](#) && [aVLOT7X1c](#) && [aVLDI7X1c](#) &&
[aVLLP0633c](#) && [aVLKG7X1c](#) (Do I meet enrolment requirements?)

Teacher's information

Rozdělení studentů do skupin najdete na nástěnce u sekretariátu Pediatrické kliniky, Pavilon C, 4. podlaží * Praktická výuka probíhá na odděleních Pediatrické kliniky FN Brno, Černopolní 9, Semináře od 8 hodin : Studovna Pek1, pavilon G, 3. podlaží, nebo Studovna Pek2, pavilon C, 4. podlaží. Na odděleních 46,67,48,69,56. začátek v 10:00 hodin, pozdní příchod nebude akceptován * * Pomůcky: plášť, přezuvky, fonendoskop (bez pomůcek nelze stáž absolvovat) * Nepřítomnost na stážích pro zkoušku z jiného předmětu je nutno nahradit * Šatny: pavilon A (naproti vřátnice, kde jsou k vyzvednutí klíče. Skřínky v šatně je nutno každý den uvolnit. * Další informace na nástěnce u sekretariátu Pediatrické kliniky, pavilon C, 4. podlaží***** Practical education is carried out on the wards of Department of Pediatrics, University Hospital Brno, Černopolní 9, at the wards 46, 67, 48, 69 and 56. Practical education starts at 8:00, coming late will not be accepted Lectures: Study Room PeK1 (Building G, 3rd floor) Study Room PeK2 (Building C, 4th floor) Tools, necessary to attend Practical education: official university ID card, coat, slippers, stethoscope (without tools can not student attend practical education an internship) Closets: Building A (at the opposite of the gatehouse – where is possible to pick up keys). Lockers must stay free every day. Actual information and schedule could be found on the pinboard next to the headquarters of the Department of Pediatrics, Building C, 4th floor In accordance to The MU Study and Examination Regulations all practical education and lectures are obligatory. Substitution is allowed in the Substitution week at end of semester. To get credit one half of day absence is allowed. Exam or test is NO excuse. To get credit passing of credit test is required. ***** It is the duty of every student at 7.50h to find out the allocation of students into groups and particular wards. Schedule of wards and lectures, including the allocation of students into groups is posted on the pinboard in front of the secretary of Department of Pediatrics (Building C 4th floor). Students are not allowed to change specified group. Student who will come more than 15 minutes later is not allowed to participate in lesson.

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

aVLPD7X31p Pediatrics I - lecture ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

1/0/0. 0 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Milan Bajer, Ph.D.](#) (lecturer)

[MUDr. Milena Burianová, Ph.D.](#) (lecturer)

[prof. MUDr. Zdeněk Doležel, CSc.](#) (lecturer)

[MUDr. Lenka Dostalová Kopečková, Ph.D.](#) (lecturer)

[MUDr. Veronika Fiamoli, Ph.D.](#) (lecturer)

[MUDr. Petr Jabandžiev, Ph.D.](#) (lecturer)

[MUDr. Jan Papež](#) (lecturer)

[MUDr. Magdalena Rohanová](#) (lecturer)

[MUDr. Jana Šťastná, Ph.D.](#) (lecturer)

[Libuše Darmovzalová](#) (assistant)

Supervisor

[MUDr. Petr Jabandžiev, Ph.D.](#)

[Department of Pediatrics - Institutions shared with the Faculty Hospital Brno \(paediatric medicine\) - Faculty of Medicine](#)

Contact Person: [MUDr. Milena Burianová, Ph.D.](#)

Supplier department: [Department of Pediatrics - Institutions shared with the Faculty Hospital Brno \(paediatric medicine\) - Faculty of Medicine](#)

Prerequisites (in Czech)

[aVLPF0622p](#) && [aVLPA0622p](#) && [aVLLP0633c](#) && [aVLLM0522p Medical](#)

[Microbiology II - lect](#) && [aVLIM051p Immunology - lecture](#)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The student will be acquainted with principal concepts and tasks of paediatrics.

Learning outcomes

The student will be acquainted with principal concepts and tasks of paediatrics.

Syllabus

- History of paediatrics. Child care management: out-patient, in-patient care of sick children. Social issues in paediatrics. Growth and development. Nutrition in paediatrics. Neonatology. Metabolic disorders. Prenatal care, genetic disorders.

Literature

- KLIEGMAN, Robert, Bonita F. STANTON, Joseph W. ST GEME III and Nina F. SCHOR. *Nelson textbook of pediatrics*. Edited by Richard E. Behrman. Edition 20. Philadelphia: Elsevier, 2016. lxviii, 17. ISBN 9781455775668. [info](#)
- LEBL, Jan, Jan JANDA, Petr POHUNEK and Jan STARÝ. *Klinická pediatrie*. Druhé vydání. Praha: Karolinum, 2014. xix, 698. ISBN 9788024626970. [info](#)
- LEBL, Jan, Kamil PROVAZNÍK and Ludmila HEJCMANOVÁ. *Preklinická pediatrie*. 2., přeprac. vyd. Praha: Galén, 2007. 248 s. ISBN 9788072624386. [info](#)

Teaching methods

lectures

Assessment methods

credit

Language of instruction

English

Further Comments

The course is taught each semester.

The course is taught: in blocks.

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

aVLPG0921c Gynecology and obstetrics I - practice ✳**Faculty of Medicine**

Autumn 2019

Extent and Intensity

0/2/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Pavel Ventruba, DrSc., MBA](#) (seminar tutor)

[doc. MUDr. Igor Crha, CSc.](#) (seminar tutor)

[MUDr. Michal Felsing](#) (seminar tutor)

[MUDr. Romana Gerychová](#) (seminar tutor)

[MUDr. Lukáš Hruban, Ph.D.](#) (seminar tutor)

[doc. MUDr. Robert Hudeček, Ph.D.](#) (seminar tutor)

[prof. MUDr. Martin Huser, Ph.D.](#) (seminar tutor)

[MUDr. Petr Janků, Ph.D.](#) (seminar tutor)

[MUDr. Luboš Minář, Ph.D.](#) (seminar tutor)

[doc. MUDr. Michal Pohanka, Ph.D.](#) (seminar tutor)

[MUDr. Ingrid Rejdová](#) (seminar tutor)

[prof. MUDr. Aleš Roztočil, CSc.](#) (seminar tutor)

[MUDr. Vít Weinberger, Ph.D.](#) (seminar tutor)

[doc. RNDr. Jana Žáková, Ph.D.](#) (seminar tutor)

[Ing. Kateřina Kaderková, MBA](#) (assistant)

[Zdeňka Kroupová](#) (assistant)

[Ing. Josef Stodůlka](#) (assistant)

Supervisor

[prof. MUDr. Martin Huser, Ph.D.](#)

[Department of Gynecology and Obstetrics - Institutions shared with the Faculty Hospital Brno - Institutions of Reproductive Medicine - Faculty of Medicine](#)

Contact Person: [Zdeňka Kroupová](#)

Supplier department: [Department of Gynecology and Obstetrics - Institutions shared with the Faculty Hospital Brno - Institutions of Reproductive Medicine - Faculty of Medicine](#)

Prerequisites

aVLFA0822c && aVLCH0832c && [aVLDI7X1c Diagn.imaging methods- pr.](#) &&

aVLLP0633c

Successfully passed subjects - pharmacology, surgery, diagnostic imaging, clinical introduction

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the subject Gynecology and obstetrics is to acquire the necessary and complex theoretical knowledge and practical skills in the field of prevention, diagnosis and treatment of diseases of female reproductive system. The content of the course provides students with an understanding, sufficient theoretical knowledge and basic practical skills in epidemiology, pathogenesis, diagnosis, therapy and prevention of the most important pathological conditions in gynecology and obstetrics. The course gives to its graduate's sufficient overview in reproductive health issues, family planning, diagnosis and treatment of infertility and maternal care during pregnancy. The content of the course is determined by the syllabus and is clearly and specifically defined before the course begins and includes the theoretical and practical segment. Theoretical preparation includes lectures, thematic seminars, practical lessons and self-study. The learning outcomes of the graduate of the subject include, in particular, sufficient medical knowledge to supervise the pregnancy and delivery and to resolve most common gynecological diseases. Upon graduation, the student gets enough practical and theoretical information needed for medical decision making and can practice basic examination and treatment procedures in the field of gynecology and obstetrics. Students will also get a basic clinical view of gynecology and obstetrics. Student demonstrates their practical skills and performance using the "Procedure List" form (so-called logbook).

Learning outcomes

After completing the subject Gynecology and obstetrics, the student will be able to:

- Theoretically and practically perform gynecological and obstetrical examinations
- Know all common diagnostic and therapeutic procedures in the field
- Provide sufficient medical knowledge to monitor pregnancy and childbirth
- Will be sufficiently educated in symptoms, diagnosis and treatment of gynecological diseases
- Get enough practical and theoretical information about basic clinical decision making in the field

Syllabus

- Obstetrics
Diagnosis of pregnancy
Human pelvis, delivery ways, pelvic measurements
Examination of a pregnant woman - external and internal obstetric examination
Prenatal care
Mechanism of human birth – cephalic presentation
Abnormal presentation of the fetus - causes, diagnosis, birth mechanisms
Breech presentation
Multiple pregnancy and delivery of twins
Hypertension in pregnancy - preeclampsia, eclampsia
Trophoblastic diseases
Fetal growth disorders - intrauterine growth retardation
Premature birth - causes, clinical management
Ectopic pregnancy - causes, symptoms, diagnosis, treatment
Placenta previa and

placental abruption Diseases of puerperium, puerperal sepsis Periparturine uterine bleeding and its treatment Prenatal diagnostics Ultrasound in obstetrics Gynecology Gynecological examination Laparoscopy in gynecology - indication, execution Hysteroscopy - Indication and execution Menstrual cycle disorders - classification, diagnosis, dysfunctional uterine bleeding Gynecological inflammation - etiology, pathophysiology Endometritis, myometritis, perimetritis Pelvic inflammatory disease and pelveoperitonitis Sexually transmitted diseases Endometriosis genital and extragenital Sterility, infertility - causes, meaning, treatment Contraception Benign and malignant neoplasms of gynecological organs Pre-canceroses of gynecological organs Diagnosis and treatment in oncogynecology Breast cancer, pre-cancerosis of the breast Benign breast disease Urinary incontinence in women Chronic pelvic pain Assisted reproduction

Literature

recommended literature

- ROZTOČIL, Aleš. *Moderní gynekologie*. 1. vydání. Praha: Grada Publishing, 2011. xviii, 508. ISBN 9788024728322. [info](#)
- ROZTOČIL, Aleš. *Moderní porodnictví*. 1. vyd. Praha: Grada, 2008. 405 s. ISBN 9788024719412. [info](#)
- *Dewhurst's textbook of obstetrics & gynaecology*. Edited by D. Keith Edmonds. Eighth edition. Chichester, West Sussex: Wiley-Blackwell, 2012. xv, 852. ISBN 9780470654576. [info](#)
- HÁJEK, Zdeněk, Evžen ČECH and Karel MARŠÁL. *Porodnictví*. 3., zcela přepracované a d. Praha: Grada, 2014. 538 stran. ISBN 9788024745299. [info](#)
- 1. Procházka M., Pilka R. a kol. *Porodnictví pro studenty všeobecného lékařství a porodní asistence*. Olomouc: AED - Olomouc s.r.o., 2016, 243 s., ISBN 978-80-906280-0-7

Teaching methods

Teaching takes place in three weekly blocks. Each block consists of five working days and includes teaching in inpatient and outpatient units within the Departments of Gynecology and Obstetrics. The courses last daily from 7 am to 1 pm and include a propedeutical part and practical part each day, using patients' medical reports. Every teaching day ends up with the clinical seminar led by the teacher and dedicated to one important topic within the field. Important parts of teaching methods are also practical demonstration of selected diagnostic and therapeutic techniques directly with patients or using simulators and daily presentation of clinical cases or up-to-date medical issues ended up with clinical discussion between the students and the teacher. The important part of the teaching process is to participate on at least one afternoon or weekend practice. The main purpose of such a practice is to increase the level of practical training, to allow students to experience the on-call clinical routine, to make a better overview of the daily work of a young doctor in specialty training and last but not least to reduce the number of students in the study groups during the weekday morning classes. Afternoon lessons begin at 1 pm (right after the clinical seminar, which is common for both morning and afternoon classes) and last until 4 pm. The weekend practical classes are scheduled from 8 am to 11 am and always begin at the departments' delivery rooms. The sign-up for

afternoon and weekend practical lessons is necessary to do in advance using the is.muni.cz electronic system, maximum 4 students are allowed per each block.

Assessment methods

• Continuous discussions during internship, student presentations during seminars • Recording from practice - logbook • Interview (Colloquium) • Practical exam (demonstration of skills) • Continuous test-paper form • Final exam - combined form
Daily evaluation – to receive the daily credit it is necessary to prove sufficient theoretical knowledge and practical demonstration of selected diagnostic and therapeutic procedures listed in the “Procedure list” (so-called logbook), which each student receives at the beginning of the course
Final evaluation - presentation of a given clinical problem or selected diagnostic-therapeutic method with the participation of a teacher (maximum of 10 minutes per student). In particular, the teacher assesses the professional medical level of the topic, quality and form of the presentation and the student's speech competences. This evaluation can be replaced by the elaboration and presentation of a selected scientific clinical topic (original scientific work, review article or meta-analysis, case report).

Language of instruction

English

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: in blocks.

Listed among pre-requisites of other courses

- [aVLPG1022c Gynecology and Obstetrics II - practice](#)
[aVLPG0921c](#) ([Do I meet enrolment requirements?](#))
- [aVLPG1022p Gynecology and Obstetrics II - lecture](#)
[aVLPG0921c](#) ([Do I meet enrolment requirements?](#))

Teacher's information

<http://portal.med.muni.cz/disciplina-17-porodnictvi-a-gynekologie>, www.fnbrno.cz/gpk, www.ivfbrno.cz

Organizační pokyny Zahájení výuky v pondělí v 8:00 v posluchárně Porodnice/Bohunice. Studenti zapsaní na odpolední praxi v pondělí přijdou až na seminář a pokračují odpolední praxí. Na rozdělení do 5 skupin, které se provádí v pondělí ráno, se mohou domluvit s kolegy předem. Je nezbytné bílé lékařské oblečení – košile, kalhoty, případně plášť, přezůvky, zámek na šatní skříň, zřetelné označení studenta jménovkou, učební texty (viz. doporučená literatura v is.muni.cz)!!! Ukončení výuky a závěrečné hodnocení probíhá vždy pátek 12:00 – 13:00. Pro udělení zápočtu je nutné splnit náplň stáží, splnit odpolední praxi a uspět v zápočtovém testu – správně odpovědět více než 50 % otázek.

The course is also listed under the following terms [Accreditation autumn](#).

aVLPG0921p Gynecology and Obstetrics I - lecture ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

2/0/0. 0 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Pavel Ventruba, DrSc., MBA](#) (lecturer)

[doc. MUDr. Igor Crha, CSc.](#) (lecturer)

[doc. MUDr. Vít Unzeitig, CSc.](#) (lecturer)

[doc. MUDr. Michal Pohanka, Ph.D.](#) (lecturer)

[MUDr. Atanas-Ivan Belkov](#) (lecturer)

[MUDr. Romana Gerychová](#) (lecturer)

[MUDr. Petr Janků, Ph.D.](#) (lecturer)

[MUDr. Luboš Minář, Ph.D.](#) (lecturer)

[MUDr. Vít Weinberger, Ph.D.](#) (lecturer)

[doc. RNDr. Jana Žáková, Ph.D.](#) (lecturer)

[MUDr. Michal Felsingr](#) (seminar tutor)

[prof. MUDr. Martin Huser, Ph.D.](#) (seminar tutor)

[prof. MUDr. Aleš Roztočil, CSc.](#) (seminar tutor)

[Ing. Josef Stodůlka](#) (assistant)

Supervisor

[prof. MUDr. Martin Huser, Ph.D.](#)

[Department of Gynecology and Obstetrics - Institutions shared with the Faculty Hospital Brno - Institutions of Reproductive Medicine - Faculty of Medicine](#)

Contact Person: [Zdeňka Kroupová](#)

Supplier department: [Department of Gynecology and Obstetrics - Institutions shared with the Faculty Hospital Brno - Institutions of Reproductive Medicine - Faculty of Medicine](#)

Prerequisites

aVLFA0822c && aVLCH0832c && [aVLDI7X1c Diagn.imaging methods- pr.](#) && aVLLP0633c

Successfully passed subjects - pharmacology, surgery, diagnostic imaging, clinical introduction

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the subject Gynecology and obstetrics is to acquire the necessary and complex theoretical knowledge and practical skills in the field of prevention, diagnosis and treatment of diseases of female reproductive system. The content of the course provides students with an understanding, sufficient theoretical knowledge and basic practical skills in epidemiology, pathogenesis, diagnosis, therapy and prevention of the most important pathological conditions in gynecology and obstetrics. The course gives to its graduate's sufficient overview in reproductive health issues, family planning, diagnosis and treatment of infertility and maternal care during pregnancy. The content of the course is determined by the syllabus and is clearly and specifically defined before the course begins

and includes the theoretical and practical segment. Theoretical preparation includes lectures, thematic seminars, practical lessons and self-study. The learning outcomes of the graduate of the subject include, in particular, sufficient medical knowledge to supervise the pregnancy and delivery and to resolve most common gynecological diseases. Upon graduation, the student gets enough practical and theoretical information needed for medical decision making and can practice basic examination and treatment procedures in the field of gynecology and obstetrics. Students will also get a basic clinical view of gynecology and obstetrics. Student demonstrates their practical skills and performance using the "Procedure List" form (so-called logbook).

Learning outcomes

After completing the subject Gynecology and obstetrics, the student will be able to:

- Theoretically and practically perform gynecological and obstetrical examinations
- Know all common diagnostic and therapeutic procedures in the field
- Provide sufficient medical knowledge to monitor pregnancy and childbirth
- Will be sufficiently educated in symptoms, diagnosis and treatment of gynecological diseases
- Get enough practical and theoretical information about basic clinical decision making in the field

Syllabus

- Obstetrics Diagnosis of pregnancy Human pelvis, delivery ways, pelvic measurements Examination of a pregnant woman - external and internal obstetric examination Prenatal care Mechanism of human birth – cephalic presentation Abnormal presentation of the fetus - causes, diagnosis, birth mechanisms Breech presentation Multiple pregnancy and delivery of twins Hypertension in pregnancy - preeclampsia, eclampsia Trophoblastic diseases Fetal growth disorders - intrauterine growth retardation Premature birth - causes, clinical management Ectopic pregnancy - causes, symptoms, diagnosis, treatment Placenta previa and placental abruption Diseases of puerperium, puerperal sepsis Periparturine uterine bleeding and its treatment Prenatal diagnostics Ultrasound in obstetrics Gynecology Gynecological examination Laparoscopy in gynecology - indication, execution Hysteroscopy - Indication and execution Menstrual cycle disorders - classification, diagnosis, dysfunctional uterine bleeding Gynecological inflammation - etiology, pathophysiology Endometritis, myometritis, perimetritis Pelvic inflammatory disease and pelveoperitonitis Sexually transmitted diseases Endometriosis genital and extragenital Sterility, infertility - causes, meaning, treatment Contraception Benign and malignant neoplasms of gynecological organs Pre-canceroses of gynecological organs Diagnosis and treatment in oncogynecology Breast cancer, pre-cancerosis of the breast Benign breast disease Urinary incontinence in women Chronic pelvic pain Assisted reproduction

Literature

recommended literature

- HÁJEK, Zdeněk, Evžen ČECH and Karel MARŠÁL. *Porodnictví*. 3., zcela přepracované a d. Praha: Grada, 2014. 538 stran. ISBN 9788024745299. [info](#)
- ROB, Lukáš, Alois MARTAN and Karel CITTEBART. *Gynekologie*. 2., dopl. a přeprac. vyd. Praha: Galén, 2008. xxiv, 319. ISBN 9788072625017. [info](#)

- *Dewhurst's textbook of obstetrics & gynaecology*. Edited by D. Keith Edmonds. Eighth edition. Chichester, West Sussex: Wiley-Blackwell, 2012. xv, 852. ISBN 9780470654576. [info](#)
- OATS, Jeremy and Suzanne ABRAHAM. *Llewellyn-Jones fundamentals of obstetrics and gynaecology*. 8th ed. Edinburgh: Mosby, 2005. x, 365. ISBN 0723433291. [info](#)

not specified

- ČECH, Evžen, Zdeněk HÁJEK, Karel MARŠÁL and Bedřich SRP. *Porodnictví*. 2., přepracované a doplně. Praha: Grada, 2007. 544 s. ISBN 9788024713038. [info](#)

Teaching methods

Teaching takes place in three weekly blocks. Each block consists of five working days and includes teaching in inpatient and outpatient units within the Departments of Gynecology and Obstetrics. The courses lasts daily from 7 am to 1 pm and includes a propedeutical part and practical part each day, using patients medical reports. Every teaching day ends up with the clinical seminar led by the teacher and dedicated to one important topic within the field. Important parts of teaching methods are also practical demonstration of selected diagnostic and therapeutic techniques directly with patients or using simulators and daily presentation of clinical cases or up-to-date medical issues ended up with clinical discussion between the students and the teacher. The important part of the teaching process is to participate on at least one afternoon or weekend practice. The main purpose of such a practice is to increase the level of practical training, to allow students to experience the on-call clinical routine, to make a better on overview of the daily work of a young doctor in specialty training and last but not least to reduce the number of students in the study groups during the weekday morning classes. Afternoon lessons begin at 1 pm (right after the clinical seminar, which is common for both morning and afternoon classes) and lasts until 4 pm. The weekend practical classes are scheduled from 8 am to 11 am and always begin at the departments delivery rooms. The sign-up for afternoon and weekend practical lessons is necessary to do in advance using the is.muni.cz electronic system, maximum 4 students are allowed per each block.

Assessment methods

- Continuous discussions during internship, student presentations during seminars
- Recording from practice - logbook
- Interview (Colloquium)
- Practical exam (demonstration of skills)
- Continuous test-paper form
- Final exam - combined form

Daily evaluation – to receive the daily credit it is necessary to prove sufficient theoretical knowledge and practical demonstration of selected diagnostic and therapeutic procedures listed in the “Procedure list” (so-called logbook), which each student receives at the beginning of the course

Final evaluation - presentation of a given clinical problem or selected diagnostic-therapeutic method with the participation of a teacher (maximum of 10 minutes per student). In particular, the teacher assesses the professional medical level of the topic, quality and form of the presentation and the student's speech competences. This evaluation can be replaced by the elaboration and presentation of a selected scientific clinical topic (original scientific work, review article or meta-analysis, case report).

Language of instruction

English

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

Teacher's information

<http://portal.med.muni.cz/disciplina-17-porodnictvi-a-gynekologie>, www.fnbrno.cz/gpk,
www.ivfbrno.cz

Organizační pokyny Zahájení výuky v pondělí v 8:00 v posluchárně Porodnice/Bohunice. Studenti zapsaní na odpolední praxi v pondělí přijdou až na seminář a pokračují odpolední praxí. Na rozdělení do 5 skupin, které se provádí v pondělí ráno, se mohou domluvit s kolegy předem. Je nezbytné bílé lékařské oblečení – košile, kalhoty, případně plášť, přezůvky, zámek na šatní skříň, zřetelné označení studenta jménem, učební texty (viz. doporučená literatura v is.muni.cz)!!! Ukončení výuky a závěrečné hodnocení probíhá vždy pátek 12:00 – 13:00. Pro udělení zápočtu je nutné splnit náplň stáží, splnit odpolední praxi a uspět v zápočtovém testu – správně odpovědět více než 50 % otázek.

The course is also listed under the following terms [Accreditation autumn](#).

aVLP1022c Gynecology and Obstetrics II - practice ✨**Faculty of Medicine**

Spring 2018

Extent and Intensity

0/4/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Pavel Ventruba, DrSc., MBA](#) (lecturer)

[doc. MUDr. Igor Crha, CSc.](#) (lecturer)

[doc. MUDr. Vít Unzeitig, CSc.](#) (lecturer)

[MUDr. Petr Janků, Ph.D.](#) (seminar tutor)

[MUDr. Lukáš Hruban, Ph.D.](#) (seminar tutor)

[MUDr. Michal Felsing](#) (seminar tutor)

[MUDr. Romana Gerychová](#) (seminar tutor)

[MUDr. Zuzana Hodická, Ph.D.](#) (seminar tutor)

[doc. MUDr. Robert Hudeček, Ph.D.](#) (seminar tutor)

[prof. MUDr. Martin Huser, Ph.D.](#) (seminar tutor)

[MUDr. Luboš Minář, Ph.D.](#) (seminar tutor)

[doc. MUDr. Michal Pohanka, Ph.D.](#) (seminar tutor)

[MUDr. Ingrid Rejdová](#) (seminar tutor)

[prof. MUDr. Aleš Roztočil, CSc.](#) (seminar tutor)

[MUDr. Vít Weinberger, Ph.D.](#) (seminar tutor)

[doc. RNDr. Jana Žáková, Ph.D.](#) (seminar tutor)

[Ing. Kateřina Kaderková, MBA](#) (assistant)

[Zdeňka Kroupová](#) (assistant)

Supervisor

[prof. MUDr. Martin Huser, Ph.D.](#)

[Department of Gynecology and Obstetrics - Institutions shared with the Faculty Hospital
Brno - Institutions of Reproductive Medicine - Faculty of Medicine](#)

Contact Person: [Zdeňka Kroupová](#)

Supplier department: [Department of Gynecology and Obstetrics - Institutions shared with the Faculty Hospital Brno - Institutions of Reproductive Medicine - Faculty of Medicine](#)

Prerequisites

[aVLPG0921c Gynecol. and obst. I- practice](#)

Successfully passed subjects - pharmacology, surgery, diagnostic imaging, clinical introduction

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the subject Gynecology and obstetrics is to acquire the necessary and complex theoretical knowledge and practical skills in the field of prevention, diagnosis and treatment of diseases of female reproductive system. The content of the course provides students with an understanding, sufficient theoretical knowledge and basic practical skills in epidemiology, pathogenesis, diagnosis, therapy and prevention of the most important pathological conditions in gynecology and obstetrics. The course gives to its graduate's sufficient overview in reproductive health issues, family planning, diagnosis and treatment of infertility and maternal care during pregnancy. The content of the course is determined by the syllabus and is clearly and specifically defined before the course begins and includes the theoretical and practical segment. Theoretical preparation includes lectures, thematic seminars, practical lessons and self-study. The learning outcomes of the graduate of the subject include, in particular, sufficient medical knowledge to supervise the pregnancy and delivery and to resolve most common gynecological diseases. Upon graduation, the student gets enough practical and theoretical information needed for medical decision making and can practice basic examination and treatment procedures in the field of gynecology and obstetrics. Students will also get a basic clinical view of gynecology and obstetrics. Student demonstrates their practical skills and performance using the "Procedure List" form (so-called logbook).

Learning outcomes

After completing the subject Gynecology and obstetrics, the student will be able to:

- Theoretically and practically perform gynecological and obstetrical examinations
- Know all common diagnostic and therapeutic procedures in the field
- Provide sufficient medical knowledge to monitor pregnancy and childbirth
- Will be sufficiently educated in symptoms, diagnosis and treatment of gynecological diseases
- Get enough practical and theoretical information about basic clinical decision making in the field

Syllabus

- Obstetrics Diagnosis of pregnancy Human pelvis, delivery ways, pelvic measurements Examination of a pregnant woman - external and internal obstetric examination Prenatal care Mechanism of human birth – cephalic presentation

Abnormal presentation of the fetus - causes, diagnosis, birth mechanisms Breech presentation Multiple pregnancy and delivery of twins Hypertension in pregnancy - preeclampsia, eclampsia Trophoblastic diseases Fetal growth disorders - intrauterine growth retardation Premature birth - causes, clinical management Ectopic pregnancy - causes, symptoms, diagnosis, treatment Placenta previa and placental abruption Diseases of puerperium, puerperal sepsis Periparturine uterine bleeding and its treatment Prenatal diagnostics Ultrasound in obstetrics Gynecology Gynecological examination Laparoscopy in gynecology - indication, execution Hysteroscopy - Indication and execution Menstrual cycle disorders - classification, diagnosis, dysfunctional uterine bleeding Gynecological inflammation - etiology, pathophysiology Endometritis, myometritis, perimetritis Pelvic inflammatory disease and pelveoperitonitis Sexually transmitted diseases Endometriosis genital and extragenital Sterility, infertility - causes, meaning, treatment Contraception Benign and malignant neoplasms of gynecological organs Pre-canceroses of gynecological organs Diagnosis and treatment in oncogynecology Breast cancer, pre-cancerosis of the breast Benign breast disease Urinary incontinence in women Chronic pelvic pain Assisted reproduction

Literature

recommended literature

- ROZTOČIL, Aleš. *Moderní gynekologie*. 1. vydání. Praha: Grada Publishing, 2011. xviii, 508. ISBN 9788024728322. [info](#)
- HÁJEK, Zdeněk, Evžen ČECH and Karel MARŠÁL. *Porodnictví*. 3., zcela přepracované a d. Praha: Grada, 2014. 538 stran. ISBN 9788024745299. [info](#)
- *Dewhurst's textbook of obstetrics & gynaecology*. Edited by D. Keith Edmonds. Eighth edition. Chichester, West Sussex: Wiley-Blackwell, 2012. xv, 852. ISBN 9780470654576. [info](#)

Teaching methods

Teaching takes place in three weekly blocks. Each block consists of five working days and includes teaching in inpatient and outpatient units within the Departments of Gynecology and Obstetrics. The courses last daily from 7 am to 1 pm and include a propedeutical part and practical part each day, using patients' medical reports. Every teaching day ends up with the clinical seminar led by the teacher and dedicated to one important topic within the field. Important parts of teaching methods are also practical demonstration of selected diagnostic and therapeutic techniques directly with patients or using simulators and daily presentation of clinical cases or up-to-date medical issues ended up with clinical discussion between the students and the teacher. The important part of the teaching process is to participate on at least one afternoon or weekend practice. The main purpose of such a practice is to increase the level of practical training, to allow students to experience the on-call clinical routine, to make a better overview of the daily work of a young doctor in specialty training and last but not least to reduce the number of students in the study groups during the weekday morning classes. Afternoon lessons begin at 1 pm (right after the clinical seminar, which is common for both morning and afternoon classes) and last until 4 pm. The weekend practical classes are scheduled from 8 am to 11 am and always begin at the departments' delivery rooms. The sign-up for

afternoon and weekend practical lessons is necessary to do in advance using the is.muni.cz electronic system, maximum 4 students are allowed per each block.

Assessment methods

• Continuous discussions during internship, student presentations during seminars • Recording from practice - logbook • Interview (Colloquium) • Practical exam (demonstration of skills) • Continuous test-paper form • Final exam - combined form
Daily evaluation – to receive the daily credit it is necessary to prove sufficient theoretical knowledge and practical demonstration of selected diagnostic and therapeutic procedures listed in the “Procedure list” (so-called logbook), which each student receives at the beginning of the course
Final evaluation - presentation of a given clinical problem or selected diagnostic-therapeutic method with the participation of a teacher (maximum of 10 minutes per student). In particular, the teacher assesses the professional medical level of the topic, quality and form of the presentation and the student's speech competences. This evaluation can be replaced by the elaboration and presentation of a selected scientific clinical topic (original scientific work, review article or meta-analysis, case report).

Language of instruction

English

Further comments (probably available only in Czech)

The course is taught each semester.

The course is taught: in blocks.

Teacher's information

<http://portal.med.muni.cz/disciplina-17-porodnictvi-a-gynekologie>, www.fnbrno.cz/gpk, www.ivfbrno.cz

Organizační pokyny Zahájení výuky v pondělí v 8:00 v posluchárně Porodnice/Bohunice. Studenti zapsaní na odpolední praxi v pondělí přijdou až na seminář a pokračují odpolední praxí. Na rozdělení do 5 skupin, které se provádí v pondělí ráno, se mohou domluvit s kolegy předem. Je nezbytné bílé lékařské oblečení – košile, kalhoty, případně plášť, přezůvky, zámek na šatní skříň, zřetelné označení studenta jménovkou, učební texty (viz. doporučená literatura v is.muni.cz)!!! Ukončení výuky a závěrečné hodnocení probíhá vždy pátek 12:00 – 13:00. Pro udělení zápočtu je nutné splnit náplň stáží, splnit odpolední praxi a uspět v zápočtovém testu – správně odpovědět více než 50 % otázek.

The course is also listed under the following terms [Accreditation spring](#).

aVLPG1022p Gynecology and Obstetrics II - lecture ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

0/1/0. 0 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Pavel Ventruba, DrSc., MBA](#) (lecturer)

[doc. MUDr. Igor Crha, CSc.](#) (lecturer)

[doc. MUDr. Vít Unzeitig, CSc.](#) (lecturer)

[MUDr. Atanas-Ivan Belkov](#) (lecturer)

[MUDr. Michal Felsing](#) (lecturer)

[MUDr. Romana Gerychová](#) (lecturer)
[MUDr. Lukáš Hruban, Ph.D.](#) (lecturer)
[doc. MUDr. Robert Hudeček, Ph.D.](#) (lecturer)
[prof. MUDr. Martin Huser, Ph.D.](#) (lecturer)
[MUDr. Petr Janků, Ph.D.](#) (lecturer)
[doc. MUDr. Michal Pohanka, Ph.D.](#) (lecturer)
[prof. MUDr. Aleš Roztočil, CSc.](#) (lecturer)
[MUDr. Vít Weinberger, Ph.D.](#) (lecturer)
[doc. RNDr. Jana Žáková, Ph.D.](#) (lecturer)

Supervisor

[prof. MUDr. Martin Huser, Ph.D.](#)
[Department of Gynecology and Obstetrics - Institutions shared with the Faculty Hospital Brno - Institutions of Reproductive Medicine - Faculty of Medicine](#)
Contact Person: [Zdeňka Kroupová](#)
Supplier department: [Department of Gynecology and Obstetrics - Institutions shared with the Faculty Hospital Brno - Institutions of Reproductive Medicine - Faculty of Medicine](#)

Prerequisites

[aVLPG0921c Gynecol. and obst. I- practice](#)
Successfully passed subjects - pharmacology, surgery, diagnostic imaging, clinical introduction
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the subject Gynecology and obstetrics is to acquire the necessary and complex theoretical knowledge and practical skills in the field of prevention, diagnosis and treatment of diseases of female reproductive system. The content of the course provides students with an understanding, sufficient theoretical knowledge and basic practical skills in epidemiology, pathogenesis, diagnosis, therapy and prevention of the most important pathological conditions in gynecology and obstetrics. The course gives to its graduate's sufficient overview in reproductive health issues, family planning, diagnosis and treatment of infertility and maternal care during pregnancy. The content of the course is determined by the syllabus and is clearly and specifically defined before the course begins and includes the theoretical and practical segment. Theoretical preparation includes lectures, thematic seminars, practical lessons and self-study. The learning outcomes of the graduate of the subject include, in particular, sufficient medical knowledge to supervise the pregnancy and delivery and to resolve most common gynecological diseases. Upon graduation, the student gets enough practical and theoretical information needed for medical decision making and can practice basic examination and treatment procedures in the field of gynecology and obstetrics. Students will also get a basic clinical view of

gynecology and obstetrics. Student demonstrates their practical skills and performance using the "Procedure List" form (so-called logbook).

Learning outcomes

After completing the subject Gynecology and obstetrics, the student will be able to: • Theoretically and practically perform gynecological and obstetrical examinations • Know all common diagnostic and therapeutic procedures in the field • Provide sufficient medical knowledge to monitor pregnancy and childbirth • Will be sufficiently educated in symptoms, diagnosis and treatment of gynecological diseases • Get enough practical and theoretical information about basic clinical decision making in the field

Syllabus

- Obstetrics Diagnosis of pregnancy Human pelvis, delivery ways, pelvic measurements Examination of a pregnant woman - external and internal obstetric examination Prenatal care Mechanism of human birth – cephalic presentation Abnormal presentation of the fetus - causes, diagnosis, birth mechanisms Breech presentation Multiple pregnancy and delivery of twins Hypertension in pregnancy - preeclampsia, eclampsia Trophoblastic diseases Fetal growth disorders - intrauterine growth retardation Premature birth - causes, clinical management Ectopic pregnancy - causes, symptoms, diagnosis, treatment Placenta previa and placental abruption Diseases of puerperium, puerperal sepsis Periparturine uterine bleeding and its treatment Prenatal diagnostics Ultrasound in obstetrics Gynecology Gynecological examination Laparoscopy in gynecology - indication, execution Hysteroscopy - Indication and execution Menstrual cycle disorders - classification, diagnosis, dysfunctional uterine bleeding Gynecological inflammation - etiology, pathophysiology Endometritis, myometritis, perimetritis Pelvic inflammatory disease and pelveoperitonitis Sexually transmitted diseases Endometriosis genital and extragenital Sterility, infertility - causes, meaning, treatment Contraception Benign and malignant neoplasms of gynecological organs Pre-canceroses of gynecological organs Diagnosis and treatment in oncogynecology Breast cancer, pre-cancerosis of the breast Benign breast disease Urinary incontinence in women Chronic pelvic pain Assisted reproduction

Literature

recommended literature

- HÁJEK, Zdeněk, Evžen ČECH and Karel MARŠÁL. *Porodnictví*. 3., zcela přepracované a d. Praha: Grada, 2014. 538 stran. ISBN 9788024745299. [info](#)
- *Dewhurst's textbook of obstetrics & gynaecology*. Edited by D. Keith Edmonds. Eighth edition. Chichester, West Sussex: Wiley-Blackwell, 2012. xv, 852. ISBN 9780470654576. [info](#)
- ROZTOČIL, Aleš. *Moderní gynekologie*. 1. vydání. Praha: Grada Publishing, 2011. xviii, 508. ISBN 9788024728322. [info](#)

Teaching methods

Teaching takes place in three weekly blocks. Each block consists of five working days and includes teaching in inpatient and outpatient units within the Departments of Gynecology and Obstetrics. The courses lasts daily from 7 am to 1 pm and includes a

propedeutical part and practical part each day, using patients medical reports. Every teaching day ends up with the clinical seminar led by the teacher and dedicated to one important topic within the field. Important parts of teaching methods are also practical demonstration of selected diagnostic and therapeutic techniques directly with patients or using simulators and daily presentation of clinical cases or up-to-date medical issues ended up with clinical discussion between the students and the teacher. The important part of the teaching process is to participate on at least one afternoon or weekend practice. The main purpose of such a practice is to increase the level of practical training, to allow students to experience the on-call clinical routine, to make a better on overview of the daily work of a young doctor in specialty training and last but not least to reduce the number of students in the study groups during the weekday morning classes. Afternoon lessons begin at 1 pm (right after the clinical seminar, which is common for both morning and afternoon classes) and lasts until 4 pm. The weekend practical classes are scheduled from 8 am to 11 am and always begin at the departments delivery rooms. The sign-up for afternoon and weekend practical lessons is necessary to do in advance using the is.muni.cz electronic system, maximum 4 students are allowed per each block.

Assessment methods

- Continuous discussions during internship, student presentations during seminars • Recording from practice - logbook • Interview (Colloquium) • Practical exam (demonstration of skills) • Continuous test-paper form • Final exam - combined form

Daily evaluation – to receive the daily credit it is necessary to prove sufficient theoretical knowledge and practical demonstration of selected diagnostic and therapeutic procedures listed in the “Procedure list” (so-called logbook), which each student receives at the beginning of the course Final evaluation - presentation of a given clinical problem or selected diagnostic-therapeutic method with the participation of a teacher (maximum of 10 minutes per student). In particular, the teacher assesses the professional medical level of the topic, quality and form of the presentation and the student's speech competences. This evaluation can be replaced by the elaboration and presentation of a selected scientific clinical topic (original scientific work, review article or meta-analysis, case report).

Language of instruction

English

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

Teacher's information

<http://portal.med.muni.cz/disciplina-17-porodnictvi-a-gynekologie>, www.fnbrno.cz/gpk, www.ivfbrno.cz.

Zahájení výuky v pondělí v 8:00 v posluchárně Porodnice/Bohunice. Studenti zapsaní na odpolední praxi v pondělí přijdou až na seminář a pokračují odpolední praxí. Na rozdělení do 5 skupin, které se provádí v pondělí ráno, se mohou domluvit s kolegy předem. Je nezbytné bílé lékařské oblečení – košile, kalhoty, případně plášť, přezůvky, zámek na šatní skříň, zřetelné označení studenta jmenovkou, učební texty (viz. doporučená literatura v is.muni.cz)!!! Ukončení výuky a závěrečné hodnocení probíhá vždy pátek 12:00 – 13:00. Pro udělení zápočtu je nutné splnit náplň stáží, splnit odpolední praxi a uspět v zápočtovém testu – správně odpovědět více než 50 % otázek.

The course is also listed under the following terms [Accreditation spring](#).

aVLPG11XX Obstetrics and Gynaecology - State Exam *

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/0/0. 0 credit(s). Type of Completion: SRZK (closing examination).

Teacher(s)

[prof. MUDr. Pavel Ventruba, DrSc., MBA](#) (lecturer)

[doc. MUDr. Igor Crha, CSc.](#) (lecturer)

[doc. MUDr. Vít Unzeitig, CSc.](#) (lecturer)

[doc. MUDr. Michal Pohanka, Ph.D.](#) (lecturer)

[MUDr. Atanas-Ivan Belkov](#) (lecturer)

[doc. MUDr. Robert Hudeček, Ph.D.](#) (lecturer)

[doc. RNDr. Jana Žáková, Ph.D.](#) (lecturer)

[MUDr. Luboš Minář, Ph.D.](#) (lecturer)

[MUDr. Vít Weinberger, Ph.D.](#) (lecturer)

[MUDr. Zuzana Hodická, Ph.D.](#) (lecturer)

[Zdeňka Kroupová](#) (assistant)

[Ing. Josef Stodůlka](#) (assistant)

Supervisor

[prof. MUDr. Pavel Ventruba, DrSc., MBA](#)

[Department of Gynecology and Obstetrics - Institutions shared with the Faculty Hospital Brno - Institutions of Reproductive Medicine - Faculty of Medicine](#)

Contact Person: [Zdeňka Kroupová](#)

Supplier department: [Department of Gynecology and Obstetrics - Institutions shared with the Faculty Hospital Brno - Institutions of Reproductive Medicine - Faculty of Medicine](#)

Prerequisites (in Czech)

[aVLFA0822p](#) && [aVLNE9X1p Neurology - lecture](#) && [aVLPY9X1p Psychiatry - lect.](#)

&& [aVLDV7X21p](#) && [aVLAM9X1p Intensive care med. - lect.](#) &&

[aVLVL7X61c Internal medicine - part 1 -pr](#) && [aVLVL9X62c Internal medicine part 2](#)

&& [aVLVL9X63c Internal medicine part 3](#) && [aVLVL9X64c Internal medicine part 4](#)

&& [aVLVL9X65c Internal medicine part 5](#) && [aVLIN9X22 Infectious diseases II](#) &&

[aVLON091p Clinical oncology - lec.](#) && VYCET (1 , [aVLAL091 Anaesthes. and](#)

[Treat. of Pain](#) , [aVLDO091 Paediatric Oncology](#) , [aVLKF101](#) , [aVLKB091 Clinical](#)

[Biochemistry](#) , [aVLFP091 Physiology and path.of newborn](#)) && [aVLCH9X33c Surgery](#)

[III - practice](#) && [aVLCJ0888](#) && [VSSP03X Individual project](#)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Language of instruction

English

Further Comments

The course can also be completed outside the examination period.
The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

aVLPL11Xpp General Medicine Practice and Geriatrics ✱

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/0/0. 8 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Emmanuela Fernandová](#) (lecturer)
[MUDr. Josef Laub](#) (lecturer)
[MUDr. Vladimír Marek](#) (lecturer)
[MUDr. Lucie Rausová](#) (lecturer)
[MUDr. Lenka Dvořáková](#) (seminar tutor)
[prof. MUDr. Hana Matějovská Kubešová, CSc.](#) (seminar tutor)
[MUDr. Vlasta Polcarová](#) (seminar tutor)
[prof. MUDr. Pavel Weber, CSc.](#) (seminar tutor)
[Jitka Skládaná](#) (assistant)

Supervisor

[prof. MUDr. Hana Matějovská Kubešová, CSc.](#)
[Department of Internal Medicine, Geriatrics and Practical Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)
Supplier department: [Department of Internal Medicine, Geriatrics and Practical Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Students will have the overview of basic aspects of general practice, main difference between general practice and other specialities of medicine. The practical part of this subject runs in general practitioners offices - teachers of Medical Faculty of Masaryk University, students obtain the picture of GP office performance.

Syllabus

- Family medicine and general practice. Development, content of the subject, methods of work.
- 2. Family in the past and today. The family environment influence on health and disease. Dynamice of the family.
- 3. Competences of general practitioner in diagnostics and therapy.
- 4. Interdisciplinary cooperation in health service, cooperation between family medicine/general practice and other medical specialities. How to achieve the compliance.
- 5. Aspects of the care for seriously ill patients at home. Specificities of the care for patients with cardiovascular, oncological and locomotion diseases.
- 6. Specificities of the diseases in elderly. Pharmacological and non pharmacological methods in elderly.
- 7. Psychiatric patient in the family and at non-psychiatric hospital.
- 8. First aid at home and at work place. The equipment for first aid at the non-urgent healthcare service.
- 9. Communication with patients. Empathy and burn-out syndrome prevention.
- 10. Communication with handicapped, especially with visual and hearing disturbances.
- 11. Cross influence of health and social situation. Complex home care as a support of out-patient basis care.
- 12. Different types of social facilities. Nutritional problems, physiotherapy and care for blind patients in social facilities.
- 13. Education to health life style.
- 14. Ethic aspects of primary care.

Literature

- SEIFERT, Bohumil, Václav BENEŠ and Svatopluk BÝMA. *Všeobecné praktické lékařství*. 2., dopl. a přeprac. vyd. Praha: Galén, 2013. xi, 673. ISBN 9788072629343. [info](#)
- GESENHUES, Stefan and Rainer ZIESCHÉ. *Vademecum lékaře : všeobecné praktické lékařství*. 1. vyd. Praha: Galén, 2006. xxiii, 976. ISBN 807262444X. [info](#)
- SEIFERT, Bohumil and Václav BENEŠ. *Všeobecné praktické lékařství*. 1. vyd. Praha: Galén, 2005. 292 s. ISBN 8072623699. [info](#)
- SEIFERT, Bohumil. *Primární péče. Praktické lékařství : výukový text pro studenty magisterského studia lékařství*. 1. vyd. Praha: Karolinum, 2004. 156 s. ISBN 8024608839. [info](#)

Teaching methods

lectures, class exercises, workshops, stage at GP office, at paediatric office, at geriatric department

Assessment methods

credit

Language of instruction

English

Further comments (probably available only in Czech)

The course can also be completed outside the examination period.

The course is taught each semester.

The course is taught: in blocks.

General note: výuka včetně kolokvia musí být absolvována před poslední SRZ.

Information on the extent and intensity of the course: total 17 days.

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

aVLPL11XX General Medicine Practice and Geriatrics ✱

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/0/0. 3 credit(s). Type of Completion: k (colloquium).

Teacher(s)

[MUDr. Lenka Dvořáková](#) (lecturer)

[MUDr. Emmanuela Fernandová](#) (lecturer)

[MUDr. Josef Holík](#) (lecturer)

[MUDr. Josef Laub](#) (lecturer)

[MUDr. Vladimír Marek](#) (lecturer)

[MUDr. Lucie Rausová](#) (lecturer)

[prof. MUDr. Hana Matějovská Kubešová, CSc.](#) (seminar tutor)

[Jitka Skládaná](#) (assistant)

Supervisor

[prof. MUDr. Hana Matějovská Kubešová, CSc.](#)

[Department of Internal Medicine, Geriatrics and Practical Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Supplier department: [Department of Internal Medicine, Geriatrics and Practical Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Prerequisites (in Czech)

[aVLFA0822p](#) && [aVLNE9X1p Neurology - lecture](#) && [aVLPY9X1p Psychiatry - lect.](#)

&& [aVLDV7X21p](#) && [aVLAM9X1p Intensive care med. - lect.](#) &&

[aVLVL7X61c Internal medicine - part 1 -pr](#) && [aVLVL9X62c Internal medicine part 2](#)

&& [aVLVL9X63c Internal medicine part 3](#) && [aVLVL9X64c Internal medicine part 4](#)

&& [aVLVL9X65c Internal medicine part 5](#) && [aVLIN9X22 Infectious diseases II](#) &&

[aVLON091p Clinical oncology - lec.](#) && VYCET (1 , [aVLAL091 Anaesthes. and](#)

[Treat. of Pain](#) , [aVLDO091 Paediatric Oncology](#) , [aVLKF101](#) , [aVLKB091 Clinical](#)

[Biochemistry](#) , [aVLFP091 Physiology and path.of newborn](#)) && [aVLCH9X33c Surgery III - practice](#) && [aVLCJ0888](#)

(Do I meet enrolment requirements?)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Students will have the basic overview containing basic aspects of general practice, main difference between general practice and other specialities of medicine. The practical part of this subject runs in general practitioners offices, so student will know the performance of GPs offices of teachers of Medical Faculty of Masaryk University

Syllabus

- Family medicine and general practice. Development, content of the subject, methods of work.
- 2. Family in the past and today. The family environment influence on health and disease. Dynamice of the family.
- 3. Competences of general practitioner in diagnostics and therapy.
- 4. Interdisciplinary cooperation in health service, cooperation between family medicine/general practice and other medical specialities. How to achieve the compliance.
- 5. Aspects of the care for seriously ill patients at home. Specificities of the care for patients with cardiovascular, oncological and locomotion diseases.
- 6. Specificities of the diseases in elderly. Pharmacological and non pharmacological methods in elderly.
- 7. Psychiatric patient in the family and at non-psychiatric hospital.
- 8. First aid at home and at work place. The equipment for first aid at the non-urgent healthcare service.
- 9. Communication with patients. Empathy and burn-out syndrome prevention.
- 10. Communication with handicapped, especially with visual and hearing disturbances.
- 11. Cross influence of health and social situation. Complex home care as a support of out-patient basis care.
- 12. Different types of social facilities. Nutritional problems, physiotherapy and care for blind patients in social facilities.
- 13. Education to health life style.
- 14. Ethic aspects of primary care.

Literature

recommended literature

- <http://www.woncaeurope.org/content/world-book-family-medicine-european-edition-2015-table-content>
- SEIFERT, Bohumil, Václav BENEŠ and Svatopluk BÝMA. *Všeobecné praktické lékařství*. 2., dopl. a přeprac. vyd. Praha: Galén, 2013. xi, 673. ISBN 9788072629343. [info](#)
- *Textbook of family medicine*. Edited by Ian R. McWhinney - Thomas Freeman. 3rd ed. New York: Oxford University Press, 2009. xii, 460 p. ISBN 0195369858. [info](#)

- SEIFERT, Bohumil and Václav BENEŠ. *Všeobecné praktické lékařství*. 1. vyd. Praha: Galén, 2005. 292 s. ISBN 8072623699. [info](#)

Teaching methods

4 seminars, 1 workshop -case reports, active preparation and presentation of report

Assessment methods

koloqium, case description

Language of instruction

English

Further comments (probably available only in Czech)

The course is taught each semester.

The course is taught: in blocks.

General note: výuka včetně kolokvia musí být absolvována před poslední SRZ.

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

aVLPO011c First Aid - practice ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/1/0. 1 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Lukáš Dadák, Ph.D.](#) (seminar tutor)

[MUDr. Jan Maláška, Ph.D.](#) (seminar tutor)

[doc. MUDr. Petr Štourač, Ph.D.](#) (seminar tutor)

[MUDr. Roman Štoudek](#) (seminar tutor)

[MUDr. Ivan Čundrle, Ph.D.](#) (seminar tutor)

[prof. MUDr. Roman Gál, Ph.D.](#) (seminar tutor)

[MUDr. Olga Gimunová, Ph.D.](#) (seminar tutor)

[MUDr. Martin Helán, Ph.D.](#) (seminar tutor)

[MUDr. Ondřej Hrdý](#) (seminar tutor)

[MUDr. Kamil Hudáček](#) (seminar tutor)

[MUDr. Miloš Chobola](#) (seminar tutor)

[MUDr. Jozef Klučka](#) (seminar tutor)

[MUDr. Ivo Křikava, Ph.D.](#) (seminar tutor)

[MUDr. Adéla Macková](#) (seminar tutor)

[MUDr. Lukáš Růžek](#) (seminar tutor)

[MUDr. Martin Slezák](#) (seminar tutor)

[MUDr. Pavel Suk, Ph.D.](#) (seminar tutor)

[MUDr. Petr Suk](#) (seminar tutor)

[prof. MUDr. Vladimír Šrámek, Ph.D.](#) (seminar tutor)

[MUDr. Katarína Zdražilová](#) (seminar tutor)

[MUDr. Jitka Zemanová](#) (seminar tutor)

[MUDr. Václav Zvoníček, Ph.D.](#) (seminar tutor)

[Lenka Dobrovolná](#) (assistant)
[Martina Matoušková](#) (assistant)
[Eva Podborská](#) (assistant)
[Irena Vaňurová](#) (assistant)

Supervisor

[MUDr. Lukáš Dadák, Ph.D.](#)
[Department of Anesthesiology and Intensive Care - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)
Contact Person: [MUDr. Lukáš Dadák, Ph.D.](#)
Supplier department: [Department of Anesthesiology and Intensive Care - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Timetable of Seminar Groups

aVLPO011c/30: each even Monday 14:30–16:10 [N02144](#), *J. Maláska*
aVLPO011c/31: each odd Tuesday 8:00–9:40 [N02144](#), *J. Maláska*
aVLPO011c/32: each even Monday 15:00–16:40 [063](#), *L. Dadák*
aVLPO011c/33: each odd Monday 15:00–16:40 [063](#), *L. Dadák*
aVLPO011c/34: each odd Tuesday 8:00–9:40 [063](#), *L. Dadák, P. Suk*
aVLPO011c/35: each odd Monday 14:30–16:10 [N02144](#), *J. Maláska*
aVLPO011c/36: each even Tuesday 8:00–9:40 [063](#), *L. Dadák, P. Suk*
aVLPO011c/37: each even Tuesday 8:00–9:40 [N02144](#), *J. Maláska*
aVLPO011c/38: each odd Wednesday 8:00–9:40 [N02144](#), *J. Maláska*
aVLPO011c/39: each even Wednesday 8:00–9:40 [063](#), *L. Dadák*

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

At the end of this course, students should be able to:
understand basic vital signs;
provide Basic Cardiac Life Support according to ERC guidelines from 2015;
provide first aid including wound dressing, transport and vital signs monitoring.

Learning outcomes

Student will be able to:
- carry out primary and secondary survey of the patient;
- show 1 minute of basic life support on the model of adult;
- show 1 minute of basic life support on the model of child;
- to provide first aid to the unconscious and conscious victim.
- communicate with the conscious patient.

Syllabus

- Cardiopulmonary resuscitation; Examination of the casualty. Basic vital functions. Breathing disorders, apnea, airway obstruction. Airway management, artificial

ventilation. Cardiac arrest, circulation failure. Chest compressions, precordial thrust, cardiopulmonary resuscitation.

- CPR in children.
- Bleeding external, internal. Wounds. Bleeding management. Shock, treatment. Fainting, fatigue.
- Burns.
- Bandages.
- Fractures, injuries of joints and muscles - Treatment, immobilisation skills, splints, positioning.

Literature

required literature

- AUSTIN, Margaret, Rudy CRAWFORD and Barry KLAASSEN. *First aid manual : the Authorised Manual of St John Ambulance, St Andrew's First Aid and the British Red Cross*. Revised 10th edition. London: DK, 2016. 288 stran. ISBN 9780241241233. [info](#)

not specified

- *First aid : manual*. 10th ed. London: Dorling Kindersley, 2014. 288 s. ISBN 9781409342007. [info](#)

Bookmarks

<https://is.muni.cz/auth/ln/tag/LF:aVLPO011c!>

Teaching methods

Lectures, class discussion and simulation with debriefing.

Assessment methods

Class exercises are obliged. MCQ test - student must pass well at least 75% of questions.

Language of instruction

English

Further Comments

[Study Materials](#)

The course is taught annually.

The course is also listed under the following terms [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

aVLPO011p First Aid - lecture ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

1/0/0. 2 credit(s). Type of Completion: k (colloquium).

Teacher(s)

[MUDr. Lukáš Dadák, Ph.D.](#) (lecturer)
[MUDr. Jan Maláska, Ph.D.](#) (lecturer)
[doc. MUDr. Petr Štourač, Ph.D.](#) (lecturer)
[MUDr. Roman Štoudek](#) (lecturer)
[MUDr. Ivan Čundrle, Ph.D.](#) (lecturer)
[MUDr. Martin Helán, Ph.D.](#) (lecturer)
[MUDr. Ondřej Hrdý](#) (lecturer)
[MUDr. Kamil Hudáček](#) (lecturer)
[MUDr. Jan Hudec](#) (lecturer)
[MUDr. Miloš Chobola](#) (lecturer)
[MUDr. Zdeněk Chvátal](#) (lecturer)
[MUDr. Mgr. Miroslav Jíra, Ph.D.](#) (lecturer)
[MUDr. Jozef Klučka](#) (lecturer)
[MUDr. Tomáš Korbička](#) (lecturer)
[MUDr. Ivo Křikava, Ph.D.](#) (lecturer)
[MUDr. Lukáš Růžek](#) (lecturer)
[MUDr. Martin Slezák](#) (lecturer)
[MUDr. Olga Smékalová](#) (lecturer)
[MUDr. Jan Stašek](#) (lecturer)
[MUDr. Pavel Suk, Ph.D.](#) (lecturer)
[MUDr. Petr Suk](#) (lecturer)
[prof. MUDr. Vladimír Šrámek, Ph.D.](#) (lecturer)
[MUDr. Robert Vach](#) (lecturer)
[MUDr. Václav Zvoníček, Ph.D.](#) (lecturer)
[Lenka Dobrovolná](#) (assistant)
[Martina Matoušková](#) (assistant)
[Eva Podborská](#) (assistant)
[Irena Vaňurová](#) (assistant)
[prof. MUDr. Roman Gál, Ph.D.](#) (alternate examiner)

Supervisor

[MUDr. Lukáš Dadák, Ph.D.](#)
[Department of Anesthesiology and Intensive Care - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)
Contact Person: [MUDr. Lukáš Dadák, Ph.D.](#)
Supplier department: [Department of Anesthesiology and Intensive Care - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Timetable

Wed 12:10–13:00 [A11/334](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

At the end of this course, students should be able to: understand basic vital signs; provide Basic Cardiac Life Support according to ERC guidelines; provide first aid including wound dressing, vital signs monitoring and transport.

Learning outcomes

Student will be able to:

- carry out primary and secondary survey of the patient;
- show 1 minute of basic life support on the model of adult;
- show 1 minute of basic life support on the model of child;
- to provide first aid to the unconscious and conscious victim.
- communicate with the conscious patient.

Syllabus

- **Cardiopulmonary resuscitation I** Examination of the casualty. Basic vital functions. Breathing disorders, apnea, airway obstruction. Airway management, artificial ventilation.
- **Resuscitation II** Cardiac arrest, circulation failure. Chest compressions, precordial thrust, cardiopulmonary resuscitation.
- **CPR in children.**
- **Bleeding external, internal.** Wounds. Bleeding management. Shock, treatment. Fainting, fatigue.
- **Disorders of consciousness, coma. Seizures, cramps.**
- **Head injuries, face injuries, skull fractures, brain concussion, intracranial bleeding. Backbone injuries, contusions, fractures, spinal injuries. Treatment, fixation, transport.**
- **Chest injuries, rib fractures, pneumothorax. Abdominal injuries, injuries to the pelvis, lower extremities, polytrauma. Fixation, immobilisation skills, splints.**
- **Road accidents, multiple casualties situations.** Survey, assesment, evaluation of the casualties, first aid organisation. Emergency situations in diabetic patients.
- **Heat, cold injuries, electrical injuries.** Burns, scalds, heat stroke, heat exhaustion. Hypothermia, frostbites. Chemical burns.
- **Draining. Chest pain evaluation, treatment.**
- **Animal, snake, insect bites . Infection, rabies, allergic reactions.**
- **Poisoning alcohol, drugs, CO, food. Injuries to the eye.**
- **Emergency situations in gynaecology and obstetrics.**

Literature

recommended literature

- AUSTIN, Margaret, Rudy CRAWFORD and Barry KLAASSEN. *First aid manual : the Authorised Manual of St John Ambulance, St Andrew's First Aid and the British Red Cross*. Revised 10th edition. London: DK, 2016. 288 stran. ISBN 9780241241233. [info](#)

not specified

- *First aid : manual*. 10th ed. London: Dorling Kindersley, 2014. 288 s. ISBN 9781409342007. [info](#)

Bookmarks

<https://is.muni.cz/auth/ln/tag/LF:aVLPO011p!>

Teaching methods

We use lectures, class discussion and simulation with debriefing.

Assessment methods

Oral exam.

Attending of lectures is obliged. Oral exam consists of two questions and demonstration of BLS on the mannequin.

Language of instruction

English

Further Comments

[Study Materials](#)

The course can also be completed outside the examination period.

The course is taught annually.

Listed among pre-requisites of other courses

- [aVLPP3X1 Nursing](#)
([aVLPO011p](#) || [VSP0011p](#)) ([Do I meet enrolment requirements?](#))
- [aVLPX042t](#) [Vacational Training in Nursing](#)
([VLBF011p](#) || [aVLBF011p](#)) && ([VSP0011p](#)||[aVLPO011p](#)) && ([VSLT0221s](#)||[aVLLT0222s](#)) ([Do I meet enrolment requirements?](#))

The course is also listed under the following terms [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

aVLPP3X1 Nursing ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/1/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[PhDr. Simona Saibertová](#) (lecturer)

[PhDr. Natálie Beharková, Ph.D.](#) (seminar tutor)

[Mgr. Zdeňka Knechtová](#) (seminar tutor)

[Bc. Vendula Tesaříková](#) (seminar tutor)

Supervisor

[doc. PhDr. Andrea Pokorná, Ph.D.](#)

[Department of Nursing - Departments of Non-medical Branches - Faculty of Medicine](#)

Contact Person: [doc. PhDr. Andrea Pokorná, Ph.D.](#)

Supplier department: [Department of Nursing - Departments of Non-medical Branches - Faculty of Medicine](#)

Timetable of Seminar Groups

aVLPP3X1/30: Thu 6:30–10:00 [N03017](#)

aVLPP3X1/31: Thu 6:30–10:00 [N03017](#)

aVLPP3X1/32: Tue 6:30–10:00 [N03017](#)

aVLPP3X1/37: Tue 6:30–10:00 [N03017](#)

Prerequisites

([aVLPO011p First Aid - lecture](#) || [VSP0011p First Aid - lecture](#))

are not required

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

This subject is an introduction in Nursing science for medical students. Tuition is focused on the basic information how to take care of the patient (mobile - independent, immobile - dependent) in all age and period of life. graduates will be able: - cognitive goals: to define nursing, holism and nursing care. - psychomotor goals: be able to render care and satisfy basic patients's needs. - affective goals: to understand and accept the role of general nurse.

Learning outcomes

Graduates will be able:

cognitive goals: to define nursing, holism and nursing care

psychomotor goals: be able to render care and satisfy basic patients's needs

affective goals: to understand and accept the role of general nurse

Syllabus

- The subject primary care and basic nursing skills is theoretically and practically orientated subject. The main goal of the subject is to familiarise students with nursing sciences and possible collaboration among nurses and physicians. Students obtaine knowledge and basic skills for delirevivering basic nursing skills and diagnostic procedures which are provide by nurses or in which nurse assist to doctor. first part - theory - 4 hours
- nursing - characteristics, goals, features
- nursing process and nursing documentation
- nursing unit
- patient rights
- patients bed - positioning of the patients, making beds, immobilisation syndrome - prevention
- help with hygienic care
- help with feeding and eating
- help with excretion
- Second part - 3 hours

- communication - verbal, nonverbal
- problem solving in relation to the basic nursing care
- Third part - 8 hours for english speaking students
- demonstration and exercise of basic nursing skill in clinical environment under the supervision of nursing teacher.

Literature

required literature

- POTTER, Patricia Ann, Anne Griffin PERRY, Patricia A. STOCKERT and Amy HALL. *Essentials for nursing practice*. 8th edition. xxii, 1225. ISBN 9780323112024. [info](#)
- *Nursing older adults*. Edited by Jan Reed - Charlotte L. Clarke - Ann Macfarlane. New York: Open University Press/McGraw-Hill, 2012. xvii, 297. ISBN 0335240844. [info](#)
- MCEWEN, Melanie and Evelyn M. WILLS. *Theoretical basis for nursing*. 3rd ed. Philadelphia: Wolters Kluwer/Lippincott Williams & Wilkins, 2011. xix, 508. ISBN 1605473235. [info](#)

recommended literature

- Beharková, N. Soldánová, D. *Základy ošetrovatelských postupů a intervencí*. available at: <http://portal.med.muni.cz/clanek-665-zaklady-oseetrovatelskych-postupu-a-intervenci.html>
- Webb, L. *Nursing: Communication Skills in Practice (Prepare for Practice)* 1st Ed. Oxford University Press: 2011, ISBN-13: 978-0199582723
- *NANDA International, Inc. nursing diagnoses : definitions & classification 2015-2019*. Edited by T. Heather Herdman - Shigemi Kamitsuru. Tenth edition. Chichester: Wiley Blackwell, 2014. xxviii, 48. ISBN 9781118914939. [info](#)
- *Nursing Interventions Classification (NIC)*. Edited by Gloria M. Bulechek. 6th ed. St. Louis: Elsevier, 2013. xxviii, 60. ISBN 9780323100113. [info](#)
- *Nursing Outcomes Classification (NOC) : measurement of health outcomes*. Edited by Sue Moorhead. 5th ed. St. Louis: Elsevier, 2013. xix, 751. ISBN 9780323100106. [info](#)
- SCHUMACHER, Lori and Cynthia C. CHERNECKY. *Saunders nursing survival guide : critical care & emergency nursing*. 2nd ed. St. Louis, Mo.: Elsevier Saunders, 2010. xviii, 377. ISBN 141606169X. [info](#)

not specified

- Náhradní obsah: DEBNATH, Rita. *PROFESSIONAL SKILLS IN NURSING*. 1st. ed. 218 pp. ISBN 978-1-84787-396-5

Teaching methods

lecture, practical training in skills laboratory and clinical placement - obligatory

Assessment methods

Students receive credits after attendance of all three parts of tuition (theoretical lessons, communication, practical training) and lecturer's confirmation.

Language of instruction

English

Further Comments

The course is taught annually.

Listed among pre-requisites of other courses

- [aVLPX061t](#) [Vacational Training in Primary Care](#)
[aVLPX042t](#) && [aVLPP3X1](#) ([Do I meet enrolment requirements?](#))

The course is also listed under the following terms [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

aVLPX061t **Vacational Training in Primary Care** *

Faculty of Medicine

Spring 2018

Extent and Intensity

0/0. 1 credit(s). Type of Completion: z (credit).

Supervisor

[prof. MUDr. Hana Matějovská Kubešová, CSc.](#)

[Department of Internal Medicine, Geriatrics and Practical Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Supplier department: [Department of Internal Medicine, Geriatrics and Practical Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Prerequisites (in Czech)

[aVLPX042t](#) [Vacational Training Nursing](#) && [aVLPP3X1](#) [Nursing](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

This subject allows students the first contact with primary care on the ground of their new knowledge of theoretical and preclinical subjects and to obtain the overview of the performance of primary care.

Syllabus

- GP office, performance of primary care

- First contact with the patient at GP office
- Home visit of the patient
- Education of the patient in primary care
- Contact with relatives of the patient
- Emergencies at GP office

Literature

- SEIFERT, Bohumil. *Primární péče. Praktické lékařství : výukový text pro studenty magisterského studia lékařství*. 1. vyd. Praha: Karolinum, 2004. 156 s. ISBN 8024608839. [info](#)

Teaching methods

practical training at clinics

Assessment methods

one week stay, credit

Language of instruction

English

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: in blocks.

Note related to how often the course is taught: v průběhu prázdnin.

Information on the extent and intensity of the course: 1 týden.

Listed among pre-requisites of other courses

- [aVLPX084t](#) [Vacational Training in Surgery and Internal Medicine](#) [aVLFP0622p](#) && [aVLPA0622p](#) && [aVLLP0633c](#) && [aVLPX061t](#) ([Do I meet enrolment requirements?](#))

The course is also listed under the following terms [Accreditation spring](#).

aVLPX084t Vacational Training in Surgery and Internal Medicine ✱

Faculty of Medicine

Spring 2018

Extent and Intensity

0/0. 1 credit(s). Type of Completion: z (credit).

Supervisor

[prof. MUDr. Hana Matějovská Kubešová, CSc.](#)

[Department of Internal Medicine, Geriatrics and Practical Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Supplier department: [Department of Internal Medicine, Geriatrics and Practical Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Prerequisites (in Czech)

[aVLPF0622p Pathological Phys. II - lect.](#) && [aVLPA0622p Pathology II - lecture](#) &&
[aVLLP0633c Clinical Introduction III - p](#) && [aVLPX061t Vacation Training in primary](#)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

This subject is arranged in cooperation with district hospitals and offers students the opportunity to be more familiar with routine performance of internal and surgical department and out-patient clinics.

Syllabus

- 1st week - department of medicine, diagnostic examination, diagnostic and treatment procedures, patient education, dismissal
- 2nd week - internal out-patient clinic, rules of the care on out-patient basis, cooperation with home care agencies, emergency dept.
- 3rd week - surgical department, diagnostic procedures, bedside surgical procedures, operation theatre
- 4th week - surgical out patient clinic, small injuries, acute abdomen, emergencies at surgical out-patient clinic

Literature

- KLENER, Pavel. *Vnitřní lékařství*. 3., přepr. a dopl. vyd. Praha: Karolinum, 2006. 1158 s. ISBN 8024612526. [info](#)

Teaching methods

practical training at hospital during holidays

Assessment methods

Certificate of the district hospital, credit

Language of instruction

English

Further comments (probably available only in Czech)

The course is taught annually.

Information on the extent and intensity of the course: 4 weeks.

Listed among pre-requisites of other courses

- [aVLPX102t Vacation training Gynecology and Obstetrics](#)
[aVLPX084t](#) [\(Do I meet enrolment requirements?\)](#)

The course is also listed under the following terms [Accreditation spring](#).

aVLPX102t Vacation training Gynecology and Obstetrics



Faculty of Medicine

Spring 2018

Extent and Intensity

0/0. 1 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Pavel Ventruba, DrSc., MBA](#) (seminar tutor)

[doc. MUDr. Igor Crha, CSc.](#) (seminar tutor)

[doc. MUDr. Robert Hudeček, Ph.D.](#) (seminar tutor)

[MUDr. Petr Janků, Ph.D.](#) (seminar tutor)

[doc. RNDr. Jana Žáková, Ph.D.](#) (seminar tutor)

[prof. MUDr. Martin Huser, Ph.D.](#) (seminar tutor)

[MUDr. Luboš Minář, Ph.D.](#) (seminar tutor)

Supervisor

[prof. MUDr. Pavel Ventruba, DrSc., MBA](#)

[Department of Gynecology and Obstetrics - Institutions shared with the Faculty Hospital](#)

[Brno - Institutions of Reproductive Medicine - Faculty of Medicine](#)

Contact Person: [Zdeňka Kroupová](#)

Supplier department: [Department of Gynecology and Obstetrics - Institutions shared with the Faculty Hospital Brno - Institutions of Reproductive Medicine - Faculty of Medicine](#)

Prerequisites (in Czech)

[aVLPX084t](#) Vacation training

(Do I meet enrolment requirements?)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

This subject is arranged in cooperation with district hospitals and allows students to participate at the routine performance of gynaecology-obstetric department.

Syllabus

- 1st week - gynaecological department, diagnostic procedures, preoperative preparation, postoperative care, postoperative complications
- 2nd week - labour ward, care for mother and child, delivery complications, extramural delivery, pregnancy pathologies

Literature

recommended literature

- HÁJEK, Zdeněk, Evžen ČECH and Karel MARŠÁL. *Porodnictví*. 3., zcela přepracované a d. Praha: Grada, 2014. 538 stran. ISBN 9788024745299. [info](#)
- 1. Procházka M., Pilka R. a kol. *Porodnictví pro studenty všeobecného lékařství a porodní asistence*. Olomouc : AED - Olomouc s.r.o., 2016, 243 s., ISBN 978-80-906280-0-7

not specified

- ROZTOČIL, Aleš. *Moderní gynekologie*. 1. vydání. Praha: Grada Publishing, 2011. xviii, 508. ISBN 9788024728322. [info](#)

Teaching methods

practical training at hospital during holidays

Assessment methods

2-weeks stage certificate, credit

Language of instruction

English

Further comments (probably available only in Czech)

The course is taught annually.

Note related to how often the course is taught: 2 týdny během prázdnin.

The course is also listed under the following terms [Accreditation spring](#).

aVLPY9X1c Psychiatry - practice ❄

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/4/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Tomáš Kašpárek, Ph.D.](#) (seminar tutor)

[MUDr. Richard Barteček, Ph.D.](#) (seminar tutor)

[MUDr. Bc. Libor Ustohal, Ph.D.](#) (seminar tutor)

[MUDr. Pavel Theiner, Ph.D.](#) (seminar tutor)

[MUDr. Jana Hořínková, Ph.D.](#) (seminar tutor)

[MUDr. Václav Krmíček](#) (seminar tutor)

[prof. MUDr. Eva Češková, CSc.](#) (seminar tutor)

[doc. MUDr. Radek Ryšánek, CSc.](#) (seminar tutor)

[prof. MUDr. Ivana Drtílková, CSc.](#) (seminar tutor)

[MUDr. Jitka Hüttlová, Ph.D.](#) (seminar tutor)

[MUDr. Michaela Mayerová](#) (seminar tutor)

Supervisor

[prof. MUDr. Tomáš Kašpárek, Ph.D.](#)

[Department of Psychiatry - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Contact Person: [Jana Pazderová](#)

Supplier department: [Department of Psychiatry - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Prerequisites

aVLFA0822p

VLFA0722p - Farmakology II lecture

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

GENERAL PSYCHIATRY: content included propedeutic and symptomatology practical training in seminar rooms and patients exploration patients history, basic examination, a methodological approach in psychiatry psychopathology of each psychic function. Special Psychiatry: content included main psychiatric disorders, diagnostic and therapeutic procedures. Opening theoretical seminar (60 min.) practical application in patients. Presentation of patients chart, psychiatric diagnosis Classified credit, examination after practical education. Teachers information are available on the noticeboard next to Secretariat of Dept. of Psychiatry.

Syllabus

- EDUCATIONAL SEMINARS Psychiatric assessment Treatment in Psychiatry Psychopathology Affective disorders Schizophrenia Personality disorders + psychotherapy Neurotic disorders Eating disorders Child psychiatry Substance use disorders

Literature

required literature

- RABOCH, Jiří and Pavel PAVLOVSKÝ. *Psychiatrie, 1. vydání*. 1. vyd. Praha: Karolinum, 2012. 466 pp. ISBN 978-80-246-1985-9. [info](#)
- HÖSCHL, Cyril, Jan LIBIGER and Jaromír ŠVESTKA. *Psychiatrie. 2., doplněné a opravené vyd.* Praha: Tigris, 2004. 883 pp. ISBN 80-900130-7-4. [info](#)
- [KAŠPÁREK, Tomáš](#). Psychiatrická propedeutika. Multimediální podpora výuky klinických a zdravotnických oborů. In *Portál LF MU (on-line)*. 2011. [URL](#) [info](#)
- [ŽOURKOVÁ, Alexandra](#), [Eva ČEŠKOVÁ](#) and [Ivana DRTÍLKOVÁ](#). *General and specialized psychiatry. Multimediální podpora výuky klinických a zdravotnických oborů (General and specialized psychiatry)*. 2011. [URL](#) [info](#)

- COWEN, Philip, Paul HARRISON a Tom BURNS. Shorter Oxford textbook of psychiatry, sixth edition, 818 stran. ISBN 978-80-1996-0561-3

recommended literature

- DUŠEK, Karel and Alena VEČEŘOVÁ-PROCHÁZKOVÁ. *Diagnostika a terapie duševních poruch*. 2., přepracované vydání. 646 stran. ISBN 9788024748269. [info](#)
- [ŽOURKOVÁ, Alexandra](#). *Klinická sexuologie (Clinical sexology)*. 1. vyd. Brno, Česká republika: Masarykova Univerzita, 2002. 34 pp. Učební skripta. ISBN 80-210-2795-9. [info](#)
- [KRATOCHVÍL, Stanislav](#). *Základy psychoterapie*. Praha, 2006. 283 pp. Portál. ISBN 80-7367-122-0. [info](#)
- [ŽOURKOVÁ, Alexandra](#). Sexualita u nemocných s psychickými poruchami. Multimediální podpora výuky klinických a zdravotnických oborů. In *Portál LF MU (on-line)*. 2011. [URL info](#)
- STAHL, Stephen. *Stahl's essential psychopharmacology: neuroscientific basis and practical application*. 4. vyd. New York: Cambridge University Press, 2013, 608 s. ISBN 978-1-107-68646-5

Teaching methods

The course psychiatry practice takes the form of theoretical training through internships in departments and in the form of seminars.

Assessment methods

LESSON COMPLETION - CREDIT To complete the subject, a student has to attend the lessons, only one full day of excused absence is allowed. In case of more absences, substitution is required. Substitution is usually in the form of the written essay on a selected topic or short stay at one of the wards of Department of Psychiatry. The means of substitution can be arranged with Dr Barteček, deputy for education. The final evaluation is in the form of written test. The test is multiple-choice answer test with only one correct answer. To succeed in the test at least 8 out of 13 questions have to be answered correctly.

Language of instruction

English

Further comments (probably available only in Czech)

Information on completion of the course: K udělení zápočtu je třeba vypracovat písemné psychiatrické vyšetření pacienta

The course can also be completed outside the examination period.

The course is taught each semester.

The course is taught: in blocks.

General note: Další informace na: <http://psychiatrie.med.muni.cz>.

Teacher's information

<http://psychiatrie.med.muni.cz>

Výuka předmětu Psychiatrie - cvičení probíhá ve dvoutýdenních blocích podle studijních skupin. Maximální počet studentů na výuku předmětu Psychiatrie - cvičení je 26 studentů na každý blok. Prosíme o dodržování tohoto max. počtu studentů při přihlašování do jednotlivých studijních skupin. Výuka začíná každý den v 8.00 hod (v pátek v 7.30 hod.) v posluchárně Psychiatrické kliniky FN Brno, budova G, 1. patro. První den stáží (další dny taktéž) se studenti se shromáždí ve vestibulu před posluchárnou PK, budova G, zadní

trakt v prvním patře a vyčkají na sekretářku, která jim posluchárnu odemkne. Studenti si na výuku přinesou přezůvky, pláště, psací potřeby, papír na záznamy, popř. fonendoskop. Tyto věci si mohou po celou dobu výuky nechávat v zadních prostorách posluchárny. Ve dnech, kdy mají studenti předmět „Klinické dovednosti“ (8.00 – 9.00 hod.) na odděleních PK, se nejdříve převléknou v posluchárně do pláštěů, přezují se a všechny věci si mohou v posluchárně nechat (na odd. budou potřebovat jen tužku a papír). Medici musí před odchodem na oddělení posluchárnu UZAMKNOUT a klíč odevzdají na sekretariát přednosty p. Pazderové (v případě její nepřítomnosti p. Douškové). Po návratu z oddělení si klíč od posluchárny opět na sekretariátě vyzvednou. Povinnou součástí výuky je účast studentů na odborných seminářích, které se konají pravidelně v pátek od 10.00 do 12.20 hod v posluchárně PK. Program odborných seminářů je vyvěšen na dveřích posluchárny, na nástěnce vedle sekretariátu Psychiatrické kliniky a na webu <http://psychiatrie.med.muni.cz/> - odkaz: Aktuality. Očekává se, že studenti budou na výuku přicházet připraveni. To znamená, že budou disponovat alespoň základními informacemi, které budou daný den probírány v rámci výukového semináře respektive v rámci kazuistik a demonstrací. Vodítkem pro rozsah znalostí, které by měl student pojmout před zahájením výuky budiž elektronická učebnice „Psychiatrická propedeutika“ dostupná na Portálu LF MU (<http://portal.med.muni.cz/clanek-509-psychiatricka-propedeutika.html>) a krátké prezentace dostupné na is.muni.cz/el/1411/podzim2015/VLPY9X1c/um/58932521/. Pokud se student na výuku dostaví nepřipraven, nemusí mu být dovolena účast na daném dni výuky – což se rovná absenci se všemi důsledky z toho vyplývajícími (viz výše). Za dny Státního svátku není náhrada výuky. Studenti si nastudují formou samostudia zkrácené formy prezentace seminářů a základní pojmy k dané výukové jednotce. Najdete je na odkaze: is.muni.cz/el/1411/podzim2015/VLPY9X1c/um/58932521/ Rozpis stáží dle jednotlivých studijních skupin najdete na <http://psychiatrie.med.muni.cz/>, odkaz výuka. Rozpis je také vyvěšen na nástěnce vedle sekretariátu přednosty Psychiatrické kliniky v Brně-Bohunicích. Psychiatry practice: <http://psychiatrie.med.muni.cz/>, link teaching. Is Taking Place to Time-table.

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

aVLPY9X1p Psychiatry - lecture *

Faculty of Medicine

Autumn 2019

Extent and Intensity

1/0/0. 3 credit(s). Type of Completion: zk (examination).

Teacher(s)

[prof. MUDr. Tomáš Kašpárek, Ph.D.](#) (lecturer)

[MUDr. Richard Barteček, Ph.D.](#) (lecturer)

[MUDr. Pavel Theiner, Ph.D.](#) (lecturer)

[MUDr. Bc. Libor Ustohal, Ph.D.](#) (lecturer)

[prof. MUDr. Ivana Drtílková, CSc.](#) (alternate examiner)

[prof. MUDr. Alexandra Žourková, CSc.](#) (alternate examiner)

Supervisor

[prof. MUDr. Tomáš Kašpárek, Ph.D.](#)

[Department of Psychiatry - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Contact Person: [Jana Pazderová](#)

Supplier department: [Department of Psychiatry - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Prerequisites

aVLFA0822p

VLFA0722p Farmakology II - lecture

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

In the sphere of psychiatry the students are getting acquainted with history and organization of psychiatry. General psychiatry is focused on clinical manifestation and treatment of the most important psychiatric disorders (affective disorders, schizophrenia, dementia, personality disorders neurotic and stress-related disorders) and issues of child psychiatry and old age psychiatry. The next education proceeds in obligatory seminars involving eating disorders, psychotherapeutic techniques (art therapy, relaxation techniques etc.) and psychiatric sexology.

Syllabus

- The first lecture: Introduction to Psychiatry Second lecture: Sexology

Literature

required literature

- RABOCH, Jiří and Pavel PAVLOVSKÝ. *Psychiatrie, 1. vydání*. 1. vyd. Praha: Karolinum, 2012. 466 pp. ISBN 978-80-246-1985-9. [info](#)
- COWEN, Philip, Paul HARRISON a Tom BURNS. Shorter Oxford textbook of psychiatry, sixth edition, 818 stran. ISBN 978-80-1996-0561-3

recommended literature

- HOSCHL, Cyril and Jan LIBIGER. *Psychiatrie, 2. dopl. a opr. vyd.* 2. vyd. Praha: TIGIS, 2004. 883 pp. ISBN 80-900130-7-4. [info](#)
- [KAŠPÁREK, Tomáš](#). Psychiatrická propedeutika. Multimediální podpora výuky klinických a zdravotnických oborů. In *Portál LF MU (on-line)*. 2011. [URL info](#)

- STAHL, Stephen. Stahl's essential psychopharmacology: neuroscientific basis and practical application. 4. vyd. New York: Cambridge University Press, 2013, 608 s. ISBN 978-1-107-68646-5

Teaching methods

Lectures in the first week of the fall semester - theoretical training

Assessment methods

Examination in Psychiatry for VLA is oral and has 3 questions: - General Psychiatry, B - Special psychiatry, C - Clinical management of mental disorders. The list of questions for the exam in psychiatry can be found at: <http://psychiatrie.med.muni.cz>

Language of instruction

English

Follow-Up Courses

- [VLAM9X1p Intensive care medicine - lectures](#)
- [VLNE9X1p Neurology - lecture](#)
- [VLVL11XX Internal Medicine - State Exam](#)

Further comments (probably available only in Czech)

Information on completion of the course: Ustní zkouška se skládá ze 2 otázek. Otázky jsou k dispozici na <http://psychiatrie.med.muni.cz>, odkaz výuka a také na Spolku mediků.

The course can also be completed outside the examination period.

The course is taught annually.

Note related to how often the course is taught: 1. týden podzimního semestru.

General note: Další informace najdete na: <http://psychiatrie.med.muni.cz>.

Listed among pre-requisites of other courses

- [aVLCH11XX Surgery - state exam](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && VYCET(1,[aVLAL091](#),[aVLDO091](#),[aVLKF101](#),[aVLKB091](#),[aVLFP091](#)) && [aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [aVLPD11XX Pediatrics - state exam](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && VYCET(1,[aVLAL091](#),[aVLDO091](#),[aVLKF101](#),[aVLKB091](#),[aVLFP091](#)) && [aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [aVLPG11XX Obstetrics and Gynaecology - State Exam](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && VYCET(1,[aVLAL091](#),[aVLDO091](#),[aVLKF101](#),[aVLKB091](#),[aVLFP091](#)) &&

[aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) (Do I meet enrolment requirements?)

- [aVLPL11XX](#) General Medicine Practice and Geriatrics
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && VYCET(1,[aVLAL091](#),[aVLDO091](#),[aVLKF101](#),[aVLKB091](#),[aVLFP091](#)) && [aVLCH9X33c](#) && [aVLCJ0888](#) (Do I meet enrolment requirements?)
- [aVLVL11XX](#) Internal Medicine - State Exam
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && VYCET(1,[aVLAL091](#),[aVLDO091](#),[aVLKF101](#),[aVLKB091](#),[aVLFP091](#)) && [aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [aVLZP11XX](#) Public Health - State exam
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && VYCET(1,[aVLAL091](#),[aVLDO091](#),[aVLKF101](#),[aVLKB091](#),[aVLFP091](#)) && [aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) (Do I meet enrolment requirements?)

Teacher's information

<http://psychiatrie.med.muni.cz>

Otázky ke zkoušce z psychiatrie a další výukové materiály, speciálně FAQ k otázkám typu C najdete na webu <http://psychiatrie.med.muni.cz>, odkaz výuka. Odpovědi na často kladené otázky k některým zkušebním okruhům je možno nalézt na stránce <http://psychiatrie.med.muni.cz> (odkazy: Výuka - Pregraduální vzdělávání - rozvrhy, studijní literatura, FAQ).

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

aVLSD7X1c Forensic Medicine - practice ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2/0. 1 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Miroslav Hirt, CSc.](#) (lecturer)

[MUDr. Mgr. Bc. Tomáš Vojtíšek, Ph.D.](#) (lecturer)

[MUDr. Michal Zelený, Ph.D.](#) (lecturer)

[MUDr. Jan Krajsa, Ph.D.](#) (lecturer)

[Mgr. Andrea Brzobohatá, Ph.D.](#) (lecturer)

[Mgr. Tomáš Pexa](#) (lecturer)
[MUDr. Miroslav Ďatko, Ph.D.](#) (lecturer)
[MUDr. Martin Zeman](#) (lecturer)
[MUDr. Kateřina Stoklásková](#) (lecturer)
[Mgr. Jan Pivnička](#) (lecturer)
[Květa Blatná](#) (assistant)

Supervisor

[MUDr. Mgr. Bc. Tomáš Vojtíšek, Ph.D.](#)
[Department of Forensic Medicine - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Contact Person: [Květa Blatná](#)

Supplier department: [Department of Forensic Medicine - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Prerequisites (in Czech)

aVLPA0622p

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

At the end of this course, students: have basic skills in thanatology, should be oriented in the problems of the origin of a lot of kinds of injuries and sudden death, have basic skills in forensic toxicology, genetics and serology including their using in practice, should be oriented in medical and criminal law in medicine, should be able to examine dead person

Syllabus

- During lessons there will be presented: the theoretical basis of forensic thanatology including changes after death
- Sudden and unexpected death
- Blunt injuries including problems of traffic accidents
- Knife wounds
- Firearms injuries
- Forensic toxicology, genetics and serology
- Injury due to heat, cold and electricity
- Suffocation
- During the lectures there will be presented up-to-date informations in forensic medicine

Literature

required literature

- ADÁMEK, Tomáš, Michal BERAN, Igor DVOŘÁČEK, Miroslav DVOŘÁK, Jiří FIALKA, Petr HEJNA, [Miroslav HIRT](#), Jiří HLADÍK, Martin JANÍK, Přemysl KLÍR, Jozef KRAJČOVIČ, [Jan KRAJSA](#), Pavel KUBIŠTA, Rudolf MACHÁČEK, Ivan MAZURA, František NOVOMESKÝ, Peter ONDRA, Alexander PILIN, Hynek ŘEHULKA, Miloš SOKOL, Lubomír STRAKA, Přemysl STREJC, [Markéta ŠAŇKOVÁ](#), Petr TOMÁŠEK, Pavel TOUPALÍK, František TOUŠEK, [Tomáš VOJTÍŠEK](#) and František VOREL. *Soudní lékařství : I. díl (Forensic Medicine : I)*. 1. vydání. Praha: Grada Publishing, 2015. 240 pp. ISBN 978-80-247-5680-6. [info](#)
- [HIRT, Miroslav](#), [František VOREL](#), [Vladimír ANTONÍN](#), Michal BERAN, Ivan BOUŠKA, [Andrea BRZOBOHATÁ](#), Ivana ČERNÁ, [Miroslav ĎATKO](#), Martin DOBIÁŠ, Silvia FARKAŠOVÁ IANNACCONE, Iva GROSSOVÁ, Petr HEJNA, [Václav HORÁK](#), Kateřina HRUBÁ, Lucie HRUŠKOVÁ, Martin JANÍK, [Miroslav KITKA](#), Ivana KOMÁREKOVÁ, [Jan KRAJSA](#), [Ivan MAZURA](#), Peter ONDRA, Alexander PILIN, Pavel REJTAR, [Luděk RYBA](#), [Miloš SOKOL](#), Marie STAŇKOVÁ, Lubomír STRAKA, Miroslav ŠAFR, Jozef ŠIDLO, [Naděžda ŠPATENKOVÁ](#), Petr TOMÁŠEK, Jana TOMKOVÁ, [Aleš VÉMOLA](#), [Tomáš VOJTÍŠEK](#), [Milan VOTAVA](#), David VRÁNA, Lenka ZÁTOPKOVÁ and [Michal ZELENÝ](#). *Soudní lékařství II. díl (Forensic Medicine)*. 1. vydání. Praha: Grada Publishing.a.s., 2016. 232 pp. ISBN 978-80-271-0268-6. [info](#)
- [HIRT, Miroslav](#), [Tomáš VOJTÍŠEK](#), [Lukáš PRUDIL](#), [Roman HEINZ](#), [František VOREL](#), Miroslav DVOŘÁK, Petr HEJNA and Michal BERAN. *Medicína a trestní právo*. 1. vyd. Brno: Masarykova univerzita, 2011. 87 pp. ISBN 978-80-210-5508-7. [info](#)
- HIRT, Miroslav, [Dalibor STRATIL](#), Tomáš PEXA and M. PEŠTÁLOVÁ. *Forensic Medicine*. Brno: Masarykova univerzita Brno, 1999. 76 pp. ISBN 80-210-2094-6. [info](#)

recommended literature

- [HIRT, Miroslav](#), [Michal BERAN](#), [Miroslav ĎATKO](#), Petr HEJNA, [Jan CHRASTINA](#), Martin JANÍK, Ivana KOMÁREKOVÁ, [Jan KRAJSA](#), [Zdeněk NOVÁK](#), [Ivo ŘÍHA](#), Lubomír STRAKA, Miroslav ŠAFR, Pavel TOUPALÍK, Andrea VLČKOVÁ, [Tomáš VOJTÍŠEK](#), [Milan VOTAVA](#) and [Michal ZELENÝ](#). *Tupá poranění v soudním lékařství (Blunt injury in forensic medicine)*. 1. vyd. Praha: Grada Publishing, 2011. 192 pp. ISBN 978-80-247-4194-9. [info](#)
- [HIRT, Miroslav](#), [Andrea BRZOBOHATÁ](#), [Miroslav ĎATKO](#), [Jan KRAJSA](#), [Tomáš VOJTÍŠEK](#), [Michal ZELENÝ](#), [Miloš SOKOL](#), [Kateřina HIRTOVÁ](#) and [Aleš VÉMOLA](#). *Dopravní nehody v soudním lékařství a soudním inženýrství (Traffic accidents in forensic medicine and forensic engineering)*. 1. vyd. Praha: Grada, 2012. 151 pp. ISBN 978-80-247-4308-0. [info](#)
- *Soudní lékařství*. Edited by František Vorel. Vyd. 1. Praha: Grada, 1999. 600 s. ISBN 8071697281. [info](#)
- STRAKA, Lubomír, [Miroslav HIRT](#), [František NOVOMESKÝ](#), [Michal ZELENÝ](#), Jozef KRAJČOVIČ, [Tomáš VOJTÍŠEK](#), František ŠTULLER, [Jan KRAJSA](#), Martin JANÍK, [Andrea BRZOBOHATÁ](#), Ivana KOMÁREKOVÁ, [Vladimír ANTONÍN](#), Janka BUCHANCOVÁ and Oto OSINA. *Kompendium*

súdnolekárskej toxikológie. Martin SR, 2012. 179 pp. ISBN 978-80-8063-378-3. [info](#)

- [HIRT, Miroslav](#), Lubomír STRAKA, [Michal ZELENÝ](#), Jozef KRAJČOVIČ, [Tomáš VOJTÍŠEK](#), František ŠTULLER, [Jan KRAJSA](#), [Andrea BRZOBOHATÁ](#) and [Vladimír ANTONÍN](#). *Toxikologie a jiné laboratorní metody ve forenzní praxi*. 1. vyd. Brno: Masarykova univerzita, 2011. 51 pp. ISBN 978-80-210-5477-6. [info](#)
- [HIRT, Miroslav](#) and [František NOVOMESKÝ](#). *Alkoholologie v soudním lékařství*. Martin SR, 2011. ISBN 978-80-8063-367-7. [info](#)
- JASON, Payne-James, W.Byard ROGER, S Corey TRACEY and Henderson CAROL. *Encyclopedia of Forensic and Legal Medicine*. 2005. ISBN 0-12-547970-0. [info](#)
- PAYNE-JAMES, Jason. *Simpson's forensic medicine*. 13th ed. London: Hodder Arnold, 2011. x, 253. ISBN 9780340986035. [info](#)

not specified

- [HIRT, Miroslav](#), [Michal ZELENÝ](#), [Tomáš VOJTÍŠEK](#), [Jan KRAJSA](#), [Andrea BRZOBOHATÁ](#) and [Eva MATĚJŮ](#). *Soudní lékařství*. Brno: Masarykova Univerzita Právnická fakulta, 2008. 82 pp. Edice učebnic PrF MU č. 413. ISBN 978-80-210-4583-5. [info](#)
- [HIRT, Miroslav](#), Michal BERAN, Miroslav DVOŘÁK, [Aleš VÉMOLA](#), [Tomáš VOJTÍŠEK](#), František VOREL and [Michal ZELENÝ](#). *Soudní znaleství v oboru zdravotnictví*. 1. vydání. Praha: Grada publishing, 2014. 48 pp. ISBN 978-80-247-3890-1. [info](#)

Teaching methods

The seminars contains the discussion to various topics and demonstration of practical cases. Lectures are involved in new information in the forensic discipline.

Assessment methods

The final examination consists of written test.

Language of instruction

English

Further comments (probably available only in Czech)

The course can also be completed outside the examination period.

The course is taught each semester.

The course is taught: in blocks.

Information on course enrolment limitations: 15 - 25 studentů na jeden kurz

Teacher's information

Informace k výuce předmětu jsou obsaženy v interaktivní osnově v IS MUNI. Veškerý přístup do e-learningu provádějte z předmětu Soudní lékařství - přednáška!

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

aVLS7X1p Forensic medicine - lecture *

Faculty of Medicine

Autumn 2019

Extent and Intensity

0.7/3/0. 3 credit(s). Type of Completion: zk (examination).

Teacher(s)

[prof. MUDr. Miroslav Hirt, CSc.](#) (lecturer)

[MUDr. Mgr. Bc. Tomáš Vojtíšek, Ph.D.](#) (lecturer)

[MUDr. Jan Krajsa, Ph.D.](#) (lecturer)

[MUDr. Michal Zelený, Ph.D.](#) (lecturer)

[Mgr. Andrea Brzobohatá, Ph.D.](#) (seminar tutor)

[Mgr. Tomáš Pexa](#) (seminar tutor)

[MUDr. Miroslav Ďatko, Ph.D.](#) (seminar tutor)

[Mgr. Jan Pivnička](#) (seminar tutor)

[MUDr. Kateřina Stoklásková](#) (seminar tutor)

[MUDr. Martin Zeman](#) (seminar tutor)

[Květa Blatná](#) (assistant)

[Taťána Řezáčová](#) (assistant)

Supervisor

[MUDr. Mgr. Bc. Tomáš Vojtíšek, Ph.D.](#)

[Department of Forensic Medicine - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Contact Person: [Květa Blatná](#)

Supplier department: [Department of Forensic Medicine - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Prerequisites (in Czech)

aVLPA0622p

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

At the end of this course, students: have basic skills in thanatology, should be oriented in the problems of the origin of a lot of kinds of injuries and sudden death, have basic skills in forensic toxicology, genetics and serology including their using in practice, should be oriented in medical and criminal law in medicine, should be able to examine dead person

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- Firearms injuries
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- Suffocation
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Literature

required literature

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- [HIRT, Miroslav](#), [Tomáš VOJTÍŠEK](#), [Lukáš PRUDIL](#), [Roman HEINZ](#), [František VOREL](#), Miroslav DVOŘÁK, Petr HEJNA and Michal BERAN. *Medicína a trestní právo*. 1. vyd. Brno: Masarykova univerzita, 2011. 87 pp. ISBN 978-80-210-5508-7. [info](#)
- HIRT, Miroslav, [Dalibor STRATIL](#), Tomáš PEXA and M. PEŠTÁLOVÁ. *Forensic Medicine*. Brno: Masarykova univerzita Brno, 1999. 76 pp. ISBN 80-210-2094-6. [info](#)

recommended literature

- [HIRT, Miroslav](#), [Michal BERAN](#), [Miroslav ĎATKO](#), Petr HEJNA, [Jan CHRASTINA](#), Martin JANÍK, Ivana KOMÁREKOVÁ, [Jan KRAJSA](#), [Zdeněk NOVÁK](#), [Ivo ŘÍHA](#), Lubomír STRAKA, Miroslav ŠAFR, Pavel TOUPALÍK, Andrea VLČKOVÁ, [Tomáš VOJTÍŠEK](#), [Milan VOTAVA](#) and [Michal ZELENÝ](#). *Tupá poranění v soudním lékařství (Blunt injury in forensic medicine)*. 1.vyd. Praha: Grada Publishing, 2011. 192 pp. ISBN 978-80-247-4194-9. [info](#)

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- *Soudní lékařství*. Edited by František Vorel. Vyd. 1. Praha: Grada, 1999. 600 s. ISBN 8071697281. [info](#)
- [HIRT, Miroslav](#), Lubomír STRAKA, [Michal ZELENÝ](#), Jozef KRAJČOVIČ, [Tomáš VOJTÍŠEK](#), František ŠTULLER, [Jan KRAJSA](#), [Andrea BRZOBOHATÁ](#) and [Vladimír ANTONÍN](#). *Toxikologie a jiné laboratorní metody ve forenzní praxi*. 1. vyd. Brno: Masarykova univerzita, 2011. 51 pp. ISBN 978-80-210-5477-6. [info](#)
- STRAKA, Lubomír, [Miroslav HIRT](#), [František NOVOMESKÝ](#), [Michal ZELENÝ](#), Jozef KRAJČOVIČ, [Tomáš VOJTÍŠEK](#), František ŠTULLER, [Jan KRAJSA](#), Martin JANÍK, [Andrea BRZOBOHATÁ](#), Ivana KOMÁREKOVÁ, [Vladimír ANTONÍN](#), Janka BUCHANCOVÁ and Oto OSINA. *Kompendium súdnolekárskej toxikológie*. Martin SR, 2012. 179 pp. ISBN 978-80-8063-378-3. [info](#)
- STRAKA, Lubomír. *Alkohologie v soudním lékařství*. Martin: Vydavatelstvo Osveta, 2011. 182 s. ISBN 9788080633677. [info](#)
- JASON, Payne-James, W.Byard ROGER, S Corey TRACEY and Henderson CAROL. *Encyklopedia of Forensic and Legal Medicine*. 2005. ISBN 0-12-547970-0. [info](#)
- PAYNE-JAMES, Jason. *Simpson's forensic medicine*. 13th ed. London: Hodder Arnold, 2011. x, 253. ISBN 9780340986035. [info](#)

not specified

- [HIRT, Miroslav](#), [Michal ZELENÝ](#), [Tomáš VOJTÍŠEK](#), [Jan KRAJSA](#), [Andrea BRZOBOHATÁ](#) and [Eva MATEJŮ](#). *Soudní lékařství*. Brno: Masarykova Univerzita Právnická fakulta, 2008. 82 pp. Edice učebnic PrF MU č. 413. ISBN 978-80-210-4583-5. [info](#)
- HIRT, Miroslav. *Soudní znaleství v oboru zdravotnictví*. 1. vyd. Praha: Grada, 2014. 47 s. ISBN 9788024738901. [info](#)

Teaching methods

The seminars contains the discussion to various topics and demonstration of practical cases. Lectures are involved in new information in the forensic discipline.

Assessment methods

The final examination consists of written test.

Language of instruction

English

Further comments (probably available only in Czech)

The course can also be completed outside the examination period.

The course is taught annually.

The course is taught: every week.

Teacher's information

Podrobné informace k výuce předmětu jsou obsaženy v interaktivní osnově v IS MUNI.
Information about the course are available in the Interactive syllabus in the IS MU.
The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#),
[Accreditation spring](#).

aVLSP03X Individual project ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/0/0. 5 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Jiří Litzman, CSc.](#) (lecturer)
[prof. MUDr. Miroslav Penka, CSc.](#) (lecturer)
[MUDr. Tomáš Andrašina, Ph.D.](#) (seminar tutor)
[prof. MUDr. Martin Bareš, Ph.D.](#) (seminar tutor)
[prof. MUDr. Josef Bednařík, CSc.](#) (seminar tutor)
[MUDr. Atanas-Ivan Belkov](#) (seminar tutor)
[doc. MUDr. Eva Brichtová, Ph.D.](#) (seminar tutor)
[prof. MUDr. Petr Dobšák, CSc.](#) (seminar tutor)
[prof. RNDr. Petr Dubový, CSc.](#) (seminar tutor)
[doc. MUDr. Josef Feit, CSc.](#) (seminar tutor)
[MUDr. Ivo Hanke, Ph.D.](#) (seminar tutor)
[MUDr. Markéta Hanslianová](#) (seminar tutor)
[MUDr. Lukáš Homola, Ph.D.](#) (seminar tutor)
[MUDr. Ivana Hradilová Svíženská, CSc.](#) (seminar tutor)
[prof. MUDr. Petr Husa, CSc.](#) (seminar tutor)
[MUDr. Zita Chovancová, Ph.D.](#) (seminar tutor)
[doc. MUDr. Jan Chrastina, Ph.D.](#) (seminar tutor)
[prof. MUDr. Zdeněk Kala, CSc.](#) (seminar tutor)
[MUDr. Michala Karkanová, Ph.D.](#) (seminar tutor)
[MUDr. Marie Kolářová, CSc.](#) (seminar tutor)
[Mgr. Zuzana Koledová, Ph.D.](#) (seminar tutor)
[prof. MUDr. Marta Krejčí, Ph.D.](#) (seminar tutor)
[MUDr. Břetislav Lipový, Ph.D.](#) (seminar tutor)
[prof. MUDr. Jiří Litzman, CSc.](#) (seminar tutor)
[prof. MUDr. Jindřich Lokaj, CSc.](#) (seminar tutor)
[MUDr. Jan Maláska, Ph.D.](#) (seminar tutor)
[MUDr. Veronika Matušková, Ph.D., FEBO](#) (seminar tutor)
[MUDr. Ladislav Mitáš, Ph.D.](#) (seminar tutor)
[MUDr. Miroslav Nečas, Ph.D.](#) (seminar tutor)
[PhDr. Hana Neudertová, Ph.D.](#) (seminar tutor)
[MUDr. Marcela Nováková](#) (seminar tutor)
[doc. MUDr. Mgr. Jiří Pařenica, Ph.D.](#) (seminar tutor)
[MUDr. Klára Perceová, Ph.D.](#) (seminar tutor)

[MUDr. Markéta Petrovová, Ph.D.](#) (seminar tutor)
[Dipl. Ing. Martin Piskáček, Dr. rer. nat.](#) (seminar tutor)
[JUDr. Radek Polícar](#) (seminar tutor)
[doc. MUDr. Zbyněk Rozkydal, Ph.D.](#) (seminar tutor)
[PharmDr. Jana Rudá, Ph.D.](#) (seminar tutor)
[doc. MUDr. Jarmila Rulcová, CSc.](#) (seminar tutor)
[MUDr. Kräuff Rainer Schwanhaeuser Wulff, MBA, Ph.D. et Ph.D., M.A.](#) (seminar tutor)
[doc. MUDr. Šárka Skorkovská, CSc.](#) (seminar tutor)
[doc. MUDr. Jarmila Skotáková, CSc.](#) (seminar tutor)
[prof. MUDr. Jana Skříčková, CSc.](#) (seminar tutor)
[MUDr. Libor Streit, Ph.D.](#) (seminar tutor)
[MUDr. Hana Svačinová, Ph.D.](#) (seminar tutor)
[doc. RNDr. Sabina Ševčíková, Ph.D.](#) (seminar tutor)
[MUDr. Martina Šišáková, Ph.D.](#) (seminar tutor)
[MUDr. Mgr. Karel Šlais, Ph.D.](#) (seminar tutor)
[MUDr. Taťána Šrámková, Ph.D.](#) (seminar tutor)
[prof. MUDr. Vojtěch Thon, Ph.D.](#) (seminar tutor)
[MUDr. Karel Urbášek](#) (seminar tutor)
[MUDr. Jitka Vokurková, Ph.D.](#) (seminar tutor)
[Mgr. Robert Vysoký, Ph.D.](#) (seminar tutor)
[MUDr. Miroslava Zavřelová](#) (seminar tutor)
[Jana Aberlová](#) (assistant)
[Renata Bláblová](#) (assistant)
[Vlasta Břicháčková](#) (assistant)
[Miroslava Bučková](#) (assistant)
[Libuše Darmovzalová](#) (assistant)
[prof. MUDr. Bc. Zuzana Derflerová Brázdová, DrSc.](#) (assistant)
[Lenka Chrástová](#) (assistant)
[MUDr. Tomáš Křivka](#) (assistant)
[Lucie Kučerová](#) (assistant)
[Lea Müllerová](#) (assistant)
[Dana Procházková](#) (assistant)

Supervisor

[Faculty of Medicine](#)

Supplier department: [Faculty of Medicine](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

Student should become acquainted with methods of research work. In the end of the project he should be able to use specialized literature and databases to know principles of scientific report or overview preparation to evaluate experimental data using statistical methods

or to plan experiments
to formulate conclusions from the result
be able to prepare presentation of results

Syllabus

- Individual project includes a) Summarization of literature data to the given topic and elaboration of written overview
- or b) project based on evaluation of clinical results by statistical methods, formulation of conclusions and presentation in form of a scientific paper or ppt presentation
- or c) own experimental research work to the given topic. The work includes evaluation of experiments, formulation of conclusions and presentation in form of a scientific paper or ppt presentation

Literature

- <https://is.muni.cz/auth/elearning/warp.pl?furl=%2Fauth%2Fel%2F1431%2Fjaro2009%2FXK010%2Findex.qwarp;url=%2Fel%2F1431%2Fjaro2009%2FXK010%2Findex.qwarp>

Assessment methods

Individual project is compulsory component of General medicine study plan. Individual project is completed by submitting results of other project in written form and presentation of results on the workshop of the given department where the results were obtained or on the Students scientific conference. The course unit credit is given after it.

Language of instruction

English

Further comments (probably available only in Czech)

The course is taught each semester.

General note: Studenti se přihlašují k tématům ze stránky IS MU Osobní administrativa --> Student-->Rozpisy témat-->Samostatné práce VL.

Information on the extent and intensity of the course: dle zadání.

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

aVLST7X1c Stomatology - practice ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/1/0. 1 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Lydie Izakovičová Hollá, Ph.D.](#) (lecturer)

[MUDr. Sonia Bartáková, Ph.D.](#) (seminar tutor)

[MUDr. Alena Bryšová, Ph.D.](#) (seminar tutor)

[doc. MUDr. Pavlína Černochová, Ph.D.](#) (seminar tutor)
[prof. MUDr. Antonín Fassmann, CSc.](#) (seminar tutor)
[MUDr. Lubomír Freyburg, CSc.](#) (seminar tutor)
[MUDr. Karin Klimo Kaňovská](#) (seminar tutor)
MUDr Tomáš Křiva (seminar tutor)
[prof. MUDr. Martina Kukletová, CSc.](#) (seminar tutor)
[doc. MUDr. Milan Machálka, CSc.](#) (seminar tutor)
[MUDr. Eva Petrová](#) (seminar tutor)
[MUDr. Hana Poskerová, Ph.D.](#) (seminar tutor)
[MUDr. Ludmila Procházková, CSc.](#) (seminar tutor)
[MUDr. Jan Vokurka](#) (seminar tutor)
[Milena Prudíková](#) (assistant)

Supervisor

[MUDr. Sonia Bartáková, Ph.D.](#)
[Department of Stomatology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)
Supplier department: [Department of Stomatology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Prerequisites (in Czech)

[aVLPF0622p](#) && [aVLPA0622p](#) && [aVLLP0633c](#) && [aVLLM0522p Medical Microbiology II - lect](#) && [aVLIM051p Immunology - lecture](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Characterization of the field "Stomatology". Division of the field into dentoalveolar and maxillofacial surgery. Classification of parodontopathies. Etiology of the dental caries. Differences between primary and permanent dentition. Prosthetic treatment of defects of the dentition. Characterization of orthodontics.

Syllabus

- 1. Characterization of the field " Stomatology". Division of the field into dentoalveolar and maxillofacial surgery. Specifics of the post-graduate education. The in-patient department. Anesthesia in dentistry. Characterization of some interventions: tooth extraction, incision, resection, apicoectomy, transplantation, implantation. Tumours of the orofacial region. Inflammatory diseases in the dentoalveolar region, dentitis difficilis, periosteal inflammations, inflammations of the lymph nodes, inflammations affecting the jawbones. Cysts of the jaws. Fractures in the orofacial region. Lymphadenitis, salivary glands diseases, jaw anomalies, temporomandibular joint disorders, hemorrhagic diseases. 2. Classification of parodontopathies. Diagnosis and therapy with a view to needs of

the dental practitioner. Oral mucous membrane diseases associated with systemic diseases. 3. Etiology of the dental caries. Prevention of the dental caries. Clinical symptoms, localization and classification of the caries. Caries treatment, filling materials. Pulpitis, periodontitis, focal infection. Treatment of the patient at risk, geriatric dentistry. Differences between primary and permanent dentition. Differences in treatment of teeth with incompletely formed apices. Development of dentition, teeth eruption. Injuries of teeth and their consequences. Guidelines in treatment of children. Significance of healthy dentition for health of the child. 4. Prosthetic treatment of defects of the dentition and its significance for the health and social being of the individual. Characterization of orthodontics. Etiology of orthodontic anomalies. Prevention and prophylaxis in orthodontics. Classification of orthodontic anomalies, principles of treatment in orthodontics. Cleft defects.

Literature

- BILDER, Josef. *Stomatologie :pro studující všeobecného lékařství*. 1. vyd. Brno: Masarykova univerzita, 1996. 99 s. ISBN 80-210-1469-5. [info](#)
- KOŠUT, Vladimír. *Stomatologie pro studující všeobecného lékařství*. 1. vyd. Brno: Masarykova univerzita-Lékařská fakulta, 1991. 78 s. ISBN 80-210-0227-1. [info](#)
- VELGOS, Štefan, Jaroslav KOMÍNEK and František URBAN. *Stomatológia*. 1. vyd. Martin: Osveta, 1982. 171 pp. [info](#)
- URBAN, František. *Stomatologie*. 2. přeprac. a dopl. vyd. Praha: Avicenum, 1976. 357 s., vy. [info](#)

Teaching methods

Presentations by professionals from all departments of Stomatological Clinic nad Department of Maxillofacial surgery.

Assessment methods

Full attendance in the course is the condition for giving credit.

Language of instruction

English

Further comments (probably available only in Czech)

The course is taught each semester.

The course is taught: in blocks.

Teacher's information

Informace o výuce jsou na nástěnce Stomatologické kliniky a Kliniky ústní, čelistní a obličejové chirurgie.

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

aVLST7X1p Stomatology - lecture ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

1/0/0. 2 credit(s). Type of Completion: zk (examination).

Teacher(s)

[MUDr. Sonia Bartáková, Ph.D.](#) (lecturer)
[MUDr. Alena Bryšová, Ph.D.](#) (lecturer)
MUDr Oliver Bulik (lecturer)
[doc. MUDr. Pavlína Černočková, Ph.D.](#) (lecturer)
[prof. MUDr. Antonín Fassmann, CSc.](#) (lecturer)
[MUDr. Lubomír Freyburg, CSc.](#) (lecturer)
[doc. MUDr. Zdenka Halačková, CSc.](#) (lecturer)
[prof. MUDr. Lydie Izakovičová Hollá, Ph.D.](#) (lecturer)
[prof. MUDr. Martina Kukletová, CSc.](#) (lecturer)
[MUDr. Jarmila Kuklová](#) (lecturer)
[doc. MUDr. Milan Machálka, CSc.](#) (lecturer)
[MUDr. Hana Poskerová, Ph.D.](#) (lecturer)
[MUDr. Patrik Prachár, Ph.D.](#) (lecturer)
[MUDr. Hana Střeščíková, CSc.](#) (lecturer)
[prof. MUDr. Jiří Vaněk, CSc.](#) (lecturer)
[MUDr. Jan Vokurka](#) (lecturer)
[Bc. Jaroslava Páleníková](#) (assistant)
[Milena Prudíková](#) (assistant)
[Blanka Suchá](#) (assistant)

Supervisor

[MUDr. Sonia Bartáková, Ph.D.](#)
[Department of Stomatology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)
Supplier department: [Department of Stomatology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Prerequisites (in Czech)

aVLPF0622p && aVLPA0622p && aVLLP0633c && [aVLLM0522p Medical Microbiology II - lect](#) && [aVLIM051p Immunology - lecture](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Characterization of the field "Stomatology". Division of the field into dentoalveolar and maxillofacial surgery. Classification of parodontopathies. Etiology of the dental caries. Differences between primary and permanent dentition. Prosthetic treatment of defects of the dentition. Characterization of orthodontics.

Syllabus

- 1. Characterization of the field " Stomatology". Division of the field into dentoalveolar and maxillofacial surgery. Specifics of the post-graduate education. The in-patient department. Anesthesia in dentistry. Characterization of some interventions: tooth extraction, incision, resection, apicoectomy, transplantation, implantation. Tumours of the orofacial region. Inflammatory diseases in the dentoalveolar region, dentitis difficilis, periosteal inflammations, inflammations of the lymph nodes, inflammations affecting the jawbones. Cysts of the jaws. Fractures in the orofacial region. Lymphadenitis, salivary glands diseases, jaw anomalies, temporomandibular joint disorders, hemorrhagic diseases. 2. Classification of parodontopathies. Diagnosis and therapy with a view to needs of the dental practitioner. Oral mucous membrane diseases associated with systemic diseases. 3. Etiology of the dental caries. Prevention of the dental caries. Clinical symptoms, localization and classification of the caries. Caries treatment, filling materials. Pulpitis, periodontitis, focal infection. Treatment of the patient at risk, geriatric dentistry. Differences between primary and permanent dentition. Differences in treatment of teeth with incompletely formed apices. Development of dentition, teeth eruption. Injuries of teeth and their consequences. Guidelines in treatment of children. Significance of healthy dentition for health of the child. 4. Prosthetic treatment of defects of the dentition and its significance for the health and social being of the individual. Characterization of orthodontics. Etiology of orthodontic anomalies. Prevention and prophylaxis in orthodontics. Classification of orthodontic anomalies, principles of treatment in orthodontics. Cleft defects.

Literature

- BILDER, Josef. *Stomatologie :pro studující všeobecného lékařství*. 1. vyd. Brno: Masarykova univerzita, 1996. 99 s. ISBN 80-210-1469-5. [info](#)
- KOŠUT, Vladimír. *Stomatologie pro studující všeobecného lékařství*. 1. vyd. Brno: Masarykova univerzita-Lékařská fakulta, 1991. 78 s. ISBN 80-210-0227-1. [info](#)
- VELGOS, Štefan, Jaroslav KOMÍNEK and František URBAN. *Stomatológia*. 1. vyd. Martin: Osveta, 1982. 171 pp. [info](#)
- URBAN, František. *Stomatologie*. 2. přeprac. a dopl. vyd. Praha: Avicenum, 1976. 357 s., vy. [info](#)

Teaching methods

Lectures of Restorative Dentistry, Prosthetic Dentistry, Oral surgery, Maxillofacial surgery, Orthodontics, Pediatric Dentistry

Assessment methods

Course is finished by oral examination.

Language of instruction

English

Further comments (probably available only in Czech)

The course can also be completed outside the examination period.

The course is taught annually.

The course is taught: in blocks.

Teacher's information

Informace o výuce jsou na nástěnce Stomatologické kliniky a Kliniky ústní, čelistní a obličejové chirurgie.

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

aVLTA01 Language tandem *

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/0/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[Mgr. Petra Wachsmuthová](#) (seminar tutor)

[PhDr. Ivana Rešková, Ph.D.](#) (seminar tutor)

[Mgr. Linda Doleží, Ph.D.](#) (assistant)

[PhDr. Magdalena Pintarová](#) (assistant)

[Mgr. Martin Punčochář](#) (assistant)

[doc. MUDr. Iva Slaninová, Ph.D.](#) (assistant)

[Mgr. Veronika Tománková, Ph.D.](#) (assistant)

Supervisor

[PhDr. Ivana Rešková, Ph.D.](#)

[Language Centre, Faculty of Medicine Division - Faculty Branches of University Departments - Faculty of Medicine](#)

Contact Person: [Mgr. Petra Wachsmuthová](#)

Supplier department: [Language Centre, Faculty of Medicine Division - Faculty Branches of University Departments - Faculty of Medicine](#)

Prerequisites

The minimum acceptable Czech level for an international student of General Medicine, Dentistry or Physiotherapy enrolling in Language Tandem is A2 level (CEFR). Successful completion of Czech for Foreigners II is a prerequisite for enrolment in Language Tandem. Czech native speakers in the Czech programme are expected to be at B2/C1 level (CEFR) in English.

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

there are 6 fields of study the course is directly associated with, [display](#)

Course objectives

The aim of the Language Tandem is to encourage liaising between students of the Czech and English programmes. It should provide students of the English programmes with real communication situations that neither their required 8-semester Czech course nor their hospital training can provide. The Language Tandem Course will consist in students (tandem partners) meeting regularly, communicating primarily in Czech, with English (or German, Spanish, Portuguese, Norwegian, Arabic etc., depending on the interest or nationality of the tandem partners) as a working language.

Learning outcomes

At the end of the course, international students should be able to talk about:

- their everyday activities,
 - spending their free time,
 - traditions in the Czech republic and their home country,
 - life in Brno and in their hometown,
 - studying in the Czech Republic,
- and they should be aware of communication conventions, both face-to-face and written.

Czech students should be familiarized with:

- the culture in their tandem partner's country,
- life of international students in Brno.

Syllabus

- 1. Seznámení
- 2. Interkulturní komunikace
- 3. Sport a volný čas
- 4. Řekni mi, co jíš, a já ti řeknu, jaký jsi
- 5. České tradice versus svátky v jiných zemích
- 6. Brno a moje rodné město
- 7. Studium na LF v ČR a v mé zemi
- 8. Osobní kontakt (oslovování, zdvořilost, psaní mailů)
- 9. Kolik jazyků znáš, tolikrát jsi člověkem
- 10. Životní styl

Literature

recommended literature

- HOLÁ, Lída. *Czech step by step 1*. 1. vydání. Praha: Akropolis, 2016. 204 stran. ISBN 9788074701290. [info](#)
- HOLÁ, Lída and Pavla BOŘILOVÁ. *Česky krok za krokem 2*. 1. vyd. Praha: Akropolis, 2009. ISBN 978-80-86903-92-7. [URL](#) [info](#)

Teaching methods

International students will receive 10 worksheets/topics (corresponding to their level of Czech) from their teachers, on which they will collaborate with Czech students. Tandem partners will arrange their meetings depending on their time commitments. At the beginning of the course, one session with teachers will be organized.

Assessment methods

Evaluation will take place in the credit week, i.e. in the last week of the autumn/spring semester of the academic year.

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught each semester.

Note related to how often the course is taught: flexibilní setkání tandemových skupin.
Information on the extent and intensity of the course: total 20 hours.

Teacher's information

Current information about the subject, consultation hours, etc. is accessible on the notice boards at the Language Center, Faculty of Medicine Division. Contact with teachers is provided by the secretary of the department (Kamenice 5, A15), tel.: 549 498 170.

The course is also listed under the following terms [Spring 2019](#), [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

aVLTP05X Preclinical practice ✱

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/0/0. 5 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Zuzana Nováková, Ph.D.](#) (seminar tutor)

Supervisor

[prof. RNDr. Eva Tábořská, CSc.](#)

[Faculty of Medicine](#)

Contact Person: [MUDr. Zuzana Nováková, Ph.D.](#)

Supplier department: [Faculty of Medicine](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim is to obtain practical skills and experience with work in preclinical laboratories (biochemistry, physics, biology, physiology, pathophysiology)

Learning outcomes

The student will get acquainted with the equipment of the laboratory and basic laboratory processes. -learns how to handle simpler devices, understand the principle of their function. - understands the importance of methods, can evaluate and interpret the results.

Syllabus

- According to the type of the lab.

Literature

- According to the type of the lab.

Teaching methods

internship in the lab under the assistance of experienced laboratory staff.

Assessment methods

credit based on individual evaluation of participation and activity.

Language of instruction

English

Further comments (probably available only in Czech)

The course can also be completed outside the examination period.

The course is taught each semester.

Note related to how often the course is taught: Student complete 75 hours in laboratory of theoretical work during semester.

General note: The credit is given by the study department based on the confirmation about the practice from the department.

Information on the extent and intensity of the course: Student complete 75 hours in laboratory of theoretical work during semester.

Information on course enrolment limitations: Students can register only upon the previous request and the approval from the department.

The course is also listed under the following terms [Autumn 2016](#), [Accreditation autumn](#).

aVLVL101p Internal Medicine - lecture ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

0/0/0. 4 credit(s). Type of Completion: zk (examination).

Teacher(s)

[prof. MUDr. Petr Brhel, CSc.](#) (lecturer)
[prof. MUDr. Petr Dítě, DrSc.](#) (lecturer)
[prof. MUDr. Lubomír Elbl, CSc.](#) (lecturer)
[prof. MUDr. Aleš Hep, CSc.](#) (lecturer)
[doc. MUDr. Milan Kozák, Ph.D.](#) (lecturer)
[doc. MUDr. Lubomír Křivan, Ph.D.](#) (lecturer)
[prof. MUDr. Jaroslav Meluzín, CSc.](#) (lecturer)
[doc. MUDr. Miroslav Novák, CSc.](#) (lecturer)
[MUDr. Věra Olšovská, Ph.D.](#) (lecturer)
[MUDr. Jindřich Olšovský, Ph.D.](#) (lecturer)
[prof. MUDr. Miroslav Penka, CSc.](#) (lecturer)
[MUDr. Yvona Pospíšilová](#) (lecturer)
[MUDr. Aleš Průcha](#) (lecturer)
[MUDr. Ivan Řiháček, Ph.D.](#) (lecturer)
[prof. MUDr. Jarmila Siegelová, DrSc.](#) (lecturer)
[prof. MUDr. Jana Skříčková, CSc.](#) (lecturer)
[prof. MUDr. Miroslav Souček, CSc.](#) (lecturer)
[doc. MUDr. Kamil Ševela, CSc.](#) (lecturer)
[doc. MUDr. Miroslav Tomáška, CSc.](#) (lecturer)

[prof. MUDr. Jiří Vítovec, CSc.](#) (lecturer)
[MUDr. Jitka Vlašínová, Ph.D.](#) (lecturer)
[doc. MUDr. Vladimír Zbořil, CSc.](#) (lecturer)

Supervisor

[prof. MUDr. Miroslav Souček, CSc.](#)
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Contact Person: [Eva Kašpárková](#)
Supplier department: [Second Department of Internal Medicine - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Prerequisites (in Czech)

[aVLFA0822p Pharmacology II - lec.](#) && [aVLLP0633c Clinical Introduction III - p](#) && [aVLDI7X1p Diagn. imaging methods-lect.](#)

Splněné prekvizity. Teoretické znalosti z patologické anatomie, patologické fyziologie, farmakologie z problematiky týkající se bloku č. 3. Aktivní účast na seminářích.

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Particulars lectures about special problems in Internal Medicine.

Syllabus

- Heart failure
- Echocardiography
- Therapy of bradycardia, pacemakers
- Unstable angina
- Functional gastrointestinal disease
- Nonfarmacology therapy of tachyarrhythmias
- Disorders of acid-base balance
- Kidney and farmakotherapy of Internal diseases
- Cardiovascular diseases and chronic stress
- Hypertension therapy
- Iodine-associated thyroid disease
- Management of treatment typ 2 diabetes
- Peptic ulcer disease
- Inflammatory bowel disease
- Genetics and arrhythmia
- Nutrition enteral and parenteral

Literature

- Dítě Petr et all : Vnitřní lékařství Druhé, doplněné a přepracované vydání
- Souček M., et all: Vnitřní lékařství pro stomatologu
- Klener P. et all. Vnitřní lékařství Druhé doplněné vydání. Praha. Galén . 2006,
- Davidson s Principles and Practise of Medicine. 20th Edition. N.A. Boon, N.R.Colledge, B.R.Walker

Teaching methods

lecture

Assessment methods

Lectures are selective, optional.

Language of instruction

English

Further comments (probably available only in Czech)

The course can also be completed outside the examination period.

The course is taught annually.

The course is taught: every week.

Teacher's information

Přednášky probíhají v posluchárně KAMPUSu v Bohunicích a posluchárně 1. chirurgické kliniky FN u sv. Anny na Pekařské ul.

The course is also listed under the following terms [Accreditation spring](#).

aVLVL11Xpp Internal Medicine - pregraduation practice ✱

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/14/0. 18 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Zdeněk Adam, CSc.](#) (seminar tutor)

[MUDr. Irena Andršová, Ph.D.](#) (seminar tutor)

[MUDr. Denisa Bakešová](#) (seminar tutor)

[MUDr. Otakar Bednařík](#) (seminar tutor)

[MUDr. Katarína Bielaková, Ph.D.](#) (seminar tutor)

[doc. MUDr. Mojmír Blaha, CSc.](#) (seminar tutor)

[Mgr. Marek Borský](#) (seminar tutor)

[MUDr. Dagmar Brančíková, Ph.D.](#) (seminar tutor)

[MUDr. Lucie Brázdilová](#) (seminar tutor)

[Mgr. Petra Bučková](#) (seminar tutor)

[MUDr. Alena Buliková, Ph.D.](#) (seminar tutor)

[MUDr. Šárka Buřilová](#) (seminar tutor)

[MUDr. Libor Červínek, Ph.D.](#) (seminar tutor)

[prof. MUDr. Petr Dítě, DrSc.](#) (seminar tutor)

[prof. MUDr. Michael Doubek, Ph.D.](#) (seminar tutor)

[Ing. Dana Dvořáková, CSc.](#) (seminar tutor)

[MUDr. Tereza Effenbergerová](#) (seminar tutor)

[MUDr. Michal Eid](#) (seminar tutor)
[doc. RNDr. Lenka Fajkusová, CSc.](#) (seminar tutor)
[MUDr. Blanka Fischerová, Ph.D.](#) (seminar tutor)
[MUDr. Zdeněk Fojtík, Ph.D.](#) (seminar tutor)
[MUDr. František Folber, Ph.D.](#) (seminar tutor)
[MUDr. Markéta Hadrabová](#) (seminar tutor)
[MUDr. Jana Halámková, Ph.D.](#) (seminar tutor)
[prof. MUDr. Aleš Hep, CSc.](#) (seminar tutor)
[MUDr. Tomáš Horňák](#) (seminar tutor)
[MUDr. Štěpán Hrabovský](#) (seminar tutor)
[doc. MUDr. Andrea Janíková, Ph.D.](#) (seminar tutor)
[MUDr. Bohuslav Kianička, Ph.D.](#) (seminar tutor)
[doc. MUDr. Igor Kiss, Ph.D.](#) (seminar tutor)
[MUDr. Jarmila Kissová, Ph.D.](#) (seminar tutor)
[MUDr. Adam Koudelka](#) (seminar tutor)
[doc. MUDr. Milan Kozák, Ph.D.](#) (seminar tutor)
[MUDr. Zdeněk Král, CSc.](#) (seminar tutor)
[prof. MUDr. Marta Krejčí, Ph.D.](#) (seminar tutor)
[MUDr. Darja Krusová, Ph.D.](#) (seminar tutor)
[doc. MUDr. Lubomír Křivan, Ph.D.](#) (seminar tutor)
[MUDr. Andrea Křivanová, Ph.D.](#) (seminar tutor)
[MUDr. Hana Lejdarová](#) (seminar tutor)
[MUDr. Denis Lekeš](#) (seminar tutor)
[doc. Mgr. Martina Lengerová, Ph.D.](#) (seminar tutor)
[Mgr. Tomáš Loja, Ph.D.](#) (seminar tutor)
[RNDr. Jitka Malčíková, Ph.D.](#) (seminar tutor)
[prof. MUDr. Hana Matějovská Kubešová, CSc.](#) (seminar tutor)
[prof. MUDr. Jiří Mayer, CSc.](#) (seminar tutor)
[MUDr. Róbert Mazúr](#) (seminar tutor)
[prof. MUDr. Jaroslav Meluzín, CSc.](#) (seminar tutor)
[MUDr. Eva Mičulková](#) (seminar tutor)
[MUDr. Jozef Michalka](#) (seminar tutor)
[doc. MUDr. Mgr. Marek Mráz, Ph.D.](#) (seminar tutor)
[doc. MUDr. Helena Němcová, CSc.](#) (seminar tutor)
[doc. MUDr. Miroslav Novák, CSc.](#) (seminar tutor)
[MUDr. Ivo Novotný, CSc.](#) (seminar tutor)
[MUDr. Monika Ondráčková](#) (seminar tutor)
[MUDr. Lenka Ostřížková](#) (seminar tutor)
[MUDr. Martina Palacková](#) (seminar tutor)
[MUDr. Ivo Palásek](#) (seminar tutor)
[MUDr. Anna Panovská, Ph.D.](#) (seminar tutor)
[prof. MUDr. Miroslav Penka, CSc.](#) (seminar tutor)
[prof. RNDr. Šárka Pospíšilová, Ph.D.](#) (seminar tutor)
[MUDr. Yvona Pospíšilová](#) (seminar tutor)
[doc. MUDr. Luděk Pour, Ph.D.](#) (seminar tutor)
[MUDr. Markéta Protivánková](#) (seminar tutor)
[prof. MUDr. Zdeněk Ráčil, Ph.D.](#) (seminar tutor)

[Ing. Filip Rázga, Ph.D.](#) (seminar tutor)
[MUDr. Lukáš Semerád](#) (seminar tutor)
[prof. MUDr. Jana Skříčková, CSc.](#) (seminar tutor)
[prof. MUDr. Vladimír Soška, CSc.](#) (seminar tutor)
[prof. MUDr. Miroslav Souček, CSc.](#) (seminar tutor)
[doc. MUDr. Petr Szturz, Ph.D.](#) (seminar tutor)
[MUDr. David Šálek](#) (seminar tutor)
[RNDr. Ludmila Šebejová, Ph.D.](#) (seminar tutor)
[doc. MUDr. Kamil Ševela, CSc.](#) (seminar tutor)
[Hana Škabrahová, DiS.](#) (seminar tutor)
[MUDr. Lenka Šmardová](#) (seminar tutor)
[doc. MUDr. Jiří Špác, CSc.](#) (seminar tutor)
[prof. MUDr. Jindřich Špinar, CSc.](#) (seminar tutor)
[prof. MUDr. Lenka Špinarová, Ph.D., FESC](#) (seminar tutor)
[MUDr. Martin Štork](#) (seminar tutor)
[doc. MUDr. Josef Šumbera, CSc.](#) (seminar tutor)
[MUDr. Zuzana Šustková](#) (seminar tutor)
[MVDr. Boris Tichý, Ph.D.](#) (seminar tutor)
[MUDr. Jiří Tomášek, Ph.D.](#) (seminar tutor)
[doc. MUDr. Miroslav Tomáška, CSc.](#) (seminar tutor)
[doc. Mgr. Martin Trbušek, Dr.](#) (seminar tutor)
[MUDr. Jakub Trizuljak](#) (seminar tutor)
[Mgr. Eva Vetešníková](#) (seminar tutor)
[prof. MUDr. Jiří Vítovec, CSc.](#) (seminar tutor)
[MUDr. Jitka Vlašínová, Ph.D.](#) (seminar tutor)
[MUDr. Ondřej Výška](#) (seminar tutor)
[prof. MUDr. Rostislav Vyzula, CSc.](#) (seminar tutor)
[prof. MUDr. Pavel Weber, CSc.](#) (seminar tutor)
[MUDr. Barbora Weinbergerová](#) (seminar tutor)
[prof. MUDr. Karel Zeman, CSc.](#) (seminar tutor)
[MUDr. Daniela Žáčková, Ph.D.](#) (seminar tutor)
[Zdeňka Dvořáková](#) (assistant)
[Jitka Firešová](#) (assistant)
[Eva Kašpárková](#) (assistant)
[Iva Kazdová](#) (assistant)
[Jitka Macháčková](#) (assistant)
[Jarmila Mouková](#) (assistant)
[Alena Stodůlková](#) (assistant)
[Libuše Vlasáková](#) (assistant)
[Hana Zemanová](#) (assistant)
[Klára Zouharová](#) (assistant)

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Prerequisites

The preconditions of starting the course is completing theoretical subjects of pathological physiology, pharmacology and internal propedeutice and bloc 1-5 Internal Medicine.

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Students are working at the patients s bed under the physician s supervision.They perform independent examinations and suggest diagnostic and therapeutic procedures. They take care of all clinical documentation and administration connected with patients hospitalization. During the practice of 7 weeks the also work in specialized out- patient departments. Expert seminars are part of the practice. After the completion of practice the student will be able to work independently.

Learning outcomes

The outcome is to learn all practilaly knowledges necessary for work on internal department.

Syllabus

- 1.Students are autonomous working at the patients s bed under the physician s supervision
- 2.Perform independent examinations and suggest diagnostic and therapeutic procedures.
- 3.Students are working at the polyclinic under the physician s supervision
- 4.Expert seminars are part of the practice.
- 5.They take care of all clinical documentation and administration connected with patients hospitalization.

Literature

recommended literature

- Souček M. a kol. Vnitřní lékařství. Praha Grada Publishing 2011, ISBN 978-80-247-2110-1

not specified

- Dítě Petr et all :Vnitřní lékařství Druhé,doplňené a přepracované vydání
- Davidson s Principles and Practise of Medicine. 20th Edition. N.A. Boon,
- Klener P. et all. Vnitřní lékařství Druhé doplňené vydání. Praha. Galén . 2006, 1158s., ISBN 978-80-7262-430-0

- *Harrison's principles of internal medicine*. Edited by Dennis L. Kassper. 16th ed. New York: McGraw-Hill, 2005. xxix, 1301. ISBN 0071391428. [info](#)
- *Harrison's principles of internal medicine*. Edited by Dennis L. Kassper. 16th ed. New York: McGraw-Hill, 2005. xxvii, 129. ISBN 007139141X. [info](#)

Teaching methods

In the course of pregraduate practice the students verify and strengthen their own theoretical and practical knowledge of clinical examination and laboratory investigation of internal diseases. They work independently under the supervision of physicians in various departments and ambulance.

Assessment methods

The attendance of students is obligatory. The practice is closed by the state rigorous examination.

Language of instruction

English

Further comments (probably available only in Czech)

Information on completion of the course: SRZ skládá student na klinice, kde stážoval

The course can also be completed outside the examination period.

The course is taught annually.

The course is taught: in blocks.

Information on the extent and intensity of the course: total 210 hours/ 7 weeks.

Teacher's information

V den zahájení stáže - v pondělí si studenti přinesou zámeček k uzamčení šatní skříňky, bílý plášť, přezůvky a fonendoskop. Po ukončení 7. týdenní blokové stáže jsou povinni opět šatní skříňku uvolnit. Studenti jsou rozděleni na jednotlivá oddělení, pracují samostatně pod dozorem lékařů. Během stáže probíhají odborné semináře. Účast studentů je povinná. Poslední-7. týden mohou absolvovat na jiném interním pracovišti. Před ukončením stáže absolvují studenti praktickou část SRZ na pracovišti kde stážovali. Předpromoční praxe je zakončena Státní rigorózní zkouškou.

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

aVLVL11XX Internal Medicine - State Exam ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/0/0. 0 credit(s). Type of Completion: SRZK (closing examination).

Teacher(s)

[doc. MUDr. Stanislav Janoušek, CSc.](#) (lecturer)

[prof. MUDr. Zdeněk Adam, CSc.](#) (seminar tutor)

[MUDr. Otakar Bednařík](#) (seminar tutor)

[doc. MUDr. Mojmír Blaha, CSc.](#) (seminar tutor)

[MUDr. Dagmar Brančíková, Ph.D.](#) (seminar tutor)

[MUDr. Kristián Brat](#) (seminar tutor)

[MUDr. Alena Buliková, Ph.D.](#) (seminar tutor)
[MUDr. Libor Červinek, Ph.D.](#) (seminar tutor)
[prof. MUDr. Petr Dítě, DrSc.](#) (seminar tutor)
[prof. MUDr. Michael Doubek, Ph.D.](#) (seminar tutor)
[MUDr. Blanka Fischerová, Ph.D.](#) (seminar tutor)
[MUDr. Zdeněk Fojtík, Ph.D.](#) (seminar tutor)
[MUDr. František Folber, Ph.D.](#) (seminar tutor)
[prof. MUDr. Aleš Hep, CSc.](#) (seminar tutor)
[doc. MUDr. Andrea Janíková, Ph.D.](#) (seminar tutor)
[MUDr. Jarmila Kissová, Ph.D.](#) (seminar tutor)
[doc. MUDr. Milan Kozák, Ph.D.](#) (seminar tutor)
[MUDr. Zdeněk Král, CSc.](#) (seminar tutor)
[prof. MUDr. Marta Krejčí, Ph.D.](#) (seminar tutor)
[MUDr. Darja Krusová, Ph.D.](#) (seminar tutor)
[MUDr. Andrea Krivanová, Ph.D.](#) (seminar tutor)
[prof. MUDr. Hana Matějovská Kubešová, CSc.](#) (seminar tutor)
[prof. MUDr. Jiří Mayer, CSc.](#) (seminar tutor)
[prof. MUDr. Jaroslav Meluzín, CSc.](#) (seminar tutor)
[MUDr. Jozef Michalka](#) (seminar tutor)
[doc. MUDr. Helena Němcová, CSc.](#) (seminar tutor)
[doc. MUDr. Miroslav Novák, CSc.](#) (seminar tutor)
[MUDr. Ivo Novotný, CSc.](#) (seminar tutor)
[MUDr. Lenka Ostřížková](#) (seminar tutor)
[MUDr. Martina Palacková](#) (seminar tutor)
[MUDr. Ivo Palásek](#) (seminar tutor)
[MUDr. Anna Panovská, Ph.D.](#) (seminar tutor)
[prof. MUDr. Miroslav Penka, CSc.](#) (seminar tutor)
[MUDr. Vlasta Polcarová](#) (seminar tutor)
[prof. RNDr. Šárka Pospíšilová, Ph.D.](#) (seminar tutor)
[MUDr. Yvona Pospíšilová](#) (seminar tutor)
[doc. MUDr. Luděk Pour, Ph.D.](#) (seminar tutor)
[MUDr. Markéta Protivánková](#) (seminar tutor)
[prof. MUDr. Zdeněk Ráčil, Ph.D.](#) (seminar tutor)
[MUDr. Svatava Snopková, Ph.D.](#) (seminar tutor)
[prof. MUDr. Miroslav Souček, CSc.](#) (seminar tutor)
[doc. MUDr. Petr Szturz, Ph.D.](#) (seminar tutor)
[MUDr. Lenka Šmardová](#) (seminar tutor)
[prof. MUDr. Jindřich Špínar, CSc.](#) (seminar tutor)
[prof. MUDr. Lenka Špínarová, Ph.D., FESC](#) (seminar tutor)
[doc. MUDr. Miroslav Tomáška, CSc.](#) (seminar tutor)
[doc. Mgr. Martin Trbušek, Dr.](#) (seminar tutor)
[prof. MUDr. Jiří Vítovec, CSc.](#) (seminar tutor)
[prof. MUDr. Jiří Vorlíček, CSc.](#) (seminar tutor)
[prof. MUDr. Rostislav Vyzula, CSc.](#) (seminar tutor)
[prof. MUDr. Karel Zeman, CSc.](#) (seminar tutor)
[MUDr. Daniela Žáčková, Ph.D.](#) (seminar tutor)

[Zdeňka Dvořáková](#) (assistant)

[Eva Kašpárková](#) (assistant)

Supervisor

[prof. MUDr. Miroslav Souček, CSc.](#)

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Supplier department: [Second Department of Internal Medicine - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Prerequisites

[aVLFA0822p](#) && [aVLNE9X1p Neurology - lecture](#) && [aVLPY9X1p Psychiatry - lect.](#)

&& [aVLDV7X21p](#) && [aVLAM9X1p Intensive care med. - lect.](#) &&

[aVLVL7X61c Internal medicine - part 1 -pr](#) && [aVLVL9X62c Internal medicine part 2](#)

&& [aVLVL9X63c Internal medicine part 3](#) && [aVLVL9X64c Internal medicine part 4](#)

&& [aVLVL9X65c Internal medicine part 5](#) && [aVLIN9X22 Infectious diseases II](#) &&

[aVLON091p Clinical oncology - lec.](#) && VYCET (1 , [aVLAL091 Anaesthes. and](#)

[Treat. of Pain](#) , [aVLDO091 Paediatric Oncology](#) , [aVLKF101](#) , [aVLKB091 Clinical](#)

[Biochemistry](#) , [aVLFP091 Physiology and path.of newborn](#)) && [aVLCH9X33c Surgery](#)

[III - practice](#) && [aVLCJ0888](#) && [VSSP03X Individual project](#)

Prerequisite for the state exam in internal medicine is examination of Clinical

Examination in Internal Medicine, completing practical tuition blocks 1-5, and successful completion of all tests in 5th year and completing 7-week practice before of graduation.

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

In the course of pregraduate practice the students verify and strengthen their own theoretical and practical knowledge of clinical examination and laboratory investigation of internal diseases. They work independently under the supervision of physicians in various departments. The attendance of students is obligatory. The practice is closed by the state rigorous examination.

Syllabus

- Before the state rigorous examination the students verify and strengthen their own theoretical and practical knowledge in the 7. weeks course of pregraduate practice.
- 1. Students are autonomously working at the patients' bed under the physician's supervision
- 2. Perform independent examinations and suggest diagnostic and therapeutic procedures.
- 3. Students are working at the polyclinic under the physician's supervision

- 4.Expert seminars are part of the practice.
- 5.They take care of all clinical documentation and administration connected with patients hospitalization.
- The practice is closed by the state rigorous examination.

Literature

- Dítě Petr et all :Vnitřní lékařství Druhé,doplněné a přepracované vydání
- Davidson s Principles and Practise of Medicine. 20th Edition. N.A. Boon,
- Klener P. et all. Vnitřní lékařství Druhé doplněné vydání. Praha. Galén . 2006, 1158s., ISBN 978-80-7262-430-0
- Náhradní obsah: Součk M. akol. Vnitřní lékařství. Praha. Grada 2011, ISBN978-80-247-2110-1
- Harrison's principles of internal medicine. Edited by Dennis L. Kassper. 16th ed. New York : McGraw-Hill, 2005. xxvii, 129. ISBN 007139141X.

Teaching methods

Independent work under the supervision of physicians in various clinici departments

Assessment methods

The practice is closed by the oral state rigorous examination.

Language of instruction

English

Further comments (probably available only in Czech)

Information on completion of the course: SRZ skládá student na klinice, kde stážoval

The course can also be completed outside the examination period.

The course is taught annually.

The course is taught: in blocks.

Teacher's information

Ke státní rigorózní zkoušce se studenti dostaví ráno v 8.00 hod na sekretariát II.interní kliniky,Pekařská. U zkoušky si student vythne 1 složenou otázku ze 3 podotázek. Zkouška probíhá před komisí, která je složena ze 3 a více členů.

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

aVLVL9X63c Internal medicine part 3 - Nefrology, Diabetology, Revmatology and Endocrinology *

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/3.2/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Bohuslav Kianička, Ph.D.](#) (lecturer)

[MUDr. Jan Svojanovský, Ph.D.](#) (lecturer)

[MUDr. Karola Balšíková](#) (seminar tutor)

[doc. MUDr. Mojmír Blaha, CSc.](#) (seminar tutor)
[MUDr. Darja Krusová, Ph.D.](#) (seminar tutor)
[doc. MUDr. Helena Němcová, CSc.](#) (seminar tutor)
[doc. MUDr. Petr Němec, Ph.D.](#) (seminar tutor)
[MUDr. Věra Olšovská, Ph.D.](#) (seminar tutor)
[MUDr. Jindřich Olšovský, Ph.D.](#) (seminar tutor)
[MUDr. Aleš Průcha](#) (seminar tutor)
[MUDr. Ivan Řiháček, Ph.D.](#) (seminar tutor)
[prof. MUDr. Vladimír Soška, CSc.](#) (seminar tutor)
[MUDr. Otmar Stránský](#) (seminar tutor)
[doc. MUDr. Kamil Ševela, CSc.](#) (seminar tutor)
[doc. MUDr. Jiří Špác, CSc.](#) (seminar tutor)
[MUDr. Dalibor Zeman](#) (seminar tutor)
[Eva Kašpárková](#) (assistant)
[Hana Zemanová](#) (assistant)

Supervisor

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Prerequisites

aVLCH0832c && aVLFA0822p
Prerequisites have been met. Theoretical knowledge of pathological anatomy, pathological physiology, pharmacology. Active participation in seminars.
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

After the completion of lessons the student will understand the problems of diseases taught in the block No. 3 : diabetology, nephrology, endokrinology, rheumatology. diseases of water, elektroyte, mineral and acid-base metabolism. He/she will be able to diagnose and know the therapy of these disorders.

Learning outcomes

After the completion of lessons the student will understand the problems of diseases taught in the block No. 3 : diabetology, nephrology, endokrinology, rheumatology. diseases of water, elektroyte, mineral and acid-base metabolism. He/she will be able to diagnose and know the therapy of these disorders.

Syllabus

- Kidney and urinary disease.
- Laboratory diagnostic test and clinical examination of the kidney and urinary tract diseases.
- Glomerular diseases.
- Nephrotic syndrome.
- Diabetes nephropathy
- Tumorous of the kidney and urinary tract.
- Tubulointerstitial disease. reflux nephropathy. Renal vascular disease.
- Acute and chronic renal failure.
- Renal replacement therapy.
- Haemodialysis.
- Renal transplantation.
- Endocrine disease.
- Laboratory diagnostic test and clinical examination of the endocrine diseases.
- Hypothalamic and pituitary disease.
- Diabetes insipidus.
- Acromegaly. Gigantism.
- Hyperprolactinaemia
- Cushing's disease.
- Thyroid and parathyroid glands diseases.
- Thyroid enlargement. Goitre diffuse. Solitary thyroid nodule.
- Autoimmune thyroid disease.
- Thyrotoxicosis. Thyrotoxic crisis(thyroid storm).
- Hypothyroidism.
- Hypothyroidism.
- Thyroid neoplasma.
- The parathyroid glands disease.
- Hyperparathyroidism, primary, secondary, tertiary.
- Pseudohypoparathyroidism
- Adrenal glands diseases.
- Cushing's syndrome.
- Adrenal insufficiency.
- Congenital adrenal hyperplasia
- Pheochromocytoma.
- Neuroendocrine tumours
- Diabetes mellitus
- Aetiology and pathogenesis of diabetes
- Investigations. Insulin delivery. Insulin regimens.
- Oral-antidiabetic drugs .
- Diabetes mellitus type 1 - aetiology, pathogenesis, diagnostic, therapy.
- Diabetes mellitus type 2 - aetiology, pathogenesis, diagnostic, therapy.
- Diabetes in pregnancy. Gestational diabetes.
- Diabetic ketoacidosis,
- Nonketotic hyperosmolar diabetic coma.
- Hypoglycaemia. Hypoglycaemic coma.
- Management of the diabetes. Dietary management.
- Long-term complications of diabetes

- Diabetic retinopathy. Diabetic neuropathy.
- The diabetic foot.
- Inflammatory joint disease.
- Laboratory diagnostic test and clinical examination of the inflammatory joint diseases.
- Rheumatoid arthritis.
- Seronegative spondylarthritis
- Systemic connective tissue disease.
- Systemic lupus erythematosus.
- Systemic sclerosis
- Polymyositis and dermatomyositis
- Sjogren's syndrome
- Systemic vasculitis
- Other forms of vasculitis
- Musculoskeletal manifestations of disease in other systems
- Osteoporosis, osteomalacia, osteonecrosis, drug-induced lupus syndrome, myositis.
- Psoriasis
- Gout
- Paget's disease
- Osteoarthritis. Spinal and back disease.
- Acute rheumatic fever
- Disorders of acid-base balance
- Investigation of water and electrolytes
- Metabolic acidosis, metabolic alkalosis, respiratory acidosis, respiratory alkalosis, mixed acid-base disorders
- Disorders of amino acid metabolism
- Metabolic disease.
- Obesity. Hyperlipidemia. Metabolic bone disease.
- Malabsorption.
- Nutrition, enteral and parenteral alimentation
- Artificial alimentation

Literature

recommended literature

- Češka R. a kol. Interna Triton Praha, 2012, ISBN 978-80-7387-423-0
- Souček M. a kol. Vnitřní lékařství. Grada Publishing 2011, 1577s. ISBN 978-80-247-2110-1

not specified

- Dítě, P. a kol. Vnitřní lékařství. Druhé, doplněné a přepracované vydání Galén, 2007. 586 s.
- Klenner P. et al. Vnitřní lékařství Druhé doplněné vydání. Praha. Galén. 2006,
- Davidson's Principles and Practice of Medicine. 20th Edition. N.A. Boon, N.R. Colledge, B.R. Walker

Teaching methods

Lessons are taking place in blocks of 14 days. Attendance at the tuition is obligatory. The students work in groups of 5-6 members at the patient's bedside step by step in all specialized departments of the clinic. Expert seminars are the part of education.

Assessment methods

Successful written test on problems of internal medicine – block 3 is necessary for getting the credit. The test consists of 20 questions and the student must make out correctly 60% of questions.

Language of instruction

English

Further comments (probably available only in Czech)

The course is taught each semester.

The course is taught: in blocks.

Information on the extent and intensity of the course: total 48 hours.

Listed among pre-requisites of other courses

- [aVLCH11XX Surgery - state exam](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && [VYCET\(1,aVLAL091,aVLDO091,aVLKF101,aVLKB091,aVLFP091\)](#) && [aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [aVLPD11XX Pediatrics - state exam](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && [VYCET\(1,aVLAL091,aVLDO091,aVLKF101,aVLKB091,aVLFP091\)](#) && [aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [aVLPG11XX Obstetrics and Gynaecology - State Exam](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && [VYCET\(1,aVLAL091,aVLDO091,aVLKF101,aVLKB091,aVLFP091\)](#) && [aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [aVLPL11XX General Medicine Practice and Geriatrics](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && [VYCET\(1,aVLAL091,aVLDO091,aVLKF101,aVLKB091,aVLFP091\)](#) && [aVLCH9X33c](#) && [aVLCJ0888](#) (Do I meet enrolment requirements?)
- [aVLVL11XX Internal Medicine - State Exam](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) &&

VYCET(1,[aVLAL091](#),[aVLDO091](#),[aVLKF101](#),[aVLKB091](#),[aVLFP091](#)) &&
[aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) (Do I meet enrolment requirements?)

- [aVLZP11XX Public Health - State exam](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) &&
[aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) &&
[aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) &&
VYCET(1,[aVLAL091](#),[aVLDO091](#),[aVLKF101](#),[aVLKB091](#),[aVLFP091](#)) &&
[aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) (Do I meet enrolment requirements?)

Teacher's information

<https://is.muni.cz/auth/el/1411/podzim2009/VLVL9X63c/op/>

V den zahájení stáže - v pondělí si studenti přinesou zámeček k uzamčení šatní skříňky. Po ukončení blokové stáže t.j. v pátek jsou povinni opět šatní skříňku uvolnit!!!!!!!!!!!!!!
Děkuji za pochopení. První den výuky se studenti dostaví na sekretariát II. interní kliniky, FN Pekařská, budova J, 1. poschodí, kde dostanou stážovací kartu. Ve stážích studenti potřebují bílý plášť, přezůvky a fonendoskop. V první polovině stáže probíhá výuka u lůžka. Po přestávce následuje odborný seminář. Součástí seminářů jsou odborné prezentace studentů podle rozpisu v ISu. Udělení zápočtu na konci stáže je podmíněn úspěšným absolvováním písemného testu, který má 20 složených otázek, požadavek 60% správně zodpovězených otázek.

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

aVLVL9X64c Internal medicine part 4 - Gastroenterology and Haematology *

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/3.2/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Zdeněk Adam, CSc.](#) (seminar tutor)

[MUDr. Denisa Bakešová](#) (seminar tutor)

[MUDr. Otakar Bednařík](#) (seminar tutor)

[MUDr. Dagmar Brančíková, Ph.D.](#) (seminar tutor)

[MUDr. Lucie Brázdilová](#) (seminar tutor)

[Mgr. Petra Bučková](#) (seminar tutor)

[MUDr. Alena Buliková, Ph.D.](#) (seminar tutor)

[MUDr. Libor Červínek, Ph.D.](#) (seminar tutor)

[prof. MUDr. Petr Dítě, DrSc.](#) (seminar tutor)

[prof. MUDr. Michael Doubek, Ph.D.](#) (seminar tutor)

[MUDr. Michal Eid](#) (seminar tutor)

[MUDr. Zdeněk Fojtík, Ph.D.](#) (seminar tutor)

[MUDr. František Folber, Ph.D.](#) (seminar tutor)
[MUDr. Markéta Hadrabová](#) (seminar tutor)
[prof. MUDr. Aleš Hep, CSc.](#) (seminar tutor)
[MUDr. Miluše Hertlová, CSc.](#) (seminar tutor)
[MUDr. Tomáš Hornák](#) (seminar tutor)
[MUDr. Štěpán Hrabovský](#) (seminar tutor)
[doc. MUDr. Andrea Janíková, Ph.D.](#) (seminar tutor)
[MUDr. Jarmila Kissová, Ph.D.](#) (seminar tutor)
[RNDr. Martin Komenda, Ph.D.](#) (seminar tutor)
[MUDr. Zdeněk Král, CSc.](#) (seminar tutor)
[prof. MUDr. Marta Krejčí, Ph.D.](#) (seminar tutor)
[MUDr. Radek Kroupa, Ph.D.](#) (seminar tutor)
[MUDr. Jana Křivánková](#) (seminar tutor)
[MUDr. Andrea Křivanová, Ph.D.](#) (seminar tutor)
[prof. MUDr. Jiří Mayer, CSc.](#) (seminar tutor)
[MUDr. Róbert Mazúr](#) (seminar tutor)
[MUDr. Eva Mičulková](#) (seminar tutor)
[MUDr. Jozef Michalka](#) (seminar tutor)
[MUDr. Ivo Novotný, CSc.](#) (seminar tutor)
[MUDr. Monika Ondráčková](#) (seminar tutor)
[MUDr. Lenka Ostřížková](#) (seminar tutor)
[MUDr. Martina Palacková](#) (seminar tutor)
[MUDr. Ivo Palásek](#) (seminar tutor)
[MUDr. Anna Panovská, Ph.D.](#) (seminar tutor)
[prof. MUDr. Miroslav Penka, CSc.](#) (seminar tutor)
[MUDr. Yvona Pospíšilová](#) (seminar tutor)
[doc. MUDr. Luděk Pour, Ph.D.](#) (seminar tutor)
[MUDr. Markéta Protivánková](#) (seminar tutor)
[prof. MUDr. Zdeněk Ráčil, Ph.D.](#) (seminar tutor)
[MUDr. Lukáš Semerád](#) (seminar tutor)
[doc. MUDr. Petr Szturz, Ph.D.](#) (seminar tutor)
[MUDr. David Šálek](#) (seminar tutor)
[MUDr. Lenka Šmardová](#) (seminar tutor)
[MUDr. Martin Štork](#) (seminar tutor)
[MUDr. Zuzana Šustková](#) (seminar tutor)
[doc. MUDr. Miroslav Tomáška, CSc.](#) (seminar tutor)
[MUDr. Jakub Trizuljak](#) (seminar tutor)
[Mgr. Eva Vetešníková](#) (seminar tutor)
[MUDr. Barbora Weinbergerová](#) (seminar tutor)
[MUDr. Daniela Žáčková, Ph.D.](#) (seminar tutor)
[Zdeňka Dvořáková](#) (assistant)
[Jitka Firešová](#) (assistant)
[Jarmila Mouková](#) (assistant)
[Hana Zemanová](#) (assistant)
[Klára Zouharová](#) (assistant)

Supervisor

[MUDr. Jiří Dolina, Ph.D.](#)

[Department of Internal Gastroenterology - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Supplier department: [Department of Internal Gastroenterology - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Prerequisites (in Czech)

aVLCH0832c && aVLFA0822p

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The main objectives can be summarized as follows. To understand the basic teaching of gastroenterology during the stay on Clinic of Internal Medicine - Gastroenterology and to understand the basic knowledge of hematology during the stay on Clinic of Internal Medicine Hematooncology.

Learning outcomes

Students will know clinical symptoms and laboratory markers of all discussed diseases in this block. That they will in time recognise discussed diseases by their future patients.

Syllabus

- Internal medical education, block IV, at the internal hematooncological department consists of 5 seminars and practical case presentation in patients. 1. Malignant lymphoproliferative disease, 2. Anemia and thrombocytopenia. 3. Acute and chronic leukaemias. 4. Inherited and acquired coagulopathy. 4. Palliative and supportive treatment. Treatment of sepsis and septic shock

Literature

required literature

- [DOUBEK, Michael](#), [Zdeněk ADAM](#), [Zdeňka ČERMÁKOVÁ](#), [Libor ČERVINEK](#), [Martina DOUBKOVÁ](#), [František FOLBER](#), [Markéta HADRABOVÁ](#), [Andrea JANÍKOVÁ](#), [Jarmila KISSOVÁ](#), [Marta KREJČÍ](#), [Daniel LYSÁK](#), [Miloslava MATÝŠKOVÁ](#), [Tomáš NEBESKÝ](#), [Luděk POUR](#) and [Daniela ŽÁČKOVÁ](#). *Hematologie. Pomocník ke stáží na hematologických pracovištích*. 1. vyd. Brno: Masarykova univerzita, 2019. ISBN 978-80-210-8776-7. [info](#)

recommended literature

- [ADAM, Zdeněk](#), [Marta KREJČÍ](#), [Jiří VORLÍČEK](#), [Zuzana ADAMOVÁ](#), [Jaroslav BAČOVSKÝ](#), [Viera BAJČIOVÁ](#), [Otokar BEDNAŘÍK](#), [Jan BLATNÝ](#), [Tomáš](#)

BÜCHLER, [Igor CRHA](#), [Aleš ČERMÁK](#), [Hana DOLEŽELOVÁ](#), [Ladislav DUŠEK](#), [Karel DVORÁK](#), [Pavel FABIAN](#), [Vuk FAIT](#), [Antonín FASSMANN](#), [Jindřich FIALA](#), [Lukáš FIALA](#), [Jindřich FÍNEK](#), [Lenka FORETOVÁ](#), [Radim GROSMAN](#), [Jana HALÁMKOVÁ](#), [Miroslav HEŘMAN](#), [Martin HUSER](#), [Ludmila HYNKOVÁ](#), [Richard CHALOUPKA](#), [Libuše KALVODOVÁ](#), [Igor KISS](#), [Iva KOČMANOVÁ](#), [Martin KOMENDA](#), [Jana KOPTÍKOVÁ](#), [Zdeněk KOŘÍSTEK](#), [Renata KOUKALOVÁ](#), [Zdeněk KRÁL](#), [Eva LÉTALOVÁ](#), [Milan MACHÁLKA](#), [Josef MALIŠ](#), [Miloslava MATÝŠKOVÁ](#), [Jiří MAYER](#), [Vojtěch MORNSTEIN](#), [Mojmír MOULIS](#), [Jan MUŽÍK](#), [Miroslav MYSLIVEČEK](#), [Milan NAVRÁTIL](#), [Tomáš NEBESKÝ](#), [Miroslav NEČAS](#), [Rudolf NENUTIL](#), [Jiří NEUBAUER](#), [Martin ONDRÁK](#), [Zdeněk PAVELKA](#), [Miroslav PENKA](#), [Vojtěch PEŘINA](#), [Katarína PETRÁKOVÁ](#), [Petr POKORNÝ](#), [Luděk POUR](#), [Jiří PRÁŠEK](#), [Zdeněk RÁČIL](#), [Martin REPKO](#), [Zdeněk ŘEHÁK](#), [Jiří SCHOVANEK](#), [Ondřej SLÁMA](#), [Petr SMÍŠEK](#), [Jan STARÝ](#), [Petr SZTURZ](#), [Marek SVOBODA](#), [Vlastimil ŠČUDLA](#), [Roman ŠEFR](#), [Pavel ŠEVČÍK](#), [Pavel ŠLAMPÁ](#), [Lenka ŠMARDOVÁ](#), [Jiří ŠNAJDAUF](#), [Jaroslav ŠTĚRBA](#), [Michal TICHÝ](#), [Jiří TOMÁŠEK](#), [Miroslav TOMIŠKA](#), [Marcela TOMÍŠKOVÁ](#), [Vít UNZEITIG](#), [Jiří VANÍČEK](#), [Vladimír VAŠKŮ](#), [Rostislav VYZULA](#), [Barbora WEINBERGEROVÁ](#), [Marie ZÍTKOVÁ](#) and [Karel ZITTERBART](#). *Obecná onkologie (General oncology)*. První vydání. Praha: Galén, 2011. 394 pp. ISBN 978-80-7262-715-8. [URL](#) [info](#)

- [ADAM, Zdeněk](#), [Marta KREJČÍ](#) and [Jiří VORLÍČEK](#). *Speciální onkologie. Příznaky, diagnostika a léčba maligních chorob (Special oncology. Symptoms, diagnostics and therapy of malignant disease)*. 1. vyd. Praha: Galén, 2010. 418 pp. Med. ISBN 978-80-7262-648-9. [info](#)

not specified

- [ADAM, Zdeněk](#), [Marta KREJČÍ](#) and [Jiří VORLÍČEK](#). *Hematologie : přehled maligních hematologických nemocí*. 2., dopl. a zcela přeprac. Praha: Grada, 2008. 390 s.,x. ISBN 9788024725024. [info](#)
- [DÍTĚ, Petr](#) and ET AL. *Vnitřní lékařství*. Druhé vydání. Praha: GALÉN, Na Bělidle 34, 2007. 586 pp. ISBN 978-80-7262-496-6. [info](#)

Teaching methods

Lessons are taking place in blocks of 14 days. Attendance at the tuition is obligatory. The students work in groups of 5-6 members at the patient s bed step by step in all specialized department of the clinic. Expert seminars are the part of education.

Assessment methods

credit

Language of instruction

English

Further comments (probably available only in Czech)

The course can also be completed outside the examination period.

The course is taught each semester.

The course is taught: in blocks.

Information on the extent and intensity of the course: total 48 hours.

Listed among pre-requisites of other courses

- [**aVLCH11XX** Surgery - state exam](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && [VYCET\(1,aVLAL091,aVLDO091,aVLKF101,aVLKB091,aVLFP091\)](#) && [aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [**aVLPD11XX** Pediatrics - state exam](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && [VYCET\(1,aVLAL091,aVLDO091,aVLKF101,aVLKB091,aVLFP091\)](#) && [aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [**aVLPG11XX** Obstetrics and Gynaecology - State Exam](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && [VYCET\(1,aVLAL091,aVLDO091,aVLKF101,aVLKB091,aVLFP091\)](#) && [aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [**aVLPL11XX** General Medicine Practice and Geriatrics](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && [VYCET\(1,aVLAL091,aVLDO091,aVLKF101,aVLKB091,aVLFP091\)](#) && [aVLCH9X33c](#) && [aVLCJ0888](#) (Do I meet enrolment requirements?)
- [**aVLVL11XX** Internal Medicine - State Exam](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && [VYCET\(1,aVLAL091,aVLDO091,aVLKF101,aVLKB091,aVLFP091\)](#) && [aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [**aVLZP11XX** Public Health - State exam](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && [VYCET\(1,aVLAL091,aVLDO091,aVLKF101,aVLKB091,aVLFP091\)](#) && [aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) (Do I meet enrolment requirements?)

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

aVLZP11XX Public Health - State exam *

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/0/0. 0 credit(s). Type of Completion: SRZK (closing examination).

Teacher(s)

[prof. MUDr. Bc. Zuzana Derflerová Brázdová, DrSc.](#) (lecturer)

[doc. MUDr. Jindřich Fiala, CSc.](#) (lecturer)

[prof. MUDr. Drahoslava Hrubá, CSc.](#) (lecturer)

[Mgr. Pavlína Kaňová, Ph.D.](#) (lecturer)

[MUDr. Marie Kolářová, CSc.](#) (lecturer)

[MUDr. Kräuff Rainer Schwanhaeuser Wulff, MBA, Ph.D. et Ph.D., M.A.](#) (lecturer)

[doc. MUDr. Jan Šimůnek, CSc.](#) (lecturer)

[MUDr. Miroslava Zavřelová](#) (lecturer)

[Mgr. Jana Fialová, Ph.D.](#) (assistant)

[Zdeňka Jochová](#) (assistant)

[Marie Sekaninová](#) (assistant)

Supervisor

[prof. MUDr. Drahoslava Hrubá, CSc.](#)

[Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Supplier department: [Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Prerequisites

[aVLFA0822p](#) && [aVLNE9X1p Neurology - lecture](#) && [aVLPY9X1p Psychiatry - lect.](#)

&& [aVLDV7X21p](#) && [aVLAM9X1p Intensive care med. - lect.](#) &&

[aVLVL7X61c Internal medicine - part 1 -pr](#) && [aVLVL9X62c Internal medicine part 2](#)

&& [aVLVL9X63c Internal medicine part 3](#) && [aVLVL9X64c Internal medicine part 4](#)

&& [aVLVL9X65c Internal medicine part 5](#) && [aVLIN9X22 Infectious diseases II](#) &&

[aVLON091p Clinical oncology - lec.](#) && VYCET (1 , [aVLAL091 Anaesthes. and](#)

[Treat. of Pain](#) , [aVLDO091 Paediatric Oncology](#) , [aVLKF101](#) , [aVLKB091 Clinical](#)

[Biochemistry](#) , [aVLFP091 Physiology and path.of newborn](#)) && [aVLCH9X33c Surgery](#)

[III - practice](#) && [aVLCJ0888](#) && [VSSP03X Individual project](#)

Prerequisites according to the MU study and examination regulations.

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

To understand the principles of relationship between human and environment, life conditions and life style. Factors for prevention and promotion of health. Prevention: types, different significance for health prevention and promotion.

The most important non-communicable diseases: epidemiology, aetiology, prevention.

Syllabus

- PREVENTIVE MEDICINE AND HYGIENE:
- 1. METHODS OF MEASUREMENT OF NUTRITIONAL INTAKE: Questionnaire and laboratory methods - presentation. Self-evaluation of short-term recalls and long-term nutritional habits. .
- 2. PREVENTION OF THE MUSCULOSKELETICAL DISTURBANCES: ergonomic approaches to the optimization of working conditions. Risk of the sedentary position. Exercises lowering the static load. .
- 3. PREVENTION OF THE STRESS: Tests for self-availability to be stressed by the obvious load. Techniques for relaxation.
- 4. TREATMENT OF TOBACCO ADDICTION.
- 5. PROGRAMMES OF DRUGS ABUSE PRIMARY PREVENTION.
- 6. NUTRITION AND FOOD: food labelling, nutritional and health recommendations, nutritional safety .
- 7. ENVIRONMENT AND HEALTH: noise, light, radiation, living, water.
- 8. TOXICOLOGY IN PREVENTION.
- 9. WORK AND HEALTH.
- 10. EPIDEMIOLOGIC STUDY ABOUT THE NUTRITION OF TARGET POPULATIONS: proposals for the development of questionnaires, selection of a population sample, use of standardised questionnaires, digitalized information and data, evaluation of obtained results at individual and group basis.
- 11. SPECIAL TOXIKOLOGY: power point presentations on chosen chemical xenobiotics (Pb, Hg, Cr, Cd, toluene, benzene, trichlorethylene): their sources in the environment and working exposure, way of exposures, effects on humans. Clinical manifestations of poisoning, therapy. Primary and secondary prevention.
- 12. KOMPLEX PREVENTION OF CARDIOVASCULAR DISEASES: anamnesis, clinical and biochemical measurements of the main risk factors (smoking, nutrition, physical activity, blood lipids, anthropometry); evaluation of the results, preventive proposals.
- 13. SMOKING CESSATION AMONG THE HOSPITALIZED PATIENTS: Practical application of the 4A programme used for smoking cessation at some clinics.
- 14. BREAST-FEEDING PROMOTION: Practical application of the knowledge about the postnatal cure for newborns with the concern on the breast-feeding promotion.
- 15. EPIDEMIOLOGIC STUDIES WITH DIFFERENT AIMS: Preference of the different foods among children. The frequencies of the fast food consumption among children. Approaches of different target population groups to the non-smoking activities. Frequency of the fruit and vegetables consumption, dairy products among children.

- 16. CONSEQUENCES OF PRENATAL EXPOSURE TO SMOKING, during childhood and adulthood. Review of scientific literature.
- 17. BASIC OF RISK ASSESMENT, MANAGEMENT AND COMMUNICATION: examples of case-studies.
- 18. MAN AND ENVIRONMENT: Physical, biological, chemical and social factors in macro- and microenvironment. Their interactions. Ways of adaptation and compensation for keeping the homeostasis. "health" and "disease", their determinants.
- 19. PREVENTION: primary and secondary prevention, tasks and aims. The most important world and Czech primary prevention programmes.
- 20. NOISE: sources, impact on health, possibilities for control.
- 21. LIGHT AND ILLUMINATION: physiology of seeing, optimal working conditions. The physiologic sense of colours.
- 22. RADIATION: different types, their sources and impact on human health. Possibilities of control.
- 23. COMPLEX OF MICROCLIMATE: external and internal conditions. Ways of thermoregulation. Work places with extreme microclimate, rules for drinking schedule. Long-term and short-term thermal load.
- 24. BIOLOGICAL RHYTMS: circadian and other types, their influence on the performances. Shift work as a risk for health. Active and passive rest. Hygiene of sleeping.
- 25. AIR AND HEALTH: the most common contaminants of ambient air, their sources and human exposure. Smog. Health consequences of the exposure to polluted air.
- 26. BASIC TOXICOLOGY: ways of exposure, intake, uptake; metabolism of xenobiotics, genetic polymorphism in the microsomal enzymes; excretion. Health insure caused by chemical exposure, carcinogenesis. Similarities and differences between children and adults in toxicology.
- 27. HOUSING AND HEALTH: the most common risk factors at homes, health consequences of exposure (housing-related diseases, sick building syndrome, multiple chemical sensitivity). Ventilation, types and sense.
- 28. WATER AND HEALTH: the hygienic limits for drinking water, indicators of sewage contaminants. Trace elements in drinking water. Diseases related to water pollution. The principles for safety source of water.
- 29. NUTRITION AND HEALTH: diseases related to malnutrition and food contaminants. The role of nutrition in health promotion. Dietary guidelines. The ways for measurement of nutritional habits.
- 30. WASTE AND HEALTH: the types of waste products, their sources. Hygienic rules for safe destruction of waste products.
- 31. NATURAL AND MAN-MADE CHEMICALS IN ENVIRONMENT: their types, point and areal sources. Environment in the Czech Republic. Principles of the monitoring of environmental pollutants. "Natural pesticides".
- 32. SMOKING AND HEALTH: Smoking as the most important single preventable risk factor of premature morbidity and mortality. Dependence on smoking as a psychiatric disease. Involuntary smoking and health consequences of exposure.

- 33. WORKING AND HEALTH: risk occupational factors and related diseases. The rules for safety of occupational environment and health protection of workers.
- 34. STRESS AND HEALTH: physiologic response on stress situations. Stress-related diseases. Rules for the prevention of stress.
- 35. NON-COMMUNICABLE DISEASES: epidemiology, aetiology, prevention; Cardiovascular diseases, Cancer, Respiratory diseases, Allergy, Diabetes mellitus, Osteoporosis.

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- EPIDEMIOLOGY OF INFECTIOUS DISEASES:

- 1. General information about the course Epidemiology of infectious diseases. Goals of the epidemiology.
- 2. The basic knowledge of epidemiology - understanding the epidemiological methodology (descriptive, analytic, experimental epidemiology).
- 3. Epidemic process; aetiology and risk factors of epidemic diseases.
- 4. Form of sources of infection.
- 5. Contagiosity in particular stage of the disease.
- 6. Carriership of pathogenic microorganisms. Animals as source of infection.
- 7. Transmission of infectious diseases, phases of transmission.
- 8. Susceptibility of the population to the infection.
- 9. Active and passive vaccination.
- 10. Natural, social-economic factors.
- 11. Global epidemiology, epidemiologic surveillance.
- 12. Programme of eradication and elimination of infectious diseases.
- 13. Principles of control of infectious diseases - elimination of the source, interruption of transmission of infectious agents, measures in a focus of infection.
- 14. Surveillance of nosocomial infections (NI), aetiology NI, risk factors of acquiring NI, sources and localization NI, the principles of control NI.
- 15. Decontamination, disinfection and sterilization.
- 16. Epidemiological characteristics of the intestinal infections and prevention of their spreading.
- 17. Epidemiological characteristics of the airborne infections and prevention of their spreading.
- 18. Epidemiological characteristics of blood infections and prevention of their spreading.
- 19. Animals as sources of infection.
- 20. Infections of the skin and superficial mucous membrane - epidemiological characteristics and preventing their transmission.
- 21. Infections as occupational diseases and their prevention.
- 22. Infections in travelling and their prevention.
- 23. Epidemiological inspection in hospitals; the monitoring of the microbiological quality of the hospital environment.
- 24. The control of the disinfection and sterilization. Interpretation of the results.

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- SOCIAL / COMMUNITY MEDICINE AND PUBLIC HEALTH:

- 1. Public health - characteristics and general information.

- 2. Healthcare system (content, features, surroundings, current issues of healthcare system development).
- 3. Health situation in the Czech Republic, its current development and international comparisons.
- 4. Mortality as an indicator of health (health indicators based on death records, life expectancy, health aggregates).
- 5. Measuring disease frequency in the population (incidence, prevalence, mean duration of illness, relationships between indicators of morbidity).
- 6. Demography vs epidemiological transformation.
- 7. Social determinants of health.
- 8. Causes of increase in health care spending.
- 9. Health economics. The concept, theoretical background, main areas of interest (subjects).
- 10. The market and health care (market failure).
- 11. Types of healthcare systems in the world, their strengths and weaknesses.
- 12. Medical insurance (public health insurance, private health insurance).
- 13. Healthcare financing (sources of finance, structure of cash expenditure on health care reimbursement forms).
- 14. Effectiveness and efficiency, explanation of terms, their measurement and evaluation.
- 15. Accessibility of health care services.
- 16. The quality of health care, definitions, characteristics, possibilities for evaluation.
- 17. Evaluation of health care services (importance and evaluation methods, used indicators and their interpretation).
- 18. Medical needs (the needs, requirements and consumption of services).
- 19. Prevention and its obstacles (motivation to prevent, categorization prevention, prevention of barriers).
- 20. Primary care and self-care.
- 21. Medical education; role, importance and types of health literacy.
- 22. Educational program (preparation, implementation, evaluation).
- 23. Forms of decentralization.
- 24. Privatization of health care facilities.
- 25. Medical informatics and its application (information systems).
- 26. Cumulative assessment of the activities of the healthcare system (performance - responsiveness, decent financing, stewardship, methodology, interpretation).
- 27. The role of the state in health care.
- 28. The government protecting the public health.
- 29. Healthcare policy (term, focus, tools and healthcare policy goals).
Regionalization and decentralization.
- 30. The European healthcare policy (source and basis of European healthcare policy, program WHO Health 2020).

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• **MEDICAL LAW AND HEALTHCARE MANAGEMENT:**

- 1. Management theory and management of healthcare facilities.

- 2. State administration and local government in healthcare. Estates chamber, origin and historical development, current role. The basic rules of professional conduct, rights and obligations of members of the ČLK (Czech Medical Chamber).
- 3. The role of law in health care; basic legal standards in health care.
- 4. The rights and duties of citizens in health care (citizens' rights, patient rights, patient's right to information).
- 5. The provider of health care services, operating conditions; standardization and accreditation of health care providers; system providers, health care services, types and forms of health care.
- 6. The system of medical professions, the basic assumptions practice medicine; medical specialized education, lifelong learning for physicians.
- 7. Basic duties of health care professionals.
- 8. Lex artis (state of the art), definition, legal basis for liability.
- 9. Informed consent for medical procedures, denial of medical care, requirements for a negative reverse (denial of health care).
- 10. Legal liability in health care (civil liability of health care providers; criminal liability of doctors, the disciplinary responsibility of a doctor, offenses and administrative violations in health care)

Literature

required literature

- ŽÁČEK, A. and J. HOLČÍK. Sociální lékařství II, Úvod do veřejného zdravotnictví. Brno: Masarykova univerzita, 1992. 130 pp. ISBN 80-210-0375-8.
- KOTULÁN, Jaroslav and Drahoslava HRUBÁ. *Preventivní lékařství SO*. 1. vyd. Brno: Masarykova univerzita, 1993. [info](#)
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- *

recommended literature

- Required literature for PREVENTIVE MEDICINE AND HYGIENE
- *
- 1. Lener J et al: Medical hygiene. Prague - Czech Republic: Vydavatesltví Karolinum; 1997. pp 1-128.
- 2. Bártová J, Havránek J, Hrnčíř E, Lener J, Petrová K: General and environmental hygiene. Edited by J. Bártová. Prague - Czech Republic: 3rd Medical Faculty Charles University Prague; 1994. pp 5-87.
- 3. Varkey P: Mayo clinic preventive medicine and public health board review. Edited by Prathibha Varkey. New York - United States: Mayo Clinic Scientific Press - Oxford University Press; 2010. pp 111-232.
- 4. Brázdová Z, Fiala J: Dietary guidelines in the Czech Republic. Brno: Acta Facultatis Medicae Universitas Masarykianae; 1998.
- 5. Bonita R, Beaglehole R, Kjellström: Basic epidemiology. 2nd edition. Geneva - Switzerland: World Health Organization; 2006. pp 99-177.
- 6. www.who.int (information not found in the books).

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- Required literature for EPIDEMIOLOGY
- *
- 1. Bakoss P, Baška T, Bazovská S, Kmety E, Maďar R et al: Compendium of epidemiology. Edited by Pavol Bakoss. Bratislava - Slovak Republic: Comenius University Bratislava; 1999. pp 3-138.
- 2. Stone DB, Armstrong WR, Macrina DM, Pankau JW: Introduction to epidemiology. Dubuque, IA - USA: Brown & Benchmark Publishers; 1996. pp 22-63, 115-150.
- 3. Farmer R, Lawrenson R, Miller D: Epidemiology and public health medicine. 5th edition. Oxford - U.K.: Blackwell Publishing; 2004. pp 7-13, 91-126.
- 4. Bonita R, Beaglehole R, Kjellström: Basic epidemiology. 2nd edition. Geneva - Switzerland: World Health Organization; 2006. pp 117-131.
- 5. www.who.int (information not found in the books).
- 6. www.cdc.gov (information not found in the books).
- 7. <http://ecdc.europa.eu/en/Pages/home.aspx> (information not found in the books).
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- Required literature for SOCIAL / COMMUNITY MEDICINE, PUBLIC HEALTH AND HEALTHCARE ADMINISTRATION
- *
- 1. Study material for public health and healthcare administration (20 chapters / questions) CAN BE BORROWED at the Department of Public Health A21, office 321. Students MUST return it back the day of examination in good condition.
- 2. Bonita R, Beaglehole R, Kjellström: Basic epidemiology. 2nd edition. Geneva - Switzerland: World Health Organization; 2006. pp 1-60, 83-113, 165-176.
- 3. Seminar papers (Forty-two) in the subject's vault VLZP11XX - Public Health State Examination Questions (Group D).
- *
- *
- Recommended literature for PREVENTIVE MEDICINE AND HYGIENE
- Hrubá D: Occupational Medicine Practice. Basic Toxicology. (Fundamental abstracts from textbooks. LF MU: 1997).

Teaching methods

Reading and studying ALL REQUIRED LITERATURE.

The Public Health State Examination is an oral examination, in which each student randomly selects a question from every set (group) of questions, as follows:

- Preventive medicine and hygiene.
- Epidemiology.
- Public health.
- Healthcare law, administration and management - 42 seminar papers (public health subjects vault - See the Information System).

Assessment methods

PUBLIC HEALTH STATE EXAMINATION INFORMATION:

1. To sit for a state examination, it will be required to successfully complete all the prerequisite subjects.
2. The state examination is oral in front of a committee.
3. Students **MUST** succeed in **ALL** questions. Failing one question leads to examination failure. In the following term the student must answer a new question from each set again.
4. Each student must register in the Information System (IS) in one of the offered examination terms. The examination has fixed examination terms / dates - (Only during the examination period, except the examination pre-term). No extra-terms will be given.
5. Students registered to an examination term will fail the term if:
 - a-) arrive late the examination day.
 - b-) they are not present and previously did not cancel the term in the stipulated periods (see IS).
6. In case of failure, **EACH STUDENT CAN RETAKE THE STATE EXAMINATION TWO MORE TIMES**, only in given terms (according to Masaryk University study rules).
7. In case of failure during the third term (second resit), the student must repeat the course in the following school year.
8. All state examination questions are based on **ALL REQUIRED LITERATURE**, seminars and lectures on each examined subject (Social medicine; epidemiology of infectious diseases; preventive medicine; public health; and healthcare law, administration and management).

ACADEMIC MISCONDUCT, PLAGIARISM DETECTION AND UNETHICAL ISSUES:

1. Any attempts of **ACADEMIC MISCONDUCT**, such as cheating or assisting someone else to cheat during the credit test, will result in disciplinary actions, such as:
 - a-) You will be required to hand over your examination paper and asked to leave the examination room. This means, you failed the examination (examination term), with the respective score F / 4, on your academic records in the information system.
 - b-) Opening disciplinary proceedings.
 - c-) Failing the subject / course.
 - d-) Expulsion from university.
2. During the examination, it is forbidden to:
 - a-) Use smart phones / Tablets.
 - b-) Use laptops.
 - c-) To wear earphones or headphones (if not medical prescribed).

d-) To talk.

*In such cases, disciplinary actions will be taken (See above numeral 1).

Language of instruction

English

Further Comments

The course can also be completed outside the examination period.

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

aZC011 Handling chemical substances ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/0/0. 0 credit(s). Type of Completion: z (credit).

Teacher(s)

[doc. RNDr. Jiří Dostál, CSc.](#) (lecturer)

[Ing. Martina Čarnecká, Ph.D.](#) (seminar tutor)

[MUDr. Miroslava Hlaváčová](#) (seminar tutor)

[RNDr. Hana Paulová, CSc.](#) (seminar tutor)

[Mgr. Ondřej Peš, Ph.D.](#) (seminar tutor)

[PharmDr. Kristýna Šebrlová, Ph.D.](#) (seminar tutor)

[Mgr. Marie Tomandlová, Ph.D.](#) (seminar tutor)

[Mgr. Jiří Slanina, Ph.D.](#) (assistant)

Supervisor

[doc. RNDr. Jiří Dostál, CSc.](#)

[Faculty of Medicine](#)

Supplier department: [Faculty of Medicine](#)

Prerequisites

For all students manipulating with chemical substances during their study at Faculty of Medicine, MU. The subject is necessary to pass every academic year.

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [Physiotherapy \(Eng.\)](#) (programme LF, B-SZ)
- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)
- [Dentistry \(eng.\)](#) (programme LF, M-ZL)
- [Dentistry](#) (programme LF, M-ZL)

Course objectives

The course "Handling chemical substances" is compulsory for all students who manipulate with chemicals in the practical courses during their studies at Faculty of Medicine, MU. This fact follows from study plans, responsible persons are guarantors of individual study fields. Main objectives are: to know basic chemical legislation, to master handling chemical substances including hazardous chemicals, and to know the removal of chemical wastes.

Syllabus

- basic definitions characteristics of hazardous chemicals hazard symbols, H-phrases, P-phrases safety sheet packing and labeling of hazardous chemicals storing of chemical substances responsibility of person basic rules for working in chemical laboratories removal of chemical wastes

Literature

required literature

- <http://www.rect.muni.cz/nso/>

Teaching methods

Introductory lecture at the beginning of semester in practical exercises and/or first lecture.

Assessment methods

The graduation from this course is every-year testing (valid for all registered students).

Language of instruction

English

Further comments (probably available only in Czech)

The course is taught annually.

Note related to how often the course is taught: první týden v semestru.

General note: Povinné každoroční školení bez kreditového hodnocení. Absolvování tohoto předmětu je nutnou podmínkou pro vstup do všech předmětů, ve kterých dochází k manipulaci s chemickými látkami (laboratorních cvičení, bakalářských a diplomových prací).

Information on the extent and intensity of the course: 2 hod celkem.

Listed among pre-requisites of other courses

- [aZLAN0232p Anatomy II - lecture](#)
([aZLAN0131s](#)||[ZLAN0131s](#)) && ([aZC011](#)||[ZC011](#)) ([Do I meet enrolment requirements?](#))
- [aZLAN0232s Anatomy II - seminar](#)
([aZLAN0131s](#)||[ZLAN0131s](#)) && ([aZC011](#)||[ZC011](#)) ([Do I meet enrolment requirements?](#))
- [aZLBC0221p Biochemistry I - lecture](#)
([aZLLC011s](#)||[ZLLC011s](#)) && ([aZC011](#)||[ZC011](#)) ([Do I meet enrolment requirements?](#))
- [aZLBC0221s Biochemistry I - seminar](#)
([aZLLC011s](#)||[ZLLC011s](#)) && ([aZC011](#)||[ZC011](#)) ([Do I meet enrolment requirements?](#))

- [aZLBI0222c Biology II - practice](#)
([aZLBI0121c](#)||[ZLBI0121c](#)) && ([aZC011](#)||[ZC011](#)) ([Do I meet enrolment requirements?](#))
- [aZLBI0222p Biology II - lecture](#)
([aZLBI0121c](#)||[ZLBI0121c](#)) && ([aZC011](#)||[ZC011](#)) ([Do I meet enrolment requirements?](#))
- [aZLET021c Ethics in Dentistry - practice](#)
[aZC011](#) || [ZC011](#) ([Do I meet enrolment requirements?](#))
- [aZLET021p Ethics in Dentistry - lecture](#)
[aZC011](#) || [ZC011](#) ([Do I meet enrolment requirements?](#))
- [aZLHE0221c Histology and Embryology I - practice](#)
([aZLAN0131s](#)||[ZLAN0131s](#)) && ([aZC011](#)||[ZC011](#)) ([Do I meet enrolment requirements?](#))

[Zobrazit další předměty](#)

Teacher's information

<http://www.rect.muni.cz/nso/>

The course is also listed under the following terms [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

CJVAT01 English - entrance test ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/0/0. 0 credit(s). Type of Completion: -.

Teacher(s)

[Mgr. Markéta Kovaříková](#) (lecturer)
[Ing. Bc. David Schüller](#) (seminar tutor)
[PhDr. Tamara Váňová](#) (seminar tutor)
[Mgr. et Mgr. Marie Barotová](#) (assistant)
[Mgr. et Mgr. Zuzana Handlová](#) (assistant)
[Mgr. Robert Helán, Ph.D.](#) (assistant)
[Joseph Lennon, BA, Ph.D.](#) (assistant)
[PaedDr. Marta Rybičková, Ph.D.](#) (assistant)
[Mgr. Dana Straková](#) (assistant)
[Mgr. Veronika Tománková, Ph.D.](#) (assistant)

Supervisor

[Mgr. Markéta Kovaříková](#)
[Language Centre, Faculty of Medicine Division - Faculty Branches of University Departments - Faculty of Medicine](#)
 Contact Person: [Mgr. Markéta Kovaříková](#)
 Supplier department: [Language Centre, Faculty of Medicine Division - Language Centre](#)

Prerequisites

Language skills acquired before a student's admission at MU.

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

there are 15 fields of study the course is directly associated with, [display](#)

Course objectives

This subject tests the knowledge of the students of the Faculty of Medicine who enroll in English Language 1 course.

Learning outcomes

This is an entrance language test for the 1st year students of the Faculty of Medicine. This self-assessment test is available in an English and its goal is to assess entrance language skills of students who were admitted to the study prior to the beginning of the subject English 1. The test result and assessment, which a student will see, is a significant anticipation of a successful preparation for an exam in the English language. Taking the test is compulsory for all first-semester students admitted to the Faculty of Medicine. The access to the test is time-limited; the number of attempts at taking the test is limited too (see guidelines for taking the test). The achieved level suggests if the language knowledge is sufficient to enroll in the subject English 1.

Syllabus

- -

Literature

- Any materials aimed at preparation for B1 level examinations.

Teaching methods

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Assessment methods

There are no lessons taught in this subject. CJVAT01 serves only as an entrance test to the subject English Language 1. This test is compulsory for all the students at the Faculty of Medicine who enroll in English Language 1.

Language of instruction

Czech

Further Comments

[Study Materials](#)

The course is taught annually.

Listed among pre-requisites of other courses

- [BAAJ0121 English Language I - practice](#)
[CJVAT01 \(Do I meet enrolment requirements?\)](#)
- [BDAJ0121 English Language I - practice](#)
[CJVAT01 \(Do I meet enrolment requirements?\)](#)
- [BFAJ0121 English Language I - practice](#)
[CJVAT01 \(Do I meet enrolment requirements?\)](#)

- [BHAJ0121 English language I - practice](#)
[CJVAT01 \(Do I meet enrolment requirements?\)](#)
- [BLAN0321 English Language I - practice](#)
[CJVAT01 \(Do I meet enrolment requirements?\)](#)
- [BLKAN0321 English Language I - practice](#)
[CJVAT01 \(Do I meet enrolment requirements?\)](#)
- [BOAJ0121 English Language I - practice](#)
[CJVAT01 \(Do I meet enrolment requirements?\)](#)
- [BPAJ0121 English Language I - practice](#)
[CJVAT01 \(Do I meet enrolment requirements?\)](#)
- [BRAJ0121 English Language I - practice](#)
[CJVAT01 \(Do I meet enrolment requirements?\)](#)

[Zobrazit další předměty](#)

Teacher's information

<https://is.muni.cz/auth/el/1411/podzim2019/CJVAT01/index.qwarp>

The course is also listed under the following terms [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#), [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

DSCB060 Masaryk University Life Sciences Seminar sponsored by CEITEC and ICRC ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2/0. 5 credit(s). Type of Completion: z (credit).

Teacher(s)

[Mgr. et Mgr. Ľubomíra Anderková, Ph.D.](#) (lecturer)

[doc. Mgr. Vítězslav Bryja, Ph.D.](#) (lecturer)

[prof. Mgr. Jiří Damborský, Dr.](#) (lecturer)

[doc. Mgr. Lumír Krejčí, Ph.D.](#) (lecturer)

[Mgr. Lucie Nesvadbová](#) (lecturer)

[Mary O'Connell, Ph.D., MS](#) (lecturer)

[Mgr. Veronika Papoušková, Ph.D.](#) (lecturer)

[prof. Mgr. Stanislav Pekár, Ph.D.](#) (lecturer)

[Mgr. Karel Říha, Ph.D.](#) (lecturer)

[prof. RNDr. Vladimír Sklenář, DrSc.](#) (lecturer)

[Mgr. Martina Vráblíková](#) (lecturer)

Supervisor

[doc. Mgr. Lumír Krejčí, Ph.D.](#)

[Department of Biology - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [Mgr. Martina Vráblíková](#)

Supplier department: [Department of Biology - Theoretical Departments - Faculty of Medicine](#)

Prerequisites

Students need to have good knowledge of university level biology and other respective fields related to the Mendel lecture talks.

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

there are 79 fields of study the course is directly associated with, [display](#)

Course objectives

The goal of the MU Life Sciences Seminar is to become an ongoing prestigious seminar series at UKB in the interconnected and complementary fields, collectively called "Life Sciences". The seminar series, expanding already successfully implemented CEITEC Structural Biology Seminar Series, is focused on currently growing fields, which combine modern methods of biophysics, computational modelling, imaging, biochemistry and molecular biology with "more classical" disciplines such as microbiology, cell biology, physiology, genetics, toxicology, developmental and evolutionary biology and medicine. Purpose: The purpose of the seminar series is to (i) invite to Brno renowned speakers from abroad to establish and develop professional contacts, (ii) create a Seminar Series of excellence, which will inspire and motivate both scientists and students at MU, and (iii) finally, to promote mutual contacts and interaction between individual labs/departments working at UKB. This seminar series includes the Mendel lectures. Community: All Departments and PhD programs, whose research encompass "Life Sciences" and are situated at UKB, are very welcome to join the Seminar Series. Format: One hour talk takes place each Thursday during the semester in lecture hall A11. Host (a person, which nominated the speaker) together with the administrator are responsible to arrange the program of visit for the speaker with the aim to maximize the interaction with interested local scientists.

Learning outcomes

Students will obtain knowledge about currently growing fields, which combine modern methods of biophysics, computational modelling, imaging, biochemistry and molecular biology with "more classical" disciplines such as microbiology, cell biology, physiology, genetics, toxicology, developmental and evolutionary biology and medicine.

Syllabus

- Updated programme to be found at the following websites: www.ceitec.cz/life-sciences-seminar-series/t2068 www.mendellectures.muni.cz

Literature

- VOET, Donald, Judith G. VOET and Charlotte W. PRATT. *Fundamentals of biochemistry : life at the molecular level*. 3rd ed. Hoboken, N.J.: John Wiley & Sons, 2008. xxx, 1099. ISBN 9780470129302. [info](#)

Teaching methods

Seminar; Lecture & presentation

Assessment methods

Sufficient presence (80% = 8 lectures per semester) at the MU Life Science Seminar Series is required. The presence will be checked using the official attendance lists. It is possible to substitute an absence by attending a Mendel lecture.

Language of instruction

Czech

Further Comments

[Study Materials](#)

The course is taught each semester.

The course is taught: every week.

The course is also listed under the following terms [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

DSCC060 Masaryk University Life Sciences Seminar sponsored by CEITEC and ICRC ✳

Faculty of Medicine

Spring 2018

Extent and Intensity

0/2/0. 5 credit(s). Type of Completion: z (credit).

Teacher(s)

[Mgr. et Mgr. Lubomíra Anderková, Ph.D.](#) (lecturer)

[doc. Mgr. Vítězslav Bryja, Ph.D.](#) (lecturer)

[MUDr. Alena Damborská, Ph.D.](#) (lecturer)

[prof. Mgr. Jiří Damborský, Dr.](#) (lecturer)

[prof. Ing. Petr Dvořák, CSc.](#) (lecturer)

[doc. Mgr. Lumír Krejčí, Ph.D.](#) (lecturer)

[Mgr. Lucie Nesvadbová](#) (lecturer)

[Mary O'Connell, Ph.D., MS](#) (lecturer)

[Mgr. Veronika Papoušková, Ph.D.](#) (lecturer)

[prof. Mgr. Stanislav Pekár, Ph.D.](#) (lecturer)

[Mgr. Karel Říha, Ph.D.](#) (lecturer)

[prof. RNDr. Vladimír Sklenář, DrSc.](#) (lecturer)

[Mgr. Martina Vráblíková](#) (lecturer)

Supervisor

[doc. Mgr. Lumír Krejčí, Ph.D.](#)

[Department of Biology - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [Mgr. Martina Vráblíková](#)

Supplier department: [Department of Biology - Theoretical Departments - Faculty of Medicine](#)

Prerequisites

Students need to have knowledge of biology and other fields (according to the talks topic) at university level.

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

there are 171 fields of study the course is directly associated with, [display](#)

Course objectives

The goal of the MU Life Sciences Seminar is to become an ongoing prestigious seminar series at UKB in the interconnected and complementary fields, collectively called "Life Sciences". The seminar series, expanding already successfully implemented CEITEC Structural Biology Seminar Series, is focused on currently growing fields, which combine modern methods of biophysics, computational modelling, imaging, biochemistry and molecular biology with "more classical" disciplines such as microbiology, cell biology, physiology, genetics, toxicology, developmental and evolutionary biology and medicine. Purpose: The purpose of the seminar series is to (i) invite to Brno renowned speakers from abroad to establish and develop professional contacts, (ii) create a Seminar Series of excellence, which will inspire and motivate both scientists and students at MU, and (iii) finally, to promote mutual contacts and interaction between individual labs/departments working at UKB. This seminar series includes the Mendel lectures. Community: All Departments and PhD programs, whose research encompass "Life Sciences" and are situated at UKB, are very welcome to join the Seminar Series. Format: One hour talk takes place each Thursday during the semester in lecture hall A11.

Learning outcomes

Students will obtain knowledge about currently growing fields, which combine modern methods of biophysics, computational modelling, imaging, biochemistry and molecular biology with "more classical" disciplines such as microbiology, cell biology, physiology, genetics, toxicology, developmental and evolutionary biology and medicine.

Syllabus

- The actual program: www.mendellectures.muni.cz and www.ceitec.cz/life-sciences-seminar-series/t2068

Literature

- VOET, Donald, Judith G. VOET and Charlotte W. PRATT. *Fundamentals of biochemistry : life at the molecular level*. 3rd ed. Hoboken, N.J.: John Wiley & Sons, 2008. xxx, 1099. ISBN 9780470129302. [info](#)

Teaching methods

Seminar; Lecture & presentation

Assessment methods

Active attendance required. Minimum 80% of obligatory attendance or attendance depending on the decision of each supervisor.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught each semester.

The course is taught: every week.

General note: Rozvrh pro období jaro 2015 bude zveřejněn v So 31. 1. 2015.

Teacher's information

<https://www.ceitec.cz/life-sciences-seminar-series/t2068>

The course is also listed under the following terms [Spring 2015](#), [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

DSETz01 Ethics of Biomedical Research *

Faculty of Medicine

Autumn 2019

Extent and Intensity

4/0/0. 5 credit(s). Type of Completion: k (colloquium).

Teacher(s)

[doc. Mgr. Josef Kuře, Dr. phil.](#) (lecturer)

Supervisor

[doc. Mgr. Josef Kuře, Dr. phil.](#)

[Department of Medical Ethics - Theoretical Departments - Faculty of Medicine](#)

Supplier department: [Department of Medical Ethics - Theoretical Departments - Faculty of Medicine](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

The capacity limit for the course is 40 student(s).

Current registration and enrolment status: enrolled: **38/40**, only registered: **2/40**, only registered with preference (fields directly associated with the programme): **2/40**

Fields of study the course is directly associated with

there are 116 fields of study the course is directly associated with, [display](#)

Course objectives

Course is for PhD students from medical or biological field of study. The main objectives are: - to introduce to the ethical problems in biomedical research - to develop ability to perceive ethical aspects of biomedical research, mainly in one's research - to acquire the ethical and legal principles and its use in project application - to develop ability to independently solve new ethical problems in biomedical research

Syllabus

- Science and ethics & Ethics of biomedical research (historical overview) & Human subject research & Human biological material used for research purposes & Animal research & Ethics of scientific conduct (scientific integrity) & Regulatory frameworks & Ethics Committees & Ethical and legal requirements of grant application

Literature

recommended literature

- FOSTER, Claire. *The ethics of medical research on humans*. New York: Cambridge University Press, 2001. xiii, 159. ISBN 0521645735. [info](#)

- *The Oxford textbook of clinical research ethics*. Edited by Ezekiel J. Emanuel. New York: Oxford University Press, 2008. xx, 827. ISBN 0195168658. [info](#)
- MACRINA, Francis L. *Scientific integrity : text and cases in responsible conduct of research*. 3rd ed. Washington, DC: ASM Press, 2005. xxv, 402. ISBN 1555813186. [info](#)
- MURPHY, Timothy F. *Case studies in biomedical research ethics*. 1st ed. Cambridge: MIT Press, 2004. xvii, 340. ISBN 0262134373. [info](#)
- *Research ethics : a reader*. Edited by Deni Elliott - Judy E. Stern. 1st ed. Hanover: University Press of New England, 1997. xii, 319. ISBN 0874517974. [info](#)
- WEIR, Robert F., Robert S. OLICK and Jeffrey C. MURRAY. *Stored tissue issue : biomedical research, ethics, and law in the era of genomic medicine*. 1st ed. Oxford: Oxford University Press, 2004. xvii, 339. ISBN 9780195123685. [info](#)
- ROLLIN, Bernard E. *Science a ethics*. 1st ed. Cambridge: Cambridge University Press, 2006. xii, 292. ISBN 0521857546. [info](#)
- *Research ethics*. Edited by Ana Smith Iltis. New York: Routledge, 2006. 181 s. ISBN 0415701589. [info](#)
- BIGGS, Hazel. *Healthcare research ethics and law : regulation, review and responsibility*. New York, NY: Routledge-Cavendish, 2010. xvi, 188. ISBN 9780203940402. [info](#)
- *Ethics of biomedical research : an international perspective*. Edited by Baruch A. Brody. 1st ed. Oxford: Oxford University Press, 1998. xiii, 386. ISBN 0195090071. [info](#)

Teaching methods

lecture, essay

Assessment methods

paper, (oral) colloquium

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught each semester.

The course is taught: in blocks.

Note related to how often the course is taught: 9.10. 2019, 13:00-16:30, UBK, Kamenice 5, A19/113, vstup z koridoru 2.NP.

Teacher's information

Závěrečné hodnocení (kolokvium) je tvořeno písemnou a ústí částí: A) Písemná: 1. Přehled etických aspektů vlastní výzkumné práce/projektu (resp. oboru doktorského studia) - Co vše je z etického hlediska důležité v mém výzkumném projektu, resp. v oboru mého doktorského studia? 2. Pojednání o jednom vybraném etickém aspektu vlastní výzkumné práce/projektu (1.) včetně formulace zdůvodněného etického stanoviska. B) Ústní: Rozprava nad 1. a 2. a obhájení 2. Obě písemné části se podávají v elektronické podobě nejpozději dva dny před kolokviem (na adresu: jkure@med.muni.cz).

The course is also listed under the following terms [Spring 2000](#), [Autumn 2000](#), [Autumn 2001](#), [Spring 2002](#), [Autumn 2002](#), [Spring 2003](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn](#)

[2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

MPPL072 Public Health ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

2/0/0. 6 credit(s). Type of Completion: SZK (final examination).

Teacher(s)

[prof. MUDr. Bc. Zuzana Derflerová Brázdová, DrSc.](#) (lecturer)

[doc. MUDr. Jindřich Fiala, CSc.](#) (lecturer)

[prof. MUDr. Drahošlava Hrubá, CSc.](#) (lecturer)

[RNDr. Danuše Lefnerová, Ph.D.](#) (lecturer)

[Mgr. Aleš Peřina, Ph.D.](#) (lecturer)

[doc. MUDr. Jan Šimůnek, CSc.](#) (lecturer)

Supervisor

[doc. MUDr. Jindřich Fiala, CSc.](#)

[Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [Zdeňka Jočová](#)

Supplier department: [Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Prerequisites

Pre-requisites, according to the order of the study

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

Student will explain the relationships between man and environment. Student will be able to evaluate the impact of life conditions and life styl in the ethiology of the most important non-communicable diseases. Student will define the main risk factors and their management toward the health protection, as well as the factors for health promotion. Student will distinguish types of prevention and their aims. Student will be able to formulate expert advices about the primary prevention topics.

Syllabus

- MAN AND ENVIRONMENT: Physical, biological, chemical and social factors in macro- and microenvironment. Their interactions. Ways of adaptation and compensation for keeping the homeostasis. "health" and "disease", their determinants.

- **PREVENTION:** primary and secondary prevention, tasks and aims. The most important world and Czech primary prevention programmes. **NOISE:** sources, impact on health, possibilities for control.
- **LIGHT AND ILLUMINATION:** physiology of seeing, optimal working conditions. The physiologic sense of colours.
- **RADIATION:** different types, their sources and impact on human health. Possibilities of control.
- **COMPLEX OF MICROCLIMATE:** external and internal conditions. Ways of thermoregulation. Work places with extreme microclimate, rules for drinking schedule. Long-term and short-term thermal load.
- **BIOLOGICAL RHYTHMS:** circadian and other types, their influence on the performances. Shift work as a risk for health. Active and passive rest. Hygiene of sleeping.
- **AIR AND HEALTH:** the most common contaminants of ambient air, their sources and human exposure. Smog. Health consequences of the exposure to polluted air.
- **BASIC TOXICOLOGY:** ways of exposure, intake, uptake; metabolism of xenobiotics, genetic polymorphism in the microsomal enzymes; excretion. Health insurance caused by chemical exposure, carcinogenesis. Similarities and differences between children and adults in toxicology.
- **HOUSING AND HEALTH:** the most common risk factors at homes, health consequences of exposure (housing-related diseases, sick building syndrome, multiple chemical sensitivity). Ventilation, types and sense.
- **WATER AND HEALTH:** the hygienic limits for drinking water, indicators of sewage contaminants. Trace elements in drinking water. Diseases related to water pollution. The principles for safety source of water.
- **NUTRITION AND HEALTH:** diseases related to malnutrition and food contaminants. The role of nutrition in health promotion. Dietary guidelines. The ways for measurement of nutritional habits.
- **WASTE AND HEALTH:** the types of waste products, their sources. Hygienic rules for safe destruction of waste products.
- **NATURAL AND MAN-MADE CHEMICALS IN ENVIRONMENT:** their types, point and areal sources. Environment in the Czech Republic. Principles of the monitoring of environmental pollutants. "Natural pesticides".
- **SMOKING AND HEALTH:** Smoking as the most important single preventable risk factor of premature morbidity and mortality. Dependence on smoking as a psychiatric disease. Involuntary smoking and health consequences of exposure.
- **WORKING AND HEALTH:** risk occupational factors and related diseases. The rules for safety of occupational environment and health protection of workers.
- **STRESS AND HEALTH:** physiologic response on stress situations. Stress-related diseases. Rules for the prevention of stress.
- **NON-COMMUNICABLE DISEASES:** epidemiology, etiology, prevention; Cardiovascular diseases, Cancer, Respiratory diseases, Allergy, Diabetes mellitus, Osteoporosis.

Literature

- Provazník K. aj.: Manuál prevence v lékařské praxi. 3. LF UK Praha, SZÚ Praha, 2003, 2004
- Kotulán aj: Preventivní lékařství I, II. Lékařská fakulta MU, 1991, 1992
- Brázdová Z.: Dietary guidelines. LF MU,

Teaching methods

Lectures

Assessment methods

A written credit test in the last week of semester: 20 of test questions, 70 % of correct answers is needed to get credit.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

General note: Vybraná témata vhodná pro studenty zdravotně specializace učitelství na 1. stupni ZŠ.

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#), [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

USMLE USMLE ✱

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/0/0. Type of Completion: -.

Teacher(s)

[MUDr. Marek Čierny](#) (seminar tutor)

[MUDr. Petr Vaněk](#) (seminar tutor)

[MUDr. Timotej Vataha](#) (seminar tutor)

[Mgr. Jiří Kratochvíl, Ph.D.](#) (assistant)

Supervisor

[prof. RNDr. Eva Táborská, CSc.](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Language of instruction

Czech

Further Comments

The course is taught each semester.
The course is also listed under the following terms [Autumn 2013](#), [Autumn 2014](#), [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

usmle_jaro USMLE ✳

Faculty of Medicine

Spring 2018

Extent and Intensity

0/0. Type of Completion: -.

Teacher(s)

[MUDr. Marek Čierný](#) (seminar tutor)

[MUDr. Petr Vaněk](#) (seminar tutor)

[Šimon Hajda](#) (assistant)

[Mgr. Jiří Kratochvíl, Ph.D.](#) (assistant)

[MUDr. Klára Valešová](#) (assistant)

[MUDr. Timotej Vataha](#) (assistant)

Supervisor

[prof. RNDr. Eva Tábořská, CSc.](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Language of instruction

Czech

Further Comments

The course is taught each semester.
The course is also listed under the following terms [Spring 2014](#), [Spring 2015](#), [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VLADV041 Vybrané kapitoly anatomie dětského věku ✳

Faculty of Medicine

Spring 2018

Extent and Intensity

0.8/0/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. RNDr. Petr Dubový, CSc.](#) (lecturer)

[MUDr. Marek Joukal, Ph.D.](#) (lecturer)

[MUDr. Lenka Vargová, Ph.D.](#) (lecturer)
[Dana Procházková](#) (assistant)

Supervisor

[prof. RNDr. Petr Dubový, CSc.](#)
[Department of Anatomy - Theoretical Departments - Faculty of Medicine](#)

Prerequisites

[VLAN0222p Anatomy II 1](#) || [VSAN0333p Anatomy III - lec.](#)
basic knowledge of anatomy adult
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

based on acquired knowledge, students will be able to understand the morphological changes to the anatomical relationships during childhood

Syllabus

- Syllabus
- 1. The growth period, growth of proportionality; postnatal development of musculoskeletal system
- 2. Postnatal development of the digestive and respiratory systems
- 3. Postnatal development of female and male urogenital system; postnatal development of the cardiovascular system
- 4. Postnatal development of the nervous system and sensory organs
- 5. Overview topography of the head, neck and chest in neonates and infants
- 6. Overview topography of the abdomen and pelvis in neonates and infants, credit

Literature

required literature

- [VARGOVÁ, Lenka](#) and [Marek JOUKAL](#). *Anatomie dětského věku (Anatomy of childhood)*. 1. vyd. Brno: Masarykova univerzita, 2015. 199 pp. ISBN 978-80-210-8061-4. [info](#)

recommended literature

- Chamley, C. A., Carson, P., Randall, D., Sandwell, M. (2005): *Developmental Anatomy and Physiology of Children*. Elsevier.

Teaching methods

lecture

Assessment methods

credit - obliged to attend the lecture

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught: every other week.

Information on the extent and intensity of the course: 12hod/semestr.

Information on course enrolment limitations: Přednášky pro zájemce o pediatrický směr nezbytné, mohou si je zapisovat i studenti z vyšších ročníků, kteří již studijí v pediatrickém směru.

The course is also listed under the following terms [Spring 2019](#), [Accreditation spring](#).

VLAJ0121 English Language 1 I - practice *

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[Mgr. et Mgr. Marie Barotová](#) (seminar tutor)

[Mgr. Robert Helán, Ph.D.](#) (seminar tutor)

[Mgr. Markéta Kovaříková](#) (seminar tutor)

[Joseph Lennon, BA, Ph.D.](#) (seminar tutor)

[Mgr. Dana Straková](#) (seminar tutor)

[Mgr. Veronika Tománková, Ph.D.](#) (seminar tutor)

[Mgr. et Mgr. Zuzana Handlová](#) (assistant)

[PhDr. Jana Vyorálková](#) (assistant)

Supervisor

[Mgr. Veronika Tománková, Ph.D.](#)

[Language Centre, Faculty of Medicine Division - Faculty Branches of University](#)

[Departments - Faculty of Medicine](#)

Contact Person: [Mgr. Veronika Tománková, Ph.D.](#)

Supplier department: [Language Centre, Faculty of Medicine Division - Faculty Branches of University Departments - Faculty of Medicine](#)

Timetable of Seminar Groups

VLAJ0121/01: Tue 14:50–16:30 [A15/113](#), *R. Helán*

VLAJ0121/02: Wed 11:30–13:10 [A15/113](#), *M. Kovaříková*

VLAJ0121/03: Mon 11:30–13:10 [A15/113](#), *M. Kovaříková*

VLAJ0121/04: Mon 13:20–15:00 [A15/113](#), *M. Kovaříková*

VLAJ0121/05: Thu 9:20–11:00 [A15/113](#), *M. Kovaříková*

VLAJ0121/06: Thu 7:30–9:10 [A15/113](#), *M. Kovaříková*

VLAJ0121/07: Fri 9:15–10:55 [A15/113](#), *M. Barotová*

VLAJ0121/08: Fri 7:30–9:10 [A15/113](#), *M. Barotová*

VLAJ0121/09: Tue 7:30–9:10 [A15/113](#), *V. Tománková*

VLAJ0121/10: Mon 15:10–16:50 [A15/113](#), *V. Tománková*

VLAJ0121/11: Tue 9:20–11:00 [A15/113](#), *V. Tománková*

VLAJ0121/12: Tue 13:00–14:40 [A15/113](#), *R. Helán*

VLAJ0121/13: Tue 11:10–12:50 [A15/113](#), *J. Lennon*
VLAJ0121/14: Fri 11:10–12:50 [A15/113](#), *M. Barotová*
VLAJ0121/15: Thu 13:00–14:40 [A15/113](#), *J. Lennon*
VLAJ0121/16: Thu 14:50–16:30 [A15/113](#), *J. Lennon*
VLAJ0121/25: Mon 18:30–20:10 [KOM 409](#), *R. Helán*, Skupina pro 2. a 3. ročník.
VLAJ0121/26: Thu 13:05–14:45 [A11/327](#), *D. Straková*, Skupina pro 2. a 3. ročník.

Prerequisites

General English at the B1+ CEFR level.

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

The course objective is to develop students' receptive (reading, listening) and productive (speaking, writing) English language skills and to enhance their knowledge of selected grammar chapters at level B2. The course also seeks to develop in students knowledge of specialized discipline-specific vocabulary and skills for effective doctor-patient communication.

Learning outcomes

At the end of the course students should be able to describe and explain terms related to body systems (namely skeletal, muscular, cardiovascular, hematic, lymphatic, gastrointestinal, respiratory, and integumentary systems), their organs, functions and disorders; use practical medical vocabulary (namely the language of communication in hospital, surgery, and when examining patients; language of describing treatment, medication, medical instruments, and machines); should be able to apply medical language in doctor-patient communication, interpret medical texts, create medical documentation; use grammatical structures typical for medical language.

Syllabus

- 1. week: Introduction to the Study of English, E-learning, requirements, assessment, recommended literature and other study sources.
- 2. week: The Human Body. Topic: Naming Parts of the Body.
- 3. week: Muscular and Skeletal Systems - Anatomy. Topic: At the Doctor's.
- 4. week: Muscular and Skeletal Systems - Pathological Conditions.
- 5. week: Cardiovascular and Hematic/Lymphatic Systems - Anatomy. Topic: Injuries.
- 6. week: Cardiovascular and Hematic/Lymphatic Systems - Pathological Conditions.
- 7. week: Gastrointestinal System - Anatomy. Topic: In Hospital.
- 8. week: MIDTERM TEST
- 9. week: Gastrointestinal System - Pathological Conditions.
- 10. week: Respiratory System - Anatomy and Pathological Conditions.
- 11. week: Integumentary System - Anatomy. Topic: Feeling Ill.
- 12. week: Integumentary System - Pathological Conditions.

- 13. week: Autopsy Week - lessons cancelled (supplementary work)
- 14. week: FINAL TEST.
- Grammar taught in the course: passive, relative clauses, forming questions.
- In addition to the above mentioned topics and grammar, the course will also focus on the mastery of communicative skills - i.e. speaking, listening, reading, and writing - on the B2 level of the European Reference Framework.

Literature

- [KOBYLKOVÁ, Anděla](#). *English for medical students*. 2. vyd. Brno: Masarykova univerzita, 1998. 107 pp. ISBN 80-210-1771-6. [info](#)
- GOUGH, Chris. *English vocabulary organiser : 100 topics for self-study*. Hove: LTP language, 2001. 224 s. ISBN 1-899396-36-5. [info](#)
- MURPHY, Raymond. *English grammar in use : a self-study reference and practice book for intermediate students of English : with answers*. 3rd ed. Cambridge: Cambridge University Press, 2004. x, 379. ISBN 0521537622. [info](#)
- *Anglicko-český tematický slovník : člověk po stránce fyzické*. Edited by Miroslav Jaroščík. 1. vyd. Olomouc: Nakladatelství Olomouc, 2005. 863 s. ISBN 8071821942. [info](#)
- GLENDINNING, Eric H. and Ron HOWARD. *Professional English in use : medicine*. 1st ed. Cambridge: Cambridge University Press, 2007. 175 s. ISBN 9780521682015. [info](#)
- GYÖRFFY, Mária. *English for Doctors*. 1. vyd. Praha: Triton, 2001. 226 pp. ISBN 80-7254-203-6. [info](#)
- HOUSE, Christine. *Grammar no problem : 50 praktických lekcí anglické gramatiky s cvičeními a klíčem*. 1. vyd. Plzeň: Fraus, 2004. 128 s. ISBN 8072383094. [info](#)
- [ŠTĚPÁNEK, Libor](#), Janice DE HAAFF, [Alena HRADILOVÁ](#) and [David SCHÜLLER](#). *Academic English – Akademická angličtina: Průvodce anglickým jazykem pro studenty, akademiky a vědce (Academic English: a guide for students, academics and scientists)*. Praha: Grada, 2011. 224 pp. ISBN 978-80-247-3577-1. [info](#)
- MCCARTER, Sam. *Oxford English for careers : Medicine 1*. Oxford: Oxford University Press, 2009. 1 CD. ISBN 9780194023030. [info](#)
- MCCARTER, Sam. *Oxford English for careers : Medicine 2*. Oxford: Oxford University Press, 2009. 1 CD. ISBN 9780194569583. [info](#)

Teaching methods

seminars, discussions, pair work, group work, home assignments, e-learning, reading, presentations

Assessment methods

Attendance is compulsory. Two absences are tolerated provided a letter of excuse is handed in at the Department of Studies. It is highly recommended to make up for the absence in the same week. Assessment is based on the results of the credit test (score - minimum 60%) and attendance. Students get two credits for successful completion of the course.

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

Information on completion of the course: Pro studenty se státní jazykovou zkouškou, příp. jejím ekvivalentem (TOEFL, FCE apod.) je účast na výuce v podzimním semestru nepovinná. Předmět si nicméně zaregistrují a na konci semestru jej ukončí složením zápočtového testu.

The course can also be completed outside the examination period.

The course is taught annually.

Listed among pre-requisites of other courses

- [VLAJ0222 English Language 1 II - practice](#)
[VLAJ0121](#) ([Do I meet enrolment requirements?](#))

Teacher's information

<http://www.med.muni.cz/cjv/>

Aktuální informace o předmětu, konzultačních hodinách atd. jsou zveřejňovány na webových stránkách oddělení cizích jazyků - <http://www.med.muni.cz/cjv>

The course is also listed under the following terms [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VLAJ0222 English Language 1 II - practice ✳

Faculty of Medicine

Spring 2018

Extent and Intensity

0/2/0. 3 credit(s). Type of Completion: zk (examination).

Teacher(s)

[Mgr. et Mgr. Marie Barotová](#) (seminar tutor)

[Mgr. Robert Helán, Ph.D.](#) (seminar tutor)

[Mgr. Markéta Kovaříková](#) (seminar tutor)

[Joseph Lennon, BA, Ph.D.](#) (seminar tutor)

[Mgr. Dana Straková](#) (seminar tutor)

[Mgr. Veronika Tománková, Ph.D.](#) (seminar tutor)

[Mgr. et Mgr. Zuzana Handlová](#) (assistant)

[PhDr. Jana Vyorálková](#) (assistant)

Supervisor

[Mgr. Veronika Tománková, Ph.D.](#)

[Language Centre, Faculty of Medicine Division - Language Centre](#)

Contact Person: [Mgr. Veronika Tománková, Ph.D.](#)

Supplier department: [Language Centre, Faculty of Medicine Division - Language Centre](#)

Prerequisites

[VLAJ0121 English 1 I -p](#)

General English at the B2 CEFR level. The knowledge of specialist discipline-specific vocabulary covered in the VLAJ0121 English 1 I course.

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

The course objective is to develop students' receptive (reading, listening) and productive (speaking, writing) English language skills and to enhance their knowledge of selected grammar chapters at level B2. The course also seeks to develop in students knowledge of specialized discipline-specific vocabulary, academic presentation and writing skills as well as skills for effective doctor-patient, doctor-doctor and doctor-nursing staff communication.

Learning outcomes

At the end of the course students should be able to describe and explain terms related to body systems (namely urinary, endocrine, reproductive, nervous, and sensory systems), their organs, functions and disorders; use practical medical vocabulary; apply medical language in doctor-patient, doctor-doctor, and doctor-nursing staff communication, interpret medical texts, present and discuss specialized topics, write cover letters; use grammatical structures typical for medical and academic language.

Syllabus

- 1. week: Introduction, e-learning, requirements, assessment, revision, cover letter.
- 2. week: Presentations and Public Speaking in English, Language of Presentations I.
- 3. week: Presentations and Public Speaking in English, Language of Presentations II.
- 4. week: Urinary and Reproductive Systems - Anatomy. Student Presentations.
- 5. week: Urinary and Reproductive Systems - Pathological Conditions. Student Presentations.
- 6. week: Endocrine System - Anatomy. Student Presentations.
- 7. week: Endocrine System - Pathological Conditions. Student Presentations.
- 8. week: MIDTERM TEST
- 9. week: Nervous System - Anatomy. Student Presentations.
- 10. week: Nervous System - Pathological Conditions. Student Presentations.
- 11. week: Sensory System: Eye - Anatomy and Pathological Conditions. Student Presentations.
- 12. week: Sensory System: Ear - Anatomy and Pathological Conditions. Student Presentations.
- 13. week: REVISION
- 14. week: FINAL TEST
- Grammar taught in the course: conditional clauses, direct and indirect speech.
- In addition to the above mentioned topics and grammar, the course will also focus on the mastery of communicative skills - i.e. speaking, listening, reading, and writing - on the B2 level of the European Reference Framework.

Literature

- [KOBYLKOVÁ, Anděla](#). *English for medical students*. 2. vyd. Brno: Masarykova univerzita, 1998. 107 pp. ISBN 80-210-1771-6. [info](#)
- GOUGH, Chris. *English vocabulary organiser :100 topics for self-study*. Hove: LTP language, 2001. 224 s. ISBN 1-899396-36-5. [info](#)
- MURPHY, Raymond. *English grammar in use : a self-study reference and practice book for intermediate students of English : with answers*. 3rd ed. Cambridge: Cambridge University Press, 2004. x, 379. ISBN 0521537622. [info](#)
- *Anglicko-český tematický slovník :člověk po stránce fyzické*. Edited by Miroslav Jaroščík. 1. vyd. Olomouc: Nakladatelství Olomouc, 2005. 863 s. ISBN 8071821942. [info](#)
- GLENDINNING, Eric H. and Ron HOWARD. *Professional English in use : medicine*. 1st ed. Cambridge: Cambridge University Press, 2007. 175 s. ISBN 9780521682015. [info](#)
- GYŐRFFY, Mária. *English for Doctors*. 1. vyd. Praha: Triton, 2001. 226 pp. ISBN 80-7254-203-6. [info](#)
- HOUSE, Christine. *Grammar no problem : 50 praktických lekcí anglické gramatiky s cvičeními a klíčem*. 1. vyd. Plzeň: Fraus, 2004. 128 s. ISBN 8072383094. [info](#)
- [ŠTĚPÁNEK, Libor](#), Janice DE HAAFF, [Alena HRADILOVÁ](#) and [David SCHÜLLER](#). *Academic English – Akademická angličtina: Průvodce anglickým jazykem pro studenty, akademiky a vědce (Academic English: a guide for students, academics and scientists)*. Praha: Grada, 2011. 224 pp. ISBN 978-80-247-3577-1. [info](#)
- MCCARTER, Sam. *Oxford English for careers : Medicine 1*. Oxford: Oxford University Press, 2009. 1 CD. ISBN 9780194023030. [info](#)
- MCCARTER, Sam. *Oxford English for careers : Medicine 2*. Oxford: Oxford University Press, 2009. 1 CD. ISBN 9780194569583. [info](#)

Teaching methods

seminars, discussions, pair work, group work, home assignments, e-learning, reading, presentations

Assessment methods

The above mentioned topics will be consolidated using all the study skills (reading, listening, speaking, and writing). Supplementary materials used in the seminars (hard copies, electronic documents etc.) will be provided by the lecturer. The course takes the form of seminars. Attendance is compulsory. Two absences are tolerated provided a letter of excuse is handed in at the Office of Studies. Assessment is based on the results of the final examination (testing the knowledge from the autumn and spring semesters) and attendance. The examination consists of two parts, written and oral. The prerequisite for the written part is a presentation on a medical topic during the semester. The prerequisite of the oral part is to reach a minimum score of 60 per cent in the written part of the examination.

Language of instruction

English

Further comments (probably available only in Czech)

Information on completion of the course: Studenti se státní jazykovou zkouškou, příp. jejím ekvivalentem na úrovni B2 ERR (TOEFL, FCE apod.) mohou vykonat zkoušku v rámci hromadného předtermínu konaného během semestru.

The course can also be completed outside the examination period.

The course is taught annually.

The course is taught: every week.

Listed among pre-requisites of other courses

- [VLAW051 Academic Writing](#)
[VSAJ0222](#)||[VLAJ0222](#) (Do I meet enrolment requirements?)
- [VLFA0722c Pharmacology II - practice](#)
[VLFA0621c](#) && ([VSAJ0222](#) || [VLAJ0222](#) || [VSCJ0686](#) || [VSNJ0222](#) || [VSSJ0222](#)) (Do I meet enrolment requirements?)
- [VLFA0722p Pharmacology - lectures](#)
[VLFA0621c](#) && ([VSAJ0222](#) || [VLAJ0222](#) || [VSCJ0686](#) || [VSNJ0222](#) || [VSSJ0222](#)) (Do I meet enrolment requirements?)
- [VLCH11XX Surgery - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLS7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VRL041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [VLPD11XX Paediatrics - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLS7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VRL041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [VLR11XX Family Medicine and Geriatrics](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLIN9X22](#) && [VLPL9X1](#) && [VLON091](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VRL041](#),

[VLTL081](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) (Do I meet enrolment requirements?)

- **[VLVL11XX](#) Internal Medicine - State Exam**
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- **[VLZP11XX](#) Public Health - State Exam**
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

Teacher's information

Aktuální informace o předmětu, konzultačních hodinách atd. jsou zveřejňovány na webových stránkách oddělení cizích jazyků - <http://www.med.muni.cz/cjv>

The course is also listed under the following terms [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VLAL081 Anaesthesiology and Treatment of Pain I *

Faculty of Medicine

Spring 2018

Extent and Intensity

2/0/0. 3 credit(s). Type of Completion: k (colloquium).

Teacher(s)

[doc. MUDr. Petr Štourač, Ph.D.](#) (lecturer)

[MUDr. Lukáš Dadák, Ph.D.](#) (lecturer)

[MUDr. Jitka Zemanová](#) (lecturer)

[MUDr. Jozef Klučka](#) (lecturer)

[MUDr. Ivo Křikava, Ph.D.](#) (lecturer)

[MUDr. Jan Maláška, Ph.D.](#) (lecturer)

[MUDr. Pavel Suk, Ph.D.](#) (lecturer)
[prof. MUDr. Vladimír Šrámek, Ph.D.](#) (lecturer)
[MUDr. Roman Štoudek](#) (lecturer)
[MUDr. Robert Vach](#) (lecturer)
[MUDr. Václav Zvoníček, Ph.D.](#) (lecturer)
[MUDr. Ivan Čundrle, Ph.D.](#) (seminar tutor)
[MUDr. Petr Dominik](#) (seminar tutor)
[MUDr. Martin Helán, Ph.D.](#) (seminar tutor)
[MUDr. Jan Hruza, Ph.D.](#) (seminar tutor)
[MUDr. Miloš Chobola](#) (seminar tutor)
[MUDr. Milan Jelínek](#) (seminar tutor)
[MUDr. Michal Zimmer](#) (seminar tutor)
[Simona Holčáková](#) (assistant)
[Eva Podborská](#) (assistant)
[Irena Vaňurová](#) (assistant)

Supervisor

[doc. MUDr. Petr Štourač, Ph.D.](#)
[Department of Paediatric Anaesthesiology and Intensive Care Medicine - Institutions shared with the Faculty Hospital Brno \(paediatric medicine\) - Faculty of Medicine](#)
Contact Person: [MUDr. Roman Štoudek](#)
Supplier department: [Department of Paediatric Anaesthesiology and Intensive Care Medicine - Institutions shared with the Faculty Hospital Brno \(paediatric medicine\) - Faculty of Medicine](#)

Prerequisites

Finished 3rd year of medicine and pharmacology.

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

At the end of the course students should be able to:
understand basic concepts of general and regional anesthesia;
learn basic skills of airway management

Learning outcomes

Student will be able to: provide airway management on the manequine; discuss perioperative management of the patient; describe goals and complications of general and regional anaesthesia; propose prescription of basic pain killers for acute or chronic pain.

Syllabus

- Preoperative evaluation and premedication;
- Airway management
- General anaesthesia
- Regional anaesthesia
- Pain management

Literature

recommended literature

- BARASH, Paul G., Bruce F. CULLEN and Robert K. STOELTING. *Klinická anesteziologie*. 1. vydání. Praha: Grada, 2015. xii, 804. ISBN 9788024740539. [info](#)

not specified

- *Anestezie*. Edited by Reinhard Larsen - Jarmila Drábková. 2. vyd. Praha: Grada, 2004. 1376 s. ISBN 8024704765. [info](#)
- *Anesthesia*. Edited by Ronald D. Miller. 5th ed. New York: Churchill Livingstone, 2000. xx, 1662. ISBN 0443079889. [info](#)

Assessment methods

Final exam - oral form

Language of instruction

Czech

Further comments (probably available only in Czech)

The course can also be completed outside the examination period.

The course is taught annually.

The course is taught: in blocks.

Information on the extent and intensity of the course: 6 přednášek, 5 dopoledních stáží á 4 h.

Teacher's information

Začátkem semestru proběhne blok přednášek. Od dubna do září bude probíhat praktická část. V případě většího zájmu jsou upřednostněni studenti vyšších ročníků. Lectures in the beginning of spring semester. Internship in operating room and pain clinic from April to September.

The course is also listed under the following terms [Accreditation spring](#).

VLAM9X1c Intensive care medicine-practice ✱

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Vladimír Šrámek, Ph.D.](#) (lecturer)

[prof. MUDr. Roman Gál, Ph.D.](#) (seminar tutor)

[MUDr. Jan Maláska, Ph.D.](#) (seminar tutor)

[MUDr. Václav Zvoníček, Ph.D.](#) (seminar tutor)

[doc. MUDr. Ivan Čundrle, CSc.](#) (seminar tutor)

[MUDr. Roman Štoudek](#) (seminar tutor)

[doc. MUDr. Petr Štourač, Ph.D.](#) (seminar tutor)

[MUDr. Robert Wagner, Ph.D.](#) (seminar tutor)

[MUDr. Petr Dominik](#) (lecturer)

[MUDr. Václav Zvoniček, Ph.D.](#) (lecturer)

[MUDr. Lukáš Dadák, Ph.D.](#) (seminar tutor)

[MUDr. Jozef Klučka](#) (seminar tutor)

[MUDr. Milan Kratochvíl](#) (seminar tutor)

[MUDr. Ivo Křikava, Ph.D.](#) (seminar tutor)

[MUDr. Igor Sas](#) (seminar tutor)

[MUDr. Martin Slezák](#) (seminar tutor)

[MUDr. Jan Stašek](#) (seminar tutor)

[MUDr. Eva Straževská](#) (seminar tutor)

[Irena Vaďurová](#) (seminar tutor)

[MUDr. Iveta Zimová](#) (seminar tutor)

[Lenka Dobrovolná](#) (assistant)

[Martina Matoušková](#) (assistant)

[Eva Podborská](#) (assistant)

Supervisor

[MUDr. Jan Maláska, Ph.D.](#)

[Department of Anaesthesiology and Intensive Care Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Contact Person: [MUDr. Václav Zvoniček, Ph.D.](#)

Supplier department: [Department of Anaesthesiology and Intensive Care Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Timetable of Seminar Groups

VLAM9X1c/01: Mon 8. 1. to Fri 19. 1. each working day 10:15–12:30 [N01004](#), *R. Štoudek, P. Štourač*

VLAM9X1c/02: Mon 18. 12. to Fri 5. 1. each working day 10:15–12:30 [N02144](#), *J. Maláska*

VLAM9X1c/03: Mon 4. 12. to Fri 15. 12. each working day 10:15–12:30 [063](#), *L. Dadák, V. Zvoniček*

VLAM9X1c/04: Mon 20. 11. to Fri 1. 12. each working day 10:15–12:30 [N02144](#), *J. Maláska*

VLAM9X1c/05: Mon 6. 11. to Fri 17. 11. each working day 10:15–12:30 [063](#), *L. Dadák*

VLAM9X1c/06: Mon 23. 10. to Fri 3. 11. each working day 10:15–12:30 [N02144](#), *J. Maláska*

VLAM9X1c/30: Mon 25. 9. to Fri 6. 10. each working day 10:15–12:30 [063](#), *J. Maláska*

VLAM9X1c/31: Mon 20. 11. to Fri 1. 12. each working day 10:15–12:30 [N02144](#), *L. Dadák, V. Zvoniček*

Prerequisites (in Czech)

([VLFA0822c Pharmacology II - p](#) || [VLFA0722c Pharmacology IIp](#)) &&

[VLCH0832c Surgery II - practicals](#) && [VSIP0622p Introduction to internal II-pr](#) &&

[VLCP0622p Introd. to surgery II -lec.](#) && [VLDM7X1c Diagn.imaging - practice](#) &&

[VSOT7X1c Otorhinolaryngology - practice](#) && [VLIN7X21 Infectious diseases - practice](#)

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

On the end of the course the student will be able to perform basic cardiopulmonary resuscitation and will understand how to perform advance cardiopulmonary resuscitation. The student will be able to assess the critical ill patient.

Syllabus

- **Intensive care practical training- two weeks intensive course**
- **time: 10:15-12:30**
- **!Study group 31 has courses at ARK, study group 30 at KARIM!**
- abbreviation:
- ARK = Anesteziologicko-resuscitační klinika FN u sv. Anny v Brně,
- KARIM= Klinika anesteziologie, resuscitace a intenz. med., FN Brno, Bohunice
- KDAR= Klinika dětské anesteziologie a resuscitace, FN Brno, Dětská nemocnice
-
- **1st week**
- *Monday:* CPR, chest compression, recognition of arrest, laryngeal mask, intubation
- *Tuesday:* Advanced CPR, defibrillation, drugs for CPR, cycles of CPR
- *Wednesday:* Shocks, hypovolemia, pulmonary embolism, myocardial infarction
- *Thursday:* Respiratory insufficiency, asthma, COPD, PNO, asphyxia, tamponade
- *Friday:* Paediatric intensive care, **!courses are located in KDAR!**
- **2nd week at ARK**
- *Monday:* intoxication, gastric lavage, hyperkalaemia, hyponatremia, anaphylactic shock
- *Tuesday:* trauma, head trauma, thoracic and abdominal trauma, basic approach
- *Wednesday:* scenario of critically ill patient, sepsis
- *Thursday:* MOF- definition, CVVHD, acid base- practical training
- *Friday:* scenario of critically ill. Credit

Literature

required literature

- KLEMENTA, Bronislav, Olga KLEMENTOVÁ and Pavel MARCIÁN. *Resuscitace*. 1. vyd. [Olomouc: EPAVA, 2014. 279 s. ISBN 9788086297415. [info](#)
- DOPORUČENÉ POSTUPY PRO RESUSCITACI ERC 2015:.. časopis Urgentní medicína. MEDIPRAX CB s.r.o., 2015, Ročník 18 ISSN 1212-1924, <https://cprguidelines.eu> – záložka 2015 Guidelines – Translations – Czech.
- Perkins GD, Handley AJ e al. Adult basic life support and automated external defibrillation section Collaborators. European Resuscitation Council Guidelines for Resuscitation 2015: Section 2. Resuscitation.2015 Oct;95:81-99.

- Soar J, Nolan J et al. Adult advanced life support section Collaborators. European Resuscitation Council Guidelines for Resuscitation 2015: Section 3. Adult advanced life support. *Resuscitation*. 2015 Oct;95:100-47
- *ABC of intensive care*. Edited by Graham Nimmo - Mervyn Singer. 2nd ed. Chichester, West Sussex, UK: Blackwell Pub., 2011. xi, 76. ISBN 9781405178037. [info](#)

recommended literature

- *Oh's intensive care manual*. Edited by Andrew D. Bersten - Neil Soni. 7th ed. [S.l.]: Butterworth-Heinemann, 2014. xix, 1242. ISBN 9780702047626. [info](#)
- Pavel Ševčík. Intenzivní medicína. 3. přeprac. a rozšíř. vyd. Praha: Galén, 2014. s. 1047-1051, 5 s. ISBN 978-80-7492-066-0

Bookmarks

<https://is.muni.cz/auth/ln/tag/LF:VLAM9X1c!>

Teaching methods

lectures and discussions, presentation of patients by consultant, simulation.

Assessment methods

credit requirements is participation in course, one absence is accepted.

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught each semester.

Listed among pre-requisites of other courses

- [aVLAP111 Practical skills in acute patient VLPX084t](#) && [VLAM9X1c](#) (Do I meet enrolment requirements?)

Teacher's information

<http://www.akutne.cz>

European Resuscitation Council a Česká resuscitační rada. DOPORUČENÉ POSTUPY PRO RESUSCITACI ERC 2015: MEDIPRAX CB s.r.o., 2015, Ročník 18 ISSN 1212-1924. Český překlad shrnutí doporučených postupů pro KPR 2015, který byl vydán jako mimořádné vydání časopisu Urgentní medicína, je k dispozici ke stažení z webu <https://cprguidelines.eu> – záložka 2015 Guidelines – Translations – Czech.

The course is also listed under the following terms [Autumn 1999](#), [Spring 2000](#), [Autumn 2000](#), [Spring 2001](#), [Autumn 2001](#), [Spring 2002](#), [Autumn 2002](#), [Spring 2003](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

VLAM9X1p Intensive care medicine - lectures ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

2/0/0. 3 credit(s). Type of Completion: zk (examination).

Teacher(s)

[prof. MUDr. Vladimír Šrámek, Ph.D.](#) (lecturer)

[prof. MUDr. Roman Gál, Ph.D.](#) (lecturer)

[doc. MUDr. Petr Štourač, Ph.D.](#) (lecturer)

[doc. MUDr. Ivan Čundrle, CSc.](#) (lecturer)

[MUDr. Petr Dominik](#) (lecturer)

[MUDr. Jan Hruša, Ph.D.](#) (lecturer)

[MUDr. Jozef Klučka](#) (lecturer)

[MUDr. Milan Kratochvíl](#) (lecturer)

[MUDr. Ivo Křikava, Ph.D.](#) (lecturer)

[MUDr. Jan Maláška, Ph.D.](#) (lecturer)

[MUDr. Igor Sas](#) (lecturer)

[MUDr. Jan Stašek](#) (lecturer)

[MUDr. Roman Štoudek](#) (lecturer)

[prof. MUDr. Danuše Táborská, DrSc.](#) (lecturer)

[MUDr. Václav Zvoníček, Ph.D.](#) (lecturer)

[MUDr. Martin Slezák](#) (seminar tutor)

[MUDr. Eva Straževská](#) (seminar tutor)

[MUDr. Iveta Zimová](#) (seminar tutor)

[Lenka Dobrovolná](#) (assistant)

[Martina Matoušková](#) (assistant)

[Eva Podborská](#) (assistant)

[Irena Vaňurová](#) (assistant)

Supervisor

[MUDr. Jan Maláška, Ph.D.](#)

[Department of Anaesthesiology and Intensive Care Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Contact Person: [MUDr. Václav Zvoníček, Ph.D.](#)

Supplier department: [Department of Anaesthesiology and Intensive Care Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Timetable

Mon 18. 9. 17:10–19:15 [A11/114](#), Tue 19. 9. 17:00–19:00 [A11/114](#), Wed 20. 9. 14:30–16:30 [A11/114](#), Thu 21. 9. 17:00–19:00 [A11/114](#), Fri 22. 9. 14:30–16:30 [A11/114](#)

Prerequisites (in Czech)

([VLFA0822c Pharmacology II - p](#) || [VLFA0722c Pharmacology IIp](#)) &&

[VLCH0832c Surgery II - practicals](#) && [VSIP0622c Introduction to internal II-pr](#) &&

[VLCP0622p Introduc. to surgery II -lec.](#) && [VLDM7X1c Diagn.imaging - practice](#) &&

[VSOT7X1c Otorhinolaryngology - practice](#) && [VLIN7X21 Infectious diseases - practice](#)

(Do I meet enrolment requirements?)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the course is to understand the basics of intensive care medicine. Lectures consist of etiology, diagnostics and treatment of most frequent critical conditions. The specific management of critically ill will be explained, including mechanical ventilation and advanced cardiopulmonary resuscitation.

Syllabus

- Paediatric intensive care Nutrition. Acid-base balance disorders, electrolyte disorders Sepsis Intoxication Intensive care. Hemodynamic monitoring Shock. Fluid resuscitation Blood transfusions. Haematological management Disorders of consciousness, status epilepticus Respiratory failure. Status asthmaticus

Literature

required literature

- KLEMENTA, Bronislav, Olga KLEMENTOVÁ and Pavel MARCIÁN. *Resuscitace*. 1. vyd. [Olomouc: EPAVA, 2014. 279 s. ISBN 9788086297415. [info](#)
- DOPORUČENÉ POSTUPY PRO RESUSCITACI ERC 2015: časopis Urgentní medicína. MEDIPRAX CB s.r.o., 2015, Ročník 18 ISSN 1212-1924, <https://cprguidelines.eu> – záložka 2015 Guidelines – Translations – Czech.
- Perkins GD, Handley AJ et al. Adult basic life support and automated external defibrillation section Collaborators. European Resuscitation Council Guidelines for Resuscitation 2015: Section 2. *Resuscitation*. 2015 Oct;95:81-99.
- Soar J, Nolan JP et al. Adult advanced life support section Collaborators. European Resuscitation Council Guidelines for Resuscitation 2015: Section 3. Adult advanced life support. *Resuscitation*. 2015 Oct;95:100-47
- *ABC of intensive care*. Edited by Graham Nimmo - Mervyn Singer. 2nd ed. Chichester, West Sussex, UK: Blackwell Pub., 2011. xi, 76. ISBN 9781405178037. [info](#)

recommended literature

- *Oh's intensive care manual*. Edited by Andrew D. Bersten - Neil Soni. 7th ed. [S.l.]: Butterworth-Heinemann, 2014. xix, 1242. ISBN 9780702047626. [info](#)
- Náhradní obsah: Pavel Ševčík. *Intenzivní medicína*. 3. přeprac. a rozšíř. vyd. Praha: Galén, 2014. s. 1047-1051, 5 s. ISBN 978-80-7492-066-0

Bookmarks

<https://is.muni.cz/auth/ln/tag/LF:VLAM9X1p!>

Teaching methods

Lectures are obliged. The main teaching method is with a support of PPT.

Assessment methods

final classification: oral exam and writtent test – condition to pass the exam is credit of Intensive care medicine – practice.

Language of instruction

Czech

Further Comments

The course can also be completed outside the examination period.

The course is taught annually.

Listed among pre-requisites of other courses

- [VLCH11XX Surgery - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [VLPD11XX Paediatrics - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [VLPG11XX Obstetric and Gynaecology - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && [VLVL9X66c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VSNO071](#), [VLKA091](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLTL081](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSDL071](#), [VLRL041](#), [VLIA081](#), [VLKM081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

- [VLRL11XX Family Medicine and Geriatrics](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VSDV9X22p](#)
&& [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) &&
[VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) &&
[VLVL9X66c](#) && [VLIN9X22](#) && [VLPL9X1](#) && [VLON091](#) && [VYCET\(3,](#)
[VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#),
[VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#),
[VTL081](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSFP071](#)) && [VLCH9X33c](#) &&
([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) (Do I meet enrolment requirements?)
- [VLVL11XX Internal Medicine - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#)
&& [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) &&
[VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) ||
[VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) &&
[VLSD7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) &&
[VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) &&
[VYCET\(3,](#) [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#),
[VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#),
[VLRL041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) &&
([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment
requirements?)
- [VLZP11XX Public Health - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#)
&& [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) &&
[VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) ||
[VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) &&
[VLSD7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) &&
[VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && [VYCET\(3,](#)
[VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#),
[VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#),
[VTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) ||
[VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

The course is also listed under the following terms [Autumn 1999](#), [Spring 2000](#), [Autumn 2000](#), [Spring 2001](#), [Autumn 2001](#), [Spring 2002](#), [Autumn 2002](#), [Spring 2003](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

VLAN0121c Anatomy I ✨

Faculty of Medicine
Autumn 2019

Extent and Intensity

0/0/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[doc. RNDr. Ladislava Horáčková, Ph.D.](#) (seminar tutor)

[MUDr. Ivana Hradilová Svíženská, CSc.](#) (seminar tutor)

[MUDr. Marek Joukal, Ph.D.](#) (seminar tutor)

[MUDr. Ilona Klusáková, Ph.D.](#) (seminar tutor)

[MUDr. Kateřina Kubíčková](#) (seminar tutor)

[doc. MUDr. Pavel Matonoha, CSc.](#) (seminar tutor)

[RNDr. Michaela Račanská, Ph.D.](#) (seminar tutor)

[MUDr. Drahomíra Stančeva Pernicová, Ph.D.](#) (seminar tutor)

[MUDr. Lenka Vargová, Ph.D.](#) (seminar tutor)

[Mgr. Kateřina Vymazalová, Ph.D.](#) (seminar tutor)

[Dana Procházková](#) (assistant)

Supervisor

[MUDr. Marek Joukal, Ph.D.](#)

[Department of Anatomy - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [prof. RNDr. Petr Dubový, CSc.](#)

Supplier department: [Department of Anatomy - Theoretical Departments - Faculty of Medicine](#)

Timetable of Seminar Groups

VLAN0121c/01: Mon 11. 12. to Fri 15. 12. each working day 8:00–12:00 [P01005/S105](#)

VLAN0121c/02: Mon 11. 12. to Fri 15. 12. each working day 13:00–17:00 [P01005/S105](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

At the end of the course students should be able to:

1. Describe all components (bones, joints, muscles, vessels and nerves) of the upper and lower extremities, and back
2. Relate features of extremities and back with respect to adjacent structures
3. Review arrangement of layers from the superficial to deep onness in all regions of the upper and lower limbs and back
4. Create the anatomical prosection of some studied region using specified dissecting procedures
5. Distinguish abnormalities of the prosections.

Syllabus

- 1st day:back - skin incisions, subcutis, innervation, blood supply; UL - reg. deltoideoscapularis, dissection of the arm; LL - reg. glutea; reg. femoris ant.
- 2nd day:back - dissection of the trapezius, latissimus dorsi; UL - completion of the dissection of the arm; reg. antebrachii, skin, subcutic, superficial muscles; LL - reg. femoris post., reg. cruris.

- 3rd day:back - dissection of the rhomboids, levator scapulae, erector spinae; UL - completion of the dissection of the forearm; palma manus; LL - completion of the dissection of the crus; dorsum pedis;
- 4th day:back - dissection of the splenius, semispinalis, mm. serrati; mm. nuchae profundi, trigonum suboccipitale, mm. multifidi; UL - completion of the dissection of the palma manus; dorsum manus; LL - planta pedis
- 5th day: Demonstration of the dissected regions

Literature

required literature

- ŽLÁBEK, Karel. *Pitevni cvičení z normální anatomie*. 3., nezměněné. Brno: Masarykova univerzita, 2011. 66 pp. ISBN 978-80-210-5471-4. [info](#)

recommended literature

- NETTER, Frank H. *Netterův anatomický atlas člověka*. 2. vyd. Brno: CPress, 2012. 548 s. ISBN 9788026400790. [info](#)
- DRAKE, Richard L., Wayne VOGL and Adam W. M. MITCHELL. *Gray's anatomy for students*. 3rd ed. Philadelphia, Pa.: Churchill Livingstone, 2015. xxv, 1161. ISBN 9780702051319. [info](#)
- Miloš Grim, Rastislav Druga et al. ZÁKLADY ANATOMIE. 1. OBECNÁ ANATOMIE A POHYBOVÝ SYSTÉM. 1. vyd. Praha: Koedice GALÉN - KAROLINUM;2006.159s. ISBN 80-246-0307-1. Dotisk
- Miloš Grim, Rastislav Druga et al. ZÁKLADY ANATOMIE. 2. KARDIOVASKULÁRNÍ A LYMFATICKÝ SYSTÉM. 1. vyd. Praha: Koedice GALÉN - KAROLINUM;2016.117s. ISBN 80-246-3313-8.
- Miloš Grim, Rastislav Druga et al. ZÁKLADY ANATOMIE. 3. Trávicí, dýchací, močopohlavní a endokrinní systém. 1. vyd. Praha: GALÉN; 2005.164s. ISBN 8072623020.
- [DUBOVÝ, Petr](#) and [Radim JANČÁLEK](#). *Základy neuroanatomie a nervových drah - I*. 3. dotisk 1. vyd. Brno: Masarykova univerzita, 2013. 114 pp. ISBN 978-80-210-4707-5. [info](#)
- Miloš Grim, Rastislav Druga et al. ZÁKLADY ANATOMIE. 4b. Periferní nervový systém, smyslové orgány a kůže. 1. vyd. Praha: GALÉN;2014.173s. ISBN 80-7492-156-8.
- Miloš Grim, Rastislav Druga et al. ZÁKLADY ANATOMIE. 5. Anatomie krajiny těla. 1. vyd. Praha: GALÉN;208.120s. ISBN 8072621798.
- HUDÁK, Radovan and David KACHLÍK. *Memorix anatomie*. 2. vyd. Kroměříž: Triton, 2013. xxi, 605. ISBN 9788073877125. [info](#)

Teaching methods

Anatomical dissection of the human body

Assessment methods

Completion of the course is assessed by the course-unit credit. A precondition for obtaining the course-unit credit is 100% attendance and demonstration of the basic knowledge during an examination at the close of the dissection course. When 100%

attendance could not be fulfilled due to an illness (medical confirmation required) the dissection course has to be substituted in full extent during the second week of the examination period of the semester. The results of the examination will be included in the results of the practical part of the final examination in Anatomy. A minimum of 6 out of 10 possible points (grade E) in the examination at the end of the course is required for fulfillment. For unsuccessful students a resit date will be offered (involved in the final exam date).

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

Information on the extent and intensity of the course: 1,3 hod týdně.

Listed among pre-requisites of other courses

- [VLAN0222c Anatomy II - practice](#)
[VLAN0121s](#) && [VLAN0121c](#) ([Do I meet enrolment requirements?](#))
- [VLAN0222p Anatomy II - lecture](#)
[VLAN0121s](#) && [VLAN0121c](#) ([Do I meet enrolment requirements?](#))
- [VLAN0222s Anatomy II - seminar](#)
[VLAN0121s](#) && [VLAN0121c](#) ([Do I meet enrolment requirements?](#))

Teacher's information

Student musí mít plášť, plastové návleky přes obuv, anatomickou pinzetu 14,5 nebo 16 cm a držátko skalpelových čepelek č.4 s čepečkami č. 23 nebo 21.

A student has to wear the lab coat and plastic shoe covers, use the dressing forceps 14.5 or 16 cm long, and scalpel handle No. 4 with scalpel blades No. 23 or 21.

The course is also listed under the following terms [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VLAN0121p Anatomy I - lecture ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

2/0/0. 0 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. RNDr. Petr Dubový, CSc.](#) (lecturer)
[doc. RNDr. Ladislava Horáčková, Ph.D.](#) (lecturer)
[MUDr. Ivana Hradilová Svíženská, CSc.](#) (lecturer)
[doc. MUDr. Pavel Matonoha, CSc.](#) (lecturer)
[MUDr. Lenka Vargová, Ph.D.](#) (lecturer)
[MUDr. Marek Joukal, Ph.D.](#) (seminar tutor)
[MUDr. Iлона Klusáková, Ph.D.](#) (seminar tutor)

[MUDr. Kateřina Kubíčková](#) (seminar tutor)
[RNDr. Michaela Račanská, Ph.D.](#) (seminar tutor)
[MUDr. Drahomíra Stančeva Pernicová, Ph.D.](#) (seminar tutor)
[Mgr. Kateřina Vymazalová, Ph.D.](#) (seminar tutor)
[Dana Procházková](#) (assistant)

Supervisor

[MUDr. Marek Joukal, Ph.D.](#)
[Department of Anatomy - Theoretical Departments - Faculty of Medicine](#)
Contact Person: [prof. RNDr. Petr Dubový, CSc.](#)
Supplier department: [Department of Anatomy - Theoretical Departments - Faculty of Medicine](#)

Timetable

Mon 9:30–11:20 [A22/116 aula](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

At the end of the course students should be able to:

1. Name all parts of the human skeleton including the detailed relief.
2. Describe correctly joints of the bones.
3. Describe the movements occurring at each joint.
4. Characterize the newborn skull.
5. Distinguish the male and female skull and pelvis.
6. Identify individual muscles of the human body, discuss their attachments and innervations.
7. Define actions of individual muscles and muscular groups.
8. Define the components of the major organ systems (digestive, respiratory, urinary, and male genital)
9. Explain the morphology of the organs
10. Create apprehension about position and spatial relationships of particular organs and organ systems

Syllabus

- 1. Introduction to anatomy (anatomical terminology, planes and directions of the human body). Osteology, rules for description of bones. Introduction to radiology. Skeleton of the spine and thorax.
- 2. Skeleton of the upper and lower limb.
- 3. Bones of the neurocranium.
- 4. Bones of the splanchnocranium. Skull.
- 5. Diarthroses (general structure). Joints of the spine, thorax and skull. Joints of the upper limb (art. humeri et cubiti).

- 6. Joints of the upper limb (art.radiocarpalis et mediocarpalis, canalis carpi).Joints of the lower limb (art. coxae, art. genus, art. talocruralis, art. tarsi transversa). Arches of the foot.
- 7. General description of a muscle. Functional muscular groups and their representatives.
- 8. Selected muscles of the back and extremities.
- 9. Digestive system 1 (structure of the digestive tube, oral cavity, pharynx, oesophagus, small and large intestine).
- 10. Digestive system 2 (liver, gall bladder, bile ducts, pancreas).Peritoneal cavity.
- 11. Respiratory system (laryngeal muscles and their function, laryngoscopic picture, blood supply of lungs, mechanism of respiration).
- 12. Spinal nerve; dorsal rami; plexus brachialis, lumbalis et sacralis.
- 13. Dissection I. (dissection of the back, upper and lower extremities).
- 14. Urinary system, male genital system, male pelvic floor

Literature

required literature

- Miloš Grim, Rastislav Druga et al. ZÁKLADY ANATOMIE. 1. OBECNÁ ANATOMIE A POHYBOVÝ SYSTÉM. 1. vyd. Praha: Koedice GALÉN - KAROLINUM;2006.159s. ISBN 80-246-0307-1. Dotisk
- Miloš Grim, Rastislav Druga et al. ZÁKLADY ANATOMIE. 2. KARDIOVASKULÁRNÍ A LYMFATICKÝ SYSTÉM. 1. vyd. Praha: Koedice GALÉN - KAROLINUM;2016.117s. ISBN 80-246-3313-8.
- Miloš Grim, Rastislav Druga et al. ZÁKLADY ANATOMIE. 3. Trávicí, dýchací, močopohlavní a endokrinní systém. 1. vyd. Praha: GALÉN; 2005.164s. ISBN 8072623020.
- [DUBOVÝ, Petr](#) and [Radim JANČÁLEK](#). *Základy neuroanatomie a nervových drah - I.* 3. dotisk 1. vyd. Brno: Masarykova univerzita, 2013. 114 pp. ISBN 978-80-210-4707-5. [info](#)
- Miloš Grim, Rastislav Druga et al. ZÁKLADY ANATOMIE. 4b. Periferní nervový systém, smyslové orgány a kůže. 1. vyd. Praha: GALÉN;2014.173s. ISBN 80-7492-156-8.
- Miloš Grim, Rastislav Druga et al. ZÁKLADY ANATOMIE. 5. Anatomie krajiny těla. 1. vyd. Praha: GALÉN;208.120s. ISBN 8072621798.

recommended literature

- DRAKE, Richard L., Wayne VOGL and Adam W. M. MITCHELL. *Gray's anatomy for students*. 3rd ed. Philadelphia, Pa.: Churchill Livingstone, 2015. xxv, 1161. ISBN 9780702051319. [info](#)
- NETTER, Frank H. *Netterův anatomický atlas člověka*. 2. vyd. Brno: CPress, 2012. 548 s. ISBN 9788026400790. [info](#)
- HUDÁK, Radovan and David KACHLÍK. *Memorix anatomie*. 2. vyd. Kroměříž: Triton, 2013. xxi, 605. ISBN 9788073877125. [info](#)

Teaching methods

Lectures

Assessment methods

Assessment is carried out after completion of following subjects within the scope of anatomy final examination: VLAN0121s Anatomy I – seminar, VLAN0121c Anatomy I – dissection, VLAN0222p Anatomy II – lecture, VLAN0222s Anatomy II – seminar, VLAN0222c Anatomy II – dissection)

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

Information on course enrolment limitations: Mimo studenty LF, max. 15 studentů z PřF

The course is also listed under the following terms [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VLAN0121s Anatomy I - seminar ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[doc. RNDr. Ladislava Horáčková, Ph.D.](#) (seminar tutor)

[MUDr. Ivana Hradilová Sviženská, CSc.](#) (seminar tutor)

[MUDr. Marek Joukal, Ph.D.](#) (seminar tutor)

[MUDr. Ilona Klusáková, Ph.D.](#) (seminar tutor)

[MUDr. Kateřina Kubíčková](#) (seminar tutor)

[doc. MUDr. Pavel Matonoha, CSc.](#) (seminar tutor)

[RNDr. Michaela Račanská, Ph.D.](#) (seminar tutor)

[MUDr. Drahomíra Stančeva Pernicová, Ph.D.](#) (seminar tutor)

[MUDr. Lenka Vargová, Ph.D.](#) (seminar tutor)

[Mgr. Kateřina Vymazalová, Ph.D.](#) (seminar tutor)

[Dana Procházková](#) (assistant)

Supervisor

[MUDr. Marek Joukal, Ph.D.](#)

[Department of Anatomy - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [prof. RNDr. Petr Dubový, CSc.](#)

Supplier department: [Department of Anatomy - Theoretical Departments - Faculty of Medicine](#)

Timetable of Seminar Groups

VLAN0121s/01: Thu 9:20–11:00 [P01005/S105](#)

VLAN0121s/02: Thu 9:20–11:00 [P01005/S105](#)

VLAN0121s/03: Thu 9:20–11:00 [P01005/S105](#)

VLAN0121s/04: Thu 7:30–9:10 [P01005/S105](#)

VLAN0121s/05: Thu 7:30–9:10 [P01005/S105](#)

VLAN0121s/06: Thu 9:20–11:00 [P01005/S105](#)
VLAN0121s/07: Thu 11:10–12:50 [P01005/S105](#)
VLAN0121s/08: Thu 11:10–12:50 [P01005/S105](#)
VLAN0121s/09: Thu 7:30–9:10 [P01005/S105](#)
VLAN0121s/10: Thu 7:30–9:10 [P01005/S105](#)
VLAN0121s/11: Thu 13:00–14:40 [P01005/S105](#)
VLAN0121s/12: Thu 13:00–14:40 [P01005/S105](#)
VLAN0121s/13: Thu 13:00–14:40 [P01005/S105](#)
VLAN0121s/14: Thu 13:00–14:40 [P01005/S105](#)
VLAN0121s/15: Thu 11:10–12:50 [P01005/S105](#)
VLAN0121s/16: Thu 11:10–12:50 [P01005/S105](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

At the end of the course students should be able to:

1. Name all parts of the human skeleton including the detailed relief.
2. Describe correctly joints of the bones.
3. Describe the movements occurring at each joint.
4. Characterize the newborn skull.
5. Distinguish the male and female skull and pelvis.
6. Identify individual muscles of the human body, discuss their attachments and innervations.
7. Define actions of individual muscles and muscular groups.
8. Define the components of the major organ systems (digestive, respiratory, urinary, and male genital)
9. Explain the morphology of the organs
10. Create apprehension about position and spatial relationships of particular organs and organ systems

Syllabus

- 1. Skeleton of the spine and thorax (vertebrae, sacrum, coccyx, ribs, sternum).
- 2. Skeleton of the upper and lower limb. Description of x-ray pictures.
- 3. Bones of the neurocranium.
- 4. Bones of splanchnocranium. Skull. Description of x-ray pictures.
- 5. Joints of the spine, thorax and skull. Joints of the upper limb (art. humeri et cubiti). Description of x-ray pictures.
- 6. Joints of the upper and lower limbs. Pelvis. Pelvic planes. Description of x-ray pictures.
- 7. Muscles of the back and upper extremity I.
- 8. Muscles of the upper extremity II, muscles of the lower extremity.
- 9. Muscles of the head. Oral cavity (incl. tongue and salivary glands), pharynx, oesophagus, stomach, small and large intestine. Description of x-ray pictures.

- 10. Muscles of the abdomen. Liver, gall bladder, spleen, pancreas. Peritoneal cavity. Description of x-ray pictures. Dissection I. (dissection of the back, upper and lower extremities).
- 11. Muscles of the thorax. External nose, nasal cavity proper), larynx, bronchi, lungs, thyroid gland. Description of x-ray pictures.
- 12. Demonstration of the regions and structures of the back and extremities (including vessels and nerves).
- 13. Dissection I. (dissection of the back, upper and lower extremities).
- 14. Practical examination of the dissected regions (part of the final examination)

Literature

required literature

- Miloš Grim, Rastislav Druga et al. ZÁKLADY ANATOMIE. 1. OBECNÁ ANATOMIE A POHYBOVÝ SYSTÉM. 1. vyd. Praha: Koedice GALÉN - KAROLINUM;2006.159s. ISBN 80-246-0307-1. Dotisk
- Miloš Grim, Rastislav Druga et al. ZÁKLADY ANATOMIE. 2. KARDIOVASKULÁRNÍ A LYMFATICKÝ SYSTÉM. 1. vyd. Praha: Koedice GALÉN - KAROLINUM;2016.117s. ISBN 80-246-3313-8.
- Miloš Grim, Rastislav Druga et al. ZÁKLADY ANATOMIE. 3. Trávicí, dýchací, močopohlavní a endokrinní systém. 1. vyd. Praha: GALÉN; 2005.164s. ISBN 8072623020.
- [DUBOVÝ, Petr](#) and [Radim JANČÁLEK](#). *Základy neuroanatomie a nervových drah - I.* 3. dotisk 1. vyd. Brno: Masarykova univerzita, 2013. 114 pp. ISBN 978-80-210-4707-5. [info](#)
- Miloš Grim, Rastislav Druga et al. ZÁKLADY ANATOMIE. 4b. Periferní nervový systém, smyslové orgány a kůže. 1. vyd. Praha: GALÉN;2014.173s. ISBN 80-7492-156-8.
- Miloš Grim, Rastislav Druga et al. ZÁKLADY ANATOMIE. 5. Anatomie krajjin těla. 1. vyd. Praha: GALÉN;208.120s. ISBN 8072621798.

recommended literature

- DRAKE, Richard L., Wayne VOGL and Adam W. M. MITCHELL. *Gray's anatomy for students*. 3rd ed. Philadelphia, Pa.: Churchill Livingstone, 2015. xxv, 1161. ISBN 9780702051319. [info](#)
- NETTER, Frank H. *Netterův anatomický atlas člověka*. 2. vyd. Brno: CPress, 2012. 548 s. ISBN 9788026400790. [info](#)
- HUDÁK, Radovan and David KACHLÍK. *Memorix anatomie*. 2. vyd. Kroměříž: Triton, 2013. xxi, 605. ISBN 9788073877125. [info](#)

Teaching methods

Practice with the human anatomical specimens

Assessment methods

Completion of the subject is assessed by the course-unit credit. A precondition for obtaining the course-unit credit is 95% attendance at the seminars (1 non-attendance tolerated).

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

Listed among pre-requisites of other courses

- [VLAN0222c Anatomy II - practice](#)
[VLAN0121s](#) && [VLAN0121c](#) (Do I meet enrolment requirements?)
- [VLAN0222p Anatomy II - lecture](#)
[VLAN0121s](#) && [VLAN0121c](#) (Do I meet enrolment requirements?)
- [VLAN0222s Anatomy II - seminar](#)
[VLAN0121s](#) && [VLAN0121c](#) (Do I meet enrolment requirements?)
- [VLHE0221c Histology and Embryology I - practice](#)
[VLAN0121s](#) && [VLBI0121c](#) (Do I meet enrolment requirements?)
- [VLHE0221p Histology and Embryology I - lecture](#)
[VLAN0121s](#) && [VLBI0121c](#) (Do I meet enrolment requirements?)

Teacher's information

Studenti musí mít přes oděv zapnutý bílý plášť, na nohou přezůvky nebo plastové návleky přes obuv, na ruku vyšetřovací rukavice. Pro studium skeletu budou studenti potřebovat sondu a pro studium kadaverózního materiálu je nutné mít anatomickou pinzetu. Students will wear lab coats, plastic shoe covers, and protective gloves. Students will bring a wire pointer for study of the skeleton and dressing forceps for study with prosections.

The course is also listed under the following terms [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VLAN0222c Anatomy II - practice ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

0/0/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[doc. RNDr. Ladislava Horáčková, Ph.D.](#) (seminar tutor)

[MUDr. Ivana Hradilová Svíženská, CSc.](#) (seminar tutor)

[MUDr. Marek Joukal, Ph.D.](#) (seminar tutor)

[MUDr. Ilona Klusáková, Ph.D.](#) (seminar tutor)

[MUDr. Kateřina Kubíčková](#) (seminar tutor)

[doc. MUDr. Pavel Matonoha, CSc.](#) (seminar tutor)

[RNDr. Michaela Račanská, Ph.D.](#) (seminar tutor)

[MUDr. Drahomíra Stančeva Pernicová, Ph.D.](#) (seminar tutor)

[MUDr. Lenka Vargová, Ph.D.](#) (seminar tutor)

[Mgr. Kateřina Vymazalová, Ph.D.](#) (seminar tutor)

[Dana Procházková](#) (assistant)

Supervisor

[MUDr. Marek Joukal, Ph.D.](#)

[Department of Anatomy - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [prof. RNDr. Petr Dubový, CSc.](#)

Supplier department: [Department of Anatomy - Theoretical Departments - Faculty of Medicine](#)

Prerequisites (in Czech)

[VLAN0121s Anatomy I s](#) && [VLAN0121c Anatomy I](#)

(Do I meet enrolment requirements?)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

At the end of the course students should be able to:

1. Define topographical regions of the head, neck, thorax, abdomen, and pelvis
2. Identify basic anatomical structures (bones, joints, viscera, vessels, and nerves) in the regions of the head, neck, thorax, abdomen, and pelvis
3. Demonstrate practically particular organs of the head, neck, thorax, abdomen, and pelvis at the human cadaver
4. Create the anatomical prosection of some studied region using specified dissecting procedures
5. Distinguish abnormalities of the prosections.

Syllabus

- Dissection of the head: parotideomasseteric region, anterior facial region, temporal region, occipitofrontal region, cranial cavity, dissection of the brain, pharynx, parapharyngeal space, soft palate, infratemporal fossa, larynx, nasal cavity, orbit, temporal bone.
- Dissection of the neck: skin incisions, subcutaneous tissue, infrahyoid muscles, carotid triangle, suprahyoid region, cervical and brachial plexuses, subclavian triangle.
- Dissection of the thorax: skin incisions, subcutaneous tissue, muscular layer, axillary fossa, intercostal spaces, thoracic cavity, pleura and lungs, pericardium and heart, mediastinum.
- Dissection of the abdomen: skin incisions, subcutaneous tissue, muscular layer, inguinal region, abdominal cavity, situs viscerum, removal of organs, branches of the abdominal aorta, retroperitoneal space.
- Dissection of the pelvis: perineal region, external genital organs, ischioanal fossa, pelvic floor, organs of the lesser pelvis, the wall of the pelvis.

Literature

required literature

- ŽLÁBEK, Karel. *Pitevni cvičení z normální anatomie*. 3., nezměněné. Brno: Masarykova univerzita, 2011. 66 pp. ISBN 978-80-210-5471-4. [info](#)

recommended literature

- DRAKE, Richard L., Wayne VOGL and Adam W. M. MITCHELL. *Gray's anatomy for students*. 3rd ed. Philadelphia, Pa.: Churchill Livingstone, 2015. xxv, 1161. ISBN 9780702051319. [info](#)
- HUDÁK, Radovan and David KACHLÍK. *Memorix anatomie*. 2. vyd. Kroměříž: Triton, 2013. xxi, 605. ISBN 9788073877125. [info](#)

Teaching methods

Anatomical dissection of the human body

Assessment methods

Completion of the subject is assessed by the course-unit credit. A precondition for obtaining the course-unit credit is 100% attendance and demonstration of basic knowledge during examination at the close of the practicals. The student who fails the 100% attendance due to an illness (after presentation of a medical certificate) substitutes the course to the full extent during the examination period of the semester. A minimum of 6 out of 10 possible points (grade E) in each examination is required for fulfillment. The results of the examination will be included in the results of the practical part of the final examination in Anatomy. The unsuccessful student will be re-examined at the respective date of the theoretical part of the final examination in Anatomy.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: in blocks.

Note related to how often the course is taught: blokové pitvy 13. a 14. týden.

Information on the extent and intensity of the course: 2,7.

Listed among pre-requisites of other courses

- [VLLP0431c Clinical Introduction I - practice](#)
[VLFY0321c](#) && [VLFY0321s](#) && [VLBC0321s](#) && [VLBC0321c](#) && [VLAN0222c](#) && [VLAN0222s](#) (Do I meet enrolment requirements?)
- [VLLP0431p Clinical Introduction I - lecture](#)
[VLFY0321c](#) && [VLFY0321s](#) && [VLBC0321s](#) && [VLBC0321c](#) && [VLAN0222c](#) && [VLAN0222s](#) (Do I meet enrolment requirements?)
- [VLTZ0451 Theoretical Bases of Clinical Medicine I - seminar](#)
[VLFY0321c](#) && [VLFY0321s](#) && [VLBC0321s](#) && [VLBC0321c](#) && [VLBI0222p](#) && [VLAN0222c](#) && [VLAN0222s](#) (Do I meet enrolment requirements?)

Teacher's information

Student musí mít plášť, plastové návleky přes obuv, anatomickou pinzetu 14,5 nebo 16 cm a držátko skalpelových čepelek č.4 s čepečkami č. 23 nebo 21.

A student has to wear the lab coat and plastic shoe covers, use the dressing forceps 14.5 or 16 cm long, and scalpel handle No. 4 with scalpel blades No. 23 or 21.

The course is also listed under the following terms [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VLAN0222p Anatomy II - lecture ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

3/0/0. 7 credit(s). Type of Completion: zk (examination).

Teacher(s)

[prof. RNDr. Petr Dubový, CSc.](#) (lecturer)

[doc. RNDr. Ladislava Horáčková, Ph.D.](#) (lecturer)

[MUDr. Ivana Hradilová Svíženská, CSc.](#) (lecturer), [RNDr. Michaela Račanská, Ph.D.](#) (deputy)

[doc. MUDr. Pavel Matonoha, CSc.](#) (lecturer)

[MUDr. Lenka Vargová, Ph.D.](#) (lecturer)

[MUDr. Marek Joukal, Ph.D.](#) (seminar tutor)

[MUDr. Ilona Klusáková, Ph.D.](#) (seminar tutor)

[MUDr. Kateřina Kubíčková](#) (seminar tutor)

[RNDr. Michaela Račanská, Ph.D.](#) (seminar tutor)

[MUDr. Drahomíra Stančeva Pernicová, Ph.D.](#) (seminar tutor)

[Mgr. Kateřina Vymazalová, Ph.D.](#) (seminar tutor)

[Dana Procházková](#) (assistant)

Supervisor

[MUDr. Marek Joukal, Ph.D.](#)

[Department of Anatomy - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [prof. RNDr. Petr Dubový, CSc.](#)

Supplier department: [Department of Anatomy - Theoretical Departments - Faculty of Medicine](#)

Prerequisites (in Czech)

[VLAN0121s Anatomy I s](#) && [VLAN0121c Anatomy I](#)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

At the end of the course students should be able to:

1. Describe cardiovascular organs, organs of senses, peripheral and central nervous

systems

2. Explain function of the cardiovascular system, senses, peripheral and central nervous systems
3. Relate cardiovascular organs, organs of senses, peripheral and central nervous systems with respect to adjacent structures
4. Identify distribution and function of the sympathetic and parasympathetic components of the autonomic nervous system
5. Define topographical regions of the head, neck, thorax, abdomen, and pelvis
6. Identify basic anatomical structures (bones, joints, viscera, vessels, and nerves) in the regions of the head, neck, thorax, abdomen, and pelvis
7. Review mutual continuity between particular organ systems.

Syllabus

- 1. Female genital system. Pelvic floor
- 2. Heart, aortic arch
- 3. Arteries, veins, lymphatic system
- 4. Spinal cord and brain stem (structure)
- 5. Cranial nerves (III-VII., IX-XII)
- 6. Cerebellum and diencephalon (structure, pathways, functions). Hypothalamo-hypophyseal tract
- 7. Telencephalon (structure). Basal ganglia (pathways, functions)
- 8. Blood supply of the CNS. Meninges. Ventricles, CSF
- 9. Vestibulo-cochlear system. CN VIII
- 10. Visual system, orbit
- 11. Imaging techniques. Projection of thoracic and abdominal
- 12. ANS (cervical sympathetic system, enteric system, central modulation of the ANS) 13.+14. Dissections (dissection of the head, neck and trunk)

Literature

recommended literature

- DRAKE, Richard L., Wayne VOGL and Adam W. M. MITCHELL. *Gray's anatomy for students*. 3rd ed. Philadelphia, Pa.: Churchill Livingstone, 2015. xxv, 1161. ISBN 9780702051319. [info](#)
- HUDÁK, Radovan and David KACHLÍK. *Memorix anatomie*. 2. vyd. Kroměříž: Triton, 2013. xxi, 605. ISBN 9788073877125. [info](#)

Teaching methods

lectures

Assessment methods

The subject is evaluated in the scope of the final examination.

Final examination:

The final examination in Anatomy consists of a practical and a theoretical part. To pass successfully the exam, the student has to obtain at least the grade E in both practical and theoretical parts of the final examination.

The practical part of final examination is represented by the results of the examinations in Anatomy I - Dissection and Anatomy II - Dissection. The student, who has not obtained at

least grade E during above-mentioned courses, will be re-examined at the respective date of the theoretical part of the final examination in Anatomy.

The theoretical part of final examination first proceeds in the form of a test with subsequent oral examination. To be entitled to proceed to oral examination, the student has to obtain at least 12 out of 18 points in the test. When successful at the test the student does not repeat it during a re-sit date. The student takes the test only during the regular and 1st re-sit dates. When unsuccessful at the test during the 1st re-sit date, the student will not repeat the test before the oral examination of the 2nd re-sit date. In the course of oral examination the student answers 4 questions selected by lot out of preannounce sets of questions and presents anatomical descriptions of two imaging techniques.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

Information on course enrolment limitations: Mimo studenty LF, max. 15 studentů PřF

Listed among pre-requisites of other courses

- [VLADV041 Vybrané kapitoly anatomie dětského věku](#)
[VLAN0222p](#) || [VSAN0333p](#) (Do I meet enrolment requirements?)
- [VLLP0532c Clinical Introduction II](#)
[VLLP0431c](#) && ([VLAN0222p](#) || [VSAN0333p](#)) && ([VLHE0322c](#) || [VSHE0322c](#))
&& ([VLBC0422c](#) || [VSBC041c](#)) && ([VLFY0422c](#) || [VSFY0422c](#)) (Do I meet enrolment requirements?)
- [VLLP0633c Clinical Introduction III - practice](#)
[VLLP0532c](#) && ([VLAN0222p](#) || [VSAN0333p](#)) && [VLHE0322p](#) &&
[VLBC0422p](#) && [VLFY0422p](#) (Do I meet enrolment requirements?)
- [VLPA0521c Pathology I - practicals](#)
([VLFY0422p](#) || [VSFY0422p](#)) && ([VSBC041p](#) || [VLBC0422p](#)) && ([VLAN0222p](#)
|| [VSAN0333p](#)) && ([VLHE0322p](#) || [VSHE0322p](#)) && [VLLM0421c](#) (Do I meet enrolment requirements?)
- [VLPA0521p Pathology I - lecture](#)
([VLFY0422p](#) || [VSFY0422p](#)) && ([VSBC041p](#) || [VLBC0422p](#)) && ([VLAN0222p](#)
|| [VSAN0333p](#)) && ([VLHE0322p](#) || [VSHE0322p](#)) && [VLLM0421c](#) (Do I meet enrolment requirements?)
- [VLPF0521c Pathological physiology I - practice](#)
([VLFY0422p](#) || [VSFY0422p](#)) && ([VSBC041p](#) || [VLBC0422p](#)) && ([VLAN0222p](#)
|| [VSAN0333p](#)) && ([VLHE0322p](#) || [VSHE0322p](#)) && [VLLM0421c](#) (Do I meet enrolment requirements?)
- [VLPF0521p Pathological Physiology I - lecture](#)
([VLFY0422p](#) || [VSFY0422p](#)) && ([VSBC041p](#) || [VLBC0422p](#)) && ([VLAN0222p](#)
|| [VSAN0333p](#)) && ([VLHE0322p](#) || [VSHE0322p](#)) && [VLLM0421c](#) (Do I meet enrolment requirements?)
- [VLTZ0552 Theoretical Bases of Clinical Medicine II](#)
[VLTZ0451](#) && ([VLAN0222p](#) || [VSAN0333p](#)) (Do I meet enrolment requirements?)

The course is also listed under the following terms [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VLAN0222s Anatomy II - seminar ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

0/3/0. 4 credit(s). Type of Completion: z (credit).

Teacher(s)

[doc. RNDr. Ladislava Horáčková, Ph.D.](#) (seminar tutor)

[MUDr. Ivana Hradilová Sviženská, CSc.](#) (seminar tutor)

[MUDr. Marek Joukal, Ph.D.](#) (seminar tutor)

[MUDr. Ilona Klusáková, Ph.D.](#) (seminar tutor)

[MUDr. Kateřina Kubičková](#) (seminar tutor)

[doc. MUDr. Pavel Matonoha, CSc.](#) (seminar tutor)

[RNDr. Michaela Račanská, Ph.D.](#) (seminar tutor)

[MUDr. Drahomíra Stančeva Pernicová, Ph.D.](#) (seminar tutor)

[MUDr. Lenka Vargová, Ph.D.](#) (seminar tutor)

[Mgr. Kateřina Vymazalová, Ph.D.](#) (seminar tutor)

[Dana Procházková](#) (assistant)

Supervisor

[MUDr. Marek Joukal, Ph.D.](#)

[Department of Anatomy - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [prof. RNDr. Petr Dubový, CSc.](#)

Supplier department: [Department of Anatomy - Theoretical Departments - Faculty of Medicine](#)

Prerequisites (in Czech)

[VLAN0121s Anatomy I s](#) && [VLAN0121c Anatomy I](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

At the end of the course students should be able to:

1. Define organs of the cardiovascular system, senses, and organs of peripheral and central nervous systems
2. Identify particular anatomical features of the cardiovascular system, eye, ear, central and peripheral nervous systems (i.e. brain, spinal cord, and peripheral nerves) including their blood supply
3. Characterize function of organs of cardiovascular system, senses, peripheral and central

nervous systems

4. Discuss the distribution and function of the sympathetic and parasympathetic nervous systems

5. Relate studied organs with respect to adjacent structures

Syllabus

- 1. Ženská pohlavní soustava. Svalové dno pánevní ženy. Popis struktur na rtg snímcích
- 2. Srdce, vzestupná aorta, aortální oblouk, a. carotis communis et externa
- 3. Hlavní tepny a žíly. V. portae, portokavální anastomózy. Fetální oběh
- 4. Zevní popis míchy a mozkového kmene. Výstupy hlavových nervů z mozkového kmene. Jádra hlavových nervů na spodině IV. komory
- 5. Hlavové nervy (III, IV, VI, VII, IX-XII). Baze lební
- 6. Hlavové nervy (V). Zevní popis mozečku a mezimozku
- 7. Koncový mozek (zevní popis; šedá hmota – kůra + bazální ganglia; bílá hmota – dráhy)
- 8. Cévní zásobení a obaly CNS. Komory mozkové, likvor
- 9. Sluchově-rovnovážný systém. Os temporale
- 10. Zrakový systém, orbita
- 11. Zobrazovací metody, čtení anatomických struktur
- 12. Krajiny hlavy, krku a trupu
- 13.+ 14. Pitevnický blok (pitva hlavy, krku a trupu)

Literature

recommended literature

- DRAKE, Richard L., Wayne VOGL and Adam W. M. MITCHELL. *Gray's anatomy for students*. 3rd ed. Philadelphia, Pa.: Churchill Livingstone, 2015. xxv, 1161. ISBN 9780702051319. [info](#)
- HUDÁK, Radovan and David KACHLÍK. *Memorix anatomie*. 2. vyd. Kroměříž: Triton, 2013. xxi, 605. ISBN 9788073877125. [info](#)

Teaching methods

Practice with the human anatomical specimens

Assessment methods

Completion of the subject is assessed by the course-unit credit. A precondition for obtaining the course-unit credit is 95% attendance at the seminars (1 non-attendance tolerated).

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

Information on course enrolment limitations: Mimo studenty LF, max. 15 studentů z PřF

Listed among pre-requisites of other courses

- [VLFY0321c Physiology I - practice](#) ([VLBI0222p](#) || [VSBI0222p](#)) && ([VLBF011c](#) && [VLAN0222s](#)) (Do I meet enrolment requirements?)
- [VLFY0321p Physiology I - lecture](#) ([VLBI0222p](#) || [VSBI0222p](#)) && ([VLBF011c](#) && [VLAN0222s](#)) (Do I meet enrolment requirements?)
- [VLFY0321s Physiology I - seminar](#) ([VLBI0222p](#) || [VSBI0222p](#)) && ([VLBF011c](#) && [VLAN0222s](#)) (Do I meet enrolment requirements?)
- [VLLP0431c Clinical Introduction I - practice](#) [VLFY0321c](#) && [VLFY0321s](#) && [VLBC0321s](#) && [VLBC0321c](#) && [VLAN0222c](#) && [VLAN0222s](#) (Do I meet enrolment requirements?)
- [VLLP0431p Clinical Introduction I - lecture](#) [VLFY0321c](#) && [VLFY0321s](#) && [VLBC0321s](#) && [VLBC0321c](#) && [VLAN0222c](#) && [VLAN0222s](#) (Do I meet enrolment requirements?)
- [VLTZ0451 Theoretical Bases of Clinical Medicine I - seminar](#) [VLFY0321c](#) && [VLFY0321s](#) && [VLBC0321s](#) && [VLBC0321c](#) && [VLBI0222p](#) && [VLAN0222c](#) && [VLAN0222s](#) (Do I meet enrolment requirements?)

Teacher's information

Student musí mít plášť, plastové návleky přes obuv, anatomickou pinzetu 14,5 nebo 16 cm a sondu.

A student has to wear the lab coat and plastic shoe covers, use the dressing forceps 14.5 or 16 cm long, and a probe.

The course is also listed under the following terms [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VLAT081 Fundamentals of Antimicrobial Therapy ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

2/0. 3 credit(s). Type of Completion: k (colloquium).

Teacher(s)

[MUDr. Lenka Černožorská, Ph.D.](#) (lecturer)

[MUDr. Renata Tejkalová](#) (lecturer)

[Ing. Veronika Holá, Ph.D.](#) (seminar tutor)

[MUDr. Ondřej Zahradníček](#) (assistant)

Supervisor

[prof. MUDr. Miroslav Votava, CSc.](#)

[Department of Microbiology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Contact Person: [MUDr. Renata Tejkalová](#)

Supplier department: [Department of Microbiology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Prerequisites

([VLLM0421c Med.Microbiol.](#) && [VLLM0522c Medical Microbiology II-pract.](#))

Subject is recommended for 4th and 5th year students, mostly after having exam from farmacology.

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

The subject gives gives larger knowledge of antibiotics and their use in medical microbiology. Main objectives can be summarized as follows:

* to review a survey of medically important antimicrobial drugs, to get more practical information concerning individual groups of antibiotics (mostly from the point of view of a general practitioner)

* to have survey of factors of resistance of bacteria, and to know, what are the multiresistant strains of bacteria and what is their importance (MRSA, producents of ESBL, VRE etc.) * to get some information concerning basic guidelines for treatment of infections of respiratory ways, gastrointestinal tract, urinary system, genital system, bloodstream, tissues; hospital infections

* to understand basically treatment of immunocompromised persons, pregnant and lactating females, newborns and small babies

Syllabus

- **I. Theoretical basis of action of antimicrobial drugs**
- 1. Classification of antimicrobial agents, comparison with decontamination methods. Term "antibiotic", primarilyly bactericidal and bacteriostatical antibiotics.
- 2. Individual groups of antibiotics according to chemical simillarity and effect mechanism - I Betalaktam antibiotics, penicillins, cephalosporins, monobactams, carbapenems, polypeptides, quinolones
- 3. Individual groups of antibiotics according to chemical simillarity and effect mechanism - II Aminoglykosides, amphenicols, tetracyclins, macrolides (including azalides and ketolides), lincosamids, sulphonamids, glycopeptids, ansamycins, other atbs
- 4. Survey of main mechanisms or resistance. Resistance to beta-lactam antibiotics: beta-lactamases, PBP alteration, decrease of permeability. Betalaktamases globally. In vitro testing of susceptibility and resistance.
- 5. Epidemiologically important factors of resistance. ESBL. MRSA and MRSCN. Resistance to glycopeptids, VRE, VISA and VRSA. Note about other important resistance factors (to aminoglycosides, to macrolides, mostly MLS type in streptococci and staphylococci). Importance of nosocomial strains with factors of

increased rezistence, Their surveillance and measures when they occur. Detection of individual resistance factors

- **II. Treatment of infections of individual organ systems in practice**
- 6. Basics of antibiotic treatment of bloodstream infections, proper blood culture sampling, interpretation of finding in relation to therapy
- 7. Basics of treatment of locomotor system, pyogene and anaerobic infections. Penetration of individual antibiotic groups to the tissues. Basics of antibiotic treatment of neural system and eye
- 8. Antibiotic treatment in gastrointestinal infections, including stomatological problems. Basics of antibiotic treatment of respiratory infections and otitis.
- 9. Basics of antibiotic therapy of urinary, genital and skin infections. 10. Basics of use of antivirotics, antimycotics and antiparasital drugs in various infections
- **III. Treatment of special cases. Basics of proper practice, treatment economics**
- 11. Treatment of neutropenic patients.
- 12. Basic rules for treatment in liver and kidney problems, in pregnancy, lactation and in children
- 13. Basics of proper antibiotic practice, antibiotic centers, prescription limits, economy of antimicrobial treatment.
- 14. Theme reserved

Literature

required literature

- Powerpointové prezentace, dostupné ve studijních materiálech. - Powerpoint slideshows, available in Study materials

recommended literature

- BENEŠ, Jiří. *Infekční lékařství*. 1. vyd. Praha: Galén, 2009. xxv, 651. ISBN 9788072626441. [info](#)
- JINDRÁK, Vlastimil, Dana HEDLOVÁ and Pavla URBÁŠKOVÁ. *Antibiotická politika a prevence infekcí v nemocnici*. První vydání. Praha: Mladá fronta, 2014. 709 stran. ISBN 9788020428158. [info](#)
- SIMON, Claus and Wolfgang STILLE. *Antibiotika v současné lékařské praxi*. Edited by Miroslav Hejzlar. 1. vyd. Praha: Grada, 1998. 711 s. ISBN 8071692689. [info](#)

Teaching methods

seminary, self-study

Assessment methods

Time schedule: Subject has the form of two-lesson seminars.

To get the colloquium, students have to be succesful at the colloquial test, and also to participate on the lessons (max. 3 absences, partially may be substituted by a referate, more info on the first lesson).

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

Information on the extent and intensity of the course: 14 x 2 hodiny.

Teacher's information

Na jaře 2010 je předmět vyučován v úterý 16.50 až 18.30 v posluchárně I. patologického ústavu, budova H, FN u sv. Anny. E-mailový a telefonický kontakt - E-mail and phone contact:

MUDr. Renata Tejkalová: renata.tejkalova@fnusa.cz, TEL 543 183 096 (popřípadě 543 183 109, 543 183 097)

Doc. MUDr. Filip Růžička, PhD: fruzic@fnusa.cz, TEL 543 183 090 (přednosta ústavu/head)

prof. MUDr. Miroslav Votava, CSc.: miroslav.votava@fnusa.cz, TEL 543 183 117

as. MUDr. Ondřej Zahradníček: zahradnicek@fnusa.cz, TEL 543 183 113

odb. as. MUDr. Lenka Černohorská, PhD.: lenka.cernohorska@fnusa.cz, TEL 543 183 097

odb. as. Mgr. Monika Dvořáková Heroldová, PhD: monika.heroldova@fnusa.cz

as. Mgr. Barbora Žaloudíková: barzal@ektch.cz

as. Mgr. Martina Mahelová: 150878@mail.muni.cz

Předmět převážně vyučuje dr. Tejkalová, vedoucí antibiotického střediska Mikrobiologického ústavu LF MU a FN u sv. Anny v Brně. (Dr. Tejkalová je převážně zaměstnankyní fakultní nemocnice, proto ji nenajdete v seznamu kmenových učitelů ústavu.)

The course is also listed under the following terms [Accreditation spring](#).

VLA051 Academic Writing *

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2/0. 4 credit(s). Type of Completion: z (credit).

Teacher(s)

[Mgr. Robert Helán, Ph.D.](#) (lecturer)

[Joseph Lennon, BA, Ph.D.](#) (lecturer)

Supervisor

[Mgr. Robert Helán, Ph.D.](#)
[Language Centre, Faculty of Medicine Division - Faculty Branches of University Departments - Faculty of Medicine](#)

Contact Person: [Mgr. Robert Helán, Ph.D.](#)

Supplier department: [Language Centre, Faculty of Medicine Division - Faculty Branches of University Departments - Faculty of Medicine](#)

Timetable

Fri 13:30–15:10 [A15/113](#)

Prerequisites

[VSAJ0222 English 1 II -p](#) || [VLAJ0222 English 1 II -p](#)

Students should have the minimum knowledge of English corresponding to the B2 level of the Common European Framework of Reference for Languages.

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

The capacity limit for the course is 19 student(s).

Current registration and enrolment status: enrolled: **17/19**, only registered: **0/19**, only registered with preference (fields directly associated with the programme): **0/19**

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

To familiarize students with selected lexico-grammatical features of English academic style by means of language analysis of exemplary academic texts.

To develop students' strategies for the specific phases of the writing process (prewriting, writing, editing).

To discuss and achieve an understanding of important themes, issues and debates related to academic writing in the context of English as a foreign language.

Learning outcomes

At the end of the course students should be able to write a paper on a research topic.

Syllabus

- 1. Introduction to the Course; Introduction to Academic Writing: Audience, Purpose, Organization, Style, Flow, Presentation; Features of Academic Writing
- 2. The Writing Process; Writing Stages: Pre-Writing, Writing, Re-Writing, Editing; The Use of Techniques from Creative Writing; Types of Academic Publications; Structure of a Research Paper
- 3. Academic Vocabulary: Synonyms, Nominalizations, Levels of Formality, Paraphrasing; Collocations: Using Corpora for Language Learning
- 4. Academic Grammar: Objective Language, Hedging, Metalanguage; Selected Points of Grammar for Academic Writing (Passive vs. Active Voice)
- 5. Abstracts and the Writing of Abstracts: Types of Abstracts, Their Structure and Typical Moves, Summarizing and Paraphrasing
- 6. Medical Case Reports: Structure and Language, Case Presentation Section: Problem-Solution Pattern; Conventions of Medical Writing

- 7. Revision – Midterm Evaluation
- 8. Constructing a Research Paper I: IMRaD Structure; Introductions: Creating a Research Space, Citations and Tenses, General-to-Specific Pattern
- 9. Constructing a Research Paper II: Methods Sections; Selected Points of Grammar for Academic Writing: Linking Devices
- 10. Constructing a Research Paper III: Results Sections; Selected Points of Grammar for Academic Writing: Location Statements, Making Comparisons
- 11. Constructing a Research Paper IV: Discussion Sections, Levels of Generalizations, Expressions of Limitations
- 12. How To Get Published: Writing for Specific Audiences; Target Journal Analysis; Selected Points of Grammar for Academic Writing: Gerunds and Infinitives
- 13. Remaining Issues and Topics
- 14. Final Revision and Consolidation, Final Evaluation

Literature

recommended literature

- GODSON, Patricia. *Becoming an Academic Writer*. Texas A and M University: Sage, 2013.
- KLAUSER, Heriette Anne: *Writing on both sides of the brain*. New York: Harper Collins, 1987.
- SWALES, John and Christine B. FEAK. *Academic writing for graduate students : essential tasks and skills*. 3rd ed. Ann Arbor, Mich.: University of Michigan Press, 2012. xiv, 418. ISBN 9780472034758. [info](#)
- ŠTĚPÁNEK, Libor, Janice DE HAAFF, Alena HRADILOVÁ and David SCHÜLLER. *Academic English – Akademická angličtina: Průvodce anglickým jazykem pro studenty, akademiky a vědce (Academic English: a guide for students, academics and scientists)*. Praha: Grada, 2011. 224 pp. ISBN 978-80-247-3577-1. [info](#)
- BAILEY, Stephen. *Academic writing : a handbook for international students*. 3rd ed. New York: Routledge, 2011. xx, 293. ISBN 9780415595803. [info](#)
- GILLET, Andy, Angela HAMMOND and Mary MARTALA. *Successful academic writing*. 1st pub. Harlow: Pearson, 2009. xxvi, 334. ISBN 9780273721710. [info](#)
- HARTLEY, James. *Academic writing and publishing : a practical handbook*. London: Routledge, 2008. viii, 196. ISBN 9780415453219. [info](#)
- SWALES, John. *Research genres : explorations and applications*. Cambridge: Cambridge University Press, 2004. xii, 314. ISBN 0521533341. [info](#)
- *The A to Z of medical writing*. Edited by Tim Albert. London: BMJ Books, 2000. 145p. ;. ISBN 0727914871. [info](#)
- HUFF, Anne Sigismund. *Writing for scholarly publication*. Thousand Oaks: SAGE Publications, 1998. xi, 185. ISBN 0761918051. [info](#)
- SWALES, John. *Genre analysis : English in academic and research settings*. Cambridge: Cambridge University Press, 1990. xi, 260. ISBN 0521338131. [info](#)

Teaching methods

Interactive lectures
Student oral presentations
Individual/pair/group work
Discussions of relevant issues tackled in the lectures
Written reflections on course material
Final written work

Assessment methods

Attendance and active participation in seminars
Oral presentation of assigned chapter(s) from required reading
Final drafts of assigned written work (abstract and research article introduction)

Language of instruction

English

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

Information on course enrolment limitations: Předmět je určen pro studenty 3.ročníku se zaměřením P-Pool

Teacher's information

Course dates - on Fridays, 1:30 pm - 3:10 pm (A15/113)

The course is also listed under the following terms [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VLBC0321c Biochemistry I *

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[Ing. Martina Čarnecká, Ph.D.](#) (seminar tutor)
[doc. RNDr. Jiří Dostál, CSc.](#) (seminar tutor)
[Mgr. Jana Gregorová, Ph.D.](#) (seminar tutor)
[MUDr. Miroslava Hlaváčová](#) (seminar tutor)
[MUDr. Michaela Králíková, Ph.D.](#) (seminar tutor)
[RNDr. Hana Paulová, CSc.](#) (seminar tutor)
[Mgr. Ondřej Peš, Ph.D.](#) (seminar tutor)
[Mgr. Jiří Slanina, Ph.D.](#) (seminar tutor)
[prof. RNDr. Eva Táborská, CSc.](#) (seminar tutor)
[doc. RNDr. Josef Tomandl, Ph.D.](#) (seminar tutor)
[Mgr. Marie Tomandlová, Ph.D.](#) (seminar tutor)
[Mgr. Katarína Kostolanská](#) (assistant)
[Lenka Nerudová](#) (assistant)
[Mgr. Lucie Novotná](#) (assistant)
[Mgr. Anna Pleskačová](#) (assistant)
[Mgr. Roman Sándor](#) (assistant)

Supervisor

[prof. RNDr. Eva Tábořská, CSc.](#)

[Department of Biochemistry - Theoretical Departments - Faculty of Medicine](#)

Supplier department: [Department of Biochemistry - Theoretical Departments - Faculty of Medicine](#)

Timetable of Seminar Groups

VLBC0321c/01: Wed 7:30–9:10 [A16/211](#)

VLBC0321c/02: Wed 7:30–9:10 [A16/211](#)

VLBC0321c/03: Wed 7:30–9:10 [A16/211](#), *M. Králíková*

VLBC0321c/04: Wed 7:30–9:10 [A16/211](#), *M. Králíková*

VLBC0321c/05: Fri 9:20–11:00 [A16/211](#), *J. Gregorová*

VLBC0321c/06: Fri 9:20–11:00 [A16/211](#), *J. Gregorová*

VLBC0321c/07: Thu 15:20–17:00 [A16/211](#), *M. Čarnecká*

VLBC0321c/08: Fri 7:30–9:10 [A16/211](#), *M. Tomandlová*

VLBC0321c/09: Thu 15:20–17:00 [A16/211](#), *M. Čarnecká*

VLBC0321c/10: Fri 7:30–9:10 [A16/211](#), *M. Tomandlová*

VLBC0321c/11: Wed 16:00–17:40 [A16/211](#), *J. Slanina*

VLBC0321c/12: Wed 16:00–17:40 [A16/211](#), *J. Slanina*

VLBC0321c/13: Wed 14:00–15:40 [A16/211](#), *H. Paulová*

VLBC0321c/14: Wed 14:00–15:40 [A16/211](#), *H. Paulová*

VLBC0321c/15: Fri 7:30–9:10 [A16/211](#), *J. Dostál*

VLBC0321c/16: Fri 7:30–9:10 [A16/211](#), *J. Dostál*

VLBC0321c/17: Wed 12:00–13:40 [A16/211](#), *J. Tomandl*

VLBC0321c/18: Wed 12:00–13:40 [A16/211](#), *J. Tomandl*

Prerequisites (in Czech)

[VLBI0222c Biology II-pract.](#) && [VLBF011c Biophysics - pract.](#)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

The aim of the course is to obtain knowledge on essential metabolic processes on the cellular level. Understanding of these processes is a base for comprehension of metabolism on the tissue and organ level. In the introductory lessons are summarized basic terms from chemistry needed for understanding of body structure a physico-chemical processes occurring in it ((chemical composition of the body, survey of biologically important elements, water, electrolytes, non-electrolytes, osmotic pressure, acid-base, redox and precipitation reactions), the following lectures are focused on biochemical pathways in cells.

Learning outcomes

In the end of the course will students understand the meaning of basic chemical terms (pH, osmolality, electrolyte, buffer, etc.) and apply this knowledge when describing the properties of body fluids.

Describe the role of macro- and microbiogenic elements in the organism
Discusse the properties and function of enzymes
Describes basic catabolic and anabolic pathways of carbohydrate, lipid and protein metabolism, and their relationships.
Understand the principles of energy production, utilization and deposition at the cellular level.
Explain the function of cell membranes and the principle of compartmentalization at the cellular level and the transport processes on the membrane.
Describe protein synthesis, starting with the replication and transcription, translation and post-translational modifications. Understand the relationship between protein structure and function.
Explain the function of hemoglobin in oxygen transport and maintaining acid-base balance.
Discusses the principles of some diseases at the molecular level.

Syllabus

- Chemical composition of human body.
- Water, electrolytes, osmotic pressure, osmolality. pH, buffers. Structure of haemoglobin and its relationship to the function. Hb types in the blood of healthy subjects, HbCO and MetHb, abnormal Hb types. Enzymes - reaction rate, progress curve, the Michaelis plot and K_m , enzyme inhibition. Coenzymes, their relationship to vitamins. Membrane structure and assembly. Transport across membranes. Metabolism of glucose: Glycolysis under anaerobic and aerobic conditions and the oxidation of pyruvate. Gluconeogenesis. Glycogenesis and glycogenolysis. Metabolism of proteins. Common features of amino acid conversion. The synthesis of urea. Nitrogen balance. Important reactions in amino acid catabolism. Biosynthesis and desaturation of fatty acids. The sources of essential fatty acids. Metabolism of triacylglycerols. Metabolism of phospholipids. Biosynthesis of eicosanoids. Peroxidation of lipids. The citric acid cycle. The respiratory chain and oxidative phosphorylation. Replication, transcription, proteosynthesis.

Literature

required literature

- Seminární texty dostupné v IS.

Teaching methods

Course is based on group discussion to the given topics. The outlines of discussion are in the recommended textbook. Complementary materials are available in section Study materials.

Assessment methods

Full attendance in seminars is the principal condition. If any absence, it must be apologized through Department of Study Affairs up to five days. If apology is recorded in Information System, then student is allowed to make up the absence according to teacher's instructions. Four revision tests are written in seminars, semestral limit for credit is 42. If the semestral limit is not fulfilled, student must write the Credit test (limit 14/30). All

absences must be made up before writing the credit test. One repetition of the Credit test is approved.

Language of instruction

Czech

Further Comments

The course is taught annually.

Listed among pre-requisites of other courses

- [VLBC0422c Biochemistry II](#)
([VLBI0222p](#) || [VSBI0222p](#)) && [VLBF011p](#) && [VLBC0321s](#) && [VLBC0321c](#) && [VLFY0321c](#) && [VLFY0321s](#) (Do I meet enrolment requirements?)
- [VLBC0422p Biochemistry II - lecture](#)
([VLBI0222p](#) || [VSBI0222p](#)) && [VLBF011p](#) && [VLBC0321s](#) && [VLBC0321c](#) && [VLFY0321c](#) && [VLFY0321s](#) (Do I meet enrolment requirements?)
- [VLBC0422s Biochemistry I - seminar](#)
([VLBI0222p](#) || [VSBI0222p](#)) && [VLBF011p](#) && [VLBC0321s](#) && [VLBC0321c](#) && [VLFY0321c](#) && [VLFY0321s](#) (Do I meet enrolment requirements?)
- [VLLP0431c Clinical Introduction I - practice](#)
[VLFY0321c](#) && [VLFY0321s](#) && [VLBC0321s](#) && [VLBC0321c](#) && [VLAN0222c](#) && [VLAN0222s](#) (Do I meet enrolment requirements?)
- [VLLP0431p Clinical Introduction I - lecture](#)
[VLFY0321c](#) && [VLFY0321s](#) && [VLBC0321s](#) && [VLBC0321c](#) && [VLAN0222c](#) && [VLAN0222s](#) (Do I meet enrolment requirements?)
- [VLTZ0451 Theoretical Bases of Clinical Medicine I - seminar](#)
[VLFY0321c](#) && [VLFY0321s](#) && [VLBC0321s](#) && [VLBC0321c](#) && [VLBI0222p](#) && [VLAN0222c](#) && [VLAN0222s](#) (Do I meet enrolment requirements?)

The course is also listed under the following terms [Autumn 2016](#), [Accreditation autumn](#).

VLBC0321p Biochemistry I - lecture ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

3/0/0. 0 credit(s). Type of Completion: z (credit).

Teacher(s)

[Ing. Martina Čarnecká, Ph.D.](#) (lecturer)
[doc. RNDr. Jiří Dostál, CSc.](#) (lecturer)
[Mgr. Jana Gregorová, Ph.D.](#) (lecturer)
[MUDr. Miroslava Hlaváčová](#) (lecturer)
[MUDr. Michaela Králíková, Ph.D.](#) (lecturer)
[RNDr. Hana Paulová, CSc.](#) (lecturer)
[Mgr. Ondřej Peš, Ph.D.](#) (lecturer)
[Mgr. Jiří Slanina, Ph.D.](#) (lecturer)

[prof. RNDr. Eva Táborská, CSc.](#) (lecturer)
[doc. RNDr. Josef Tomandl, Ph.D.](#) (lecturer)
[Mgr. Marie Tomandlová, Ph.D.](#) (lecturer)
[Mgr. Katarína Kostolanská](#) (assistant)
[Lenka Nerudová](#) (assistant)
[Mgr. Lucie Novotná](#) (assistant)
[Mgr. Anna Pleskačová](#) (assistant)
[Mgr. Roman Sándor](#) (assistant)

Supervisor

[prof. RNDr. Eva Táborská, CSc.](#)
[Department of Biochemistry - Theoretical Departments - Faculty of Medicine](#)
Supplier department: [Department of Biochemistry - Theoretical Departments - Faculty of Medicine](#)

Timetable

Tue 8:00–9:50 [A22/116 aula](#), Thu 7:30–8:20 [A22/116 aula](#)

Prerequisites (in Czech)

[VLBI0222c Biology II-pract.](#) && [VLBF011c Biophysics - pract.](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

The aim of the course is to obtain knowledge on essential metabolic processes on the cell level. Understanding of these processes is a base for comprehension of metabolism on the tissue and organ level. In the introductory lessons are summarized basic terms from chemistry needed for understanding of body structure a physico-chemical processes occurring in it ((chemical composition of the body, survey of biologically important elements, water, electrolytes, non-electrolytes, osmotic pressure, acid-base, redox and precipitation reactions), the following lectures are focused on biochemical pathways in cells.

Learning outcomes

In the end of the course will students understand the meaning of basic chemical terms (pH, osmolality, electrolyte, buffer, etc.) and apply this knowledge when describing the properties of body fluids.

Describe the role of macro- and microbiogenic elements in the organism

Discuss the properties and function of enzymes

Describes basic catabolic and anabolic pathways of carbohydrate, lipid and protein metabolism, and their relationships.

Understand the principles of energy production, utilization and deposition at the cellular level.

Explain the function of cell membranes and the principle of compartmentalization at the cellular level and the transport processes on the membrane.

Describe protein synthesis, starting with the replication and transcription, translation and

post-translational modifications. Understand the relationship between protein structure and function.

Explain the function of hemoglobin in oxygen transport and maintaining acid-base balance.

Discusses the principles of some diseases at the molecular level.

Syllabus

- Chemical composition of human body, survey of biochemically important elements, ROS. Water (properties, distribution), electrolytes, nonelectrolytes, osmotic pressure, osmolality, osmolarity. Acid-base processes (pH, values of pH in organism). Buffers, Henderson-Hasselbalch equation. Introduction to metabolism. Bases of bioenergetics (Gibbs energy, macroergic compounds and their formation, chemical equilibrium and steady state). Redox equilibrium (electrode potential, Nernst-Peters equation, biological redox systems). Membrane structure, the assembly and recycling of membranes. Specialized structures of plasma membrane – lipid rafts, caveols, tight junctions. membrane transport. Enzymes. Characteristic features of biocatalysis, enzyme structure and function, nomenclature and classification of enzymes. Enzyme cofactors, review of structures and functions. Mechanisms of enzyme action. Kinetics of enzyme catalyzed reactions. Assays of enzyme activity, the conditions used. Factors affecting catalytic activity of enzymes, types of enzyme inhibition. Metabolism: basic concepts and design. Biological oxidations, generation of high-energy compounds. Saccharide metabolism: the glycolytic pathway and aerobic decarboxylation of pyruvate. Gluconeogenesis. Glycogen biosynthesis and breakdown. The pentose phosphate pathway. The glucuronate pathway. Interconversions of monosaccharides and of their derivatives. Protein and amino acid metabolism. The common reactions in amino acid degradation. The ureosynthetic cycle. Metabolic breakdown of individual amino acids. Biosynthesis and breakdown of fatty acids, ketogenesis. Synthesis of triacylglycerols. Metabolism of phospholipids and glycolipids. Synthesis of eicosanoids. Biosynthesis and transformations of cholesterol, biosynthesis of bile acids. Interrelationships among the major pathways involved in energy metabolism. The citric acid cycle. Synthesis of haem. Mitochondria. Oxidative phosphorylation - mitochondrial electron transport chain, synthesis of ATP. Structure of haemoglobin, structure-function relationships (the oxygen saturation curve, inducement of haemoglobin saturation and oxygen transport. Bohr effect. Normal haemoglobin types in blood, haemoglobin concentration. Other forms (glycohaemoglobin, methaemoglobin, carboxyhaemoglobin) and abnormal haemoglobins. Biosynthesis and catabolism of purine and pyrimidine nucleotides. Chromatin, DNA replication. DNA transcription. Regulation of gene expression. Protein synthesis and post-translational processing.

Literature

required literature

- KOOLMAN, Jan and Klaus-Heinrich RÖHM. *Barevný atlas biochemie*. 1. vyd. Praha: Grada, 2012. 498 pp. ISBN 978-80-247-2977-0. [info](#)

- MURRAY, Robert K., David A. BENDER, Kathleen M. BOTHAM, Peter J. KENNELLY, Victor W. RODWELL and P. Anthony WEIL. *Harperova ilustrovaná biochemie*. Translated by Bohuslav Matouš. Páté české vydání, prv. Praha: Galén, 2012. xii, 730. ISBN 9788072629077. [info](#)

recommended literature

- VASUDEVAN, D. M., S. SREEKUMARI and Kannan VAIDYANATHAN. *Úvod do všeobecnej a klinicky aplikovanej biochémie*. Edited by Jozef Čársky. Prvé slovenské vydanie. Bratislava: Balneotherma s.r.o., 2015. 669 stran. ISBN 9788097015688. [info](#)

Teaching methods

Teaching form are lectures. Supplementary subjects are seminars VLBC0321s a VLBC0321c

Assessment methods

Subject is a first part of two-semester subject Biochemistry a is not terminated by exam nor course unit credit.

Language of instruction

Czech

Further Comments

The course is taught annually.

The course is also listed under the following terms [Autumn 2016](#), [Accreditation autumn](#).

VLBC0321s Biochemistry I - seminar ✱

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2/0. 4 credit(s). Type of Completion: z (credit).

Teacher(s)

[Ing. Martina Čarnecká, Ph.D.](#) (seminar tutor)
[doc. RNDr. Jiří Dostál, CSc.](#) (seminar tutor)
[Mgr. Jana Gregorová, Ph.D.](#) (seminar tutor)
[MUDr. Miroslava Hlaváčová](#) (seminar tutor)
[MUDr. Michaela Králíková, Ph.D.](#) (seminar tutor)
[RNDr. Hana Paulová, CSc.](#) (seminar tutor)
[Mgr. Ondřej Peš, Ph.D.](#) (seminar tutor)
[Mgr. Jiří Slanina, Ph.D.](#) (seminar tutor)
[prof. RNDr. Eva Táborská, CSc.](#) (seminar tutor)
[doc. RNDr. Josef Tomandl, Ph.D.](#) (seminar tutor)
[Mgr. Marie Tomandlová, Ph.D.](#) (seminar tutor)
[Mgr. Katarína Kostolanská](#) (assistant)
[Lenka Nerudová](#) (assistant)
[Mgr. Lucie Novotná](#) (assistant)

[Mgr. Anna Pleskačová](#) (assistant)

[Mgr. Roman Sándor](#) (assistant)

Supervisor

[prof. RNDr. Eva Táborská, CSc.](#)

[Department of Biochemistry - Theoretical Departments - Faculty of Medicine](#)

Supplier department: [Department of Biochemistry - Theoretical Departments - Faculty of Medicine](#)

Timetable of Seminar Groups

VLBC0321s/01: Mon 7:30–9:10 [A16/213](#), *E. Táborská*

VLBC0321s/02: Mon 7:30–9:10 [A16/213](#), *E. Táborská*

VLBC0321s/03: Mon 9:30–11:10 [A16/213](#), *M. Králíková*

VLBC0321s/04: Mon 9:30–11:10 [A16/213](#), *M. Králíková*

VLBC0321s/05: Tue 13:00–14:40 [A16/213](#), *J. Gregorová*

VLBC0321s/06: Tue 13:00–14:40 [A16/213](#), *J. Gregorová*

VLBC0321s/07: Mon 16:20–18:00 [A16/213](#), *M. Čarnecká*

VLBC0321s/08: Tue 14:50–16:30 [A16/213](#), *M. Tomandlová*

VLBC0321s/09: Mon 16:20–18:00 [A16/213](#), *M. Čarnecká*

VLBC0321s/10: Tue 14:50–16:30 [A16/213](#), *M. Tomandlová*

VLBC0321s/11: Mon 14:00–15:40 [A16/213](#), *J. Slanina*

VLBC0321s/12: Mon 14:00–15:40 [A16/213](#), *J. Slanina*

VLBC0321s/13: Mon 7:30–9:10 [A16/213](#), *H. Paulová*

VLBC0321s/14: Mon 7:30–9:10 [A16/213](#), *H. Paulová*

VLBC0321s/15: Tue 17:00–18:40 [A16/213](#), *J. Dostál*

VLBC0321s/16: Tue 17:00–18:40 [A16/213](#), *J. Dostál*

VLBC0321s/17: Mon 11:30–13:10 [A16/213](#), *J. Tomandl*

VLBC0321s/18: Mon 11:30–13:10 [A16/213](#), *J. Tomandl*

Prerequisites (in Czech)

[VLBI0222c Biology II-pract.](#) && [VLBF011c Biophysics - pract.](#)

(Do I meet enrolment requirements?)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

The aim of the course is to obtain knowledge on essential metabolic processes on the cellular level. Understanding of these processes is a base for comprehension of metabolism on the tissue and organ level. In the introductory lessons are summarized basic terms from chemistry needed for understanding of body structure a physico-chemical processes occurring in it ((chemical composition of the body, survey of biologically important elements, water, electrolytes, non-electrolytes, osmotic pressure, acid-base, redox and precipitation reactions), the following lectures are focused on biochemical pathways in cells.

Learning outcomes

In the end of the course will students understand the meaning of basic chemical terms (pH, osmolality, electrolyte, buffer, etc.) and apply this knowledge when describing the properties of body fluids.

Describe the role of macro- and microbiogenic elements in the organism

Discusse the properties and function of enzymes

Describes basic catabolic and anabolic pathways of carbohydrate, lipid and protein metabolism, and their relationships.

Understand the principles of energy production, utilization and deposition at the cellular level.

Explain the function of cell membranes and the principle of compartmentalization at the cellular level and the transport processes on the membrane.

Describe protein synthesis, starting with the replication and transcription, translation and post-translational modifications. Understand the relationship between protein structure and function.

Explain the function of hemoglobin in oxygen transport and maintaining acid-base balance.

Discusses the principles of some diseases at the molecular level.

Syllabus

- Chemical composition of human body.
- Water, electrolytes, osmotic pressure, osmolality. pH, buffers. Structure of haemoglobin and its relationship to the function. Hb types in the blood of healthy subjects, HbCO and MetHb, abnormal Hb types. Enzymes - reaction rate, progress curve, the Michaelis plot and K_m , enzyme inhibition. Coenzymes, their relationship to vitamins. Membrane structure and assembly. Transport across membranes. Metabolism of glucose: Glycolysis under anaerobic and aerobic conditions and the oxidation of pyruvate. Gluconeogenesis. Glycogenesis and glycogenolysis. Metabolism of proteins. Common features of amino acid conversion. The synthesis of urea. Nitrogen balance. Important reactions in amino acid catabolism. Biosynthesis and desaturation of fatty acids. The sources of essential fatty acids. Metabolism of triacylglycerols. Metabolism of phospholipids. Biosynthesis of eicosanoids. Peroxidation of lipids. The citric acid cycle. The respiratory chain and oxidative phosphorylation. Replication, transcription, proteosynthesis.

Literature

required literature

- Seminární texty dostupné v IS.

Teaching methods

Course is based on group discussion to the given topics. The outlines of discussion are in the recommended textbook. Complementary materials are available in section Study materials.

Assessment methods

Full (100%) attendance in seminars is the principal condition. If any absence, it must be apologized through Department of Study Affairs up to five days. If apology is recorded in

Information System, then student is allowed to make up the absence according to teacher's instructions. Four revision tests are written in seminars, semestral limit for credit is 42. If the semestral limit is not fulfilled, student must write the Credit test (limit 14/30). All absences must be made up before writing the credit test. One repetition of the Credit test is approved.

Language of instruction

Czech

Further Comments

The course is taught annually.

Listed among pre-requisites of other courses

- [VLBC0422c Biochemistry II](#)
([VLBI0222p](#) || [VSBI0222p](#)) && [VLBF011p](#) && [VLBC0321s](#) && [VLBC0321c](#) && [VLFY0321c](#) && [VLFY0321s](#) (Do I meet enrolment requirements?)
- [VLBC0422p Biochemistry II - lecture](#)
([VLBI0222p](#) || [VSBI0222p](#)) && [VLBF011p](#) && [VLBC0321s](#) && [VLBC0321c](#) && [VLFY0321c](#) && [VLFY0321s](#) (Do I meet enrolment requirements?)
- [VLBC0422s Biochemistry I - seminar](#)
([VLBI0222p](#) || [VSBI0222p](#)) && [VLBF011p](#) && [VLBC0321s](#) && [VLBC0321c](#) && [VLFY0321c](#) && [VLFY0321s](#) (Do I meet enrolment requirements?)
- [VLLP0431c Clinical Introduction I - practice](#)
[VLFY0321c](#) && [VLFY0321s](#) && [VLBC0321s](#) && [VLBC0321c](#) && [VLAN0222c](#) && [VLAN0222s](#) (Do I meet enrolment requirements?)
- [VLLP0431p Clinical Introduction I - lecture](#)
[VLFY0321c](#) && [VLFY0321s](#) && [VLBC0321s](#) && [VLBC0321c](#) && [VLAN0222c](#) && [VLAN0222s](#) (Do I meet enrolment requirements?)
- [VLTZ0451 Theoretical Bases of Clinical Medicine I - seminar](#)
[VLFY0321c](#) && [VLFY0321s](#) && [VLBC0321s](#) && [VLBC0321c](#) && [VLBI0222p](#) && [VLAN0222c](#) && [VLAN0222s](#) (Do I meet enrolment requirements?)

The course is also listed under the following terms [Autumn 2016](#), [Accreditation autumn](#).

VLBC0422c Biochemistry II ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

0/3/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[Ing. Martina Čarnecká, Ph.D.](#) (seminar tutor)

[doc. RNDr. Jiří Dostál, CSc.](#) (seminar tutor)

[MUDr. Lenka Fědorová](#) (seminar tutor)

[Mgr. Jana Gregorová, Ph.D.](#) (seminar tutor)

[MUDr. Miroslava Hlaváčová](#) (seminar tutor)

[Mgr. Katarína Kostolanská](#) (seminar tutor)
[MUDr. Michaela Králíková, Ph.D.](#) (seminar tutor)
[Mgr. Lucie Novotná](#) (seminar tutor)
[RNDr. Hana Paulová, CSc.](#) (seminar tutor)
[Mgr. Ondřej Peš, Ph.D.](#) (seminar tutor)
[Mgr. Anna Pleskačová](#) (seminar tutor)
[MUDr. RNDr. Michal Řiháček](#) (seminar tutor)
[Mgr. Roman Sándor](#) (seminar tutor)
[Mgr. Jiří Slanina, Ph.D.](#) (seminar tutor)
[prof. RNDr. Eva Táborská, CSc.](#) (seminar tutor)
[doc. RNDr. Josef Tomandl, Ph.D.](#) (seminar tutor)
[Mgr. Marie Tomandlová, Ph.D.](#) (seminar tutor)
[Lenka Nerudová](#) (assistant)

Supervisor

[prof. RNDr. Eva Táborská, CSc.](#)
[Department of Biochemistry - Theoretical Departments - Faculty of Medicine](#)
Supplier department: [Department of Biochemistry - Theoretical Departments - Faculty of Medicine](#)

Prerequisites (in Czech)

([VLBI0222p Biology II-lect.](#) || [VSBI0222p Biology II-lect.](#)) &&
[VLBF011p Biophysics-lect.](#) && [VLBC0321s Biochemistry I sem](#) &&
[VLBC0321c Biochemistry I](#) && [VLFY0321c Physiology I - practice](#) &&
[VLFY0321s Physiology I - seminar](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

Course is complementary to VLBC0421p a VLLC0421s. The aim of the course is to bring experience with solving practical problems in clinical biochemistry, to acquire practical laboratory skills and to learn students to use results of biochemical analysis for diagnostics.

Learning outcomes

The student will explain the ways of obtaining biological material for biochemical analysis and is familiar with the rules of manipulation. Describes the physiological values of the most important biochemical parameters. Interprets the results of biochemical analyzes, discusses the significance of the findings. Understands the principles of the most important biochemical-analytical methodologies. Is oriented in basic laboratory manipulations.

Syllabus

- Handling biological material. Anticoagulants and their use for blood plasma separation. Communicating results of tests in clinical biochemistry: request forms and laboratory reports.
- Analysis of the absorption spectra of haemoglobin, oxyhaemoglobin and carbonylhaemoglobin. Determination of haemoglobin in blood. Urine test for haemoglobin.
- Determination of total bilirubin in serum. Estimation of bilirubin, urobilinogens and urobilins in urine.
- Determination of total serum proteins by biuret reagent, determination of albumin. Precipitation tests for urine proteins. Detection of proteinuria by diagnostic strips.
- Determination of alanine aminotransferase activity in serum. Determination of alkaline phosphatase activity in serum.
- The enzymatic assay of glucose in blood and urine. Oral glucose tolerance test. Estimation of glycaemia by diagnostic strips. Detection of glucose in urine.
- Determination of total cholesterol in serum. Principles of HDL-cholesterol determination and calculation of the LDL-cholesterol concentration. Chromatography of serum lipids.
- The solubility of uric acid. Murexide test for uric acid. Detection of uric acid in renal calculi. Determination of uric acid in serum and urine.
- Determination of urea in serum and urine. Approximate assessment of the nitrogen balance.
- Appearance and volume of urine, specific gravity and osmolality of urine. Urine pH measurement. Determination of creatinine in blood, serum and urine. Creatinine clearance calculation, calculation of tubular reabsorption and fractional excretion of water.
- Tests in routine urinalysis employing chemical principle: determination of pathological components, multipurpose diagnostic strips in urinalysis.
- Simplified chemical analysis of renal calculi. Practice in urinalysis, seeking for pathological constituents in urine.
- Determination of gastric acid output. Tubeless gastric analyses. Detection of lactic acid.
- Immunochemical assays.

Literature

required literature

- Podklady ke cvičení dostupné v Informačním systému
- Instructions for practicals available in Information system

Teaching methods

laboratory practicals

Assessment methods

Practicals in biochemistry lab.

Full attendance in all lessons (making up all missing and justified lessons. Obtaining of course-unit credits of practices is the pre-requisite for registration to the examination of Biochemistry I.

Language of instruction

Czech

Further Comments

The course is taught annually.

The course is taught: every week.

Listed among pre-requisites of other courses

- [VLLM0522c Medical Microbiology II - practice](#)
[VLLM0421c](#) && ([VLBC0422c](#) || [VSBC041c](#)) && ([VLBC0422s](#) || [VSBC041s](#)) ([Do I meet enrolment requirements?](#))
- [VLLP0532c Clinical Introduction II](#)
[VLLP0431c](#) && ([VLAN0222p](#) || [VSAN0333p](#)) && ([VLHE0322c](#) || [VSHE0322c](#)) && ([VLBC0422c](#) || [VSBC041c](#)) && ([VLFY0422c](#) || [VSFY0422c](#)) ([Do I meet enrolment requirements?](#))

Teacher's information

<http://www.med.muni.cz/toCP1250.cs/biochem/vyuka.html>

The course is also listed under the following terms [Spring 2019](#), [Accreditation spring](#).

VLBC0422p Biochemistry II - lecture ✱

Faculty of Medicine

Spring 2018

Extent and Intensity

2/0/0. 7 credit(s). Type of Completion: zk (examination).

Teacher(s)

[doc. RNDr. Jiří Dostál, CSc.](#) (lecturer)
[prof. RNDr. Eva Táborská, CSc.](#) (lecturer)
[doc. RNDr. Josef Tomandl, Ph.D.](#) (lecturer)
[Ing. Martina Čarnecká, Ph.D.](#) (assistant)
[MUDr. Lenka Fědorová](#) (assistant)
[Mgr. Jana Gregorová, Ph.D.](#) (assistant)
[MUDr. Miroslava Hlaváčová](#) (assistant)
[Mgr. Katarína Kostolanská](#) (assistant)
[MUDr. Michaela Králíková, Ph.D.](#) (assistant)
[Lenka Nerudová](#) (assistant)
[Mgr. Lucie Novotná](#) (assistant)
[RNDr. Hana Paulová, CSc.](#) (assistant)
[Mgr. Ondřej Peš, Ph.D.](#) (assistant)
[Mgr. Anna Pleskačová](#) (assistant)
[MUDr. RNDr. Michal Řiháček](#) (assistant)
[Mgr. Roman Sándor](#) (assistant)
[Mgr. Jiří Slanina, Ph.D.](#) (assistant)
[Mgr. Marie Tomandlová, Ph.D.](#) (assistant)

Supervisor

[prof. RNDr. Eva Tábořská, CSc.](#)

[Department of Biochemistry - Theoretical Departments - Faculty of Medicine](#)

Supplier department: [Department of Biochemistry - Theoretical Departments - Faculty of Medicine](#)

Prerequisites (in Czech)

([VLBI0222p Biology II-lect.](#) || [VSBI0222p Biology II-lect.](#)) &&

[VLBF011p Biophysics-lect.](#) && [VLBC0321s Biochemistry I sem](#) &&

[VLBC0321c Biochemistry I](#) && [VLFY0321c Physiology I - practice](#) &&

[VLFY0321s Physiology I - seminar](#)

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

The course extends the knowledge of biochemistry acquired in the course Biochemistry I and deals with integration of biochemical processes in human body. The aim is to understand biochemical processes characteristic for individual tissues and organs and principles of their regulation. It focuses on the relationship between health and disease from a biochemical point of view. It points to the links between biochemical principles and other medical subjects such as physiology, immunology, pharmacology, toxicology and others. It is also an introduction to clinical biochemistry.

Learning outcomes

The student is able to explain the interrelationship between the metabolism of nutrients under different states of the organism. Describes the metabolic characteristics of major organs and tissues and major disorders, discusses their association with diseases.

Understands and discusses principles of maintaining homeostasis and acid-base balance in the organism, including modeling situations. It discusses the composition of body fluids and their disorders in connection with the principles of homeostasis. It explains the principles of metabolism regulation at all levels.

Syllabus

- Digestion and absorption of lipids. Blood plasma lipids and the major groups of lipoproteins. Metabolic fate of chylomicrons and VLDL, the metabolism of HDL
- The integration of intermediary metabolism at the tissue and organ level (after the meal, during starvation, stress, obesity, diabetes).
- The metabolic functions of the liver. Metabolism of main nutrients. Catabolism of haemoglobin, bilirubin metabolism. Metabolism of iron and copper.
- Biotransformation of xenobiotics. Two phases of biotransformation, typical reactions, cytochrome P450. Metabolism of ethanol. Water and Na⁺, K⁺ ions balance, osmolality and volume of ECF, regulation, disorders.
- Transport of O₂ and CO₂. Metabolic pathways producing/consuming H⁺ ions. Buffer bases of blood, blood plasma, ICF, the parameters of acid-base status.
- Normal renal functions. Glomerular filtration. Tubular resorption and secretion.

- Steroid and thyroid hormones – biosynthesis, secretion, and effects.
- Control of metabolism. Mechanism of hormone and neurotransmitter action. Types of cell membrane receptors, intracellular effects of ligand binding; intracellular receptors.
- Metabolism of nervous tissue. Neuro-secretion. The biosynthesis and inactivation of neurotransmitters, neurotransmission across synapses. Cholinergic, adrenergic, and (inhibitory) gabaergic receptors.
- Metabolism of calcium, magnesium, phosphates, fluorine, and iodine. Hormones involved in their metabolism.
- The extracellular matrix. Synthesis and post-translational modifications of collagen, intermolecular crosslinks in collagen and elastin, proteoglycans. Calcification of bone, regulation. Biochemical markers of bone resorption and formation.
- The major proteins of blood plasma. Endothelial cells. The blood-coagulation cascade, inhibition of clotting. Fibrinogen, fibrin, fibrinolysis.
- Biochemistry of blood cells. Molecular principles of immunochemistry.

Literature

required literature

- MURRAY, Robert K., David A. BENDER, Kathleen M. BOTHAM, Peter J. KENNELLY, Victor W. RODWELL and P. Anthony WEIL. *Harperova ilustrovaná biochemie*. Translated by Bohuslav Matouš. Páté české vydání, prv. Praha: Galén, 2012. xii, 730. ISBN 9788072629077. [info](#)

Teaching methods

Teaching form are lectures. Supplementary subjects are seminars and practicals (VSBC041c and VSBC041s).

Assessment methods

Student must have course-unit credit of seminar and practicals in the day of exam. The examination has written and oral part. The test consists of 25 questions and is solved on computers in the computer room of Department of Biochemistry (personal university ID /UCO/ and pass-word for IS MUNI is necessary for entrance to the test): As a rule, 10 questions are from practical exercises. Remaining 15 questions cover essential knowledge ranging over all studied topics. Only those students who gain 14 correct answers at a minimum will be permitted to sit for the oral examination. The oral part of examination Students select three questions and have about 30 minutes for the written preparation. They should summarize their answers as concisely and accurately as possible. It is recommended to follow these items: - to write a brief synopsis emphasizing the main ideas. - to draw metabolic pathways in structural formulas with a short comment. - where appropriate, to draw a picture. A good and concise preparation reflects the students' knowledge and understanding the biochemistry and will be considered in the final classification.

Language of instruction

Czech

Further Comments

The course is taught annually.

The course is taught: every week.

Listed among pre-requisites of other courses

- [VLIM051c Immunology - practice](#)
([VLBC0422p](#) || [VSBC0221p](#)) && ([VSFY0422p](#) || [VLFY0422p](#)) ([Do I meet enrolment requirements?](#))
- [VLIM051p Immunology - lecture](#)
([VLBC0422p](#) || [VSBC0221p](#)) && ([VSFY0422p](#) || [VLFY0422p](#)) ([Do I meet enrolment requirements?](#))
- [VLLM0522p Medical Microbiology II - lecture](#)
[VLLM0421c](#) && ([VLBC0422p](#) || [VSBC041p](#)) ([Do I meet enrolment requirements?](#))
- [VLLP0633c Clinical Introduction III - practice](#)
[VLLP0532c](#) && ([VLAN0222p](#) || [VSAN0333p](#)) && [VLHE0322p](#) && [VLBC0422p](#) && [VLFY0422p](#) ([Do I meet enrolment requirements?](#))
- [VLOZ0642c Public Health II - practice](#)
([VLOZ0241c](#) || [VLOZ0141c](#)) && [VLLM0522c](#) && [VLLM0522p](#) && [VLBC0422p](#) ([Do I meet enrolment requirements?](#))
- [VLOZ0642p Public Health II - lecture](#)
([VLOZ0241p](#) || [VLOZ0141p](#)) && [VLLM0522c](#) && [VLLM0522p](#) && [VLBC0422p](#) ([Do I meet enrolment requirements?](#))
- [VLPA0521c Pathology I - practicals](#)
([VLFY0422p](#) || [VSFY0422p](#)) && ([VSBC041p](#) || [VLBC0422p](#)) && ([VLAN0222p](#) || [VSAN0333p](#)) && ([VLHE0322p](#) || [VSHE0322p](#)) && [VLLM0421c](#) ([Do I meet enrolment requirements?](#))
- [VLPA0521p Pathology I - lecture](#)
([VLFY0422p](#) || [VSFY0422p](#)) && ([VSBC041p](#) || [VLBC0422p](#)) && ([VLAN0222p](#) || [VSAN0333p](#)) && ([VLHE0322p](#) || [VSHE0322p](#)) && [VLLM0421c](#) ([Do I meet enrolment requirements?](#))
- [VLPF0521c Pathological physiology I - practice](#)
([VLFY0422p](#) || [VSFY0422p](#)) && ([VSBC041p](#) || [VLBC0422p](#)) && ([VLAN0222p](#) || [VSAN0333p](#)) && ([VLHE0322p](#) || [VSHE0322p](#)) && [VLLM0421c](#) ([Do I meet enrolment requirements?](#))

[Zobrazit další předměty](#)

The course is also listed under the following terms [Spring 2019](#), [Accreditation spring](#).

VLBC0422s Biochemistry I - seminar ✱

Faculty of Medicine

Spring 2018

Extent and Intensity

0/3/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[Ing. Martina Čarnecká, Ph.D.](#) (seminar tutor)
[doc. RNDr. Jiří Dostál, CSc.](#) (seminar tutor)
[MUDr. Lenka Fědorová](#) (seminar tutor)
[Mgr. Jana Gregorová, Ph.D.](#) (seminar tutor)
[MUDr. Miroslava Hlaváčová](#) (seminar tutor)
[Mgr. Katarína Kostolanská](#) (seminar tutor)
[MUDr. Michaela Králíková, Ph.D.](#) (seminar tutor)
[Mgr. Lucie Novotná](#) (seminar tutor)
[RNDr. Hana Paulová, CSc.](#) (seminar tutor)
[Mgr. Ondřej Peš, Ph.D.](#) (seminar tutor)
[Mgr. Anna Pleskačová](#) (seminar tutor)
[MUDr. RNDr. Michal Řiháček](#) (seminar tutor)
[Mgr. Roman Sándor](#) (seminar tutor)
[Mgr. Jiří Slanina, Ph.D.](#) (seminar tutor)
[prof. RNDr. Eva Táborská, CSc.](#) (seminar tutor)
[doc. RNDr. Josef Tomandl, Ph.D.](#) (seminar tutor)
[Mgr. Marie Tomandlová, Ph.D.](#) (seminar tutor)
[Lenka Nerudová](#) (assistant)

Supervisor

[prof. RNDr. Eva Táborská, CSc.](#)
[Department of Biochemistry - Theoretical Departments - Faculty of Medicine](#)
Supplier department: [Department of Biochemistry - Theoretical Departments - Faculty of Medicine](#)

Prerequisites (in Czech)

([VLBI0222p Biology II-lect.](#) || [VSBI0222p Biology II-lect.](#)) &&
[VLBF011p Biophysics-lect.](#) && [VLBC0321s Biochemistry I sem](#) &&
[VLBC0321c Biochemistry I](#) && [VLFY0321c Physiology I - practice](#) &&
[VLFY0321s Physiology I - seminar](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

Seminars are complementary to Biochemistry II lecture (VLBC0422p). At the end of the course students understand principles of intermediary metabolism, characteristic features of metabolism of individual organs and tissues and metabolism at various conditions of organism (well fed state, fasting, starvation, metabolic stress, obesity, metabolic syndrome).

Learning outcomes

The student is able to explain the interrelationship between the metabolism of nutrients under different states of the organism. Describes the metabolic characteristics of major organs and tissues and major disorders, discusses their association with diseases.

Understands and discusses principles of maintaining homeostasis and acid-base balance in the organism, including modeling situations. It discusses the composition of body fluids and their disorders in connection with the principles of homeostasis. It explains the principles of metabolism regulation at all levels.

Syllabus

- Enzyme assays in clinical diagnostics. Methods in clinical biochemistry (photometry, electrophoretic methods).
- Plasma lipoproteins, interconversions of lipoproteins. Cholesterol transport, balance of cholesterol intake and excretion.
- Blood glucose (sources, consumption, regulation). Diabetes mellitus.
- Proteins in nutrition. Absorption of amino acids, utilization of amino acids in tissues, blood transport of ammonia, the glutamine cycle. Hormonal regulation.
- Integration of metabolism of nutrients: relationships among the major metabolic pathways in the fed state, post-absorptive state, prolonged starvation, obesity.
- The liver functions – the role in metabolism of nutrients. Catabolism of haemoglobin, urobilinoids, the types of hyperbilirubinemia.
- The liver functions – the role in metabolism of hormones, and vitamins. Metabolism of Fe. Biotransformation of xenobiotics. Metabolism of ethanol.
- Water and mineral metabolism. Sodium and water homeostasis, osmolality and volume of water, regulation, disorders. Blood acid-base parameters. Transport of O₂ a CO₂. Metabolic processes producing and consuming H⁺. Buffer bases. Acid base disorders.
- Major functions of the kidney. Glomerular filtration.
- Tubular resorption and secretion.
- Neurotransmitters and hormone receptors. The most common signal pathways.
- Metabolism of Ca, Mg, P, F, I. Hormones important for their metabolism.
- Metabolism of connective tissue. Extracellular matrix. Mineralisation of bone tissue, regulation. Biochemical markers of bone metabolism. Cartilage and skin.
- Biochemistry of muscle work (skeletal, cardiac, smooth). Effect of NO. Energetics of muscle work.

Literature

required literature

- Podklady pro semináře jsou ve studijních materiálech předmětu VSBC041s. The seminar files are available in IS, Study materials VSBC041s.

Teaching methods

Course is based on group discussion to the given topics. The outlines of discussion are in the recommended textbook. Complementary materials are available in section Study materials.

Assessment methods

course-unit credit. Conditions for giving the course-unit credit. Full attendance in all lessons. Three short tests are written during the semester. Students that will obtain 52/75 points or more during the semester are not obliged to write the credit test. The other students will write the credit test with the 30 questions in the last week of the semester.

The limit for passing the credit test is 14 points. All absences must be made before writing the credit test. Students are allowed to repeat the test once. Students that will not fulfill this requirement will not be given the course-unit credit. Obtaining of course-unit credits of practices and seminars is the pre-requisite for registration to the examination of Biochemistry I.

Language of instruction

Czech

Further Comments

The course is taught annually.

The course is taught: every week.

Listed among pre-requisites of other courses

- [VLLM0522c Medical Microbiology II - practice](#)
[VLLM0421c](#) && ([VLBC0422c](#) || [VSBC041c](#)) && ([VLBC0422s](#) || [VSBC041s](#)) ([Do I meet enrolment requirements?](#))

Teacher's information

<http://www.med.muni.cz/toCP1250.cs/biochem/vyuka.html>

The course is also listed under the following terms [Spring 2019](#), [Accreditation spring](#).

VLBF011c Biophysics - practice ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/4/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[Mgr. Vladan Bernard, Ph.D.](#) (seminar tutor)
[MUDr. Aleš Bourek, Ph.D.](#) (seminar tutor)
[Mgr. Ing. Marek Dostál](#) (seminar tutor)
[MUDr. Lenka Forýtková, CSc.](#) (seminar tutor)
[MUDr. Tomáš Jůza](#) (seminar tutor)
[MUDr. Věra Maryšková](#) (seminar tutor)
[prof. RNDr. Vojtěch Mornstein, CSc.](#) (seminar tutor)
[Mgr. Erik Staffa, Ph.D.](#) (seminar tutor)
[doc. RNDr. Jiřina Škorpíková, CSc.](#) (seminar tutor)
[Ing. Jiřina Valkovičová](#) (seminar tutor)
[Mgr. Daniel Vlček, CSc.](#) (seminar tutor)
[Marta Vágnerová](#) (assistant)

Supervisor

[prof. RNDr. Vojtěch Mornstein, CSc.](#)

[Department of Biophysics - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [prof. RNDr. Vojtěch Mornstein, CSc.](#)

Supplier department: [Department of Biophysics - Theoretical Departments - Faculty of Medicine](#)

Timetable of Seminar Groups

VLBF011c/01: Tue 7:30–10:50 [N04009/309](#)
VLBF011c/02: Tue 7:30–10:50 [N04009/309](#)
VLBF011c/03: Thu 13:50–17:10 [N04009/309](#)
VLBF011c/04: Thu 13:50–17:10 [N04009/309](#)
VLBF011c/05: Tue 11:00–14:20 [N04009/309](#)
VLBF011c/06: Tue 11:00–14:20 [N04009/309](#)
VLBF011c/07: Fri 11:00–14:20 [N04009/309](#)
VLBF011c/08: Fri 11:00–14:20 [N04009/309](#)
VLBF011c/09: Thu 10:20–13:40 [N04009/309](#)
VLBF011c/10: Thu 10:20–13:40 [N04009/309](#)
VLBF011c/11: Thu 17:10–20:30 [N04009/309](#)
VLBF011c/12: Thu 17:10–20:30 [N04009/309](#)
VLBF011c/13: Fri 7:30–10:50 [N04009/309](#)
VLBF011c/14: Fri 7:30–10:50 [N04009/309](#)
VLBF011c/15: Mon 14:30–17:50 [N04009/309](#)
VLBF011c/16: Mon 14:30–17:50 [N04009/309](#)

Prerequisites

Basic knowledge of high school physics

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

At the end of the course students should be able: understand and explain biophysical principles and laws; operate basic biophysical devices; evaluate obtained data by the basic biophysical methods in light of a scientific, effective, safe and efficient attitude to their use; understand principles of the more complex therapeutical and diagnostical medical devices; discriminate possible usage of the biophysical techniques and medical devices in practice.

At the end of this course the student will also have to demonstrate basic skills and habits in data handling and processing of health related data, information and concepts, and the ability of making reasoned decisions as defined in the following paragraphs: 1. Searching, retrieval, storage, use of data, information and knowledge in medical decision making in diagnostics, treatment. 2. Improvement of skills in critical thinking especially in the area of Evidence Based Medicine. 3. Understanding the logics of the health and health care environment, communication with professionals and lay community. 4. Gaining initial insight in the core areas of health care informatics competences (possibilities, limitations and risks) in use of information and communication technologies in a medical environment. This is not a course in computer literacy (working with software programs).

Learning outcomes

After finishing this course the student will: understand the most important biophysical principles and laws; master the measurement by means of the basic biophysical instruments as well as the statical evaluation of this measurement; evaluate the results

obtained by the basic biophysical methods; understand the principles of some more complex medical diagnostic devices to use them in a way which is safe for medical staff and patients; differentiate the application possibilities of biophysical methods and medical devices in practice.

The student will be able to independently and actively seek and use tools, procedures and processes facilitating the correct use of information society environment for more effective study of medicine and more efficient provision of medical services in individual medical specialties; The student will understand the possibilities and risks of digitization and use of digital information and communication tools in the process of providing medical services; The student will get a general overview of the benefits of the information society in the medical domain and will acquire basic behavioral habits in this field.

Syllabus

- **Practical exercises on biophysics**
- 1. Introduction, regulations of practical exercises, laboratory safety rules, etc. An introduction to the theory of measurement.
- 2. Information (overview and evolution). Medical informatics (definitions, the subject). Information technologies (hardware, software, OS, LAN, WAN).
- 3. Information resources (data mining - data warehousing). Information systems (HIS, expert systems, AI, CME).
- 4. Measurement of liquid viscosity. Measurement of surface tension of liquids
- 5. Eosin absorption curve. Spectrophotometrical determination of concentration of eosin. Refractometric determination of NaCl concentration. Polarimetry.
- 6. Audiometry. Measurement of the blood pressure. Ergometry.
- 7. Temperature measurement with a thermocouple. Measuring surface skin temperature with a thermistor. Measuring environmental parameters (noise).
- 8. Haemolysis of erythrocyte suspension by therapeutic ultrasound. Measuring ionising radiation absorption.
- 9. Measuring the voltage and frequency of electric signals by the oscilloscope. Measuring skin resistance. Measuring tissue model impedance. Analysis of acoustic elements of human voice.
- 10. Electromagnetic radiation. Measuring the cooling effect of the environment. Catathermometry. Measuring the illuminance, Luxmeter.
- 11. Contact and contactless thermography. Thermocamera and thermovision. Physiotherapy.
- 12. Electrodiagnostic, electrotherapeutic methods. Individual measuring of the ECG. Electrical excitability. Effect of the direct and alternating currents.
- 13. Advanced imaging methods. Ultrasound – diagnostic and therapeutic usage. Doppler measuring of the velocity of the blood flow. X-rays and Tomography. NMR.
- 14. Knowledge test.

Literature

recommended literature

- HRAZDIRA, Ivo, Aleš BOUREK and Jiřina ŠKORPÍKOVÁ. *Fundamentals of biophysics and medical technology*. Edited by Vojtěch Mornstein. 1. vydání. Brno: Masaryk University, 2007. viii, 317. ISBN 9788021042285. [info](#)
- MORNSTEIN, Vojtěch, Ivo HRAZDIRA and Aleš BOUREK. *Lékařská fyzika a informatika : (se zaměřením na zubní lékařství)*. [1. vydání]. Brno: Neptun, 2007. 352 stran. ISBN 9788086850023. [info](#)

not specified

- HRAZDIRA, Ivo and Vojtěch MORNSTEIN. *Lékařská biofyzika a přístrojová technika*. Dotisk 1. vyd. Brno: NEPTUN, 2004. 381 s. ISBN 8090289614. [info](#)

Teaching methods

Practical exercises

Assessment methods

Basic requirement is the full attendance in the lessons. Theoretical knowledges of the principles used methods are continuously controled by oral examination, in case of fundamental ignorance, student can be excluded from a lesson. For all tasks students must elaborate comprehensive and unique report, these are graded. If are two or more reports graded as "unsuccessful", student cannot write a closing test. Course is finished by the multiple choice test consisting usually 20 questions, evaluated by 20 points. For successfully mastered test student need at least 10 points.

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

Information on completion of the course: Ukončeno závěrečným testem

Listed among pre-requisites of other courses

- [VLBC0321c Biochemistry I](#)
[VLBI0222c](#) && [VLBF011c](#) ([Do I meet enrolment requirements?](#))
- [VLBC0321p Biochemistry I - lecture](#)
[VLBI0222c](#) && [VLBF011c](#) ([Do I meet enrolment requirements?](#))
- [VLBC0321s Biochemistry I - seminar](#)
[VLBI0222c](#) && [VLBF011c](#) ([Do I meet enrolment requirements?](#))
- [VLFY0321c Physiology I - practice](#)
([VLBI0222p](#) || [VSBI0222p](#)) && ([VLBF011c](#) && [VLAN0222s](#)) ([Do I meet enrolment requirements?](#))
- [VLFY0321p Physiology I - lecture](#)
([VLBI0222p](#) || [VSBI0222p](#)) && ([VLBF011c](#) && [VLAN0222s](#)) ([Do I meet enrolment requirements?](#))
- [VLFY0321s Physiology I - seminar](#)
([VLBI0222p](#) || [VSBI0222p](#)) && ([VLBF011c](#) && [VLAN0222s](#)) ([Do I meet enrolment requirements?](#))

Teacher's information

<http://www.med.muni.cz/biofyz/vlzl.htm>

The course is also listed under the following terms [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VLBF011p Biophysics - lecture ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

3/0/0. 6 credit(s). Recommended Type of Completion: zk (examination). Alternate Types of Completion: RZk (examination).

Teacher(s)

[Mgr. Vladan Bernard, Ph.D.](#) (lecturer)

[MUDr. Aleš Bourek, Ph.D.](#) (lecturer)

[MUDr. Lenka Forýtková, CSc.](#) (lecturer)

[prof. RNDr. Vojtěch Mornstein, CSc.](#) (lecturer)

[Mgr. Daniel Vlk, CSc.](#) (lecturer)

[Marta Vágnerová](#) (assistant)

[doc. RNDr. Jiřina Škorpíková, CSc.](#) (alternate examiner)

Supervisor

[prof. RNDr. Vojtěch Mornstein, CSc.](#)

[Department of Biophysics - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [prof. RNDr. Vojtěch Mornstein, CSc.](#)

Supplier department: [Department of Biophysics - Theoretical Departments - Faculty of Medicine](#)

Timetable

Mon 7:30–9:20 [A22/116 aula](#), Wed 9:30–10:20 [A22/116 aula](#)

Prerequisites

Common level of high school knowledge in physics

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

At the end of the course students will understand and explain biophysical principles and laws; understand biophysical principles of the main devices; evaluate data obtained by the basic biophysical methods in light of a scientific, effective, safe and efficient attitude to their use; understand possible usage of the biophysical techniques and medical devices in practice; explain basic principles of the so-called physiological biophysics and (in certain extent) the theory and methods of molecular biophysics.

Learning outcomes

After finishing this course the student will: understand the most important biophysical principles and laws; evaluate the results obtained by the basic biophysical methods;

understand the principles of some more complex medical diagnostic devices to use them in a way which is safe for medical staff and patients; understand the basic ideas of the physiological and molecular biophysics; understand the importance of biophysical processes for the physiology and pathological physiology; differentiate the application possibilities of biophysical methods and medical devices in practice.

Syllabus

- **Introduction into medical biophysics.**
- 1. Introduction. Biophysical view on structure of matter.
- 2. Biological effects of ionising radiation.
- 3. Thermodynamic principles and entropy.
- 4. Thermodynamic processes in living organisms.
- 5. Introduction into molecular biophysics I (subject of study).
- 6. Introduction into molecular biophysics II (methods of study).
- 7. Biophysics of biomembranes. Bioelectric phenomena.
- 8. Biophysics of cardiovascular system.
- 9. Biophysics of respiratory system.
- 10. Biophysical function of sensory receptors. Biophysics of hearing.
- 11. Biophysics of vision.
- 12. Effects of mechanical forces and acoustic fields on the living organisms.
- 13. Biological effects of electromagnetic fields and non-ionising radiation.
- 14. Introduction into biocybernetics and modelling.
- **Physical principles of medical technology.**
- 1. Medicine and technology. Biosignals and their processing.
- 2. Conventional X-ray imaging methods.
- 3. Modern tomographic methods (CT, MRI).
- 4. Radionuclide diagnostics.
- 5. Methods and instruments for ionising radiation therapy.
- 6. Measurement and registration of temperature.
- 7. Optical laboratory instruments.
- 8. Optical diagnostic instruments.
- 9. Electrodiagnostic methods.
- 10. Ultrasound imaging.
- 11. Ultrasound Doppler and duplex methods.
- 12. Measurement and registration of mechanical quantities.
- 13. Methods and instruments used in physiotherapy.
- 14. Modern physical methods in surgery. Lithotripsy.
- 15. Artificial body organs. Nanotechnology in medicine.

Literature

required literature

- HRAZDIRA, Ivo and Vojtěch MORNSTEIN. *Lékařská biofyzika a přístrojová technika*. Dotisk 1. vyd. Brno: NEPTUN, 2004. 381 s. ISBN 8090289614. [info](#)

not specified

- [HRAZDIRA, Ivo](#), [Vojtěch MORNSTEIN](#), [Aleš BOUREK](#) and [Jiřina ŠKORPÍKOVÁ](#). *Fundamentals of biophysics and medical technology*. Edited by Vojtěch Mornstein. 3. dotisk 2., přeprac. vyd. Brno: Masarykova univerzita, 2019. 325 pp. ISBN 978-80-210-5758-6. [info](#)

Teaching methods

lectures

Assessment methods

The practical exercises in Biophysics are compulsory, missing practicals have to be substituted. The exam has theoretical character but can be done only with the credits gained for practicals. The exam consists of written test consisting of 25 questions and oral part, which can be done only when the number of correctly answered questions is 14 or more. This limit is lowered to 11 in the last exam resit. The oral part consists of 2 questions as a rule. They are chosen from the list which is available in department web page. The examined student has to be able to explain the problems and characterise their possible clinical importance.

Language of instruction

Czech

Further Comments

The course can also be completed outside the examination period.

The course is taught annually.

Listed among pre-requisites of other courses

- [aVLLM0421c Medical Microbiology I - practice](#) ([VSBI0222p](#) || [aVLBI0222p](#)) && ([VLBF011p](#) || [aVLBF011p](#)) ([Do I meet enrolment requirements?](#))
- [aVLLM0421p Medical Microbiology I - lecture](#) ([VSBI0222p](#) || [aVLBI0222p](#)) && ([VLBF011p](#) || [aVLBF011p](#)) ([Do I meet enrolment requirements?](#))
- [aVLPX042t Vacation Training in Nursing](#) ([VLBF011p](#) || [aVLBF011p](#)) && ([VSP0011p](#)||[aVLPO011p](#)) && ([VSLT0221s](#)||[aVLLT0222s](#)) ([Do I meet enrolment requirements?](#))
- [VLBC0422c Biochemistry II](#) ([VLBI0222p](#) || [VSBI0222p](#)) && [VLBF011p](#) && [VLBC0321s](#) && [VLBC0321c](#) && [VLFY0321c](#) && [VLFY0321s](#) ([Do I meet enrolment requirements?](#))
- [VLBC0422p Biochemistry II - lecture](#) ([VLBI0222p](#) || [VSBI0222p](#)) && [VLBF011p](#) && [VLBC0321s](#) && [VLBC0321c](#) && [VLFY0321c](#) && [VLFY0321s](#) ([Do I meet enrolment requirements?](#))
- [VLBC0422s Biochemistry I - seminar](#) ([VLBI0222p](#) || [VSBI0222p](#)) && [VLBF011p](#) && [VLBC0321s](#) && [VLBC0321c](#) && [VLFY0321c](#) && [VLFY0321s](#) ([Do I meet enrolment requirements?](#))
- [VLLF111 Medical physics - advanced exercises](#) [VLBF011p](#) ([Do I meet enrolment requirements?](#))
- [VLLM0421c Medical Microbiology I - practice](#) ([VSBI0222p](#) || [VLBI0222p](#)) && ([VSBF011p](#) || [VLBF011p](#)) ([Do I meet enrolment requirements?](#))

- [VLLM0421p Medical Microbiology I - lecture](#)
[VSBI0222p](#) || [VLBI0222p](#) && [VLBF011p](#) ([Do I meet enrolment requirements?](#))

[Zobrazit další předměty](#)

Teacher's information

<http://www.med.muni.cz/biofyz/vlzl.htm>

The course is also listed under the following terms [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#), [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VLBI0121c Biology I - practice ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/3/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[Mgr. Kateřina Cetkovská, Ph.D.](#) (lecturer)

[Mgr. Petr Fojtík](#) (seminar tutor)

[Mgr. Iva Gudernová](#) (seminar tutor)

[Mgr. Pavla Havlíčková](#) (seminar tutor)

[Mgr. Hana Hříbková](#) (seminar tutor)

[Mgr. Šárka Jelínková](#) (seminar tutor)

[Mgr. Aneta Kohutová](#) (seminar tutor)

[Mgr. Tatiana Kováčová](#) (seminar tutor)

[Mgr. Markéta Nováková, Ph.D.](#) (seminar tutor)

[Mgr. Veronika Palušová](#) (seminar tutor)

[MUDr. Martin Pešl, Ph.D.](#) (seminar tutor)

[Mgr. Petra Pospíšilová, Ph.D.](#) (seminar tutor)

[Mgr. Vladimír Rotrekl, Ph.D.](#) (seminar tutor)

[doc. MUDr. Iva Slaninová, Ph.D.](#) (seminar tutor)

[Mgr. Kateřina Straková, Ph.D.](#) (seminar tutor)

[Mgr. Barbora Štefanovie](#) (seminar tutor)

[Mgr. Barbora Valčíková](#) (seminar tutor)

[Mgr. Tereza Váňová](#) (seminar tutor)

[Gretsen Velezmoro Jauregui, M.Sc.](#) (seminar tutor)

[Mgr. Kateřina Vopěnková, Ph.D.](#) (seminar tutor)

[Mgr. Karolína Zoufalová](#) (seminar tutor)

[Jana Růžičková](#) (assistant)

[Mgr. Martina Vráblíková](#) (assistant)

Supervisor

[prof. Ing. Petr Dvořák, CSc.](#)

[Department of Biology - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [Mgr. Kateřina Vopěnková, Ph.D.](#)

Supplier department: [Department of Biology - Theoretical Departments - Faculty of Medicine](#)

Timetable of Seminar Groups

VLBI0121c/01: Thu 13:10–15:40 [A7/205b](#)
VLBI0121c/02: Thu 13:10–15:40 [A7/205b](#)
VLBI0121c/03: Tue 7:30–10:00 [A7/205b](#)
VLBI0121c/04: Tue 7:30–10:00 [A7/205b](#)
VLBI0121c/05: Mon 11:30–14:00 [A7/205b](#)
VLBI0121c/06: Mon 11:30–14:00 [A7/205b](#)
VLBI0121c/07: Tue 10:20–12:50 [A7/205b](#)
VLBI0121c/08: Tue 10:20–12:50 [A7/205b](#)
VLBI0121c/09: Wed 14:10–16:40 [A7/205b](#)
VLBI0121c/10: Wed 14:10–16:40 [A7/205b](#)
VLBI0121c/11: Fri 7:30–10:00 [A7/205b](#)
VLBI0121c/12: Fri 7:30–10:00 [A7/205b](#)
VLBI0121c/13: Wed 11:30–14:00 [A7/205b](#)
VLBI0121c/14: Wed 11:30–14:00 [A7/205b](#)
VLBI0121c/15: Tue 13:00–15:30 [A7/205b](#)
VLBI0121c/16: Tue 13:00–15:30 [A7/205b](#)

Prerequisites

Knowledge of high-school biology on the level of Overview of High School Biology (https://is.muni.cz/auth/do/med/el/overview/overview_CZ.qwarp) or similar is required.

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

After completion of the course student: operates light microscope and can perform some of the basic cytochemical staining techniques; understands the basics of electron microscopy, genetic toxicology, gene engineering or the methods of karyotyping; is able to evaluate the risk of hereditary diseases in a patient on the basis of assigned family anamnesis of this disease; is able to propose and interpret elementary molecular screening methods for some hereditary, neoplastic or microbial diseases. Student is also able to apply this knowledge and skills in other subject, especially histology, pathology and human genetics.

Learning outcomes

After completion of the course student: operates light microscope and can perform some of the basic cytochemical staining techniques; understands the basics of electron microscopy, genetic toxicology, gene engineering or the methods of karyotyping; is able to evaluate the risk of hereditary diseases in a patient on the basis of assigned family anamnesis of this disease; is able to propose and interpret elementary molecular screening methods for some hereditary, neoplastic or microbial diseases. Student is also able to apply this knowledge and skills in other subject, especially histology, pathology and human genetics.

Syllabus

- Week 1: Instructions. Non-cellular organisms and infectious agents
- Week 2: Prokaryotic cells and their medical significance
- Week 3: Microscopic observation of eukaryotic cells
- Week 4: *In vitro* culture of human cells - significance for medical research
- Week 5: Plasma membrane - osmosis, cell fusion
- Week 6: Principles of electron microscopy, cellular ultrastructure
- Week 7: DNA structure and replication. **Control test 1 (knowledge of the weeks 1 to 6 - lectures, seminars, practices)**
- Week 8: Transcription and translation
- Week 9: Methods of cell cycle studying
- Week 10: Mitosis observation under light microscope
- Week 11: Biological significance of meiosis - gametogenesis
- Week 12: Human karyotype and chromosomal abnormalities
- Week 13: no practice - dissection week
- Week 14: Genetic disorders - autosomal inheritance **Control test 2 (knowledge of the weeks 7 to 13 - lectures, seminars, practices)**

Literature

required literature

- Aktuální protokoly k praktickým cvičením jsou dostupné pouze v elektronické podobě na stránkách informačního systému MU (ISu): Studijní materiály předmětu VLBI0121c

Teaching methods

laboratory practice, class discussion

Assessment methods

Practical classes are mandatory.

Requirements for course completion: full attendance in the practices (1 absence, excused or unexcused, is allowed); all protocols completed (also for missed lessons) and checked and signed by appropriate teachers; successfully passed 2 written control tests during the semester (20 questions each, 4 possibilities, 1 answer correct, student need to reach at least 12 points out of 20 in each test). In case you do not pass one of the control tests and its re-sit, you have to pass the final test (so-called Credit test) based on knowledge of the entire semester lectures, seminars and practices. The test comprises of 20 questions: 10 test questions (multiple answers can be correct, negative marking is obtained for incorrect answers) + 10 given terms for written explanation. At least 10 points out of 20 are needed to pass.

In case of student's late arrival to the practice or poor activity at the practice, student is required to write an essay in the length of 2 pages on a given topic. Same for the case of 2nd and any additional absence in practices (excused or unexcused). Find the instructions for essay writing in the Course-related instructions in the IS, bring the essay printed to the teacher who specified the topic and be ready to answer the teacher's questions regarding the topic.

In case of 3 absences, (or more than 3 absences all excused by the Office for Studies

within 5 days from the beginning of the absence and introduced to the Information System), it is addressed individually and course-unit credit is awarded only after the proof of the student's knowledge of the entire semester topics (Credit test, see above).
In case of 4 or more unexcused absences, course-unit credit is not awarded.

Language of instruction

Czech

Follow-Up Courses

- [VLBI0222c Biology II - practice](#)
- [VLBI0222p Biology II - lecture](#)

Further comments (probably available only in Czech)

The course is taught annually.

Listed among pre-requisites of other courses

- [VLBI0222c Biology II - practice](#)
[VLBI0121c](#) && [VLBI0121s](#) ([Do I meet enrolment requirements?](#))
- [VLBI0222p Biology II - lecture](#)
[VLBI0121c](#) && [VLBI0121s](#) ([Do I meet enrolment requirements?](#))
- [VLHE0221c Histology and Embryology I - practice](#)
[VLAN0121s](#) && [VLBI0121c](#) ([Do I meet enrolment requirements?](#))
- [VLHE0221p Histology and Embryology I - lecture](#)
[VLAN0121s](#) && [VLBI0121c](#) ([Do I meet enrolment requirements?](#))

Teacher's information

<https://is.muni.cz/auth/el/1411/podzim2019/VLBI0121c/index.qwarp>

Potřeby pro cvičení: vytištěný aktuální protokol, psací potřeby. Protokoly pro každé praktické cvičení si stáhněte ze Studijních materiálů v ISu a nastudujte předem. Přezůvky, pláště a vlastní chirurgické rukavice nejsou vyžadovány, ale při úlohách s barvením preparátů jsou pláště doporučeny.

Do učebny si vezměte pouze protokoly a psací potřeby, všechny ostatní věci si ještě před začátkem výuky odložte do šatny Biologického ústavu (A7, místnost 203), která bude po dobu výuky uzamčena.

Nahrazování cvičení: Pokud výjimečně nemůžete absolvovat praktická cvičení se svou skupinou (nemoc, návštěva lékaře - maximálně 1x za semestr), domluvte si e-mailem s kontaktní osobou předmětu nahrazení cvičení s jinou skupinou. Pište nejméně 24 hodin před plánovaným nahrazením a upřesněte skupinu (datum a čas), se kterou se chcete cvičení zúčastnit. Výuku lze nahradit pouze v tom samém výukovém týdnu, kdy byla zameškována. Při vyčerpání kapacity skupiny vám nahrazení nemusí být umožněno. Opakované nahrazování výuky s jinými skupinami není povoleno.

Kompletní pokyny k výuce najdete na následujícím odkazu:

https://is.muni.cz/auth/el/1411/podzim2019/VLBI0121c/op/Pokyny_ke_cvicenim_z_Biologie.pdf

Při opakování předmětu je možné na vyžádání uznat absolvovanou praktickou výuku. O uznání je potřeba požádat v prvním týdnu výuky e-mailem s uvedením důvodu.

The course is also listed under the following terms [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VLBI0121p Biology I - lecture ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

1/0/0. 0 credit(s). Type of Completion: z (credit).

Teacher(s)

[Mgr. Kateřina Cetkovská, Ph.D.](#) (lecturer)

[prof. Ing. Petr Dvořák, CSc.](#) (lecturer)

[doc. Mgr. Lumír Krejčí, Ph.D.](#) (lecturer)

[Mgr. Pavel Krejčí, Ph.D.](#) (lecturer)

[Mgr. Vladimír Rotrekl, Ph.D.](#) (lecturer)

[doc. MUDr. Iva Slaninová, Ph.D.](#) (lecturer)

[prof. MUDr. David Šmajš, Ph.D.](#) (lecturer)

[RNDr. Mário Špírek, PhD.](#) (lecturer)

[Mgr. Stjepan Uldrijan, CSc.](#) (lecturer)

[Mgr. Kateřina Vopěnková, Ph.D.](#) (lecturer)

[Mgr. Kateřina Straková, Ph.D.](#) (seminar tutor)

[Jana Růžičková](#) (assistant)

[Mgr. Martina Vráblíková](#) (assistant)

Supervisor

[prof. Ing. Petr Dvořák, CSc.](#)

[Department of Biology - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [Mgr. Kateřina Vopěnková, Ph.D.](#)

Supplier department: [Department of Biology - Theoretical Departments - Faculty of Medicine](#)

Timetable

Wed 10:30–11:20 [A22/116 aula](#)

Prerequisites

Knowledge of high-school biology on the level of Overview of High School Biology (https://is.muni.cz/auth/do/med/el/overview/overview_CZ.qwarp) or similar, and knowledge of all previous lectures and practical classes of the subject. Expected knowledge for each lecture is specified in the course syllabus. Literature recommended to study before each lecture is detailed in the interactive syllabus of the course.

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

After completion of the course student: understands elementary cellular processes and processes taking place during development of a human body; comprehends the complexity of intercellular communication and mutual regulation of individual cells in a multicellular organism; knows basic principles of bacterial and viral diseases; is able to express basic coherence between malfunction in cellular processes and development of diseases, especially hereditary diseases, cancers or developmental defects, and understands the principle of genetic determination of hereditary diseases; can explain and justify action of some therapeutics with emphasis on modern medicine. Student is also able to apply this knowledge and skills in other subject, especially physiology, pathophysiology and human genetics.

Learning outcomes

After completion of the course student: understands elementary cellular processes and processes taking place during development of a human body; comprehends the complexity of intercellular communication and mutual regulation of individual cells in a multicellular organism; knows basic principles of bacterial and viral diseases; is able to express basic coherence between malfunction in cellular processes and development of diseases, especially hereditary diseases, cancers or developmental defects, and understands the principle of genetic determination of hereditary diseases; can explain and justify action of some therapeutics with emphasis on modern medicine. Student is also able to apply this knowledge and skills in other subject, especially physiology, pathophysiology and human genetics.

Syllabus

- Week 1:
- Introduction to medical biology - from understanding of cellular principle to modern biomedicine (prof. Ing. Petr Dvořák, CSc.)
- Week 2:
- Bacteria and viruses – characteristics, reproduction strategies and principles of treatment (Mgr. Kateřina Vopěnková, Ph.D.)
- Week 3:
- Structure, functions and function anomalies of eukaryotic cells (Mgr. Kateřina Cetkovská, Ph.D.)
- Week 4:
- Cells in the context of the entire organism – principles of cell adhesion and intercellular communication (Mgr. Kateřina Cetkovská, Ph.D.)
- Week 5:
- Cell signalling and the principle of cell differentiation (Mgr. Kateřina Vopěnková, Ph.D.)
- Week 6:
- The importance of genetic information – the journey from a gene to protein; DNA replication (RNDr. Mária Špírek, Ph.D.)
- Week 7:
- Cell cycle – molecular mechanisms of regulation and significance for oncology (Mgr. Stjepan Uldrijan, CSc.)

- Week 8:
- Mitotic division in normal and cancer cells (Mgr. Vladimír Rotrekl, Ph.D.)
- Week 9:
- Meiosis and the principle of genetic variability (Mgr. Vladimír Rotrekl, Ph.D.)
- Week 10:
- The basics of genetics, the nature of dominance and recessivity (Mgr. Kateřina Vopěnková, Ph.D.)
- Week 11:
- Genetics of human diseases – molecular principles of genetically determined diseases (doc. MUDr. Iva Slaninová, Ph.D.)
- Week 12:
- Cell death – mechanisms and regulation of apoptosis and its significance for medicine (doc. MUDr. Iva Slaninová, Ph.D.)
- Week 13:
- dissection week - no lecture
- Week 14:
- Epigenetics – the link between genes and environment (Mgr. Stjepan Uldrijan, CSc.)

Literature

required literature

- ALBERTS, Bruce. *Základy buněčné biologie : úvod do molekulární biologie buňky*. Translated by Arnošt Kotyk. 2. vyd. Ústí nad Labem: Espero Publishing, 2004. xxvi, 630. ISBN 8090290620. [info](#)
- PRITCHARD, D. J. and Bruce R. KORF. *Základy lékařské genetiky*. první české vydání. Praha: Galén, 2007. 182 stran. ISBN 9788072624492. [info](#)

recommended literature

- HARDIN, Jeff, Gregory BERTONI and Lewis J. KLEINSMITH. *Becker's world of the cell*. 8th ed. Boston: Benjamin Cummings, 2012. xxviii, 79. ISBN 9780321709783. [info](#)
- LODISH, Harvey F. *Molecular cell biology*. 6th ed. New York, N.Y.: W.H. Freeman and Company, 2008. xxxvii, 11. ISBN 9780716776017. [info](#)
- SNUSTAD, D. Peter, Michael J. SIMMONS, [Jiřina RELICHOVÁ](#), [Jiří DOŠKAŘ](#), [Jiří FAJKUS](#), [Petr HOŘÍN](#), [Aleš KNOLL](#), [Petr KUGLÍK](#), [Jan ŠMARDA](#), [Jana ŠMARDOVÁ](#), [Renata VESELSKÁ](#) and [Boris VYSKOT](#). *Genetika (Principles of Genetics)*. 1. vyd. Brno: Masarykova univerzita, 2009. 894 pp. Učebnice. ISBN 978-80-210-4852-2. [URL](#) [info](#)
- WEINBERG, Robert A. *The biology of cancer*. 2nd ed. New York: Garland Science, 2014. 1 v. ISBN 9780815345282. [info](#)
- *Principles of development*. Edited by Lewis Wolpert. 2nd ed. Oxford: Oxford University Press, 2002. xxv, 542. ISBN 0198792913. [info](#)

Teaching methods

lecture

Assessment methods

Lecture attendance is optional. Students continue with following subjects without proof of this semester's knowledge. Biology I (VLBI0121p) is followed by Biology II (VLBI0222p) that is completed with a written examination test. The test is based on knowledge of all topics from both semesters (lectures, seminars, practices).

Language of instruction

Czech

Follow-Up Courses

- [VLBI0222p Biology II - lecture](#)

Further comments (probably available only in Czech)

The course is taught annually.

Teacher's information

<https://is.muni.cz/auth/el/1411/podzim2019/VLBI0121p/index.qwarp>

Studenti jsou povinni **sledovat interaktivní osnovu předmětu**, kde se dozví aktuální informace (harmonogram, nahrazování, státní svátky, atd.) a zároveň zde najdou příslušnou studijní literaturu na každý týden a odkazy na animace a videa k tématu (<https://is.muni.cz/auth/el/1411/podzim2019/VLBI0121p/index.qwarp>)

Dvě knihy, které jsou součástí povinné studijní literatury (Alberts - Základy buněčné biologie a Pritchard - Základy lékařské genetiky), mohou být vypůjčeny z knihovny univerzitního kampusu (<https://kuk.muni.cz/?page=&lang=czech>) nebo mohou být čteny z počítačů knihovny univerzitního kampusu (pomocí e-prezenčky - <https://kuk.muni.cz/?page=9&lang=czech>)

The course is also listed under the following terms [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VLBI0121s Biology I - seminar ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/1/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[Mgr. Kateřina Cetkovská, Ph.D.](#) (lecturer)

[prof. Ing. Petr Dvořák, CSc.](#) (lecturer)

[doc. MUDr. Iva Slaninová, Ph.D.](#) (lecturer)

[Mgr. Stjepan Uldrijan, CSc.](#) (lecturer)

[Mgr. Kateřina Vopěnková, Ph.D.](#) (lecturer)

[Mgr. Kateřina Straková, Ph.D.](#) (seminar tutor)

[Mgr. Martina Vráblíková](#) (assistant)

Supervisor

[prof. Ing. Petr Dvořák, CSc.](#)

[Department of Biology - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [Mgr. Kateřina Vopěnková, Ph.D.](#)

Supplier department: [Department of Biology - Theoretical Departments - Faculty of Medicine](#)

Timetable of Seminar Groups

VLBI0121s/01: Wed 11:40–12:30 [A22/116 aula](#)

VLBI0121s/02: Wed 17:10–18:00 [A22/116 aula](#)

VLBI0121s/03: Wed 11:40–12:30 [A22/116 aula](#)

VLBI0121s/04: Wed 11:40–12:30 [A22/116 aula](#)

VLBI0121s/05: Wed 17:10–18:00 [A22/116 aula](#)

VLBI0121s/06: Wed 17:10–18:00 [A22/116 aula](#)

VLBI0121s/07: Wed 11:40–12:30 [A22/116 aula](#)

VLBI0121s/08: Wed 11:40–12:30 [A22/116 aula](#)

VLBI0121s/09: Wed 11:40–12:30 [A22/116 aula](#)

VLBI0121s/10: Wed 11:40–12:30 [A22/116 aula](#)

VLBI0121s/11: Wed 17:10–18:00 [A22/116 aula](#)

VLBI0121s/12: Wed 11:40–12:30 [A22/116 aula](#)

VLBI0121s/13: Wed 17:10–18:00 [A22/116 aula](#)

VLBI0121s/14: Wed 17:10–18:00 [A22/116 aula](#)

VLBI0121s/15: Wed 17:10–18:00 [A22/116 aula](#)

VLBI0121s/16: Wed 17:10–18:00 [A22/116 aula](#)

Prerequisites

Seminars revise the knowledge discussed at the Biology lectures - knowledge from the lectures is required.

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

The aim of the seminars is to revise and deepen the knowledge discussed at the respective Biology lecture, and especially to put them in a broader medical context. By interactive problem-solving tasks students will practise how to apply theoretical knowledge into medical practice.

Learning outcomes

The aim of the seminars is to revise and deepen the knowledge discussed at the respective Biology lecture, and especially to put them in a broader medical context. By interactive problem-solving tasks students will practise how to apply theoretical knowledge into medical practice.

Syllabus

- Week 1:

- Introduction to medical biology - from understanding of cellular principle to modern biomedicine (Mgr. Kateřina Cetkovská, Ph.D.)
- Week 2:
- Bacteria and viruses – characteristics, reproduction strategies and principles of treatment (Mgr. Kateřina Vopěnková, Ph.D.)
- Week 3:
- Structure, functions and function anomalies of eukaryotic cells (Mgr. Kateřina Cetkovská, Ph.D.)
- Week 4:
- Cells in the context of the entire organism – principles of cell adhesion and intercellular communication (Mgr. Kateřina Cetkovská, Ph.D.)
- Week 5:
- Cell signalling and the principle of cell differentiation (Mgr. Kateřina Vopěnková, Ph.D.)
- Week 6:
- The importance of genetic information – the journey from a gene to protein; DNA replication (Mgr. Kateřina Vopěnková, Ph.D.)
- Week 7:
- Cell cycle – molecular mechanisms of regulation and significance for oncology (Mgr. Stjepan Uldrijan, CSc.)
- Week 8:
- Mitotic division in normal and cancer cells (Mgr. Kateřina Cetkovská, Ph.D.)
- Week 9:
- Meiosis and the principle of genetic variability (Mgr. Kateřina Vopěnková, Ph.D.)
- Week 10:
- The basics of genetics, the nature of dominance and recessivity (Mgr. Kateřina Vopěnková, Ph.D.)
- Week 11:
- Genetics of human diseases – molecular principles of genetically determined diseases (doc. MUDr. Iva Slaninová, Ph.D.)
- Week 12:
- Cell death – mechanisms and regulation of apoptosis and its significance for medicine (Mgr. Kateřina Cetkovská, Ph.D.)
- Week 13:
- dissection week - no seminar
- Week 14:
- Epigenetics – the link between genes and environment (Mgr. Stjepan Uldrijan, CSc.)

Literature

required literature

- ALBERTS, Bruce. *Základy buněčné biologie : úvod do molekulární biologie buňky*. Translated by Arnošt Kotyk. 2. vyd. Ústí nad Labem: Espero Publishing, 2004. xxvi, 630. ISBN 8090290620. [info](#)
- PRITCHARD, D. J. and Bruce R. KORF. *Základy lékařské genetiky*. první české vydání. Praha: Galén, 2007. 182 stran. ISBN 9788072624492. [info](#)

Teaching methods

Seminar is organized in an interactive way based on class discussions, problem solving and voting using a voting system.

Assessment methods

Seminar attendance is mandatory.

Requirements for course completion - full attendance in the seminars (1 absence, excused or unexcused, is allowed). Other absences have to be excused by the Office for Studies within 5 days from the beginning of the absence and introduced into the Information System (IS).

Students continue with following subjects without proof of this semester's knowledge.

The subject is followed by Biology II-lecture (VLBI0222p) that is completed with a written examination test covering the knowledge of all Biology topics from both semesters (lectures, seminars, practices).

Language of instruction

Czech

Follow-Up Courses

- [VLBI0222p Biology II - lecture](#)

Further comments (probably available only in Czech)

The course is taught annually.

Listed among pre-requisites of other courses

- [VLBI0222c Biology II - practice](#)
[VLBI0121c](#) && [VLBI0121s](#) ([Do I meet enrolment requirements?](#))
- [VLBI0222p Biology II - lecture](#)
[VLBI0121c](#) && [VLBI0121s](#) ([Do I meet enrolment requirements?](#))

Teacher's information

<https://is.muni.cz/auth/el/1411/podzim2019/VLBI0121s/index.qwarp>

V seminářích se bude procvičovat učivo probrané na přednášce z Biologie - jsou tedy vyžadovány znalosti z příslušné přednášky.

Studenti jsou povinni **sledovat Interaktivní osnovu předmětu**, kde se dozví aktuální informace (harmonogram, nahrazování, státní svátky, atd.):

<https://is.muni.cz/auth/el/1411/podzim2019/VLBI0121s/index.qwarp>

The course is also listed under the following terms [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VLBI0222c Biology II - practice ✳

Faculty of Medicine

Spring 2018

Extent and Intensity

0/3. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[Ivana Aćimović, M.Sc.](#) (seminar tutor)
[Mgr. Kateřina Cetkovská, Ph.D.](#) (seminar tutor)
[Mgr. Petr Fojtík](#) (seminar tutor)
[Mgr. Iva Gudernová](#) (seminar tutor)
[Mgr. Pavla Havlíčková](#) (seminar tutor)
[Mgr. Šárka Jelínková](#) (seminar tutor)
[Mgr. Aneta Kohutová](#) (seminar tutor)
[Mgr. Markéta Nováková, Ph.D.](#) (seminar tutor)
[Mgr. Veronika Palušová](#) (seminar tutor)
[Mgr. Lenka Paštěková, Ph.D.](#) (seminar tutor)
[MUDr. Martin Pešl, Ph.D.](#) (seminar tutor)
[Mgr. Vladimír Rotrekl, Ph.D.](#) (seminar tutor)
[doc. MUDr. Iva Slaninová, Ph.D.](#) (seminar tutor)
[Mgr. Kateřina Straková, Ph.D.](#) (seminar tutor)
[Shyam Sushama Jose](#) (seminar tutor)
[Mgr. Barbora Štefanovie](#) (seminar tutor)
[Mgr. Barbora Valčíková](#) (seminar tutor)
[Mgr. Tereza Váňová](#) (seminar tutor)
[Mgr. Kateřina Vopěnková, Ph.D.](#) (seminar tutor)
[Mgr. Karolína Zoufalová](#) (seminar tutor)
[Jana Růžičková](#) (assistant)
[Mgr. Martina Vráblíková](#) (assistant)

Supervisor

[prof. Ing. Petr Dvořák, CSc.](#)
[Department of Biology - Theoretical Departments - Faculty of Medicine](#)
Contact Person: [Mgr. Kateřina Vopěnková, Ph.D.](#)
Supplier department: [Department of Biology - Theoretical Departments - Faculty of Medicine](#)

Prerequisites (in Czech)

[VLBI0121c Biology I -pract.](#) && [VLBI0121s Biology I - seminar](#)
(Do I meet enrolment requirements?)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

After completion of the course student: operates light microscope; understands the basics of electron microscopy, genetic toxicology, gene engineering or the methods of karyotyping; is able to evaluate the risk of hereditary diseases in a patient on the basis of assigned family anamnesis of this disease; is able to propose and interpret elementary molecular screening methods for some hereditary, neoplastic or microbial diseases.

Student is also able to apply this knowledge and skills in other subject, especially histology, pathology and human genetics.

Learning outcomes

After completion of the course student: operates light microscope; understands the basics of electron microscopy, genetic toxicology, gene engineering or the methods of karyotyping; is able to evaluate the risk of hereditary diseases in a patient on the basis of assigned family anamnesis of this disease; is able to propose and interpret elementary molecular screening methods for some hereditary, neoplastic or microbial diseases. Student is also able to apply this knowledge and skills in other subject, especially histology, pathology and human genetics.

Syllabus

- Week 1: Genetic disorders - gonosomal inheritance
- Week 2: Deviations from Mendelian genetics
- Week 3: Genetic prognosis and genetic counselling
- Week 4: Human population genetics
- Week 5: Molecular diagnostics of cancer - odd groups; **Control test 3 - even groups (knowledge from week 13 of the autumn semester to week 4 of the spring semester - lectures, seminar, practices)**
- Week 6: Molecular diagnostics of cancer - even groups; **Control test 3 - odd groups (knowledge from week 13 of the autumn semester to week 4 of the spring semester - lectures, seminar, practices)**
- Week 7: Gene engineering - odd groups
- Week 8: Gene engineering - even groups
- Week 9: Molecular diagnostics of human pathogenic bacteria - odd groups
- Week 10: Molecular diagnostics of human pathogenic bacteria - even groups
- Week 11: Genetic toxicology
- Week 12: **Control test 4 (knowledge from week 5 to week 11 of the spring semester - lectures, practices)**
- Week 13: substitution practices (groups not having dissections clashing with the class)
- Week 14: substitution practices (remaining groups)

Literature

required literature

- Protokoly ke cvičením jsou dostupné v elektronické podobě v Informačním systému MU ve Studijních materiálech předmětu VLBI0222c

Teaching methods

laboratory practice, class discussion

Assessment methods

Practical classes are mandatory.

Requirements for course completion: full attendance in the practices (1 absence, excused or unexcused, is allowed); all protocols completed (also for missed lessons) and checked and signed by appropriate teachers; successfully passed 2 written control tests during the semester (20 questions each, 4 possibilities, 1 answer correct, student need to reach at

least 12 points out of 20 in each test). In case you do not pass one of the control tests and its re-sit, you have to pass the final test (so-called Credit test) based on knowledge of the entire semester lectures and practices. The test comprises of 20 questions: 10 test questions (multiple answers can be correct, negative marking is obtained for incorrect answers) + 10 given terms for written explanation. At least 10 points out of 20 are needed to pass.

In case of student's late arrival to the practice or poor activity at the practice, the student is required to write an essay in the length of 2 pages on a given topic. Same for the case of 2nd and any additional absence in practices (excused or unexcused). Find the instructions for essay writing in the Course-related instructions in the IS, bring the essay printed to the teacher who specified the topic and be ready to answer the teacher's questions regarding the topic.

In case of 3 absences, (or more than 3 absences all excused by the Office for Studies within 5 days from the beginning of the absence and introduced to the Information System), it is addressed individually and course-unit credit is awarded only after the proof of the student's knowledge of the entire semester topics (Credit test, see above).

In case of 4 or more unexcused absences, course-unit credit is not awarded.

Language of instruction

Czech

Follow-Up Courses

- [VLBC0321p Biochemistry I - lecture](#)
- [VLBC0321s Biochemistry I - seminar](#)
- [VLHE0322c Histology and Embryology II - practice](#)
- [VLHE0322p Histology and Embryology II - lecture](#)

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

Listed among pre-requisites of other courses

- [AMOLc Introduction into molecular biology and genetics - practice](#) (![VSBI0222c](#)) && (![VLBI0222c](#)) && (![ZLBI0222c](#)) && !NOWANY([VLBI0222c](#),[ZLBI0222c](#)) && (![PřF:Bi1700c](#)) ([Do I meet enrolment requirements?](#))
- [VLBC0321c Biochemistry I](#) [VLBI0222c](#) && [VLBF011c](#) ([Do I meet enrolment requirements?](#))
- [VLBC0321p Biochemistry I - lecture](#) [VLBI0222c](#) && [VLBF011c](#) ([Do I meet enrolment requirements?](#))
- [VLBC0321s Biochemistry I - seminar](#) [VLBI0222c](#) && [VLBF011c](#) ([Do I meet enrolment requirements?](#))
- [VLHE0322c Histology and Embryology II - practice](#) ([VLHE0221c](#) || [VSHE0221c](#)) && ([VLBI0222c](#) || [VSBI0222c](#)) ([Do I meet enrolment requirements?](#))
- [VLHE0322p Histology and Embryology II - lecture](#) ([VLHE0221c](#) || [VSHE0221c](#)) && ([VLBI0222c](#) || [VSBI0222c](#)) ([Do I meet enrolment requirements?](#))

Teacher's information

Interaktivní osnova předmětu:

Liché

skupiny:https://is.muni.cz/auth/el/1411/jaro2019/VLBI0222c/index_liche.qwarp">https://is.muni.cz/auth/el/1411/jaro2019/VLBI0222c/index_liche.qwarp

Sudé

skupiny:https://is.muni.cz/auth/el/1411/jaro2019/VLBI0222c/index_sude.qwarp">https://is.muni.cz/auth/el/1411/jaro2019/VLBI0222c/index_sude.qwarp

Potřeby pro cvičení: vytištěný aktuální protokol, psací potřeby. Protokoly pro každé praktické cvičení si stáhněte ze Studijních materiálů v ISu a nastudujte předem. Přezůvky, pláště a vlastní chirurgické rukavice nejsou vyžadovány, ale při úlohách s barvením preparátů jsou pláště doporučeny.

Do učebny si vezměte pouze protokoly a psací potřeby, všechny ostatní věci si ještě před začátkem výuky odložte do šatny Biologického ústavu (A7, místnost 203), která bude po dobu výuky uzamčena.

Nahrazování cvičení: Pokud výjimečně nemůžete absolvovat praktická cvičení se svou skupinou (nemoc, návštěva lékaře - maximálně 1x za semestr), domluvte si e-mailem s kontaktní osobou předmětu nahrazení cvičení s jinou skupinou. Pište nejméně 24 hodin před plánovaným nahrazením a upřesněte skupinu (datum a čas), se kterou se chcete cvičení zúčastnit. Výuku lze nahradit pouze v tom samém výukovém týdnu, kdy byla zameškána. Při vyčerpání kapacity skupiny vám nahrazení nemusí být umožněno. Opakované nahrazování výuky s jinými skupinami není povoleno.

Kompletní pokyny k výuce najdete na následujícím odkazu:

https://is.muni.cz/auth/el/1411/jaro2019/VLBI0222c/op/Pokyny_k_vyuce.pdf

Při opakování předmětu je možné na vyžádání uznat absolvovanou praktickou výuku. O uznání je potřeba požádat v prvním týdnu výuky e-mailem s uvedením důvodu.

The course is also listed under the following terms [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VLBI0222p Biology II - lecture ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

1/0. 4 credit(s). Recommended Type of Completion: zk (examination). Alternate Types of Completion: RZk (examination).

Teacher(s)

[Mgr. Kateřina Cetkovská, Ph.D.](#) (lecturer)

[prof. Ing. Petr Dvořák, CSc.](#) (lecturer)

[doc. Mgr. Lumír Krejčí, Ph.D.](#) (lecturer)
[Mgr. Pavel Krejčí, Ph.D.](#) (lecturer)
[Mgr. Vladimír Rotrekl, Ph.D.](#) (lecturer)
[doc. MUDr. Iva Slaninová, Ph.D.](#) (lecturer)
[prof. MUDr. David Šmajš, Ph.D.](#) (lecturer)
[RNDr. Mário Špírek, Ph.D.](#) (lecturer)
[Mgr. Stjepan Uldrijan, CSc.](#) (lecturer)
[Mgr. Kateřina Vopěnková, Ph.D.](#) (lecturer)
[Mgr. Kateřina Straková, Ph.D.](#) (seminar tutor)
[Jana Růžičková](#) (assistant)
[Mgr. Martina Vráblíková](#) (assistant)

Supervisor

[prof. Ing. Petr Dvořák, CSc.](#)
[Department of Biology - Theoretical Departments - Faculty of Medicine](#)
Contact Person: [Mgr. Kateřina Cetkovská, Ph.D.](#)
Supplier department: [Department of Biology - Theoretical Departments - Faculty of Medicine](#)

Prerequisites

[VLBI0121c Biology I -pract.](#) && [VLBI0121s Biology I - seminar](#)

Knowledge of high-school biology and all previous lectures and practical classes of the subject are prerequisites for studying the course. Expected knowledge for each lecture is specified in the course syllabus. Literature recommended to study before each lecture is detailed in the interactive syllabus of the course.

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

After completion of the course student: understands elementary cellular processes and processes taking place during development of a human body; comprehends the complexity of intercellular communication and mutual regulation of individual cells in a multicellular organism; knows basic principles of bacterial and viral diseases; is able to express basic coherence between malfunction in cellular processes and development of diseases, especially hereditary diseases, cancers or developmental defects, and understands the principle of genetic determination of hereditary diseases; can explain and justify action of some therapeutics with emphasis on modern medicine. Student is also able to apply this knowledge and skills in other subject, especially physiology, pathophysiology and human genetics.

Learning outcomes

After completion of the course student: understands elementary cellular processes and processes taking place during development of a human body; comprehends the complexity of intercellular communication and mutual regulation of individual cells in a multicellular organism; knows basic principles of bacterial and viral diseases; is able to

express basic coherence between malfunction in cellular processes and development of diseases, especially hereditary diseases, cancers or developmental defects, and understands the principle of genetic determination of hereditary diseases; can explain and justify action of some therapeutics with emphasis on modern medicine. Student is also able to apply this knowledge and skills in other subject, especially physiology, pathophysiology and human genetics.

Syllabus

- 1. week:
- DNA damage and repair – from molecular mechanisms to clinical significance (doc. Mgr. Lumír Krejčí, Ph.D.)
- 2. week:
- Introduction to cancer biology (Mgr. Stjepan Uldrijan, CSc.)
- 3. week:
- Oncogenes and oncoviruses in cancer transformation (Mgr. Stjepan Uldrijan, CSc.)
- 4. week:
- Tumour suppressor genes and their significance for diagnostics and therapy (Mgr. Stjepan Uldrijan, CSc.)
- 5. week:
- Paradigm of cancer stem cells and implications for anti-cancer therapies (doc. MUDr. Iva Slaninová, Ph.D.)
- 6. týden:
- Gene therapy – targets and strategies of molecular therapies (doc. MUDr. Iva Slaninová, Ph.D.)
- 7. week:
- Stem cells and tissue engineering – prospects of regenerative medicine (prof. Ing. Petr Dvořák, CSc.)
- 8. week:
- From a single cell to human I – introduction to developmental biology (Mgr. Vladimír Rotrekl, Ph.D.)
- 9. week:
- From a single cell to human II – molecular basis of mammalian development in health and disease (Mgr. Pavel Krejčí, Ph.D.)
- 10. week:
- Human genome and genomics in current biomedicine (prof. MUDr. David Šmajš, Ph.D.)
- 11. week:
- Human microbiome (prof. MUDr. David Šmajš, Ph.D.)
- 12. week:
- Bioinformatics in medicine – from molecules to populations (Mgr. Vladimír Rotrekl, Ph.D.)
- 13. week:
- Modern approaches in studying macromolecules and their use in current biomedicine (Mgr. Vladimír Rotrekl, Ph.D.)
- 14. week:
- Substitution lecture

Literature

required literature

- ALBERTS, Bruce. *Základy buněčné biologie : úvod do molekulární biologie buňky*. Translated by Arnošt Kotyk. 2. vyd. Ústí nad Labem: Espero Publishing, 2004. xxvi, 630. ISBN 8090290620. [info](#)
- PRITCHARD, D. J. and Bruce R. KORF. *Základy lékařské genetiky*. první české vydání. Praha: Galén, 2007. 182 stran. ISBN 9788072624492. [info](#)

recommended literature

- HARDIN, Jeff, Gregory BERTONI and Lewis J. KLEINSMITH. *Becker's world of the cell*. 8th ed. Boston: Benjamin Cummings, 2012. xxviii, 79. ISBN 9780321709783. [info](#)
- LODISH, Harvey F. *Molecular cell biology*. 6th ed. New York, N.Y.: W.H. Freeman and Company, 2008. xxxvii, 11. ISBN 9780716776017. [info](#)
- SNUSTAD, D. Peter, Michael J. SIMMONS, [Jiřina RELICHOVÁ](#), [Jiří DOŠKAŘ](#), [Jiří FAJKUS](#), [Petr HOŘÍN](#), [Aleš KNOLL](#), [Petr KUGLÍK](#), [Jan ŠMARDA](#), [Jana ŠMARDOVÁ](#), [Renata VESELSKÁ](#) and [Boris VYSKOT](#). *Genetika (Principles of Genetics)*. 1. vyd. Brno: Masarykova univerzita, 2009. 894 pp. Učebnice. ISBN 978-80-210-4852-2. [URL](#) [info](#)
- WEINBERG, Robert A. *The biology of cancer*. 2nd ed. New York: Garland Science, 2014. 1 v. ISBN 9780815345282. [info](#)
- *Principles of development*. Edited by Lewis Wolpert. 2nd ed. Oxford: Oxford University Press, 2002. xxv, 542. ISBN 0198792913. [info](#)

Teaching methods

lecture

Assessment methods

The course Biology II builds on knowledge gained from subjects Biology I - lecture (aVLBI0121p) and Biology - seminar (aVLBI0121s). The course is completed with a written examination test taken on computers. It contains questions based on the topics discussed in the lectures, seminars and practices. The students are expected to be able to solve given problems on their own, and to derive the solutions by their own consideration based on the theory discussed in the course of both semesters and supplemented by the recommended reading.

Language of instruction

Czech

Follow-Up Courses

- [VLBC0422c Biochemistry II](#)
- [VLBC0422p Biochemistry II - lecture](#)
- [VLBC0422s Biochemistry I - seminar](#)
- [VLCP0521c Clinical Introduction to Surgery I - practice](#)
- [VLFY0321c Physiology I - practice](#)
- [VLFY0321s Physiology I - seminar](#)
- [VLIM051c Immunology - practice](#)

- [VLIM051p Immunology - lecture](#)
- [VLLM0421c Medical Microbiology I - practice](#)

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

Listed among pre-requisites of other courses

- [AMOLp Introduction into molecular biology and genetics - lecture](#) ([!VSBI0222p](#)) && ([!VLBI0222p](#)) && ([!ZLBI0222p](#)) && ([!PřF:Bi1700](#)) ([Do I meet enrolment requirements?](#))
- [VLBC0422c Biochemistry II](#) ([VLBI0222p](#) || [VSBI0222p](#)) && [VLBF011p](#) && [VLBC0321s](#) && [VLBC0321c](#) && [VLFY0321c](#) && [VLFY0321s](#) ([Do I meet enrolment requirements?](#))
- [VLBC0422p Biochemistry II - lecture](#) ([VLBI0222p](#) || [VSBI0222p](#)) && [VLBF011p](#) && [VLBC0321s](#) && [VLBC0321c](#) && [VLFY0321c](#) && [VLFY0321s](#) ([Do I meet enrolment requirements?](#))
- [VLBC0422s Biochemistry I - seminar](#) ([VLBI0222p](#) || [VSBI0222p](#)) && [VLBF011p](#) && [VLBC0321s](#) && [VLBC0321c](#) && [VLFY0321c](#) && [VLFY0321s](#) ([Do I meet enrolment requirements?](#))
- [VLFY0321c Physiology I - practice](#) ([VLBI0222p](#) || [VSBI0222p](#)) && ([VLBF011c](#) && [VLAN0222s](#)) ([Do I meet enrolment requirements?](#))
- [VLFY0321p Physiology I - lecture](#) ([VLBI0222p](#) || [VSBI0222p](#)) && ([VLBF011c](#) && [VLAN0222s](#)) ([Do I meet enrolment requirements?](#))
- [VLFY0321s Physiology I - seminar](#) ([VLBI0222p](#) || [VSBI0222p](#)) && ([VLBF011c](#) && [VLAN0222s](#)) ([Do I meet enrolment requirements?](#))
- [VLFZ041 Selected lectures from Physiology](#) ([VLBI0222p](#) && [VLFY0321c](#)) ([Do I meet enrolment requirements?](#))
- [VLLM0421c Medical Microbiology I - practice](#) ([VSBI0222p](#) || [VLBI0222p](#)) && ([VSBF011p](#) || [VLBF011p](#)) ([Do I meet enrolment requirements?](#))

[Zobrazit další předměty](#)

Teacher's information

<https://is.muni.cz/auth/el/1411/jaro2019/VLBI0222p/index.qwarp>

Studenti jsou povinni **sledovat interaktivní osnovu předmětu**, kde se dozví aktuální informace (harmonogram, nahrazování, státní svátky, atd.) a zároveň zde najdou příslušnou studijní literaturu na každý týden a odkazy na animace a videa k tématu (<https://is.muni.cz/auth/el/1411/jaro2019/VLBI0222p/index.qwarp>)

Dvě knihy, které jsou součástí povinné studijní literatury (Alberts - Základy buněčné biologie a Pritchard - Základy lékařské genetiky), mohou být vypůjčeny z knihovny univerzitního kampusu (<https://kuk.muni.cz/?page=&lang=czech>) nebo mohou být čteny

z počítačů knihovny univerzitního kampusu (pomocí e-prezenčky - <https://kuk.muni.cz/?page=9&lang=czech>). Obě knihy jsou také dostupné v anglické verzi - v novém, aktuálnějším vydání.

The course is also listed under the following terms [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VLBS0621 Biostatistics ✱

Faculty of Medicine

Spring 2019

Extent and Intensity

0/2. 4 credit(s). Type of Completion: z (credit).

Teacher(s)

[RNDr. Jiří Jarkovský, Ph.D.](#) (seminar tutor)

[Mgr. et Mgr. Jiří Kalina](#) (seminar tutor)

[prof. MUDr. Kateřina Kaňková, Ph.D.](#) (seminar tutor)

Supervisor

[doc. RNDr. Ladislav Dušek, Ph.D.](#)

[Institute for Biostatistics and Analyses of the Faculty of Medicine - Other Departments for Educational and Scientific Research Activities - Faculty of Medicine](#)

Contact Person: [RNDr. Jiří Jarkovský, Ph.D.](#)

Supplier department: [Institute for Biostatistics and Analyses of the Faculty of Medicine - Other Departments for Educational and Scientific Research Activities - Faculty of Medicine](#)

Prerequisites

[BMAK051 Clinical data analysis](#)

None - basic course.

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the course is to provide students with basic principles of statistical analysis of biological data from the experimental design, data collection and visualisation to descriptive statistics and statistical hypotheses testing.

Learning outcomes

At the end of the course the students are able to:
Define structure of dataset for statistical analysis;
Visualize the data and interpret data visualisation;
Identify correct methods of descriptive statistics;

Formulate hypothesis for statistical testing;
Select the correct statistical tests for hypotheses confirmation/refusal;
Interpret results of statistical evaluation, both analysis of own data and statistics in scientific literature;
Assess the applicability of statistical methods on various types of data.

Syllabus

- Introduction to statistics, testing of hypotheses.
- Tables of distribution functions. Sampling from biological populations, data processing.
- Introduction to sampling design. Continuous, ordinal and nominal data in biology and medicine.
- Distribution of continuous and bivariate variables - testing of hypotheses, graphical methods.
- Application of binomial and Poisson distribution in biology.
- One sample testing: sample mean, median, standard deviation, variance, binomial p and Poisson constant.
- Two sample testing. Experimental design - randomized and blocked. Parametric and nonparametric methods.
- Application of goodness-of-fit test, analysis of R x C contingency tables, discrimination of categorical data.
- Analysis of variance (ANOVA): one-way and two-way model.
- Simple linear regression. Linear regression.

Literature

- ZAR, Jerrold H. *Biostatistical analysis*. 5th ed. Upper Saddle River, N.J.: Prentice Hall, 2010. xiii, 944. ISBN 9780131008465. [info](#)
- PETRIE, Aviva and Caroline SABIN. *Medical statistics at a glance*. 1st ed. Oxford: Blackwell Science, 2001. 138 s. ISBN 0632050756. [info](#)
- ALTMAN, Douglas G. *Practical statistics for medical research*. 1st ed. Boca Raton: Chapman & Hall/CRC, 1991. xii, 611. ISBN 0412276305. [info](#)

Teaching methods

Theoretical lectures supplemented by commented examples; students are encouraged to ask questions about discussed topics.

Assessment methods

Biostatistics course is finished by written exam aimed on principles, prerequisites and correct selection of methods for solution of practical examples.

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

The course is taught: every week.

Information on course enrolment limitations: Předmět je určen pro studenty 3.ročníku se zaměřením P-Pool

The course is also listed under the following terms [Spring 2016](#).

VLCP0521c Clinical Introduction to Surgery I - practice ✳

Faculty of Medicine

Autumn 2016

Extent and Intensity

0/2/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[Mgr. MUDr. Štěpánka Bibrová, Ph.D.](#) (lecturer)

[MUDr. Jan Maláska, Ph.D.](#) (lecturer)

[MUDr. Vladimír Bartl, CSc.](#) (seminar tutor)

[doc. MUDr. Eva Brichtová, Ph.D.](#) (seminar tutor)

[prof. MUDr. Ivan Čapov, CSc.](#) (seminar tutor)

[MUDr. Lukáš Dadák, Ph.D.](#) (seminar tutor)

[doc. MUDr. Jan Doležel, Ph.D.](#) (seminar tutor)

[prof. MUDr. Petr Gál, Ph.D.](#) (seminar tutor)

[prof. MUDr. Roman Gál, Ph.D.](#) (seminar tutor)

[MUDr. Ivo Hanke, Ph.D.](#) (seminar tutor)

[doc. MUDr. Václav Jedlička, Ph.D.](#) (seminar tutor)

[prof. MUDr. Zdeněk Kala, CSc.](#) (seminar tutor)

[MUDr. Jan Konečný, Ph.D.](#) (seminar tutor)

[MUDr. Ivo Křikava, Ph.D.](#) (seminar tutor)

[MUDr. Tomáš Kubek, Ph.D.](#) (seminar tutor)

[MUDr. Pavel Mach, Ph.D.](#) (seminar tutor)

[doc. MUDr. Michal Mašek, CSc.](#) (seminar tutor)

[MUDr. Tomáš Novotný, Ph.D.](#) (seminar tutor)

[prof. MUDr. Dalibor Pacík, CSc.](#) (seminar tutor)

[doc. MUDr. Petr Piskač, CSc.](#) (seminar tutor)

[prof. MUDr. Ladislav Plánka, Ph.D.](#) (seminar tutor)

[doc. MUDr. Jiří Podlaha, CSc.](#) (seminar tutor)

[MUDr. Martin Slezák](#) (seminar tutor)

[prof. MUDr. Robert Staffa, Ph.D.](#) (seminar tutor)

[prof. MUDr. Vladimír Šrámek, Ph.D.](#) (seminar tutor)

[doc. MUDr. Petr Štourač, Ph.D.](#) (seminar tutor)

[doc. MUDr. Lenka Veverková, Ph.D.](#) (seminar tutor)

[MUDr. Petr Vlček, Ph.D.](#) (seminar tutor)

[doc. MUDr. Jiří Vokurka, CSc.](#) (seminar tutor)

[prof. MUDr. Jan Wechsler, CSc.](#) (seminar tutor)

[MUDr. Katarína Zdražilová](#) (seminar tutor)

[MUDr. Jitka Zemanová](#) (seminar tutor)

[MUDr. Václav Zvoníček, Ph.D.](#) (seminar tutor)

[MUDr. Jan Žák, Ph.D.](#) (seminar tutor)

[Hana Baráčková](#) (assistant)

[Veronika Bradáčková](#) (assistant)

[Lenka Dobrovolná](#) (assistant)
[Lucie Kučerová](#) (assistant)
[Martina Matoušková](#) (assistant)
[Vladimíra Moravcová](#) (assistant)
[Lea Müllerová](#) (assistant)
[Zdeňka Naidarová](#) (assistant)
[Barbora Staňková](#) (assistant)

Supervisor

[MUDr. Jan Konečný, Ph.D.](#)
[Second Department of Surgery - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)
Contact Person: [doc. MUDr. Lenka Veverková, Ph.D.](#)
Supplier department: [Second Department of Surgery - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Timetable of Seminar Groups

VLCP0521c/01: Tue 10:10–11:50 [N01002](#)
VLCP0521c/02: Thu 7:30–9:10 [N07191](#)
VLCP0521c/03: Thu 9:30–11:10 [N04001](#)
VLCP0521c/04: Thu 9:30–11:10 [N07191](#)
VLCP0521c/05: Wed 8:00–9:40 [N01002](#)
VLCP0521c/06: Wed 8:00–9:40 [N03005](#)
VLCP0521c/07: Thu 7:30–9:10 [N01002](#)
VLCP0521c/08: Tue 10:10–11:50 [N04001](#)
VLCP0521c/09: Fri 8:00–9:40 [N01002](#)
VLCP0521c/10: Fri 8:00–9:40 [N04001](#)
VLCP0521c/11: Fri 10:30–12:10 [N03005](#)
VLCP0521c/12: Fri 10:30–12:10 [N07191](#)
VLCP0521c/13: Mon 10:10–11:50 [N07191](#)
VLCP0521c/14: Mon 10:10–11:50 [N01002](#)
VLCP0521c/15: Mon 8:00–9:40 [N03005](#)
VLCP0521c/16: Mon 8:00–9:40 [N04001](#)
VLCP0521c/17: Tue 8:00–9:40 [N04001](#)
VLCP0521c/18: Tue 8:00–9:40 [N07191](#)
VLCP0521c/30: No timetable has been entered into IS.
VLCP0521c/31: No timetable has been entered into IS.
VLCP0521c/32: No timetable has been entered into IS.
VLCP0521c/33: No timetable has been entered into IS.
VLCP0521c/34: No timetable has been entered into IS.
VLCP0521c/35: No timetable has been entered into IS.

Prerequisites (in Czech)

[VSAN0333p Anatomy III - lec.](#) && ([VSLC011p Med. Chemistry - lecture](#) || [VSLC021p Medical chemistry -I](#)) && [VSBI0222p Biology II-lect.](#) && ([VSBF011p Biophysics](#) || [VLBF011p Biophysics-lect.](#)) && [VSPO011p First Aid - lecture](#) && [VSPP3X1 Nursing](#) && ([VSLT0221s Bas. Med. Terminol. II -s](#) || [VSLT011s Bas. Med. Terminology -I](#)) && [VSET021 Medical Ethics I](#) && [VSPP3X1 Nursing](#) && [ZC041 Handling chemical substances](#)
(Do I meet enrolment requirements?)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the training in the 1st term of the surgical propedeutics is to introduce the main principles of the surgical care and treatment, training of the basic surgical procedures. The important part of the tuition is knowledge of the complications, its prevention and treatment and also the basic principles, techniques and specifics of the anesthesiology, urology, plastic surgery and children surgery. With the completion of this course the student should be able to provide complete clinical investigation of the surgical patient, and also to give an idea of the direction of the investigational algorithm.

Syllabus

- Structure and function of the surgical department
- History of the surgical disease, physical signs and clinical investigation, medical records
- X-rays, ultrasound and endoscopy in surgery
- Operation room and its equipment, asepsis and antisepsis, antibiotics
- Surgical instruments
- Surgical procedures, sewing, knotting
- Post-op intensive care
- Blood transfusions and blood derivatives
- Parenteral and enteral nutrition, diets
- Postoperative complications, shock
- Local and general anesthesia
- Basic principles and techniques in urology
- Basic principles of the plastic surgery
- Specific problems in children surgery

Literature

- *Essentials of surgery*. Edited by James M. Becker - Arthur F. Stucchi. Philadelphia: Elsevier/Saunders, 2006. xx, 841. ISBN 0721681867. [info](#)
- ZEMAN, Miroslav. *Chirurgická propedeutika*. 2., přeprac. a dopl. vyd. Praha: Grada, 2000. 516 s. ISBN 8071697052. [info](#)
- *Současná chirurgická diagnostika a léčba*. Edited by Lawrence W. Way, Translated by František Antoš - Miloš Hájek. 1. vyd. Praha: Grada, 1998. S.: 807-16. ISBN 8071693979. [info](#)
- *Basic surgery*. Edited by Hiram C. Polk - Bernard Gardner - H. Harlan Stone. 5th ed. St. Louis: Quality Medical Publishing, 1995. xviii, 102. ISBN 0942219740. [info](#)

- *Hamilton Bailey's demonstrations of physical signs in clinical surgery*. Edited by Hamilton Bailey - Allan Clain. 17th ed. Oxford: Butterworth-Heinemann, 1994. xiv, 622 s. ISBN 0-7506-0613-4. [info](#)

Bookmarks

<https://is.muni.cz/auth/ln/tag/LF:VLCP0521c!>

Teaching methods

The tuition has a form of presentations with the practical examples of the patients records (X-rays, CT scans, transfusion applications, application of the parenteral and enteral nutrition) and following discussion about above mentioned themes.

Assessment methods

Giving the course-unit credit is conditioned by full attendance in the lessons and successfully written test based on the taught themes knowledge.

Language of instruction

Czech

Further comments (probably available only in Czech)

Study Materials

Information on completion of the course: má-li student již ukončen blok stáží

The course can also be completed outside the examination period.

The course is taught annually.

Listed among pre-requisites of other courses

- [VLCP0622c Clinical Introduction to Surgery II - practice VLCP0521c](#) ([Do I meet enrolment requirements?](#))
- [VLCP0622p Clinical Introduction to Surgery II - lecture VLCP0521c](#) ([Do I meet enrolment requirements?](#))

Teacher's information

Výuka probíhá na uvedených pracovištích:

I. chirurgická klinika FN u sv. Anny, Pekařská 53

II. chirurgická klinika FN u sv. Anny, Pekařská 53

Chirurgická klinika FN Bohunice, Jihlavská 20

Anesteziologicko-resuscitační klinika FN u sv. Anny, Pekařská 53

Klinika plastické a estetické chirurgie, Berkova 34/38

Klinika dětské chirurgie, ortopedie a traumatologie, Černopolní 9

Informace o výuce jsou uvedeny na nástěnkách příslušných chirurgických klinik.

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#),

[Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#),
[Autumn 2014](#), [Autumn 2015](#).

VLCP0521p Clinical Introduction to Surgery I - lecture ✨

Faculty of Medicine

Autumn 2016

Extent and Intensity

2/0/0. 0 credit(s). Type of Completion: -.

Teacher(s)

[Mgr. MUDr. Štěpánka Bibrová, Ph.D.](#) (lecturer)

[MUDr. Ernest Bíroš](#) (lecturer)

[doc. MUDr. Eva Brichtová, Ph.D.](#) (lecturer)

[prof. MUDr. Pavel Brychta, CSc.](#) (lecturer)

[MUDr. Jan Buček](#) (lecturer)

[prof. MUDr. Ivan Čapov, CSc.](#) (lecturer)

[MUDr. Lukáš Dadák, Ph.D.](#) (lecturer)

[doc. MUDr. Luboš Dražan, Ph.D.](#) (lecturer)

[MUDr. Martin Dvořák, Ph.D.](#) (lecturer)

[MUDr. Zdeněk Dvořák, Ph.D.](#) (lecturer)

[MUDr. Petr Hýža, Ph.D.](#) (lecturer)

[doc. MUDr. Pavel Janíček, CSc.](#) (lecturer)

[MUDr. Ivan Justan, Ph.D.](#) (lecturer)

[MUDr. Zdeněk Konečný](#) (lecturer)

[MUDr. Miroslav Krejčí, Ph.D.](#) (lecturer)

[MUDr. Tomáš Kubek, Ph.D.](#) (lecturer)

[MUDr. Jan Maláska, Ph.D.](#) (lecturer)

[doc. MUDr. Ivan Müller, CSc.](#) (lecturer)

[MUDr. Tomáš Novotný, Ph.D.](#) (lecturer)

[prof. MUDr. Ladislav Plánka, Ph.D.](#) (lecturer)

[MUDr. Igor Stupka, Ph.D.](#) (lecturer)

[prof. MUDr. Jiří Veselý, CSc.](#) (lecturer)

[doc. MUDr. Lenka Veverková, Ph.D.](#) (lecturer)

[MUDr. Robert Vlachovský, Ph.D.](#) (lecturer)

[doc. MUDr. Jiří Vokurka, CSc.](#) (lecturer)

[prof. MUDr. Jindřich Vomela, CSc., LL.M.](#) (lecturer)

[prof. MUDr. Jan Wechsler, CSc.](#) (lecturer)

[MUDr. Katarína Zdražilová](#) (lecturer)

[prof. MUDr. Jan Žaloudík, CSc.](#) (lecturer)

[Lenka Dobrovolná](#) (assistant)

[Lucie Kučerová](#) (assistant)

[Martina Matoušková](#) (assistant)

[Vladimíra Moravcová](#) (assistant)

Supervisor

[MUDr. Jan Konečný, Ph.D.](#)

[Second Department of Surgery - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Contact Person: [doc. MUDr. Jiří Vokurka, CSc.](#)

Supplier department: [Second Department of Surgery - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Timetable

Wed 15:20–17:00 [A22/116 aula](#)

- Timetable of Seminar Groups:

VLCP0521p/VLA: Fri 8:30–10:10 [014](#)

Prerequisites (in Czech)

[VSAN0333p Anatomy III - lec.](#) && ([VSLC011p Med. Chemistry - lecture](#) || [VSLC021p Medical chemistry -I](#)) && [VSBI0222p Biology II-lect.](#) &&([VSBF011p Biophysics](#) || [VLBF011p Biophysics-lect.](#)) && [VSP011p First Aid - lecture](#) && [VSPP3X1 Nursing](#) && ([VSLT0221s Bas. Med. Terminol. II -s](#) || [VSLT011s Bas. Med. Terminology -I](#)) && [VSET021 Medical Ethics I](#) && [VSPP3X1 Nursing](#) && [ZC041 Handling chemical substances](#)
(Do I meet enrolment requirements?)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Main objectives is theoretically introduction of surgery for medical students, these lectures inform them about basic principles, surgery and procedures.

Syllabus

- During the lectures the basic principles of the general Surgery and the principal methods of the clinical investigation will be presented.
- 1. Introduction, methods of clinical examination
- 2. Pre-operative care
- 3. Operation rooms, instruments, apparatuses
- 4. Local and general Anesthesia
- 5. Antisepsis, asepsis
- 6. Operations, basic types of operations
- 7. Bleeding, blood transfusion
- 8. Shock
- 9. Post-operative reaction and complications
- 10. Surgical dietology, enteral and parenteral nutrition

Literature

- *Hamilton Bailey's demonstrations of physical signs in clinical surgery*. Edited by Hamilton Bailey - Allan Clain. 17th ed. Oxford: Butterworth-Heinemann, 1994. xiv, 622 s. ISBN 0-7506-0613-4. [info](#)
- *Chirurgická propedeutika :učebnice pro lékařské fakulty*. Edited by Vladimír Balaš - Jarmila Drábková - Miloslav Duda - Milan Med. [1. vyd.]. Praha: Grada-Avicenum, 1993. 487 s. ISBN 80-85623-45-5. [info](#)

Bookmarks

<https://is.muni.cz/auth/ln/tag/LF:VLCP0521p!>

Teaching methods

Lectures

Assessment methods

This lecture is not credited, it is a part of continual preparation for state final examination in surgery at the end of the education.

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

The course can also be completed outside the examination period.

The course is taught annually.

Teacher's information

Informace o termínech a místě konání přednášky jsou vyvěšeny na nástěnkách příslušných chirurgických klinik

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#), [Autumn 2015](#).

VLCP0622c Clinical Introduction to Surgery II - practice ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

0/2/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Vladimír Bartl, CSc.](#) (seminar tutor)

[Mgr. MUDr. Štěpánka Bibrová, Ph.D.](#) (seminar tutor)

[MUDr. Ernest Biroš](#) (seminar tutor)

[doc. MUDr. Eva Brichtová, Ph.D.](#) (seminar tutor)

[MUDr. Jan Buček](#) (seminar tutor)

[MUDr. Lukáš Dadák, Ph.D.](#) (seminar tutor)

[doc. MUDr. Jan Doležel, Ph.D.](#) (seminar tutor)

[MUDr. Martin Dvořák, Ph.D.](#) (seminar tutor)

[prof. MUDr. Petr Gál, Ph.D.](#) (seminar tutor)

[MUDr. Olga Gimunová, Ph.D.](#) (seminar tutor)

[MUDr. Ivo Hanke, Ph.D.](#) (seminar tutor)
[MUDr. Martin Helán, Ph.D.](#) (seminar tutor)
[prof. MUDr. Zdeněk Kala, CSc.](#) (seminar tutor)
[MUDr. Zdeněk Konečný](#) (seminar tutor)
[MUDr. Miroslav Krejčí, Ph.D.](#) (seminar tutor)
[MUDr. Ivo Křikava, Ph.D.](#) (seminar tutor)
[MUDr. Pavel Mach, Ph.D.](#) (seminar tutor)
[MUDr. Jan Maláska, Ph.D.](#) (seminar tutor)
[doc. MUDr. Michal Mašek, CSc.](#) (seminar tutor)
[MUDr. Tomáš Novotný, Ph.D.](#) (seminar tutor)
[prof. MUDr. Dalibor Pacík, CSc.](#) (seminar tutor)
[doc. MUDr. Petr Piskač, CSc.](#) (seminar tutor)
[prof. MUDr. Ladislav Plánka, Ph.D.](#) (seminar tutor)
[doc. MUDr. Jiří Podlaha, CSc.](#) (seminar tutor)
[prof. MUDr. Robert Staffa, Ph.D.](#) (seminar tutor)
[MUDr. Zdeněk Šilhart](#) (seminar tutor)
[MUDr. Roman Švehlák](#) (seminar tutor)
[doc. MUDr. Lenka Veverková, Ph.D.](#) (seminar tutor)
[MUDr. Robert Vlachovský, Ph.D.](#) (seminar tutor)
[doc. MUDr. Jiří Vokurka, CSc.](#) (seminar tutor)
[MUDr. Katarína Zdražilová](#) (seminar tutor)
[MUDr. Jan Žák, Ph.D.](#) (seminar tutor)
[Hana Baráčková](#) (assistant)
[Veronika Bradáčková](#) (assistant)
[Lucie Kučerová](#) (assistant)
[Lea Müllerová](#) (assistant)
[Zdeňka Naidarová](#) (assistant)
[Barbora Staňková](#) (assistant)
[Věra Stejskalová](#) (assistant)

Supervisor

[MUDr. Jan Konečný, Ph.D.](#)
[Second Department of Surgery - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)
Supplier department: [Second Department of Surgery - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Prerequisites (in Czech)

[VLCP0521c Introduc. to Surgery I -pr.](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the training in the 2nd term of the surgical propedeutics is to introduce the main types of surgical wounds, their local and systemic treatment, next obtaining of the knowledge and practical skills (according to the availability of the simulators and the department possibilities) of the basic surgical techniques (bandage application, wound debridement and dressing application). The part of the tuition are lessons from anesthesiology and children surgery. With the completion of this course the student should be able to provide (under the supervision and with the help of the surgeon) basic surgical procedures (wound sewing, venepuncture, plaster bandage application) and completion of the patients clinical records. The tuition has a form of presentations with the practical bedside or outpatient clinic examples and following discussion.

Syllabus

- shock
- metabolic disorders at the surgical ICU
- wounds
- burns, frostbite
- surgical instruments, injury of the tendons
- plaster bandage, orthosis
- surgical infections
- venous, arterial access
- dressing
- case history
- recapitulation

Literature

recommended literature

- ŠNAJDAUF, Jiří and Richard ŠKÁBA. *Dětská chirurgie*. 1. vyd. Praha: Galén, 2005. 395 s. ISBN 807262329X. [info](#)

not specified

- PAFKO, Pavel. *Základy speciální chirurgie*. 1. vyd. Praha: Galén, 2008. 385 s. ISBN 9788072624027. [info](#)
- *Essentials of surgery*. Edited by James M. Becker - Arthur F. Stocchi. Philadelphia: Elsevier/Saunders, 2006. xx, 841. ISBN 0721681867. [info](#)
- VODIČKA, Josef. *Speciální chirurgie*. 1. vyd. Praha: Karolinum, 2006. 313 s. ISBN 8024611015. [info](#)
- ZEMAN, Miroslav. *Speciální chirurgie*. 2. vyd. Praha: Galén, 2004. xxiii, 575. ISBN 8072622609. [info](#)
- HOCH, Jiří and Jan LEFFLER. *Speciální chirurgie : učebnice pro lékařské fakulty*. 1. vyd. Praha: MAXDORF-JESSENIUS, 2001. 224 s. ISBN 8085912449. [info](#)
- ZEMAN, Miroslav. *Chirurgická propedeutika*. 2., přeprac. a dopl. vyd. Praha: Grada, 2000. 516 s. ISBN 8071697052. [info](#)

- *Současná chirurgická diagnostika a léčba*. Edited by Lawrence W. Way, Translated by František Antoš - Miloš Hájek. 1. vyd. Praha: Grada, 1998. S.: 807-16. ISBN 8071693979. [info](#)
- *Basic surgery*. Edited by Hiram C. Polk - Bernard Gardner - H. Harlan Stone. 5th ed. St. Louis: Quality Medical Publishing, 1995. xviii, 102. ISBN 0942219740. [info](#)
- *Hamilton Bailey's demonstrations of physical signs in clinical surgery*. Edited by Hamilton Bailey - Allan Clain. 17th ed. Oxford: Butterworth-Heinemann, 1994. xiv, 622 s. ISBN 0-7506-0613-4. [info](#)

Bookmarks

<https://is.muni.cz/auth/ln/tag/LF:VLCP0622c!>

Teaching methods

The tuition has a form of presentations with the practical bedside examples of the patients records and procedures (results of laboratory tests, wound care, plaster bandage application, small surgical procedures participation) and following discussion about above mentioned themes.

Assessment methods

Giving the course-unit credit is conditioned by full attendance in the lessons and successfully written test based on the taught themes knowledge. The term is terminated with the oral exam. Exam consists of practical (surgical instruments, bandages, X-rays or CT scans) and oral parts. Department of Pediatric Surgery, Orthopedics and Traumatology by students at the end of the first semester of surgical propedeutics alpha test with written out response options, at least one answer is correct. After the second semester, followed by the development of a case study about a patient in the last term internships and oral examination in due dates. It includes three knowledge of surgical instruments and making the dressing.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: in blocks.

Listed among pre-requisites of other courses

- [VLDM7X1c Diagnostic Imaging Methods - practice](#)
[VLCP0622c](#) && [VSIP0622c](#) && [VSPF0622c](#) && [VSPA0622c](#) && [VSNV041p](#)
&& [VLFA0621c](#) (Do I meet enrolment requirements?)
- [VLDM7X1p Diagnostic Imaging Methods - lecture](#)
[VLCP0622c](#) && [VSIP0622c](#) && [VSPF0622c](#) && [VSPA0622c](#) && [VSNV041p](#)
&& [VLFA0621c](#) (Do I meet enrolment requirements?)
- [VLCH0731c Surgery I -practicals](#)
[VSPF0622p](#) && [VSPA0622p](#) && [VLCP0622c](#) && [VSIP0622c](#) &&
[VLFA0621c](#) (Do I meet enrolment requirements?)
- [VLCH0731p Surgery I - lectures](#)
[VSPF0622p](#) && [VSPA0622p](#) && [VLCP0622c](#) && [VSIP0622c](#) &&
[VLFA0621c](#) (Do I meet enrolment requirements?)

- [VLIN7X21 Infectious Diseases I -practice](#)
[VSPF0622p](#) && [VSPA0622p](#) && [VLCP0622c](#) && [VSIP0622c](#) && [VLLM0522p](#)
&& [VLIM051p](#) && [VLFA0621c](#) (Do I meet enrolment requirements?)
- [VLKG7X1c Clinical Genetics - practice](#)
[VLLM0522p](#) && [VLIM051p](#) && [VSIP0622c](#) && [VLCP0622c](#) &&
[VLFA0621c](#) (Do I meet enrolment requirements?)
- [VLKG7X1p Clinical Genetics - lecture](#)
[VLLM0522p](#) && [VLIM051p](#) && [VSIP0622c](#) && [VLCP0622c](#) &&
[VLFA0621c](#) (Do I meet enrolment requirements?)
- [VLNP081c Clinical Introduction to Neurology - practice](#)
[VSIP0622c](#) && [VLCP0622c](#) && [VLFA0621c](#) (Do I meet enrolment
requirements?)
- [VLNP081p Clinical Introduction to Neurology - lecture](#)
[VSIP0622c](#) && [VLCP0622c](#) (Do I meet enrolment requirements?)

[Zobrazit další předměty](#)

Teacher's information

Informace o výuce jsou na nástěnkách příslušných chirurgických klinik Klinika dětské chirurgie, ortopedie a traumatologie - Studenti jsou v předepsaném čase vyzvednuti před knihovnou KDCHOT ve 2. patře spojnice pavilonu C a B přiděleným vyučujícím a jsou odvedeni na místo výuky. Výuka probíhá v uceleném bloku 90 minut v knihovně kliniky nebo v provozech KDCHOT. Student se v šatně umístěné u hlavní brány objektu PDM přezuje a oblékne si ochranný bílý plášť. Department of Pediatric Surgery, Orthopedics and Traumatology - Students are picked up within the specified time by library on the 2nd floor of the connector Pavilion C and B are assigned by the teacher and taken to a place of teaching. Classes take place in a coherent block of 90 minutes in the library clinics or in the works KDCHOT. Students change their shoes and put a protective coat in a dressing room located at the main gate of the building PDM.

The course is also listed under the following terms [Spring 2000](#), [Spring 2001](#), [Spring 2002](#), [Spring 2003](#), [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VLCP0622p Clinical Introduction to Surgery II - lecture ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

2/0/0. 4 credit(s). Type of Completion: zk (examination).

Teacher(s)

[MUDr. Vladimír Bartl, CSc.](#) (lecturer)

[MUDr. Ernest Biroš](#) (lecturer)

[doc. MUDr. Eva Brichtová, Ph.D.](#) (lecturer)

[prof. MUDr. Pavel Brychta, CSc.](#) (lecturer)

[MUDr. Jan Buček](#) (lecturer)
[MUDr. Lukáš Dadák, Ph.D.](#) (lecturer)
[MUDr. Martin Dvořák, Ph.D.](#) (lecturer)
[MUDr. Olga Gimunová, Ph.D.](#) (lecturer)
[MUDr. Ivo Hanke, Ph.D.](#) (lecturer)
[doc. MUDr. Pavel Janíček, CSc.](#) (lecturer)
[MUDr. Zdeněk Konečný](#) (lecturer)
[MUDr. Miroslav Krejčí, Ph.D.](#) (lecturer)
[doc. MUDr. Jindřich Leypold, CSc.](#) (lecturer)
[MUDr. Jan Maláska, Ph.D.](#) (lecturer)
[doc. MUDr. Ivan Müller, CSc.](#) (lecturer)
[MUDr. Tomáš Novotný, Ph.D.](#) (lecturer)
[prof. MUDr. Ladislav Plánka, Ph.D.](#) (lecturer)
[doc. MUDr. Lenka Veverková, Ph.D.](#) (lecturer)
[MUDr. Robert Vlachovský, Ph.D.](#) (lecturer)
[doc. MUDr. Jiří Vokurka, CSc.](#) (lecturer)
[prof. MUDr. Jindřich Vomela, CSc., LL.M.](#) (lecturer)
[MUDr. Katarína Zdražilová](#) (lecturer)
[MUDr. Václav Zvoníček, Ph.D.](#) (lecturer)
[prof. MUDr. Jan Žaloudík, CSc.](#) (lecturer)
[Mgr. MUDr. Štěpánka Bibrová, Ph.D.](#) (seminar tutor)
[Hana Baráčková](#) (assistant)
[Lucie Kučerová](#) (assistant)
[Lea Müllerová](#) (assistant)
[Zdeňka Naidarová](#) (assistant)
[Barbora Staňková](#) (assistant)
[Věra Stejskalová](#) (assistant)

Supervisor

[MUDr. Jan Konečný, Ph.D.](#)
[Second Department of Surgery - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)
Supplier department: [Second Department of Surgery - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Prerequisites (in Czech)

[VLCP0521c Introduc. to Surgery I -pr.](#)
(Do I meet enrolment requirements?)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Main objectives is theoretically introduction of surgery for medical students, these lectures inform them about basic principles, surgery and procedures.

Syllabus

- Physical examination in Surgery Part II.
- Traumatology, Traumatic disasters, War Surgery
- Suffocating, tracheostomy, pneumothorax
- Wounds
- Critical Care and Metabolism in Surgery
- Burns
- Blast injury, Chemical burns, Current injury, Frostbite
- Injury of muscles & tendons
- Dressing, immobilization, transport
- Fractures
- Luxations
- Infections in Surgery, Antibiotics, Chemotherapy
- Surgical Oncology, Surgical Judgement, Surgical Responsibility

Literature

- *Hamilton Bailey's demonstrations of physical signs in clinical surgery*. Edited by Hamilton Bailey - Allan Clain. 17th ed. Oxford: Butterworth-Heinemann, 1994. xiv, 622 s. ISBN 0-7506-0613-4. [info](#)
- *Chirurgická propedeutika :učebnice pro lékařské fakulty*. Edited by Vladimír Balaš - Jarmila Drábková - Miloslav Duda - Milan Med. [1. vyd.]. Praha: Grada-Avicenum, 1993. 487 s. ISBN 80-85623-45-5. [info](#)
- ZEMAN, Miroslav. *Chirurgická propedeutika*. 2., přeprac. a dopl. vyd. Praha: Grada, 2000. 516 s. ISBN 8071697052. [info](#)

Bookmarks

<https://is.muni.cz/auth/ln/tag/LF:VLCP0622p!>

Teaching methods

lecture

Assessment methods

Practical test (bandage, surgical instruments, X-ray images)

Theoretic test (3 questions).

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: in blocks.

Listed among pre-requisites of other courses

- [VLAM9X1c Intensive Care Medicine - practice](#) ([VLFA0822c](#) || [VLFA0722c](#)) && [VLCH0832c](#) && [VSIP0622p](#) && [VLCP0622p](#) && [VLDM7X1c](#) && [VSOT7X1c](#) && [VLIN7X21](#) ([Do I meet enrolment requirements?](#))
- [VLAM9X1p Intensive Care Medicine - lectures](#) ([VLFA0822c](#) || [VLFA0722c](#)) && [VLCH0832c](#) && [VLCH0731c](#) && [VSPF0622p](#)

&& [VSIP0622c](#) && [VLCP0622p](#) && [VLDM7X1c](#) && [VSOT7X1c](#) && [VLIN7X21](#) (Do I meet enrolment requirements?)

- [VLON091](#) Clinical Oncology - lecture
([VLFA0822c](#) || [VLFA0722c](#)) && [VSIP0622p](#) && [VLCP0622p](#) && [VLCH0832c](#) && [VSOT7X1c](#) (Do I meet enrolment requirements?)
- [VLON091c](#) Clinical Oncology - practice
([VLFA0822c](#) || [VLFA0722c](#)) && [VSIP0622p](#) && [VLCP0622p](#) && [VLCH0832c](#) && [VSOT7X1c](#) (Do I meet enrolment requirements?)
- [VLPD0932c](#) Pediatrics II - practice
[VLFA0722p](#) && [VLPD7X31c](#) && [VSOT7X1c](#) && [VLDM7X1c](#) && [VSIP0622p](#) && [VLCP0622p](#) && [VLKG7X1c](#) (Do I meet enrolment requirements?)
- [VLPD0932p](#) Pediatrics II - lectures
([VLFA0822p](#) || [VLFA0722p](#)) && [VLPD7X31c](#) && [VSOT7X1c](#) && [VLDM7X1c](#) && [VSIP0622p](#) && [VLCP0622p](#) && [VLKG7X1c](#) (Do I meet enrolment requirements?)
- [VLPG0921c](#) Gynecology and obstetrics - practicals
([VLFA0822p](#) || [VLFA0722p](#)) && [VLCH0832c](#) && [VLDM7X1c](#) && [VSIP0622p](#) && [VLCP0622p](#) (Do I meet enrolment requirements?)
- [VLPG0921p](#) Gynecology and obstetrics I - lecture
([VLFA0822p](#) || [VLFA0722p](#)) && [VLCH0832c](#) && [VLDM7X1c](#) && [VSIP0622p](#) && [VLCP0622p](#) (Do I meet enrolment requirements?)

Teacher's information

Informace o přednáškách visí na nástěnkách příslušných chirurgických klinik
The course is also listed under the following terms [Spring 2000](#), [Spring 2001](#), [Spring 2002](#), [Spring 2003](#), [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VLDE051 History of Medicine ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/0/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[Mgr. Irena Wernerová](#) (lecturer)

Supervisor

[Mgr. Irena Wernerová](#)

[Faculty of Medicine](#)

Contact Person: [Mgr. Irena Wernerová](#)

Supplier department: [Faculty of Medicine](#)

Timetable

Mon 18. 9. to Fri 6. 10. Tue 15:00–16:40 [A11/327](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

The capacity limit for the course is 40 student(s).

Current registration and enrolment status: enrolled: **42/40**, only registered: **0/40**, only registered with preference (fields directly associated with the programme): **0/40**

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

The main objectives are to inform student on the main periods and tendencies of the history of medicine and to contribute to understanding of basic values of health care and health services system. Student will be able to evaluate importance of the history of medicine.

Syllabus

- 1. Origin of medicine and health care. 2. Diseases and healing in a prehistoric society. 3. Christian tradition, Arabic, Chinese and Indian medicine, 4. European medicine in the Middle Ages. 5. Medicine in the Renaissance. 6. Medicine during the Enlightenment. 7. Development of the scientific medicine in the nineteenth century. 8. Medical care in the nineteenth century. 9. The advancement and limits of medicine in the twentieth century. 10. The past, the present, and the future of medicine and health care. 11. Personalities and basic data of the development of the Czech medicine and health care system. 12. The concise history of the Masaryk University, Medical faculty, and the teaching hospital.

Literature

- GORDON, Richard. *Podivuhodné dějiny lékařství*. Translated by Růžena Loulová. 1. vyd. Praha: Melantrich, 1995. ISBN 8070232080. [info](#)
- *Největší dobrodini lidstva : historie medicíny od starověku po současnost*. Edited by Roy Porter - Jaroslav Hořejší. 1. vyd. Praha: PROSTOR, 2001. 807 s., ob. ISBN 80-7260-052-4. [info](#)
- SCHOTT, Heinz. *Kronika medicíny*. Translated by Zdeněk Bureš. 1. vyd. Praha: Fortuna Print, 1994. 648 s., fo. ISBN 80-85873-16-8. [info](#)

Teaching methods

seminars

Assessment methods

credit

Language of instruction

Czech

Further comments (probably available only in Czech)

Information on the extent and intensity of the course: 3x2 hodiny.

The course is also listed under the following terms [Accreditation autumn](#).

VLDM7X1c Diagnostic Imaging - practice ✱

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/4/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Vlastimil Válek, CSc., MBA, EBIR](#) (seminar tutor)

[doc. MUDr. Jarmila Skotáková, CSc.](#) (seminar tutor)

[MUDr. Jiří Vaniček, Ph.D.](#) (seminar tutor)

[MUDr. Tomáš Andrašina, Ph.D.](#) (seminar tutor)

[MUDr. Zuzana Balážová](#) (seminar tutor)

[MUDr. Daniel Bartušek, Ph.D.](#) (seminar tutor)

[Ing. Mgr. Hedvika Bělíková](#) (seminar tutor)

[MUDr. Martin Bulik, Ph.D.](#) (seminar tutor)

[MUDr. Petra Cimřlová](#) (seminar tutor)

[MUDr. Igor Černý, Ph.D.](#) (seminar tutor)

[MUDr. Vladimír Červeňák](#) (seminar tutor)

[MUDr. Ivana Červinková](#) (seminar tutor)

[MUDr. Karel Dvořák, CSc.](#) (seminar tutor)

[MUDr. Jakub Foukal, Ph.D.](#) (seminar tutor)

[MUDr. Jakub Hustý, Ph.D.](#) (seminar tutor)

[MUDr. Marcela Charvátová](#) (seminar tutor)

[MUDr. Miloš Keřkovský, Ph.D.](#) (seminar tutor)

[MUDr. Jan Křístek, Ph.D.](#) (seminar tutor)

[MUDr. Tomáš Křivka](#) (seminar tutor)

[MUDr. Vlastirad Mach](#) (seminar tutor)

[doc. MUDr. Marek Mechl, Ph.D., MBA](#) (seminar tutor)

[MUDr. Iva Mihulová](#) (seminar tutor)

[MUDr. Pavel Ošmera](#) (seminar tutor)

[MUDr. Petr Ouředníček, Ph.D.](#) (seminar tutor)

[MUDr. Jiří Pánek](#) (seminar tutor)

[MUDr. Tamara Pavlíková](#) (seminar tutor)

[MUDr. Denisa Pavlovská](#) (seminar tutor)

[MUDr. Zdenka Povolná](#) (seminar tutor)

[MUDr. Zdeňka Ráčilová](#) (seminar tutor)

[MUDr. Svatopluk Richter](#) (seminar tutor)

[MUDr. Tomáš Rohan](#) (seminar tutor)

[MUDr. Anna Seehofnerová](#) (seminar tutor)

[MUDr. Monika Staňková](#) (seminar tutor)

[MUDr. Jakub Štulík](#) (seminar tutor)

[MUDr. Igor Suškevič](#) (seminar tutor)

[MUDr. Jan Šenkyřík](#) (seminar tutor)

[MUDr. Andrea Šprláková-Puková, Ph.D.](#) (seminar tutor)

[PharmDr. RNDr. Jiří Štěpán, Ph.D.](#) (seminar tutor)

[Iva Čechová](#) (assistant)

[Jitka Halouzková](#) (assistant)
[Dagmar Němečková](#) (assistant)
[Bc. Alena Sajdířová, DiS.](#) (assistant)

Supervisor

[MUDr. Tomáš Andrašina, Ph.D.](#)
[Department of Radiology and Nuclear Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)
Contact Person: [MUDr. Tomáš Andrašina, Ph.D.](#)
Supplier department: [Department of Radiology and Nuclear Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Timetable of Seminar Groups

VLDM7X1c/09: Mon 1. 1. to Fri 12. 1. each working day 7:30–12:20 [1148a](#)
VLDM7X1c/10: Mon 11. 12. to Fri 22. 12. each working day 7:30–12:20 [1148a](#)
VLDM7X1c/11: Mon 27. 11. to Fri 8. 12. each working day 7:30–12:20 [1148a](#)
VLDM7X1c/12: Mon 13. 11. to Fri 24. 11. each working day 7:30–12:20 [1148a](#)
VLDM7X1c/15: Mon 2. 10. to Fri 13. 10. each working day 7:30–12:20 [1148a](#)
VLDM7X1c/16: Mon 18. 9. to Fri 29. 9. each working day 7:30–12:20 [1148a](#)
VLDM7X1c/30: Mon 16. 10. to Fri 27. 10. each working day 7:30–12:20 [1148a](#)
VLDM7X1c/31: Mon 30. 10. to Fri 10. 11. each working day 7:30–12:20 [1148a](#)
VLDM7X1c/34: Mon 18. 9. to Fri 29. 9. each working day 7:30–12:20 [1148a](#)
VLDM7X1c/35: Mon 11. 12. to Fri 22. 12. each working day 7:30–12:20 [1148a](#)

Prerequisites

[VLCP0622c](#) [Introduc. to surgery II -pr.](#) && [VSIP0622c](#) [Introduction to internal II-pr](#) &&
[VSPF0622c](#) [Pathophys. II - pract. train.](#) && [VSPA0622c](#) [Pathology - practice](#) &&
[VSNV041p](#) [Neuroscience - lecture](#) && [VLFA0621c](#) [Pharmacology I - p](#)

VLCP0622c Clinical Introduction to Surgery II VSIP0622c Clinical Introduction to Internal Medicine II - practice VSPF0622c Pathological Physiology II VSPA0622c Pathology - practice VLFA0621c Pharmacology I - practice VSNV041p Neuroscience - lecture

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Nuclear medicine: The concept of this course is introduction into the study of nuclear medicine. Students should know basic principles of examination and should be able to select the diagnostic and therapeutic methods of nuclear medicine. Radiodiagnostic: The concept of this course is introduction into the study of radiology and imaging methods, including CT, MR, X-ray, angiography and ultrasound. Students should know basic principle of examination and methods of CT, MR, UZ and X-ray, including technique, anatomy, indications, contraindications and risk factors.

Learning outcomes

Student will have knowledge of the principles of imaging methods, differentiation of individual modalities, appropriate indications and contraindications of methods. Student will be able to indicate correct imaging methods in case of suspicion of specific disease conditions, will know the limitations of imaging methods in specific disease states, will be able to evaluate basic anatomical structures on imaging examinations.

Syllabus

- Nuclear Medicine: Radionuclides, interaction between ionizing radiation and matter, radiation detection, imaging techniques, SPECT, PET, fundamentals of radiopharmacology, biological effects of ionizing radiation, radiation safety. Methods of nuclear medicine used in urology, skeletal and bone marrow scintigraphy, nuclear cardiology. Scintigraphy of CNS, lungs, thyroid gland, gastrointestinal tract, liver and spleen. Examination in hematology, diagnostics of inflammations and tumors. With each examination procedure, the radiopharmaceuticals used, the methods, evaluation, interpretation of the findings, and indications are explained. Principles of radioimmunologic diagnostic procedures. Relations between the methods of nuclear medicine and other imaging methods, role of radionuclide methods in diagnostic algorithms. Fundamentals of therapy of diseases using radiopharmaceuticals. Radiodiagnostic: CT, MR, X-ray, ultrasound, angiography, interventional radiology, indications, contraindication, risk factors, limits, technical aspect, anatomy, interpretations of the findings. Methods of diagnostic imaging used in different subspecializations and areas like pediatric radiology, neuroradiology, interventional radiology, abdominal imaging, imaging in oncology, urology, woman imaging and cardiac imaging are discussed. With each examination procedure and method the contrast agents, indications, contraindications and risk factors as well as limits are explained. Technical principles, standards, protections and “how to do it” are also learned.

Literature

required literature

- HEŘMAN, Miroslav. *Základy radiologie*. 1. vyd. Olomouc: Univerzita Palackého, 2014. 314 s. ISBN 9788024429014. [info](#)
- *Nukleární medicína*. 4. uprav. a dopl. vyd. Jilemnice: Gentiana, 2002. 154 s. ISBN 8086527050. [info](#)
- HERRING, William. *Learning radiology : recognizing the basics*. 3rd edition. Philadelphia: Elsevier, 2015. xvii, 332. ISBN 9780323328074. [info](#)
- ZIESSMAN, Harvey A. and James H THRALL. *Nuclear Medicine: The Requisites, 4th Edition*. 2013. ISBN 978-0-323-08299-0. [info](#)

not specified

- VÁLEK, Vlastimil. *Moderní diagnostické metody*. Edited by Jan Žižka. 1. vyd. Brno: Institut pro další vzdělávání pracovníků ve zdravotnictví, 1996. 43 s., obr. ISBN 80-7013-225-6. [info](#)
- [SVÍŽENSKÁ, Ivana](#) and [Vlastimil VÁLEK](#). *Základy anatomie v zobrazovacích metodách. I. Skiaskopie a skiagrafie (Anatomy in image methods. I. Skiascopy and*

skiagraphy). První. Brno: IDVPZ Brno, MU Brno, Boston Scientific ČR s.r.o., 2001. 72 pp. ISBN 80-7013-334-1. [info](#)

- ELIÁŠ, Pavel, Petr MÁCA, Jiří NEUWIRTH and [Vlastimil VÁLEK](#). *Moderní diagnostické metody. II.díl Výpočetní tomografie*. 1. vyd. Brno: Institut pro další vzdělávání pracovníků ve zdravotnictví, 1998. 84 pp. ISBN 80-7013-294-9. [info](#)
- [BOUDNÝ, Jaroslav](#), Martin KÖCHER, [Jan PEREGRIN](#) and [Vlastimil VÁLEK](#). *Moderní diagnostické metody. IV.díl Instrumentárium k intervenčním výkonům*. 1. vyd. Brno: Institut pro další vzdělávání pracovníků ve zdravotnictví, 2000. 42 pp. ISBN 80-7013-298-1. [info](#)
- KUPKA, Karel, Jozef KUBINYI and Martin ŠÁMAL. *Nukleární medicína*. 1. vyd. [Praha]: P3K, 2007. 185, xiv. ISBN 9788090358492. [info](#)
- VOTRUBOVÁ, Jana. *Klinické PET a PET/CT*. 1. vyd. Praha: Galén, 2009. 207 s. ISBN 9788072626199. [info](#)
- FERDA, Jiří and Hynek MÍRKA. *Základy zobrazovacích metod*. první. Praha: Galén, 2015. 148 pp. ISBN 978-80-7492-164-3. [info](#)

Teaching methods

Seminars and practical and practical training.

Assessment methods

Full attendance and test of radiological anatomy are necessary for giving course-unit credit.

Language of instruction

Czech

Further Comments

[Study Materials](#)

The course can also be completed outside the examination period.

The course is taught each semester.

Listed among pre-requisites of other courses

- [VLAM9X1c Intensive Care Medicine - practice](#) ([VLFA0822c](#) || [VLFA0722c](#)) && [VLCH0832c](#) && [VSIP0622p](#) && [VLCPO622p](#) && [VLDM7X1c](#) && [VSOT7X1c](#) && [VLIN7X21](#) (Do I meet enrolment requirements?)
- [VLAM9X1p Intensive Care Medicine - lectures](#) ([VLFA0822c](#) || [VLFA0722c](#)) && [VLCH0832c](#) && [VLCH0731c](#) && [VSPF0622p](#) && [VSIP0622c](#) && [VLCPO622p](#) && [VLDM7X1c](#) && [VSOT7X1c](#) && [VLIN7X21](#) (Do I meet enrolment requirements?)
- [VLNE9X1c Neurology - practice](#) ([VLFA0822p](#) || [VLFA0722p](#)) && [VSIP0622c](#) && [VLDM7X1c](#) && [VLOL7X1a](#) && [VLCH0832c](#) && [VLNP081c](#) (Do I meet enrolment requirements?)
- [VLNE9X1p Neurology - lecture](#) ([VLFA0822p](#) || [VLFA0722p](#)) && [VSIP0622c](#) && [VLDM7X1c](#) && [VLOL7X1a](#) && [VLCH0832c](#) && [VLNP081c](#) (Do I meet enrolment requirements?)
- [VLPD0932c Pediatrics II - practice](#) ([VLFA0722p](#) && [VLPD7X31c](#) && [VSOT7X1c](#) && [VLDM7X1c](#) && [VSIP0622p](#) && [VLCPO622p](#) && [VLKG7X1c](#) (Do I meet enrolment requirements?)

- [VLDP0932p](#) Pediatrics II - lectures
([VLFA0822p](#) || [VLFA0722p](#)) && [VLDP7X31c](#) && [VSOT7X1c](#) && [VLDM7X1c](#)
&& [VSIP0622p](#) && [VLCP0622p](#) && [VLKG7X1c](#) (Do I meet enrolment requirements?)
- [VLPG0921c](#) Gynecology and obstetrics - practicals
([VLFA0822p](#) || [VLFA0722p](#)) && [VLCH0832c](#) && [VLDM7X1c](#) && [VSIP0622p](#)
&& [VLCP0622p](#) (Do I meet enrolment requirements?)
- [VLPG0921p](#) Gynecology and obstetrics I - lecture
([VLFA0822p](#) || [VLFA0722p](#)) && [VLCH0832c](#) && [VLDM7X1c](#) && [VSIP0622p](#)
&& [VLCP0622p](#) (Do I meet enrolment requirements?)
- [VLPL9X1](#) Preventive Medicine - lecture
[VSIP0622c](#) && [VLCP0622c](#) && [VLLM0522p](#) && [VLIM051p](#) && [VLDM7X1c](#)
&& [VSEI7X1](#) (Do I meet enrolment requirements?)

[Zobrazit další předměty](#)

The course is also listed under the following terms [Autumn 1999](#), [Spring 2000](#), [Autumn 2000](#), [Spring 2001](#), [Autumn 2001](#), [Spring 2002](#), [Autumn 2002](#), [Spring 2003](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#).

VLDM7X1p Diagnostic Imaging - lecture ✱

Faculty of Medicine

Autumn 2019

Extent and Intensity

1/0/0. 3 credit(s). Recommended Type of Completion: zk (examination). Alternate Types of Completion: RZk (examination).

Teacher(s)

[prof. MUDr. Vlastimil Válek, CSc., MBA, EBIR](#) (lecturer)

[doc. MUDr. Jarmila Skotáková, CSc.](#) (lecturer)

[MUDr. Jiří Vaniček, Ph.D.](#) (lecturer)

[doc. MUDr. Marek Mechl, Ph.D., MBA](#) (lecturer)

[MUDr. Ivana Červinková](#) (lecturer)

[MUDr. Igor Suškevič](#) (lecturer)

[MUDr. Igor Černý, Ph.D.](#) (lecturer)

[MUDr. Andrea Šprláková-Puková, Ph.D.](#) (lecturer)

[MUDr. Marcela Charvátová, Ph.D.](#) (lecturer)

[MUDr. Daniel Bartušek, Ph.D.](#) (lecturer)

[MUDr. Miloš Keřkovský, Ph.D.](#) (lecturer)

[MUDr. Tomáš Andrašina, Ph.D.](#) (lecturer)

[PharmDr. RNDr. Jiří Štěpán, Ph.D.](#) (lecturer)

[MUDr. Tomáš Rohan](#) (seminar tutor)

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[Dagmar Němečková](#) (assistant)

[Bc. Alena Sajdíková, DiS.](#) (assistant)

Supervisor

[MUDr. Tomáš Andrašina, Ph.D.](#)

[Department of Radiology and Nuclear Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Supplier department: [Department of Radiology and Nuclear Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Timetable

Mon 23. 10. to Fri 24. 11. Mon 14:00–17:00 [A11/234](#)

- Timetable of Seminar Groups:

VLDM7X1p/VLA: Mon 2. 10. to Fri 3. 11. Wed 13:20–16:40 [1148a](#)

Prerequisites

[VLCP0622c](#) [Introduc. to surgery II -pr.](#) && [VSIP0622c](#) [Introduction to internal II-pr](#) && [VSPF0622c](#) [Pathophys. II - pract. train.](#) && [VSPA0622c](#) [Pathology - practice](#) && [VSNV041p](#) [Neuroscience - lecture](#) && [VLFA0621c](#) [Pharmacology I - p](#)

VLCP0622c Clinical Introduction to Surgery II VSIP0622c Clinical Introduction to Internal Medicine II - practice VSPF0622c Pathological Physiology II VSPA0622c Pathology - practice VLFA0621c Pharmacology I - practice VSNV041p Neuroscience - lecture

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

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conditions, will know the limitations of imaging methods in specific disease states, will be able to evaluate basic anatomical structures on imaging examinations.

Syllabus

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Literature

required literature

- HEŘMAN, Miroslav. *Základy radiologie*. 1. vyd. Olomouc: Univerzita Palackého, 2014. 314 s. ISBN 9788024429014. [info](#)
- KORANDA, Pavel. *Nukleární medicína*. 1. vyd. Olomouc: Univerzita Palackého v Olomouci, 2014. 201 s. ISBN 9788024440316. [info](#)
- HERRING, William. *Learning radiology : recognizing the basics*. 3rd edition. Philadelphia: Elsevier, 2015. xvii, 332. ISBN 9780323328074. [info](#)
- ZIESSMAN, Harvey A. and James H THRALL. *Nuclear Medicine: The Requisites, 4th Edition*. 2013. ISBN 978-0-323-08299-0. [info](#)

not specified

- VÁLEK, Vlastimil. *Moderní diagnostické metody*. Edited by Jan Žižka. 1. vyd. Brno: Institut pro další vzdělávání pracovníků ve zdravotnictví, 1996. 43 s., obr. ISBN 80-7013-225-6. [info](#)
- [SVÍŽENSKÁ, Ivana](#) and [Vlastimil VÁLEK](#). *Základy anatomie v zobrazovacích metodách. I. Skiaskopie a skiagrafie (Anatomy in image methods. I. Skiascopy and skiagraphy)*. První. Brno: IDVPZ Brno, MU Brno, Boston Scientific ČR s.r.o., 2001. 72 pp. ISBN 80-7013-334-1. [info](#)

- ELIÁŠ, Pavel, Petr MÁČA, Jiří NEUWIRTH and [Vlastimil VÁLEK](#). *Moderní diagnostické metody. II.díl Výpočetní tomografie*. 1. vyd. Brno: Institut pro další vzdělávání pracovníků ve zdravotnictví, 1998. 84 pp. ISBN 80-7013-294-9. [info](#)
- [BOUDNÝ, Jaroslav](#), Martin KÖCHER, [Jan PEREGRIN](#) and [Vlastimil VÁLEK](#). *Moderní diagnostické metody. IV.díl Instrumentárium k intervenčním výkonům*. 1.vyd. Brno: Institut pro další vzdělávání pracovníků ve zdravotnictví, 2000. 42 pp. ISBN 80-7013-298-1. [info](#)
- KUPKA, Karel, Jozef KUBINYI and Martin ŠÁMAL. *Nukleární medicína*. 1. vyd. [Praha]: P3K, 2007. 185, xiv. ISBN 9788090358492. [info](#)
- VOTRUBOVÁ, Jana. *Klinické PET a PET/CT*. 1. vyd. Praha: Galén, 2009. 207 s. ISBN 9788072626199. [info](#)
- LANG, Otto, Milan KAMÍNEK and Helena TROJANOVÁ. *Nukleární kardiologie*. Praha: Galén, 2008. 130 s. ISBN 9788072624812. [info](#)
- FERDA, Jiří and Hynek MÍRKA. *Základy zobrazovacích metod*. první. Praha: Galén, 2015. 148 pp. ISBN 978-80-7492-164-3. [info](#)

Teaching methods

lecture

Assessment methods

Full attendance is necessary for giving course-unit credit.

Language of instruction

Czech

Further Comments

The course can also be completed outside the examination period.

The course is taught each semester.

Listed among pre-requisites of other courses

- [VLVL101p Internal medicine - lecture](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VSIP0622p](#) && [VLDM7X1p](#) &&
([VLVL7X65c](#) || [VLVL9X65c](#)) && [VSOT7X1c](#) && [VLIN7X21](#) ([Do I meet enrolment requirements?](#))

The course is also listed under the following terms [Autumn 1999](#), [Spring 2000](#), [Autumn 2000](#), [Spring 2001](#), [Autumn 2001](#), [Spring 2002](#), [Autumn 2002](#), [Spring 2003](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#).

VLET0311p Selected lessons of embryology and teratology ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

1/0/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. RNDr. Svatopluk Čech, DrSc.](#) (lecturer)

[MUDr. Jana Dumková](#) (lecturer)

[MUDr. Irena Lauschová, Ph.D.](#) (lecturer)

[doc. MUDr. Miroslava Sedláčková, CSc.](#) (lecturer)

[RNDr. Petr Vaňhara, Ph.D.](#) (lecturer)

Supervisor

[doc. MVDr. Aleš Hampl, CSc.](#)

[Department of Histology and Embryology - Theoretical Departments - Faculty of Medicine](#)

Supplier department: [Department of Histology and Embryology - Theoretical Departments - Faculty of Medicine](#)

Timetable

Mon 2. 10. to Sun 24. 12. Thu 11:30–12:20 [A22/116 aula](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [Stomatology](#) (programme LF, M-ST)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Course objectives

At the end of the course students should be able to:

1. Describe the development of individual organ systems of human body.
2. Explain the mechanism of the origin of the most frequent or most grave developmental anomalies.

Learning outcomes

At the end of the course students should be able to:

1. Describe the development of individual organ systems of human body.
2. Explain the mechanism of the origin of the most frequent or most grave developmental anomalies.

Syllabus

- Development and teratology of cardiovascular and lymphatic systems. Development and teratology of digestive system and coelom. Teratology of urinary system. Teratology of reproductive system. Teratology of nervous system. Teratology of sensory organs.

Literature

recommended literature

- [ČECH, Svatopluk, Drahomír HORKÝ](#) and [Miroslava SEDLÁČKOVÁ](#). *Přehled embryologie člověka*. 1. vyd. Brno: Masarykova univerzita, 2011. 187 pp. ISBN 978-80-210-5414-1. [info](#)

- VACEK, Zdeněk. *Embryologie : učebnice pro studenty lékařství a oborů všeobecná sestra a porodní aistentka*. 1. vyd. Praha: Grada, 2006. 255 s. ISBN 9788024712673. [info](#)

not specified

- SADLER, T. W. *Langmanova lékařská embryologie*. 1. české vyd. Praha: Grada, 2011. xviii, 414. ISBN 9788024726403. [info](#)
- KAPPELLER, Karol and Viera POSPÍŠILOVÁ. *Embryológia človeka: učebnica pre lekárske fakulty*. Martin: Osveta, 2001. 370 pp. ISBN 80-8063-072-0. [info](#)
- Moore Keith L. - Persaud T.V.N. *Zrození člověka*. 1. české vydání. ISV nakladatelství Praha 2002. 564 s. ISBN 80-85866-94-3.

Teaching methods

lectures

Assessment methods

Giving the course-unit credit is conditioned by 80% attendance in the lectures.

Language of instruction

Czech

Further Comments

[Study Materials](#)

The course is also listed under the following terms [Autumn 2016](#), [Accreditation autumn](#).

VLFA0621c Pharmacology I - practice ✨

Faculty of Medicine

Spring 2019

Extent and Intensity

0/3/0. 5 credit(s). Type of Completion: z (credit).

Teacher(s)

[doc. MUDr. Regina Demlová, Ph.D.](#) (lecturer)
[doc. PharmDr. Jan Juřica, Ph.D.](#) (lecturer)
[MUDr. Jana Nováková, Ph.D.](#) (lecturer)
[MUDr. Jana Pistovčáková, Ph.D.](#) (lecturer)
[PharmDr. Ondřej Zendulka, Ph.D.](#) (lecturer)
[PharmDr. Jana Rudá, Ph.D.](#) (lecturer)
[Mgr. MVDr. Leoš Landa, Ph.D.](#) (lecturer)
[MVDr. Zuzana Babinská, Ph.D.](#) (lecturer)
[Mgr. Barbora Říhová, Ph.D.](#) (lecturer)
[doc. RNDr. Ladislava Bartošová, Ph.D.](#) (seminar tutor)
[Mgr. Gabriela Dovrtělová](#) (seminar tutor)
[MVDr. Eva Dražanová](#) (seminar tutor)
[MVDr. Eva Gospošová](#) (seminar tutor)
[Mgr. MVDr. Leoš Landa, Ph.D.](#) (seminar tutor)
[Mgr. Matej Čupťák](#) (seminar tutor)

[Mgr. Jana Merhautová, Ph.D.](#) (seminar tutor)
[Mgr. Kristýna Nosková](#) (seminar tutor)
[MUDr. Petra Řiháčková, MBA](#) (seminar tutor)
[PharmDr. Lenka Součková, Ph.D.](#) (seminar tutor)
[Mgr. Markéta Strakošová](#) (seminar tutor)
[Mgr. Tibor Štark](#) (seminar tutor)
[MUDr. Jana Vinklerová, Ph.D.](#) (seminar tutor)
[Renata Bláblová](#) (assistant)

Supervisor

[doc. MUDr. Regina Demlová, Ph.D.](#)
[Department of Pharmacology - Theoretical Departments - Faculty of Medicine](#)
Contact Person: [doc. MUDr. Regina Demlová, Ph.D.](#)
Supplier department: [Department of Pharmacology - Theoretical Departments - Faculty of Medicine](#)

Timetable of Seminar Groups

VLFA0621c/01: Wed 7:30–10:00 [A19/231](#)
VLFA0621c/02: Wed 7:30–10:00 [A19/231](#), *J. Rudá*
VLFA0621c/03: Wed 10:20–12:50 [A19/231](#)
VLFA0621c/04: Wed 10:20–12:50 [A19/231](#), *J. Juřica*
VLFA0621c/05: Fri 8:00–10:30 [A19/231](#)
VLFA0621c/06: Fri 8:00–10:30 [A19/231](#)
VLFA0621c/07: Fri 10:45–13:15 [A19/231](#)
VLFA0621c/08: Fri 10:45–13:15 [A19/231](#), *J. Pistovčáková*
VLFA0621c/09: Mon 8:00–10:30 [A19/231](#)
VLFA0621c/10: Mon 8:00–10:30 [A19/231](#)
VLFA0621c/11: Mon 10:45–13:15 [A19/231](#)
VLFA0621c/12: Mon 10:45–13:15 [A19/231](#)
VLFA0621c/13: Tue 8:00–10:30 [A19/231](#)
VLFA0621c/14: Tue 8:00–10:30 [A19/231](#)
VLFA0621c/15: Thu 10:45–13:15 [A19/231](#)
VLFA0621c/16: Thu 10:45–13:15 [A19/231](#), *J. Pistovčáková*
VLFA0621c/17: Tue 10:45–13:15 [A19/231](#), *O. Zendulka*
VLFA0621c/18: Tue 10:45–13:15 [A19/231](#), *B. Řihová*
VLFA0621c/30: Tue 13:30–16:00 [A19/231](#), *O. Zendulka*
VLFA0621c/31: Wed 13:30–16:00 [A19/326](#), *J. Rudá*
VLFA0621c/32: Thu 13:30–16:00 [A19/326](#)
VLFA0621c/33: Tue 13:30–16:00 [A19/326](#)
VLFA0621c/34: Wed 13:30–16:00 [A19/231](#), *J. Juřica*
VLFA0621c/35: Thu 13:30–16:00 [A19/326](#), *J. Pistovčáková*

Prerequisites (in Czech)

[VSPF0521c Pathophysiol. I - practice.](#) && [VSPA0521c Pathology - practicals](#)
(Do I meet enrolment requirements?)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

On completion of the course the student will be able to use formally correct terminology belonging to the valid Pharmacopoea in prescription and making of drug dosage forms of both individually prepared and bulk preparations. The student should be able to understand principles of "pharmacological thinking" for choosing a drug, dosing regimen, pharmacokinetic parameter calculation, differences in administration routes and specifics of pediatric and geriatric pharmacotherapy including possible impact of drug-drug interactions.

Learning outcomes

On completion of the course the student will be able to use formally correct terminology belonging to the valid Pharmacopoea in prescription and making of drug dosage forms of both individually prepared and bulk preparations. The student should be able to understand principles of "pharmacological thinking" for choosing a drug, dosing regimen, pharmacokinetic parameter calculation, differences in administration routes and specifics of pediatric and geriatric pharmacotherapy including possible impact of drug-drug interactions.

Syllabus

- **Pharmacology - practical courses**

Spring semester 2019

-
- **1st week (20.2.-24.2.)**
- **Topic: INTRODUCTION, TERMINOLOGY, DOSES, PHARMACOLOGICAL CALCULATIONS.**
- *Course content:* Organisation of practical courses and lectures. Recommended textbooks. Pharmacology – definition, basic terminology, subspecializations. Experimental pharmacology. Drug nomenclature, type of doses. Pharmacopoea. Drug dosology in paediatrics.
- *Getting ready for next lesson:* Repetition of latin terminology and pharmacological calculations.
- *Selfstudy:* Prescription abbreviations.
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-
- **2nd week (27.2.-2.3.)**
- **Topic: GENERAL RULES OF THE DRUG PRESCRIPTION**
- *Course content:* Medical prescription: Rules of the drug prescription. Prescription of individually prepared and ready made preparations. Legislation of drug prescription. Work with various handbooks and databases (SÚKL database, Pharmindex, DynaMed.). Prescription of narcotic and psychotropic agents.
- *Getting ready for the next lesson:* Repetition of general rules of drug prescription + abbreviations.
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- **3rd week (6.3.-10.3.)**
- **Topic: FLUID DRUG DOSAGE FORMS FOR THE EXTERNAL USE, ORAL AND PARENTERAL USE. GASEOUS DRUG DOSAGE FORMS.**
- *Course content:* : Application and rinse solutions; eye, ear and nose lotions, suspensions - composition and prescription. Solutions for oral administration, drops, aromatic waters, tinctures. Terminology, classification, prescription.
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- **4th week (13.3.-17.3.)**
- **Topic: SOLID DRUG DOSAGE FORMS. SOFT AND MELTING DRUG DOSAGE FORMS.**
- *Course content:* Powders for external and internal use, capsules, tablets, teas; suppositories. Ointments, creams, pastes, plasters. Terminology, classification, prescription. *Getting ready for the next lesson:* Repetition of general rules of the drug prescription.
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- **5th week (20.3.-24.3.)**
- **Topic: INTRODUCTION TO THE PHARMACOKINETICS.**
- *Course content:* Basic pharmacokinetic processes and parameters. One- and two-compartment kinetic models. Kinetics of the intravascular and extravascular drug administration. Kinetics of single and repeated drug administration. *Getting ready for the next lesson:* Pharmacokinetic calculations.
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- **TEST Lessons 1-4**
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- **6th week (27.3.-31.3.)**
- **Topic: CASE REPORTS I - PHARMACOKINETIC INTERACTIONS. THERAPEUTIC DRUG MONITORING.**
- *Course content:* Computer techniques in pharmacokinetics. Therapeutic drug monitoring. Calculations of the basic pharmacokinetic parameters: Work with PC: Demonstration of software MW PHARM; Interactions of pharmacokinetic type.
- *Getting ready for the next lesson:* Physiology of ANS.
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-
- **7th week (3.4.-7.4.)**
- **Topic: PHARMACOLOGY OF THE SYMPATHETIC NERVOUS SYSTEM I. SYMPATHOMIMETICS.**
- *Course content:* Receptor theory, neurotransmission in PNS. Therapeutic use of sympathomimetics.
-
- **TEST Lessons 2-6**
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- **8th week (10.4.-14.4.)**

- **Topic: PHARMACOLOGY OF THE AUTONOMIC NERVOUS SYSTEM**
- **II. SYMPATHOLYTICS**
- *Course content:* Therapeutic use of sympatholytics.
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- **9th week (17.4.-21.4.)**
- **Topic: PHARMACOLOGY OF THE SYMPATHETIC NERVOUS SYSTEM**
- **III. CHOLINERGIC DRUGS.**
- *Course content:* Therapeutic use of cholinergic drugs.
- *Getting ready for the next lesson:* Pathophysiology of ulcer disease and vomitus.
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- **10th week (24.4.-28.4.)**
- **Topic: PHARMACOLOGY OF GASTRODUODENAL ULCER DISEASE, PROKINETICS, ANTIEMETICS.**
- *Course content:* Classification, mechanisms of action and clinical use of drugs in therapy of peptic ulcer and vomiting.
- *Getting ready for the next lesson:* Repetition of physiology of adrenal cortex hormones, repetition of pathophysiology of disorders caused by hyperproduction or insufficiency of adrenal cortex hormones.
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- **11th week (1.5.-5.5.)**
- **Topic: GLUCOCORTICOIDS.**
- *Course content:* Physiology and pathophysiology of adrenal cortex hormones. Natural and synthetic adrenocorticosteroids, steroid receptors, mechanism of action, pharmacological use and side effects. Examples of ready-made drug preparations.
- *Getting ready for the next lesson:* Repetition of physiology and biochemistry of thyroidal and sex hormones.
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- **TEST Lessons 7-10**
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- **12th week (8.5.-12.5.)**
- **Topic: PHARMACOLOGY OF ENDOCRINE SYSTEM.**
- *Course content:* Endocrine therapy, hormone replacement therapy, hormonal contraceptive drugs, thyroid hormones.
- *Getting ready for next lesson:* Repetition of pathophysiology of diabetes mellitus.
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- **13th week (15.5.-19.5.)**
- **Topic: ANTIDIABETIC DRUGS.**
- *Course content:* Therapy of type 1 and 2. DM. Insulines. Peroral antidiabetics. Examples of ready-made drug preparations.
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- **TEST Lessons 11-12**

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- **14th week (22.5.-26.5.)**
- **Topic: PHARMACOLOGY OF MEDICINAL PLANTS.**
- *Course content:* History, classification and chemistry of herbal drugs, their practical medicinal use. Demonstration and tasting of selected types of plant products (teas, macerates). Toxic herbs. Demonstration of selected drug forms and raw materials used for their preparation.
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- **CREDITS.**
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- **15th week (31.5.)**
- **Topic: EXCURSION TO THE CENTRE OF MEDICINAL PLANTS.**
- **ATTENDANCE VOLUNTARY**

Literature

required literature

- RANG, H. P. *Rang & Dale's pharmacology*. 8th ed. [Edinburgh]: Churchill Livingstone, 2016. xv, 760. ISBN 9780702053627. [info](#)
- <http://portal.med.muni.cz/clanek-611-zaklady-specialni-receptury-lecivych-pripravku.html>
- For English speaking students: Practicals in Pharmacology
<http://portal.med.muni.cz/discipline-13-pharmacology>

recommended literature

- LINCOVÁ, Dagmar and Hassan FARGHALI. *Základní a aplikovaná farmakologie*. 2., dopl. a přeprac. vyd. Praha: Galén, 2007. xxiv, 672. ISBN 9788072623730. [info](#)
- <http://portal.med.muni.cz/clanek-621-zivotni-cyklus-leciv-klinicke-hodnoceni-a-registrace-lecivych-pripravku-farmakovigilance-a-stanovovani-cen-a-uhrad-leciv.html>
- <http://portal.med.muni.cz/clanek-461-farmakovigilance-a-propagace-leciv.html>
- <http://elportal.cz/publikace/kazuistiky-farmakologie>
- <http://portal.med.muni.cz/clanek-649-zaklady-farmakoekonomiky.html>
- *Pharmaceutical practice*. Edited by Judith A. Rees - Ian Smith - Jennie Watson. 5th ed. Edinburgh: Churchill Livingstone Elsevier, 2014. xvii, 552. ISBN 9780702051432. [info](#)

not specified

- <http://portal.med.muni.cz/clanek-553-zaklady-receptury-lecivych-pripravku.html>
- *Český lékopis 2009 český lékopis 2009, doplněk 2010 : český lékopis 2009, doplněk 2011*. Praha: Grada, 2011. 1 DVD. ISBN 8594049240180. [info](#)

- WHALEN, Karen. *Lippincott illustrated reviews : Pharmacology*. Edited by Richard Finkel - Thomas A. Panavelil. 6th ed. Philadelphia, Pa.: Lippincott Williams & Wilkins, 2015. xi, 664. ISBN 9781451191776. [info](#)
- [DOSTÁLEK, Miroslav](#), [Jan JUŘICA](#), Eva JANOŠTÍKOVÁ and [Lucia ZAHRADNÍKOVÁ](#). *Farmakokinetika (Pharmacokinetics)*. ČR: Grada, 2006. 220 pp. Farmacie a farmakologie. ISBN 80-247-1464-7. [info](#)
- Waller, Derek - Renwick, Andrew G. - Hillier, Keith. *Medical pharmacology and therapeutics*. 3rd ed. New York : Elsevier Saunders, 2009. ix, 744 p. ISBN 0-7020-2991-2.
- Ritter, James M. - Lewis, Lionel D. - Mant, Timothy G.K. - Ferro, Albert. *A Textbook of Clinical Pharmacology and Therapeutics*, 5th Ed., Hodder Arnold, 2008. 465 s. ISBN 978-0-340-90046-8
- <http://portal.med.muni.cz/clanek-652-behavioralni-metody-v-neuropsychofarmakologii.html>
- <http://portal.med.muni.cz/clanek-367-vyzkum-novych-leciv-od-zrodu-k-registraci.html>
- <http://portal.med.muni.cz/clanek-644-farmakologie-pro-studenty-bakalarskych-oboru-na-lf-mu.html>

Teaching methods

Practicals, the teaching process of include theoretical setting up as well as practical training of knowledge and skills stated in Syllabus. Included are also individual work with specific pharmacological softwares and homeworks on the selected topics, presented and discussed afterward in class.

Assessment methods

The participation in practicals is obligatory and registered. To get a credits a student has to pass 3 written tests: a) on drug prescription (assessed individually by the teacher), b) 3 x multiple-choice test on knowledge of topics taught (score higher than 60% of maximum to pass, 8 pts. out of 15).

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

Listed among pre-requisites of other courses

- [VLDM7X1c Diagnostic Imaging Methods - practice](#)
[VLCP0622c](#) && [VSIP0622c](#) && [VSPF0622c](#) && [VSPA0622c](#) && [VSNV041p](#)
&& [VLFA0621c](#) ([Do I meet enrolment requirements?](#))
- [VLDM7X1p Diagnostic Imaging Methods - lecture](#)
[VLCP0622c](#) && [VSIP0622c](#) && [VSPF0622c](#) && [VSPA0622c](#) && [VSNV041p](#)
&& [VLFA0621c](#) ([Do I meet enrolment requirements?](#))
- [VLFA0722c Pharmacology II - practice](#)
[VLFA0621c](#) && ([VSAJ0222](#) || [VLAJ0222](#) || [VSCJ0686](#) || [VSNJ0222](#) || [VSSJ0222](#)) ([Do I meet enrolment requirements?](#))
- [VLFA0722p Pharmacology - lectures](#)
[VLFA0621c](#) && ([VSAJ0222](#) || [VLAJ0222](#) || [VSCJ0686](#) || [VSNJ0222](#) || [VSSJ0222](#)) ([Do I meet enrolment requirements?](#))

- [VLCH0731c Surgery I -practicals](#)
[VSPF0622p](#) && [VSPA0622p](#) && [VLCP0622c](#) && [VSIP0622c](#) && [VLFA0621c](#) (Do I meet enrolment requirements?)
- [VLCH0731p Surgery I - lectures](#)
[VSPF0622p](#) && [VSPA0622p](#) && [VLCP0622c](#) && [VSIP0622c](#) && [VLFA0621c](#) (Do I meet enrolment requirements?)
- [VLCH0832c Surgery II - practice](#)
[VLCH0731c](#) && [VLFA0621c](#) (Do I meet enrolment requirements?)
- [VLIN7X21 Infectious Diseases I -practice](#)
[VSPF0622p](#) && [VSPA0622p](#) && [VLCP0622c](#) && [VSIP0622c](#) && [VLLM0522p](#) && [VLIM051p](#) && [VLFA0621c](#) (Do I meet enrolment requirements?)
- [VLKG7X1c Clinical Genetics - practice](#)
[VLLM0522p](#) && [VLIM051p](#) && [VSIP0622c](#) && [VLCP0622c](#) && [VLFA0621c](#) (Do I meet enrolment requirements?)

[Zobrazit další předměty](#)

Teacher's information

Úřední hodiny sekretariátu Farmakologického ústavu LF MU v Brně, Kamenice 5, 625 00 Brno - Bohunice: denně 13.00 - 14.00 hod, tel.: 05 - 4949 3070.

Masaryk University, Faculty of Medicine

Department of Pharmacology

Kamenice 5, 625 00 Brno - Bohunice, Czech Republic

15. týden výuky probíhá výuka praktických cvičení v Centru léčivých rostlin LF MU

<http://www.med.muni.cz/medplant/kontakt.html>

Účast dobrovolná.

The course is also listed under the following terms [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#).

VLFA0722c Pharmacology II - practice ✱

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/3/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[doc. MUDr. Regina Demlová, Ph.D.](#) (lecturer)
[doc. PharmDr. Jan Juřica, Ph.D.](#) (seminar tutor)
[MVDr. Zuzana Babinská, Ph.D.](#) (seminar tutor)
[doc. RNDr. Ladislava Bartošová, Ph.D.](#) (seminar tutor)
[Mgr. Gabriela Dovrtělová](#) (seminar tutor)
[MVDr. Eva Dražanová](#) (seminar tutor)
[MVDr. Eva Gospošová](#) (seminar tutor)
[Mgr. MVDr. Leoš Landa, Ph.D.](#) (seminar tutor)
[Mgr. Matej Čupťák](#) (seminar tutor)
[Mgr. Jana Merhautová, Ph.D.](#) (seminar tutor)
[Mgr. Kristýna Nosková](#) (seminar tutor)
[MUDr. Jana Nováková, Ph.D.](#) (seminar tutor)
[MUDr. Jana Pistovčáková, Ph.D.](#) (seminar tutor)
[PharmDr. Jana Rudá, Ph.D.](#) (seminar tutor)
[MUDr. Petra Řiháčková, MBA](#) (seminar tutor)
[Mgr. Barbora Řihová, Ph.D.](#) (seminar tutor)
[PharmDr. Lenka Součková, Ph.D.](#) (seminar tutor)
[Mgr. Markéta Strakošová](#) (seminar tutor)
[Mgr. Tibor Štark](#) (seminar tutor)
[MUDr. Jana Vinklerová, Ph.D.](#) (seminar tutor)
[PharmDr. Ondřej Zendulka, Ph.D.](#) (seminar tutor)

Supervisor

[doc. MUDr. Regina Demlová, Ph.D.](#)
[Department of Pharmacology - Theoretical Departments - Faculty of Medicine](#)
Contact Person: [Renata Blábllová](#)
Supplier department: [Department of Pharmacology - Theoretical Departments - Faculty of Medicine](#)

Timetable of Seminar Groups

VLFA0722c/01: Mon 1. 1. to Fri 12. 1. each working day 7:30–12:20 [A19/231](#)
VLFA0722c/02: Mon 18. 9. to Fri 29. 9. each working day 7:30–12:20 [A19/231](#)
VLFA0722c/04: Mon 11. 12. to Fri 22. 12. each working day 7:30–12:20 [A19/231](#)
VLFA0722c/05: Mon 27. 11. to Fri 8. 12. each working day 7:30–12:20 [A19/231](#)
VLFA0722c/06: Mon 13. 11. to Fri 24. 11. each working day 7:30–12:20 [A19/231](#)
VLFA0722c/07: Mon 1. 1. to Fri 12. 1. each working day 7:30–12:20 [A19/231](#)
VLFA0722c/08: Mon 16. 10. to Fri 27. 10. each working day 7:30–12:20 [A19/231](#)
VLFA0722c/09: Mon 13. 11. to Fri 24. 11. each working day 7:30–12:20 [A19/231](#)
VLFA0722c/10: Mon 30. 10. to Fri 10. 11. each working day 7:30–12:20 [A19/231](#)
VLFA0722c/11: Mon 16. 10. to Fri 27. 10. each working day 7:30–12:20 [A19/231](#)
VLFA0722c/12: Mon 2. 10. to Fri 13. 10. each working day 7:30–12:20 [A19/231](#)
VLFA0722c/15: Mon 11. 12. to Fri 22. 12. each working day 7:30–12:20 [A19/231](#)
VLFA0722c/16: Mon 27. 11. to Fri 8. 12. each working day 7:30–12:20 [A19/231](#)
VLFA0722c/30: Mon 18. 9. to Fri 29. 9. each working day 7:30–12:20 [A19/326](#)
VLFA0722c/31: Mon 2. 10. to Fri 13. 10. each working day 7:30–12:20 [A19/326](#)
VLFA0722c/32: Mon 30. 10. to Fri 10. 11. each working day 7:30–12:20 [A19/326](#)
VLFA0722c/33: Mon 18. 9. to Fri 29. 9. each working day 7:30–12:20 [A19/326](#)

VLFA0722c/34: Mon 30. 10. to Fri 10. 11. each working day 7:30–12:20 [A19/326](#)

VLFA0722c/35: No timetable has been entered into IS.

Prerequisites (in Czech)

[VLFA0621c Pharmacology I - p](#) && ([VSAJ0222 English 1 II -p](#) ||
[VLAJ0222 English 1 II -p](#) || [VSCJ0686 Czech for Foreigners VI -p](#) ||
[VSNJ0222 German 1 II -p](#) || [VSSJ0222 Spanish 1 II -p](#))
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

At the end of the course student should be able to prescribe representatives of individual drug classes in the form of individually prepared pharmaceutical preparation and bulk drugs. The student should be familiar with pharmacological profiles of therapeutic and adverse effects of particular drugs with an attention paid to common drug-drug interactions.

Learning outcomes

At the end of the course student should be able to prescribe representatives of individual drug classes in the form of individually prepared pharmaceutical preparation and bulk drugs. The student should be familiar with pharmacological profiles of therapeutic and adverse effects of particular drugs with an attention paid to common drug-drug interactions.

Syllabus

- **VLFA0722c Pharmacology II- practicals**

Autumn semester 2019

- **Day 1 (Monday)**
-
- **Introduction, instructions.** Distribution of co-talks.
- **1/ANALGESICS.**
- Opioid analgesics. Pharmacotherapy of pain. Opioid addiction therapy. Prescription and practical use of analgesic preparations.
-
- **2/NON-STEROIDAL ANTIINFLAMMATORY DRUGS, DRUGS USED IN GOUT, ANTIPYRETICS.**
- Mechanisms of action and classification of anti-inflammatory drugs. Drugs used in therapy of gout.
- **Getting ready for the next lesson:** *Central neurotransmitters and sites of drug effects in CNS. Basic psychical functions.*
-

-
- **Day 2 (Tuesday)**
-
- **3/ANTIDEPRESSANTS.**
- Classification and terminology of antidepressants. Review of their mechanisms of action, adverse effects, interactions.
- **Co-talks.**
-
- **4/THERAPY OF ANXIETY, HYPNOSEDATIVES.**
- Classification and terminology of psychotropics. Review of their mechanisms of action. Pharmacology of anxiolytics and hypno-sedatives. Mechanism of action of benzodiazepines. Prescription of hypno-sedatives and psychostimulants.
- **Co-talks.**
- **Getting ready for the next lesson: *Pathophysiology of cancer disease***
-

- **Day 3 (Wednesday)**

No classes.

- **Day 4 (Thursday)**
-
- **REVISING TEST I (Revision test with subsequent discussion) Lesson 1 – 4.**
-
- **5/CASE REPORTS I.**
- Selected case reports on drugs from previous lessons. (including Pharmacology I lessons).
-
- **6/ PHARMACOLOGY OF ANTICANCER DRUGS.**
- Classification, mechanisms of action, side effects.
- **Co-talks.**
- **Getting ready for the next lesson: *Structure of bacterial cell, basis of antimicrobial therapy.***
-
-
- **Day 5 (Friday)**
-
- **7/ANTIMICROBIAL AGENTS I.**
- Classification, mechanisms of action, combinations of antibiotics and chemotherapeutics.
- **Co-talks.**
-
- **8/ANTIMICROBIAL AGENTS II., THERAPY OF INFECTIOUS DIARRHEAS AND UROINFECTIONS.**
- Drugs for the treatment of intestinal and urinary infections.
- **Co-talks.**
- **Getting ready for the next lesson: *Autonomic nervous system – catecholamines, atropine. Muscle relaxants.***

-
-
- **Day 6 (Monday)**
-
- **REVISING TEST II (Overhead-test with subsequent discussion). Lessons 5 - 8.**
-
- **9/CASE REPORTS II.**
- Selected case reports on drugs from previous lessons. (including Pharmacology I lessons).
- **Co-talks.**
-
- **10/GENERAL AND LOCAL ANAESTHETICS**
- Combined and balanced anaesthesia. Signs and stages of general anaesthesia. Inhaled and injected anaesthetics - classification and characteristics. Review of drugs used in premedication.
- **Co-talks.**
- **Getting ready for the next lesson: : Allergic reactions – causes and mechanisms. Revision of PNS pharmacology - β_2 mimetics, parasympholytics. Glucocorticoids. Revision of blood coagulation.**
-
-
- **Day 7 (Tuesday)**
-
- **11/ANTICOAGULANTS AND THROMBOLYTICS.**
- Fibrinolytics, haemostatics.
- **Co-talks.**
-
- **12/H₁ ANTIHISTAMINES, TREATMENT OF BRONCHIAL OBSTRUCTION.**
- Classification and clinical use of H₁ antihistamines. Sites of action and review of drugs of bronchial obstruction and other drugs acting in respiratory tract.
- **Co-talks.**
- **Getting ready for the next lesson: : Drug dosage forms and external routes of drug administration, revision of drug prescription. Revision of prescription of drug dosage forms for external use. Physiology of blood pressure regulation. Revision of PNS pharmacology- α_1 sympatholytics, α_2 sympathomimetics, β sympatholytics.**
-
-
- **Day 8 (Wednesday)**
-
- **FINAL PRESCRIPTION TEST (includes dermatology).**
-
- **13/HYPOLIPIDEMICS, THERAPY OF OBESITY.**
- Therapy of hyperlipoproteinaemia and hypercholesterolaemia, review of drugs and their mechanism of action.

-
- **14/ANTIHYPERTENSIVE AGENTS.**
- Introduction, classification, diuretics, beta blockers, ACE inhibitors, Ca²⁺ blockers, and other hypertensives.
- **Co-talks.**
- **Getting ready for the next lesson: Revision of lessons 9-14.**
-
- **Day 9 (Thursday)**

No classes.

- **Day 10 (Friday)**
-
- **REVISING TEST III (Overhead-test with subsequent discussion). Lessons 9 - 14.**
-
- **15/CASE REPORTS III.**
- Selected case reports on drugs from previous lessons. (including Pharmacology I lessons).
-
- **CREDITS.**

Literature

required literature

- RANG, H. P. *Rang & Dale's pharmacology*. 8th ed. [Edinburgh]: Churchill Livingstone, 2016. xv, 760. ISBN 9780702053627. [info](#)
- <http://portal.med.muni.cz/clanek-461-farmakovigilance-a-propagace-leciv.html>
- <http://portal.med.muni.cz/clanek-367-vyzkum-novych-leciv-od-zrodu-k-registraci.html>

recommended literature

- LINCOVÁ, Dagmar and Hassan FARGHALI. *Základní a aplikovaná farmakologie*. 2., dopl. a přeprac. vyd. Praha: Galén, 2007. xxiv, 672. ISBN 9788072623730. [info](#)
- [HADAŠOVÁ, Eva](#), [Jana NOVÁKOVÁ](#), [Jana PISTOVČÁKOVÁ](#), [Jana VINKLEROVÁ](#), [Alexandra ŠULCOVÁ](#) and Olga STAROBOVÁ. *Praktická cvičení z farmakologie (Practical lessons on pharmacology)*. 2. opravené a doplněné vyd. Brno: Vydavatelství MU Brno-Kraví Hora, 2003. 110 pp. Skripta. ISBN 80-210-2694-4. [info](#)
- **Practicals in Pharmacology** <http://portal.med.muni.cz/discipline-13-pharmacology>
- WHALEN, Karen. *Lippincott illustrated reviews : Pharmacology*. Edited by Richard Finkel - Thomas A. Panavelil. 6th ed. Philadelphia, Pa.: Lippincott Williams & Wilkins, 2015. xi, 664. ISBN 9781451191776. [info](#)

not specified

- <http://portal.med.muni.cz/disciplina-13-farmakologie>
- https://is.muni.cz/auth/el/1411/podzim2008/VLFA0722p/um/Zasady_antibioticke_lecby.pdf?fakulta=1411;obdobi=4343;kod=VLFA0722p
- Ritter, James M. - Lewis, Lionel D. - Mant, Timothy G.K. - Ferro, Albert. A Textbook of Clinical Pharmacology and Therapeutics, 5th Ed., Hodder Arnold, 2008. 465 s. ISBN 978-0-340-90046-8
- Pharmaceutical Practice. Winfield, A.J. & Richards, R.M.E., eds. Churchill Livingstone. , 3rd Ed. 2004. ISBN 0443 07206 X
- Vybrané kapitoly z učebnice:
http://books.google.cz/books?ct=result&q=farmakologie&lr=&as_brr=3&sa=N&start=0
- <http://portal.med.muni.cz/modules.php?name=News&file=article&sid=367>
- Vybrané kapitoly z učebnice:
http://books.google.cz/books?id=71NQpLuETq4C&printsec=frontcover&dq=farmakologie&lr=&as_brr=3#PPA4,M1
- MARTÍNKOVÁ, Jiřina. *Farmakologie pro studenty zdravotnických oborů. 2.*, zcela přeprac. a doplň. Praha: Grada, 2014. ISBN 9788024713564. [info](#)
- [DOSTÁLEK, Miroslav](#), [Jan JUŘICA](#), Eva JANOŠTÍKOVÁ and [Lucia ZAHRADNÍKOVÁ](#). *Farmakokinetika (Pharmacokinetics)*. ČR: Grada, 2006. 220 pp. Farmacie a farmakologie. ISBN 80-247-1464-7. [info](#)

Teaching methods

Drug classes specifics from the Syllabus are read firstly by the teacher and presented in case reports from real clinical practice followed by discussion and training of drug prescription with the use of drug compendia and the computer database of the preparations registered in the Czech Republic (AISLP). Each student is asked to get ready as a homework to report on a specific pharmacological topic.

Assessment methods

The participation in practicals is obligatory and registered. To get credits a student has to pass 4 written tests: a) 1 on special drug prescriptions (assessed individually by the teacher), b) 3 multiple-choice tests on knowledge of topics taught (more than half correctly answered questions required).

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

Listed among pre-requisites of other courses

- [VLAM9X1c Intensive Care Medicine - practice](#) ([VLFA0822c](#) || [VLFA0722c](#)) && [VLCH0832c](#) && [VSIP0622p](#) && [VLCP0622p](#) && [VLDM7X1c](#) && [VSOT7X1c](#) && [VLIN7X21](#) ([Do I meet enrolment requirements?](#))
- [VLAM9X1p Intensive Care Medicine - lectures](#) ([VLFA0822c](#) || [VLFA0722c](#)) && [VLCH0832c](#) && [VLCH0731c](#) && [VSPF0622p](#)

&& [VSIP0622c](#) && [VLCP0622p](#) && [VLDM7X1c](#) && [VSOT7X1c](#) && [VLIN7X21](#) (Do I meet enrolment requirements?)

- [VLON091 Clinical Oncology - lecture](#) ([VLFA0822c](#) || [VLFA0722c](#)) && [VSIP0622p](#) && [VLCP0622p](#) && [VLCH0832c](#) && [VSOT7X1c](#) (Do I meet enrolment requirements?)
- [VLON091c Clinical Oncology - practice](#) ([VLFA0822c](#) || [VLFA0722c](#)) && [VSIP0622p](#) && [VLCP0622p](#) && [VLCH0832c](#) && [VSOT7X1c](#) (Do I meet enrolment requirements?)
- [VSAL081 Anaesthesiology and Treatment of Pain I](#) [VLFA0722c](#) || souhlas || [VLFA0621c](#) (Do I meet enrolment requirements?)
- [VSAL091 Anaesthesiology and Treatment of Pain](#) [VLFA0722c](#) || souhlas || [VLFA0621c](#) (Do I meet enrolment requirements?)

Teacher's information

Podzimní semestr: informace studentům

Výuka probíhá na Farmakologickém ústavu LF MU, UKB, Kamenice 5, pavilon A19.

Úřední hodiny sekretariátu denně 13.00 - 14.00 hod, tel.: 54949 3070. DOCHÁZKA

- účast studentů na cvičeních je povinná, bez 100% docházky není možné udělit zápočet
- důvodem k omluvení je nemoc popřípadě jiný závažný důvod doložený omluvenkou a zapsaný do IS studijním oddělením
- důvodem k omluvení NENÍ zkouška ani zápočet z jiného předmětu
- chybějící cvičení je možné ve **výjimečných** případech nahradit po předchozí domluvě s vyučujícím v jiné seminární skupině
- případnou absenci bude student řešit s příslušným vyučujícím (v případě řádné omluvy) nebo s Dr. Zendulkou (v ostatních případech)

PŘÍPRAVA NA NÁSLEDUJÍCÍ CVIČENÍ

- studentům je doporučeno průběžně se připravovat na cvičení na základě informací uvedených v sylabu
- připravenost studentů na cvičení bude ověřována před a během cvičení vyučujícím

REFERÁTY

- obsah, přednes (bez čtení), reakce na následné otázky od studentů a vyučujícího
- ppt prezentace nebudou přijímány

- vlastní zdroje informací jsou vítány (nutné uvést zdroj)
- témata referátů k jednotlivým praktikům, včetně zdrojů dat jsou vloženy v IS: Student - Studijní materiály (e-learning) a dále pod kódem předmětu VLFA0722c Farmakologie II – cvičení - Studijní materiály - Témata referátů a zdroje.xls

TESTY

- povolena jsou **maximálně 2 opakování!**

Následně diskutovaný test

- 15 otázek multiple-choice, správně zodpovězená celá otázka 1b, max. 15b - limit 8b

Závěrečný recepturní test

obsahuje témata obou semestrů včetně 15. lekce PS!

- 1 IPL, 1 HVLV – hodnocení prospěl/neprospěl

STUDIJNÍ LITERATURA

• Studijní materiály v IS pod kódem předmětu VLFA0722c

Praktická cvičení z Farmakologie

Poznámky ke cvičením z farmakologie II

Vyhláška o předepisování LP

- Přednášky !!

Rang & Dale's Pharmacology, 8th edition

- Farmakokinetika. Dostálek, Juřica, Janoščíková, Zahradníková. ČR: Grada, 2006. 220 s. Farmacie a farmakologie. ISBN 80-247-1464-7.

- Farmakologie pro zdravotnické obory- Martínková J. a kol.

- Elektronická skripta: **Základy speciální receptury léčivých přípravků**, Farmakovigilance a propagace léčiv a Výzkum nových léčiv od zrodu k registraci, <http://portal.med.muni.cz/disciplina-13-farmakologie.html>

PODMÍNKY UDĚLENÍ ZÁPOČTU

- 100% účast na cvičeních + úspěšné absolvování předepsaných testů

Information for the students studying in English:

ATTENDANCE

- attendance on the practical courses is obligatory, without 100% attendance will credits not be given
- the absence will be excused because of illness or because of other serious reasons declared to Office of International Studies and documented in IS
- absence **WILL NOT BE EXCUSED** due to exam or test from other courses
- missing lesson can be **exceptionally** substituted with other study group after teacher agreement
- expected absence should be addressed to Dr. Zendulka

GETTING READY FRO THE NEXT LESSON:

- students are advised to prepare for the practical courses with regard to information in the syllabus
- students who are not sufficiently prepared will not be admitted in participating in the lesson

CO-TALKS:

- should be performed as a speech without reading the full content from prepared materials
- powerpoint presentations will not be accepted
- references should be stated
- topics of single co-talks and links to selected materila can be found in IS

TESTS

- **the test can be repeated only two times**
- **Revising test:**
 - multiple choice, 15 questions, limit to pass 8pts
- **Final prescription test**

- 3 RMP including preparations from the spring semester! + 5 questions on Ddf aby routes of aministration

- classification passed/failed

TEXTBOOKS AND OTHER LEARNING MATERIALS

• **Lectures – the attendance is recommended due to interconnection with practical courses!!c**

• Rang and Dale's Pharmacology, 8th edition

• Lippincott's Illustrated Pharmacology, 5th edition

• textbook Practicals in Pharmacology (www.is.muni.cz)

• study materials for single lessons in IS course code VLFA0621c Pharmacology I practical courses

CREDITS

- requirements: 100% attendance + all tests passed

The course is also listed under the following terms [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#), [Autumn 2015](#), [Autumn 2016](#).

VLFA0722p Pharmacology - lectures ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

2/0/0. 5 credit(s). Type of Completion: zk (examination).

Teacher(s)

[doc. MUDr. Regina Demlová, Ph.D.](#) (lecturer)

[prof. MUDr. Alexandra Šulcová, CSc.](#) (lecturer)

[doc. PharmDr. Jan Juřica, Ph.D.](#) (lecturer)

[MVDr. Zuzana Babinská, Ph.D.](#) (lecturer)

[doc. RNDr. Ladislava Bartošová, Ph.D.](#) (lecturer)

[Mgr. MVDr. Leoš Landa, Ph.D.](#) (lecturer)

[MUDr. Jana Nováková, Ph.D.](#) (lecturer)

[MUDr. Jana Pistovčáková, Ph.D.](#) (lecturer)

[PharmDr. Jana Rudá, Ph.D.](#) (lecturer)

[MUDr. Petra Řiháčková, MBA](#) (lecturer)

[Mgr. Barbora Řihová, Ph.D.](#) (lecturer)

[doc. MUDr. Dalibor Valík, Ph.D.](#) (lecturer)
[MUDr. Jana Vinklerová, Ph.D.](#) (lecturer)
[doc. RNDr. Lenka Zdražilová Dubská, Ph.D.](#) (lecturer)
[PharmDr. Ondřej Zendulka, Ph.D.](#) (lecturer)
[Renata Blábllová](#) (assistant)
[Mgr. Gabriela Dovrtělová](#) (alternate examiner)
[MVDr. Eva Dražanová](#) (alternate examiner)
[MVDr. Eva Gospošová](#) (alternate examiner)
[Mgr. Matej Ľupták](#) (alternate examiner)
[Mgr. Jana Merhautová, Ph.D.](#) (alternate examiner)
[Mgr. Kristýna Nosková](#) (alternate examiner)
[PharmDr. Lenka Součková, Ph.D.](#) (alternate examiner)
[Mgr. Markéta Strakošová](#) (alternate examiner)
[Mgr. Tibor Štark](#) (alternate examiner)

Supervisor

[doc. MUDr. Regina Demlová, Ph.D.](#)
[Department of Pharmacology - Theoretical Departments - Faculty of Medicine](#)
Contact Person: [Renata Blábllová](#)
Supplier department: [Department of Pharmacology - Theoretical Departments - Faculty of Medicine](#)

Timetable

Mon 2. 10. to Fri 8. 12. Tue 13:00–15:30 [A11/114](#)

- Timetable of Seminar Groups:

VLFA0722p/VLA: Mon 25. 9. to Fri 1. 12. Thu 13:00–15:30 [A19/231](#)

Prerequisites (in Czech)

[VLFA0621c Pharmacology I - p](#) && ([VSAJ0222 English 1 II -p](#) ||
[VLAJ0222 English 1 II -p](#) || [VSCJ0686 Czech for Foreigners VI -p](#) ||
[VSNJ0222 German 1 II -p](#) || [VSSJ0222 Spanish 1 II -p](#))
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

At the end of the course student will be oriented in drug classes according to their main therapeutic indications, in pharmacological profiles of therapeutic and adverse effects of particular drugs with an attention paid to common drug-drug interactions. The student will be able to judge pharmacoeconomic analyses for pharmacotherapy used in practice.

Learning outcomes

At the end of the course student will be oriented in drug classes according to their main therapeutic indications, in pharmacological profiles of therapeutic and adverse effects of

particular drugs with an attention paid to common drug-drug interactions. The student will be able to judge pharmacoeconomic analyses for pharmacotherapy used in practice.

Syllabus

- **28.9.2019**
- Bank Holiday.
-
- **5.10.2019**
- Antihypertensives. Diuretics, antiadrenergics, vasodilators, combinative pharmacotherapy.
-
- **12.10.2019**
- Pharmacotherapy of heart failure. Inotropic drugs (digitalis, amrinone, dobutamine).
-
- **19.10.2019**
- Introduction to psychopharmacology. Neurotransmitter mechanisms and specific neurotransmitter systems. Antipsychotics.
-
- **26.10.2019**
- Anti-Parkinson pharmacotherapy. Drugs used in Alzheimer`s disease and other states of dementia. Anti-manic drugs.
-
- **2.11.2019**
- Drug addiction.
-
- **9.11.2019**
- Principles of biological therapy, monoclonal antibodies and therapeutic use.
-
- **16.11.2019**
- Principles of targeted therapy in oncology, monoclonal antibodies, tyrosinkinases inhibitors. Adverse drug reactions.
-
- **23.11.2019**
- Antimycotics, mechanism of action and adverse effects. Antivirotics.
-
- **30.11.2019**
- Basic principles of immunotherapy. Advanced therapy medicinal products.

Literature

required literature

- RANG, H. P. *Rang & Dale's pharmacology*. 8th ed. [Edinburgh]: Churchill Livingstone, 2016. xv, 760. ISBN 9780702053627. [info](#)
- <http://portal.med.muni.cz/clanek-461-farmakovigilance-a-propagace-leciv.html>
- <http://portal.med.muni.cz/clanek-367-vyzkum-novych-leciv-od-zrodu-k-registraci.html>

recommended literature

- LINCOVÁ, Dagmar and Hassan FARGHALI. *Základní a aplikovaná farmakologie*. 2., dopl. a přeprac. vyd. Praha: Galén, 2007. xxiv, 672. ISBN 9788072623730. [info](#)
- WHALEN, Karen. *Lippincott illustrated reviews : Pharmacology*. Edited by Richard Finkel - Thomas A. Panavelil. 6th ed. Philadelphia, Pa.: Lippincott Williams & Wilkins, 2015. xi, 664. ISBN 9781451191776. [info](#)

not specified

- [DOSTÁLEK, Miroslav](#), [Jan JUŘICA](#), Eva JANOŠTÍKOVÁ and [Lucia ZAHRADNÍKOVÁ](#). *Farmakokinetika (Pharmacokinetics)*. ČR: Grada, 2006. 220 pp. Farmacie a farmakologie. ISBN 80-247-1464-7. [info](#)
- <http://portal.med.muni.cz/modules.php?name=News&file=article&sid=367>
- https://is.muni.cz/auth/el/1411/podzim2008/ZLFA0722p/um/Zasady_antibioticke_lecby.pdf?fakulta=1411;obdobi=4343;kod=ZLFA0722p
- Vybrané kapitoly z učebnice:
http://books.google.cz/books?id=71NQpLuETq4C&printsec=frontcover&dq=farmakologie&lr=&as_brr=3#PPA4,M1
- Vybrané kapitoly z učebnice:
http://books.google.cz/books?ct=result&q=farmakologie&lr=&as_brr=3&sa=N&start=0
- ŠULCOVÁ, Alexandra. *Poznámky k přednáškám z farmakologie*. 1. vyd. Brno: Masarykova univerzita, 1993. 97 s. ISBN 80-210-0640-4. [info](#)
- Ritter, James M. - Lewis, Lionel D. - Mant, Timothy G.K. - Ferro, Albert. *A Textbook of Clinical Pharmacology and Therapeutics*, 5th Ed., Hodder Arnold, 2008. 465 s. ISBN 978-0-340-90046-8
- *Pharmaceutical Practice*. Winfield, A.J. & Richards, R.M.E., eds. Churchill Livingstone. , 3rd Ed. 2004. ISBN 0443 07206 X
- MARTÍNKOVÁ, Jiřina. *Farmakologie pro studenty zdravotnických oborů*. 2., zcela přeprac. a doplň. Praha: Grada, 2014. ISBN 9788024713564. [info](#)

Teaching methods

According to schedule given students are expected to attend lectures read by habilitated pharmacology teacher.

Assessment methods

The final exam is guided by the entrance test (ROPOT, the test contains 30 questions randomly generated for individual student (number of correct answers indicated)). In case of successful completion of the entrance test the exam continues by oral examination (three randomly selected questions corresponding with Syllabus (general pharmacological principles, drug classes, question of detailed knowledge about a selected drug)).

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

Listed among pre-requisites of other courses

- [VLDO091 Clinical Training in Paediatric Oncology](#)
[VLPD7X31c](#) && [VLFA0722p](#) (Do I meet enrolment requirements?)
- [VLCH11XX Surgery - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#)
&& [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) &&
[VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) ||
[VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) &&
[VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) &&
[VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) &&
VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#),
[VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#),
[VLRL041](#), [VLTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) &&
([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment
requirements?)
- [VLCH9X33c Surgery III - practice](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLCH0832c](#) && [VLOR7X1](#) (Do I meet
enrolment requirements?)
- [VLCH9X33p Surgery III - lecture](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLCH0832c](#) && [VLOR7X1](#) (Do I meet
enrolment requirements?)
- [VLKB091 Clinical Biochemistry](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLVL7X65c](#) (Do I meet enrolment
requirements?)
- [VLKF091 Clinical Pharmacology](#)
([VLFA08222p](#) || [VLFA0722p](#)) (Do I meet enrolment requirements?)
- [VLKF101 Clinical Pharmacology](#)
[VLFA0722p](#) (Do I meet enrolment requirements?)
- [VLNE9X1c Neurology - practice](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VSIP0622c](#) && [VLDM7X1c](#) && [VLLO7X1a](#)
&& [VLCH0832c](#) && [VLNP081c](#) (Do I meet enrolment requirements?)
- [VLNE9X1p Neurology - lecture](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VSIP0622c](#) && [VLDM7X1c](#) && [VLLO7X1a](#)
&& [VLCH0832c](#) && [VLNP081c](#) (Do I meet enrolment requirements?)

[Zobrazit další předměty](#)

Teacher's information

*Úřední hodiny sekretariátu Farmakologického ústavu LF MU, UKB, Kamenice 5,
pavilon A19:*

denně 13.00 - 14.00 hod, tel.: 54949 3070.

SYLABUS POŽADOVANÉ LÁTKY KE ZKOUŠCE Z~FARMAKOLOGIE

2019

Otázky z obecné farmakologie

Absorbce léčiv, presystémová eliminace

Alergie léková (hypersensitivita), idiosynkrazie

Biologická dostupnost absolutní a relativní, její měření, AUC

Biotransformace léčiv, fáze, příklady

Český lékopis

Dávkovací režim, kontinuální a intermitentní podávání léčiv

Distribuce léčiv, distribuční objem, redistribuce

Eliminace léčiv, $t_{0,5}$, KE, Cl

Exkrece léčiv (cesty, možnosti ovlivnění)

Experimentální farmakologie, problematika pokusu na zvířeti, modely

Farmakoekonomika

Farmakogenetika, vliv genetických polymorfismů na farmakokinetiku a farmakodynamiku léčiv

Farmakokinetické procesy nultého a prvního řádu, saturační kinetika

Farmakokinetika opakovaného a kontinuálního podání léčiv, kumulace léčiv

Farmakologie a její podobory, původ a zdroj léčiv, názvy léčiv, druhy farmakoterapie

Farmakoterapie v době kojení, v dětském věku

Farmakoterapie v těhotenství, teratogenita léčiv

Farmakoterapie ve stáří

Farmakovigilance, bezpečnost léčiva, reklama a marketing v oblasti léčiv, etické otázky

Inhibice a indukce enzymů léčivy

Interakce léčiv - přehled, interakce farmaceutického/technologického typu (inkompatibility)

Interakce léčiv - přehled, interakce farmakodynamického typu

Interakce léčiv - přehled, interakce farmakokinetického typu

Léková anamnéza, compliance pacienta, polypragmázie

Mechanismy vedoucí k rozvoji látkové závislosti

Nežádoucí účinky léčiv (charakter, kategorie)

Obecné principy terapie otrav, specifická antidota léčiv a mechanismy jejich účinku

Preklinické a klinické hodnocení léčiv a jejich fáze

Primární resistance pacienta k terapii a vliv opakovaného podávání léčiv – tolerance, tachyfyaxe, senzitivace, desenzitivace

Principy biologické terapie - technologie, požadavky na kvalitu, registrace, biosimilars

Přehled lékových forem a jejich vliv na farmakokinetiku a farmakodynamiku léčiv

Přehled mechanismů účinku léčiv, nespecifické mechanismy účinku léčiv

Receptorová teorie léčiv - typy receptorů, agonismus, antagonismus...

Mechanismy účinku léčiv- specifický účinek léčiv - cílové struktury, na nichž léčiva působí

Synergismus, antagonismus v účinku léčiv (farmakokinetika, farmakodynamika)

Terapeutické monitorování léčiv

Terapeutický index, terapeutická šíře, racionální farmakoterapie

Typy faktorů ovlivňujících účinek léčiv (se vztahem k léčivu, se vztahem k organismu, se vztahem k léčivu i organismu) a jejich

příklady

Vliv průvodních onemocnění na účinek léčiv, polypragmázie

Vztah dávky a účinku, typy dávek

Základní farmakokinetické parametry a procesy (přehled)

Základní legislativní normy vztahující se k zacházení s léčivými

Způsoby aplikace léčiv – přehled, charakteristika

Otázky ze speciální farmakologie

Alkylační cytostatika + ostatní zásahy do DNA

Aminoglykosidy, chloramfenikol

Antiagregancia

Antiarytmika

Antiastmatika, léčiva používaná při CHOPN

Antibiotika- přehled + chinolony, antituberkulóza

Antibiotika- přehled + Linkosamidy, glykopeptidy, polymixiny

Antibiotika- přehled + Makrolidy a příbuzná ATB

Antibiotika- přehled + tetracykliny, amfenikoly

Antibiotika- přehled, cefalosporiny, monobaktamy

Antibiotika- přehled, peniciliny, karbapenemy

Antibiotika- přehled, sulfonamidy, nitrofurany a nitroimidazoly

Antidepresiva –iMAO + ostatní antidepresiva (SSRI, NDRI, SNRI,NRI, SARI, NaSSA)

Antidiabetika pro terapii DM II (bez inzulínů)

Antiemetika, prokinetika

Antiepileptika

Antihistaminika

Antihypertenziva – přehled + ACEi, Sartany, antagonisté reninu

Antihypertenziva - přehled + alfa1-lytika, blokátory kalciových kanálů

Antihypertenziva - přehled + diuretika

Antihypertenziva- přehled + blokátory beta adrenergických receptorů + centrální antihypertenziva

Antikoagulancia

Antimetabolity + hormonální terapie v onkologii

Antimykotika

Antipsychotika

Antitrombotika, antifibrinolytika, hemostatika

Antitusika, expektorancia a mukolytika

Antiulceróza

Antiuratika

Antivirotika

Anxiolytika + tricyklická antidepresiva

Biologická léčba autoimunitních onemocnění

Celková anestetika

Cílená léčba v onkologii

Dermatologika – přehled skupin, zástupců a účinků

Digestiva, hepatoprotektiva, léčiva ovlivňující tvorbu a sekreci žluči

Farmakologická terapie závislostí + látky způsobující závislost

Glukokortikoidy

Hydrofilní vitaminy

Hypnosedativa

Hypolipidemika, anobezika

Cholinolytika

Cholinomimetika

Insuliny

Laxativa, antidiarhoika, léčba infekčních průjmů

Léčiva akutního srdečního selhání

Léčiva Alzheimerovy demence a Parkinsonovy nemoci

Léčiva chronického srdečního selhání

Léčiva nespecifických střevních zánětů

Léčiva používaná u erektilní dysfunkce a BHP

Léčiva používaná v léčbě anemií

Léčiva používaná v léčbě dnové artritidy

Léčiva užívaná u osteoporózy

Lokální anestetika

Myorelaxancia, spasmolytika

Nesteroidní antiflogistika + analgetika- antipyretika

Nootropika, kognitiva

Opioidní analgetika

Pohlavní hormony – HRT, kontraceptiva

Principy antibiotické terapie, - přehled, mechanismy účinku, rezistence, MIC, MBC

Psychomimetika, léčiva používaná v léčbě ADHD

Sympatolytika

Sympatomimetika

Tyreoidální + antityreoidální látky

Uterotonika, tokolytika

Vitaminy AEDK

SEZNAM VYBRANÝCH LÉČIV

pantoprazol

famotidin

atropin

butylskopolamin

fenpiverin, pitofenon

drotaverin

metoklopramid

ondansetron

laktulóza

inzulin lispro

inzulin glargin

metformin

glibenklamid

sitagliptin

akarboza

warfarin

enoxaparin

clopidogrel

ticlopidin

ximelagatran

altepláza

erythropoetin

digoxin

propafenon

amiodaron

adrenalin

noradrenalin

dopamin

efedrin, pseudoefedrin

milrinon

isosorbid-dinitrát

nitroglycerin

methyldopa

klonidin

prazosin

hydrochlorothiazid

chlorthalidon

furosemid

spironololakton

pindolol

acebutolol

metoprolol

labetalol

amlodipin

nimodipin

diltiazem

verapamil

perindopril

losartan

atorvastatin

fenofibrát

ezetimib

nystatin

ketokonazol

methylergometrin

dinoprost

hexoprenalin

finasterid

alfuzosin

vasopresin

oxytocin

dexamethazon

prednison

karbimazol

doxycyklin

chloramfenikol

amoxicilin

fenoxymethylpenicilin

oxacilin

aztreonam

meropenem

cefuroxim

kotrimoxazol

klarithromycin

gentamicin

amikacin

ciprofloxacin

vankomycin

amfotericin B

flukonazol

kaspofungin

rifampicin

aciklovir

zidovudin

cyklofosamid

methotrexat

6-merkaptopurin

5-fluorouracil

paklitaxel

doxorubicin

cisplatina

trastuzumab

imatinib

tamoxifen

bikalutamid

interferon alfa

cyklosporin

takrolimus

ibuprofen

diklofenak

indometacin

nimesulid

meloxikam

suxamethonium

alopurinol

kyselina alendronová

lidokain

enfluran

propofol

dihydrokodein

sufentanyl

piritramid

tramadol

paracetamol

metamizol

sumatriptan

karbamazepin

kyselina valproová

gabapentin

biperiden

haloperidol

risperidon

lithium

diazepam

alprazolam

zolpidem

midazolam

escitalopram

amitriptylin

bupropion

methylenidát

donepezil

rivastigmin

metadon

buprenorfin

betahistin

oxymetazolin, xylometazolin

fenylefrin

salbutamol

fenoterol

ipratropium-bromid

nedokromil

acetylcystein

kodein

butamirát

cetirizin

desloratadin

pilokarpin

timolol

tropikamid

***Office hours secretariat of Dept. of Pharmacology, Faculty of Medicine, MU, UKB,
Kamenice 5, A19:***

daily 13.00 - 14.00 hod, tel.: 54949 3070.

SYLABUS OF THE TOPICS FOR ORAL EXAM FROM PHARMACOLOGY

2019

GENERAL PHARMACOLOGY

Basic pharmacokinetic parameters and processes (overview)

Bioavailability, absolute, relative, estimation, AUC

European pharmacopoea, World Pharmacopoeia

Dose – response curves, kinds of doses

Drug absorption, first pass effect

Drug allergy (hypersensitivity), idiosyncratic reactions

Drug anamnesis; patient's compliance, polypharmacy

Drug biotransformation- stages, examples

Drug distribution, volume of distribution, redistribution

Drug dosage regimen, continual and intermitent administration

Drug elimination, $t_{0.5}$, KE , Cl

Drug excretion (ways of excretion, possibilities of their influence)

Drug interactions- overview, pharmaceutic/technologic interactions (incompatibilities)

Drug interactions- overview, pharmacodynamic interactions

Drug interactions- overview, pharmacokinetic interactions

Drug receptors theory - types of receptors, agonism, antagonism..

Experimental pharmacology, preclinical research, experimentation with use of animals and animal models

Factors influencing the drug effect (related to drug, related to organism or to both), examples

Influence of concomitant diseases on drug effect, polypragmasia

Influence of drugs on inhibition and induction of enzymes

Mechanisms of drug addiction

Overview of mechanisms of drug action- Specific drug effect – targets for drug action

Overview of the mechanisms of drug effects - nonspecific mechanisms of drug effects

Pharmaceutical drug dosage forms - overview and their influence on pharmacokinetics and pharmacodynamics

Pharmacoeconomics

Pharmacogenetics, influence of genetic polymorphisms on pharmacokinetics and pharmacodynamics of drugs

Pharmacokinetic processes of the first and zero order, saturation pharmacokinetics

Pharmacokinetics of repeated and continual drug administration, drug accumulation

Pharmacology, sub-branches, origin of drugs, drug names, kinds of pharmacotherapy

Pharmacotherapy in elderly

Pharmacotherapy in pediatric population, in breastfeeding women

Pharmacotherapy in pregnancy, drug teratogenicity

Pharmacovigilance, drug safety, advertisement and drug marketing, ethics

Preclinical and clinical trials, stages

Primary resistance of the patient to the treatment; influence of repeated administration - Tolerance, tachyphylaxis

Principles of biological treatment - technology, demands on quality, registration, biosimilars

Routes of drug administration – overview, characteristics

Synergism, antagonism in drug effects (pharmacokinetics, pharmacodynamics)

Therapeutic index, therapeutic range, rational pharmacotherapy

Therapeutic monitoring of drugs (TDM)

Adverse drug reactions (types, categories)

General principles of drug poisoning, specific antidotes and their mechanisms of action

SPECIAL PHARMACOLOGY

Alkylating cytostatics and impacts of DNA

Aminoglycosides, chloramphenicol

Antiarrhythmics

Antiasthmatics, drugs used in COPD

Anticoagulants

Antidepressants –iMAO + others (SSRI, NDRI, SNRI,NRI, SARI, NaSSA)

Antidiabetics for the treatment of Type2 DM

Antiemetic drugs, prokinetics

Antiepileptic drugs

Antifungal drugs

Antihistaminics

Antihypertensives – overview + ACEi, sartans, renin antagonists

Antihypertensives - overview + calcium channel blockers, alpha1 lytics

Antihypertensives- overview + beta blockers + central antihypertensives

Antihypertensives- overview + diuretics

Antimetabolites + hormonal therapy in oncology

Antiplatelet drugs

Antipsychotics

Antithrombotics, antifibrinolytics, hemostatics

Antithrombotics, thrombolytics, hemostyptics,

Antitussives, expectorants, mucolytics

Antiulcer drugs

Antivirotics

Anxiolytics + tricyclic antidepressants

ATB - overview + tetracyclines, amphenicols

ATB- overview + Linkosamides, glycopeptides, polymixins

ATB- overview + Macrolides and related ATB

ATB- overview, cephalosporins, monobactams

ATB- overview, penicillines, carbapenems

ATB- overview, quinolones, antituberculotics

ATB- overview, sulphonamides, nitrofurans, nitroimidazols

Biological treatment of autoimmune diseases

Dermatologics – overview of groups, representatives and their effects

Digestives, hepatoprotectives, drugs influencing synthesis and secretion of bile

Drugs for inflammatory bowel disease

Drugs used in acute heart failure

Drugs used in Alzheimer's disease, Parkinson's disease

Drugs used in erectile dysfunction and BHP

Drugs used in gout

Drugs used in chronic heart failure

Drugs used in osteoporosis

Drugs used in the treatment of anaemia

General anesthetics

Glucocorticoids

Hydrophilic vitamins

Hypnosedatives

Hypolipidemics, anti-obesity drugs

Cholinolytics

Cholinomimetics

Insulins

Laxatives, antidiarrhoics, pharmacotherapy of infectious diarrhoea

Local anesthetics

Myorelaxants, spasmolytics

Non-steroidal and anti-inflammatory drugs + analgesics- antipyretics

Nootropics, drugs affecting cognitive functions

Opioid analgesics

Pharmacotherapy of addictions + drugs causing addiction

Principles of antibiotic therapy – overview, mechanisms of effect, resistance, MIC, MBC

Psychomimetics, drugs used in the treatment of ADHD

Sex hormones – HRT, contraceptives

Sympatolytics

Sympatomimetics

Targeted therapy in oncology

Thyroidal hormones + anti-thyroid drugs

Uterotonics, tokolytics

Vitamins AEDK

LIST OF GENERIC NAMES – „ESSENTIAL DRUGS“

pantoprazol famotidin atropin butylscopolamine fenpiverine, pitofenon drotaverine
metoclopramid ondansetron lactulose insulin lispro insulin glargine metformin
glibenclamide sitagliptin acarbose warfarin enoxaparin clopidogrel ticlopidine
ximelagatran alteplase erythropoietin digoxin propafenone amiodarone adrenalin
noradrenalin dopamine ephedrine, pseudoephedrine milrinone isosorbid dinitrate
nitroglycerin methyl dopa clonidine prazosin hydrochlorothiazide chlorthalidone
furosemid spironolactone pindolol acebutolol metoprolol labetalol amlodipin nimodipin
diltiazem verapamil perindopril losartan atorvastatin fenofibrate ezetimibe nystatin
ketoconazole methylergometrine dinoprost hexoprenaline finasteride alfuzosin vasopresin
oxytocin dexamethasone prednisone carbimazole doxycycline chloramphenicol
amoxicilin phenoxymethylpenicillin oxacilin aztreonam meropenem cefuroxim
cotrimoxazol clarithromycin gentamicin amikacin ciprofloxacin vancomycin

amphotericin B fluconazole caspofungin rifampicin acyclovir zidovudine
cyclophosphamide methotrexate 6-mercaptopurine fluorouracil Paclitaxel doxorubicin
cisplatin trastuzumab imatinib tamoxifen bicalutamide interferon alfa cyclosporine
tacrolimus ibuprofen diclofenac Indometacin nimesulide meloxicam suxamethonium
allopurinol alendronic acid lidocaine enflurane propofol dihydrocodeine sufentanil
pirtramid tramadol paracetamol metamizole sumatriptan carbamazepine valproic acid
gabapentin biperiden haloperidol risperidone lithium diazepam alprazolam zolpidem
midazolam escitalopram amitriptyline bupropion methylphenidate donepezil rivastigmine
methadone buprenorphine betahistine xylometazoline phenylephrine salbutamol fenoterol
ipratropium bromide nedocromil acetylcysteine codeine butamirate cetirizin desloratadine
pilocarpine timolol tropicamide

The course is also listed under the following terms [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#),
[Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#),
[Autumn 2014](#), [Autumn 2015](#), [Autumn 2016](#).

VLFY0321c Physiology I - practice ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/3/0. 5 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Mohamed Al-Kubati, CSc.](#) (seminar tutor)

[Ksenia Budinskaya](#) (seminar tutor)

[MUDr. Zuzana Nováková, Ph.D.](#) (seminar tutor)

[doc. Ing. Michal Pásek, Ph.D.](#) (seminar tutor)

[MUDr. Tibor Stračina](#) (seminar tutor)

[Mgr. Jana Svačinová, Ph.D.](#) (seminar tutor)

[MUDr. Ivan Szadvári](#) (seminar tutor)

[MUDr. Filip Šustr](#) (seminar tutor)

[David Dufek](#) (assistant)

[MUDr. Aleš Dvořák](#) (assistant)

[MUDr. Michal Hendrych](#) (assistant)

[Daniela Charwátová](#) (assistant)

[Kateřina Juráková](#) (assistant)

[Peter Matejovič](#) (assistant)

[MUDr. Nikola Nováková](#) (assistant)

[Dominik Parížek](#) (assistant)

[Veronika Puchnerová](#) (assistant)

[Pavel Tinka](#) (assistant)

[Rudolf Traj](#) (assistant)

Supervisor

[prof. MUDr. Marie Nováková, Ph.D.](#)

[Department of Physiology - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [Mirka Hanousková](#)

Supplier department: [Department of Physiology - Theoretical Departments - Faculty of Medicine](#)

Timetable of Seminar Groups

VLFY0321c/01: Mon 10:30–13:00 [A20/114](#)

VLFY0321c/02: Mon 10:30–13:00 [A20/114](#)

VLFY0321c/03: Wed 13:30–16:00 [A20/114](#)

VLFY0321c/04: Mon 13:30–16:00 [A20/114](#)

VLFY0321c/05: Mon 13:30–16:00 [A20/114](#)

VLFY0321c/06: Mon 13:30–16:00 [A20/114](#)

VLFY0321c/07: Tue 13:00–15:30 [A20/114](#)

VLFY0321c/08: Mon 7:30–10:00 [A20/114](#)

VLFY0321c/09: Mon 10:30–13:00 [A20/114](#)

VLFY0321c/10: Mon 7:30–10:00 [A20/114](#)

VLFY0321c/11: Tue 13:00–15:30 [A20/114](#)

VLFY0321c/12: Tue 13:00–15:30 [A20/114](#)

VLFY0321c/13: Wed 10:30–13:00 [A20/114](#)

VLFY0321c/14: Wed 10:30–13:00 [A20/114](#)

VLFY0321c/15: Wed 10:30–13:00 [A20/114](#)

VLFY0321c/16: Thu 13:30–16:00 [A20/114](#)

VLFY0321c/17: Thu 13:30–16:00 [A20/114](#)

VLFY0321c/18: Thu 13:30–16:00 [A20/114](#)

Prerequisites

([VLBI0222p Biology II-lect.](#) || [VSBI0222p Biology II-lect.](#)) && ([VLBF011c Biophysics - pract.](#) && [VLAN0222s Anatomy II s](#))

Knowledge of medical biology and biophysics in the extent of subjects taught at Faculty of Medicine, Masaryk University.

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

To teach student clinically relevant examination methods and interpretation of their results in the context of physiology.

Learning outcomes

At the end of the course, students should be able to apply practically the methods used for examination of the functions of human organ systems. Students will be capable of interpreting the acquired records with respect to physiological processes taking place in human organisms. Next, the students will derive and calculate other parameters and indices routinely used in clinical practice. Students will be able to evaluate the results acquired both by measurement and by calculation, and to explain possible deviations.

Syllabus

- Erect posture examination. Estimation of reaction time using computer. Examination of reflexes in man. Recording of Achilles' tendon reflex. Skin sensation and general physiology of the skin. Cutaneous sense organs. Signal detection by PowerLab system – instructions. EOG - electrooculography. Vertigo and nystagmus. EEG - electroencephalography. Evoked potentials. Estimation of visual acuity. Accommodation. Scheiner's experiment. Visual field and blind spot. Examination of color blindness. Astigmatism. Higher cognitive functions – reading. Pneumography. Spirometric examination. Recording of forced vital capacity. Red blood cell count. Estimation of hemoglobin concentration and mean corpuscular hemoglobin. Calculated parameters of red blood cells. Estimation of blood group by slide method. Pneumography. Estimation of airway resistance. Erythrocyte sedimentation rate. Estimation of osmotic resistance of red blood cells.

Literature

required literature

- NOVÁKOVÁ, Zuzana and Robert ROMAN. *Praktická cvičení z fyziologie a neurovědy (Practicals in Physiology and Neuroscience)*. 1. vyd. Brno: Masarykova univerzita, 2013. 152 s. ISBN 9788021063723. [info](#)

Teaching methods

The course is organized in the form of laboratory practices where students examine each other by given method, and they prepare the report from measured data.

Assessment methods

Credits are given on the basis of full attendance in practices, handling of all laboratory reports and passing the credit test in IS. Students can be tested (written test or oral examination) during the semester from current topics.

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

Information on completion of the course: Nutno absolvovat všechna praktická cvičení, absence nahradit v nahrazovacím týdnu. Zápočtový test napsat na více jak 60%.

The course is taught annually.

Listed among pre-requisites of other courses

- [aVLFY0422c Physiology II - practice](#)
([aVLFY0321c](#) || [VLFY0321c](#)) && ([aVLFY0321s](#) || [VLFY0321s](#)) ([Do I meet enrolment requirements?](#))
- [aVLFY0422p Physiology II - lecture](#)
([aVLFY0321c](#) || [VLFY0321c](#)) && ([aVLFY0321s](#) || [VLFY0321s](#)) ([Do I meet enrolment requirements?](#))
- [aVLFY0422s Physiology II - seminar](#)
([aVLFY0321c](#) || [VLFY0321c](#)) && ([aVLFY0321s](#) || [VLFY0321s](#)) ([Do I meet enrolment requirements?](#))

- [VLBC0422c Biochemistry II](#)
([VLBI0222p](#) || [VSBI0222p](#)) && [VLBF011p](#) && [VLBC0321s](#) && [VLBC0321c](#)
&& [VLFY0321c](#) && [VLFY0321s](#) (Do I meet enrolment requirements?)
- [VLBC0422p Biochemistry II - lecture](#)
([VLBI0222p](#) || [VSBI0222p](#)) && [VLBF011p](#) && [VLBC0321s](#) && [VLBC0321c](#)
&& [VLFY0321c](#) && [VLFY0321s](#) (Do I meet enrolment requirements?)
- [VLBC0422s Biochemistry I - seminar](#)
([VLBI0222p](#) || [VSBI0222p](#)) && [VLBF011p](#) && [VLBC0321s](#) && [VLBC0321c](#)
&& [VLFY0321c](#) && [VLFY0321s](#) (Do I meet enrolment requirements?)
- [VLFY0422c Physiology II - practice](#)
[VLFY0321c](#) && [VLFY0321s](#) (Do I meet enrolment requirements?)
- [VLFY0422p Physiology II - lecture](#)
[VLFY0321c](#) && [VLFY0321s](#) (Do I meet enrolment requirements?)
- [VLFY0422s Physiology II - seminar](#)
[VLFY0321c](#) && [VLFY0321s](#) (Do I meet enrolment requirements?)

[Zobrazit další předměty](#)

Teacher's information

<http://www.med.muni.cz/fyziol>

Rozpis témat praktických cvičení je vyvěšen na nástěnce Fyziologického ústavu, na webových stránkách ústavu a v IS MUNI. Konzultace je možná po osobní domluvě s vyučujícím. Nahrazování je možné podle speciálního rozpisu, dostupného na nástěnce ústavu.

The course is also listed under the following terms [Autumn 2016](#), [Accreditation autumn](#).

VLFY0321p Physiology I - lecture ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

3/0/0. 0 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. PharmDr. Petr Babula, Ph.D.](#) (lecturer)
[doc. MUDr. Markéta Bébarová, Ph.D.](#) (lecturer)
[MUDr. Kamil Ďuriš, Ph.D.](#) (lecturer)
[prof. MUDr. Marie Nováková, Ph.D.](#) (lecturer)
[MUDr. Zuzana Nováková, Ph.D.](#) (lecturer)
[doc. Ing. Michal Pásek, Ph.D.](#) (lecturer)
[doc. MUDr. Milena Šimurdová, CSc.](#) (lecturer)
[MUDr. Mohamed Al-Kubati, CSc.](#) (assistant)
[Ksenia Budinskaya](#) (assistant)
[Mirka Hanousková](#) (assistant)
[Peter Matejovič](#) (assistant)
[Ing. Jiří Moudr](#) (assistant)

[MUDr. Jan Novák](#) (assistant)
[MUDr. Matej Pekař](#) (assistant)
[MUDr. Anna Pekařová](#) (assistant)
[MUDr. Tibor Stračina](#) (assistant)
[MUDr. Ivan Szadvári](#) (assistant)
[Branislava Vyoralová](#) (assistant)

Supervisor

[prof. MUDr. Marie Nováková, Ph.D.](#)
[Department of Physiology - Theoretical Departments - Faculty of Medicine](#)
Contact Person: [Mirka Hanousková](#)
Supplier department: [Department of Physiology - Theoretical Departments - Faculty of Medicine](#)

Timetable

Tue 10:00–11:50 [A22/116 aula](#), Thu 8:30–9:20 [A22/116 aula](#)

Prerequisites

([VLBI0222p Biology II-lect.](#) || [VSBI0222p Biology II-lect.](#)) && ([VLBF011c Biophysics - pract.](#) && [VLAN0222s Anatomy II s](#))
Knowledge of medical biology and biophysics in the extent of subjects taught at Faculty of Medicine, Masaryk University.
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

To teach students to understand and interpret various functions of human body.

Learning outcomes

At the end of the course, students will have sufficient theoretical background required for profession of physician. Student should be able to recall principles of human body functions in detail - from a cell level, across particular organs to a complex human organism. Students will be able to explain relationships among chemical, physical and biological factors of living processes. An essential aim is that students acquire critical scientific thinking, ability of independent text analysis and fundamental information selection.

Syllabus

- Introduction to study. Structural and functional organization of the living systems. Internal environment (homeostasis). Physiology of cell membranes. Excitable tissues. Introduction to neuroscience - the regulatory role of nervous system (NS). Cellular base of NS. Synapse and integration of information at the synaptic level. Hierarchy and evolution of NS. Somatosensitivity, viscerosensitivity, proprioception and pain. Olfactory and gustatory systems. Auditory and vestibular systems. Vision. Motor system. Autonomic nervous system. Limbic system. Neocortex. The highest functions of nervous system. General principles of

endocrine functions. Hypothalamus. Adenohypophysis. Thyroid gland. Regulation of calcium metabolism. Regulation of endocrine pancreas. Adrenal gland. Stress. Physiology of reproduction. Physiology of pregnancy. Physiology of parturition and lactation. Physiology of blood. Blood clotting. Blood types (groups). Plasma proteins. Immune system.

Literature

required literature

- Náhradní obsah: BORON, Walter a Emile L. BOULPAEP. Medical Physiology. 3rd edition. Elsevier 2016. ISBN 9781455743773

recommended literature

- GANONG, William F. *Přehled lékařské fyziologie*. 20. vyd. Praha: Galén, 2005. xx, 890. ISBN 8072623117. [info](#)
- HALL, John E. and Arthur C. GUYTON. *Guyton and Hall textbook of medical physiology*. 12th ed. Philadelphia, Pa.: Saunders/Elsevier, 2011. xix, 1091. ISBN 9781416045748. [info](#)
- SILBERNAGL, Stefan and Agamemnon DESPOPOULOS. *Atlas fyziologie člověka*. 6. vyd., zcela přeprac. a r. Praha: Grada, 2004. xiii, 435. ISBN 802470630X. [info](#)

Teaching methods

Lessons are led in the form of lectures.

Assessment methods

Students pass to continuing education in next semester without any duty of knowledge checking in this semester.

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

Teacher's information

<http://www.med.muni.cz/fyziol>

Rozpis témat přednášek je vyvěšen na nástěnce Fyziologického ústavu a v IS MUNI.

The course is also listed under the following terms [Autumn 2016](#), [Accreditation autumn](#).

VLFY0321s Physiology I - seminar ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/1/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Mohamed Al-Kubati, CSc.](#) (seminar tutor)
[prof. PharmDr. Petr Babula, Ph.D.](#) (seminar tutor)
[doc. MUDr. Markéta Běbarová, Ph.D.](#) (seminar tutor)
[Ksenia Budinskaya](#) (seminar tutor)
[MUDr. Kamil Ďuriš, Ph.D.](#) (seminar tutor)
[MUDr. Aleš Dvořák](#) (seminar tutor)
[MUDr. Denis Lekeš](#) (seminar tutor)
[MUDr. Jan Novák](#) (seminar tutor)
[prof. MUDr. Marie Nováková, Ph.D.](#) (seminar tutor)
[MUDr. Zuzana Nováková, Ph.D.](#) (seminar tutor)
[doc. Ing. Michal Pásek, Ph.D.](#) (seminar tutor)
[MUDr. Matej Pekař](#) (seminar tutor)
[MUDr. Anna Pekařová](#) (seminar tutor)
[MUDr. Tibor Stračina](#) (seminar tutor)
[Mgr. Jana Svačinová, Ph.D.](#) (seminar tutor)
[MUDr. Ivan Szadvári](#) (seminar tutor)
[MUDr. Veronika Tomášková](#) (seminar tutor)
[Mirka Hanousková](#) (assistant)
[Peter Matejovič](#) (assistant)

Supervisor

[prof. MUDr. Marie Nováková, Ph.D.](#)
[Department of Physiology - Theoretical Departments - Faculty of Medicine](#)
Contact Person: [Mirka Hanousková](#)
Supplier department: [Department of Physiology - Theoretical Departments - Faculty of Medicine](#)

Timetable of Seminar Groups

VLFY0321s/01: each even Tuesday 13:00–14:40 [A11/234](#)
VLFY0321s/02: each even Tuesday 13:00–14:40 [A11/234](#)
VLFY0321s/03: each even Tuesday 15:00–16:40 [A11/234](#)
VLFY0321s/04: each even Tuesday 15:00–16:40 [A11/234](#)
VLFY0321s/05: each even Tuesday 15:00–16:40 [A11/234](#)
VLFY0321s/06: each even Tuesday 15:00–16:40 [A11/234](#)
VLFY0321s/07: each even Tuesday 17:00–18:40 [A11/234](#)
VLFY0321s/08: each even Tuesday 17:00–18:40 [A11/234](#)
VLFY0321s/09: each odd Tuesday 17:00–18:40 [A11/234](#)
VLFY0321s/10: each odd Tuesday 17:00–18:40 [A11/234](#)
VLFY0321s/11: each odd Tuesday 17:00–18:40 [A11/234](#)
VLFY0321s/12: each odd Tuesday 17:00–18:40 [A11/234](#)
VLFY0321s/13: each odd Tuesday 15:00–16:40 [A11/234](#)
VLFY0321s/14: each odd Tuesday 15:00–16:40 [A11/234](#)
VLFY0321s/15: each odd Tuesday 15:00–16:40 [A11/234](#)
VLFY0321s/16: each odd Tuesday 15:00–16:40 [A11/234](#)
VLFY0321s/17: each odd Tuesday 13:00–14:40 [A11/234](#)
VLFY0321s/18: each odd Tuesday 13:00–14:40 [A11/234](#)

Prerequisites

([VLBI0222p Biology II-lect.](#) || [VSBI0222p Biology II-lect.](#)) && ([VLBF011c Biophysics - pract.](#) && [VLAN0222s Anatomy II s](#))

Knowledge of medical biology and biophysics in the extent of subjects taught at Faculty of Medicine, Masaryk University.

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

To teach students to understand and interpret various functions of human body.

Learning outcomes

After finishing the course, students will be able to understand the terms used in general and systemic physiology of man. Students will acquire knowledge necessary for analysis and subsequent interpretation of phenomena taking place on cell, tissue and organ levels as well as on the level of whole human organism.

Syllabus

- I. Intercellular contact. Resting membrane potential. Action potential. II. Nerve as an excitable tissue. Glial cells. Synapses. Neuromuscular junction. III. Autonomic nervous system (ANS) – overview. ANS - the roles and divisions. ANS regulation in organs - the principles of regulation. IV. General principles of endocrine physiology. Humoral regulation of mineral and water metabolism. Regulation of glycemia. Humoral regulation of energy production. Endocrine component of the stress response. V. General principals of endocrine physiology - related to reproduction. Cyclic changes in reproductive system. Pregnancy. Physiology of parturition. Lactation. VI. Circulation and hemostasis. Primary hemostasis and platelets. Hemocoagulation. Regulation of hemostasis. Clinical applications.

Literature

required literature

- BORON, Walter F. and Emile L. BOULPAEP. *Medical physiology*. 3rd edition. Philadelphia: Elsevier, 2016. xii, 1297. ISBN 9781455743773. [info](#)

recommended literature

- GANONG, William F. *Přehled lékařské fyziologie*. 20. vyd. Praha: Galén, 2005. xx, 890. ISBN 8072623117. [info](#)
- SILBERNAGL, Stefan and Agamemnon DESPOPOULOS. *Atlas fyziologie člověka*. 6. vyd., zcela přeprac. a r. Praha: Grada, 2004. xiii, 435. ISBN 802470630X. [info](#)
- KITTNAR, Otomar. *Lékařská fyziologie*. 1. vyd. Praha: Grada, 2011. 790 s. ISBN 9788024730684. [info](#)
- TROJAN, Stanislav and Miloš LANGMEIER. *Slovníček lékařské fyziologie*. 2. dopl. vyd. Praha: Galén, 2006. 141 s. ISBN 8072623753. [info](#)

Teaching methods

Tuition is done in the form of seminar. Students must read the literature of particular area of physiology in advance and they intensify their knowledge in discussion with the teacher.

Assessment methods

The course-unit credit is conditioned by full attendance and 60% control of preparedness in the seminars (control test at the beginning of seminar - 6 and more points).

Language of instruction

Czech

Further comments (probably available only in Czech)

Study Materials

Information on completion of the course: Absolvování seminářů je podmínkou k udělení zápočtu.

The course is taught annually.

Listed among pre-requisites of other courses

- [aVLFY0422c Physiology II - practice](#) ([aVLFY0321c](#) || [VLFY0321c](#)) && ([aVLFY0321s](#) || [VLFY0321s](#)) ([Do I meet enrolment requirements?](#))
- [aVLFY0422p Physiology II - lecture](#) ([aVLFY0321c](#) || [VLFY0321c](#)) && ([aVLFY0321s](#) || [VLFY0321s](#)) ([Do I meet enrolment requirements?](#))
- [aVLFY0422s Physiology II - seminar](#) ([aVLFY0321c](#) || [VLFY0321c](#)) && ([aVLFY0321s](#) || [VLFY0321s](#)) ([Do I meet enrolment requirements?](#))
- [VLBC0422c Biochemistry II](#) ([VLBI0222p](#) || [VSBI0222p](#)) && [VLBF011p](#) && [VLBC0321s](#) && [VLBC0321c](#) && [VLFY0321c](#) && [VLFY0321s](#) ([Do I meet enrolment requirements?](#))
- [VLBC0422p Biochemistry II - lecture](#) ([VLBI0222p](#) || [VSBI0222p](#)) && [VLBF011p](#) && [VLBC0321s](#) && [VLBC0321c](#) && [VLFY0321c](#) && [VLFY0321s](#) ([Do I meet enrolment requirements?](#))
- [VLBC0422s Biochemistry I - seminar](#) ([VLBI0222p](#) || [VSBI0222p](#)) && [VLBF011p](#) && [VLBC0321s](#) && [VLBC0321c](#) && [VLFY0321c](#) && [VLFY0321s](#) ([Do I meet enrolment requirements?](#))
- [VLFY0422c Physiology II - practice](#) [VLFY0321c](#) && [VLFY0321s](#) ([Do I meet enrolment requirements?](#))
- [VLFY0422p Physiology II - lecture](#) [VLFY0321c](#) && [VLFY0321s](#) ([Do I meet enrolment requirements?](#))
- [VLFY0422s Physiology II - seminar](#) [VLFY0321c](#) && [VLFY0321s](#) ([Do I meet enrolment requirements?](#))

[Zobrazit další předměty](#)

Teacher's information

<http://www.med.muni.cz/fyziol>

Rozpis témat seminářů je vyvěšen na nástěnce Fyziologického ústavu v IS MUNI. Konzultace je možná po osobní domluvě s vyučujícím.

The course is also listed under the following terms [Autumn 2016](#), [Accreditation autumn](#).

VLFY0422c Physiology II - practice *

Faculty of Medicine

Spring 2018

Extent and Intensity

0/3/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Mohamed Al-Kubati, CSc.](#) (seminar tutor)
[prof. PharmDr. Petr Babula, Ph.D.](#) (seminar tutor)
[doc. MUDr. Markéta Bébarová, Ph.D.](#) (seminar tutor)
[Ksenia Budinskaya](#) (seminar tutor)
[Ing. Jana Hrušková](#) (seminar tutor)
[prof. MUDr. Marie Nováková, Ph.D.](#) (seminar tutor)
[MUDr. Zuzana Nováková, Ph.D.](#) (seminar tutor)
[doc. Ing. Michal Pásek, Ph.D.](#) (seminar tutor)
[MUDr. Tibor Stračina](#) (seminar tutor)
[Mgr. Jana Svačinová, Ph.D.](#) (seminar tutor)
[MUDr. Ivan Szadvári](#) (seminar tutor)
[Šárka Bébarová](#) (assistant)
[David Dufek](#) (assistant)
[MUDr. Aleš Dvořák](#) (assistant)
[Mirka Hanousková](#) (assistant)
[MUDr. Zuzana Kubecová](#) (assistant)
[Peter Matejovič](#) (assistant)
[MUDr. Nikola Nováková](#) (assistant)
[Veronika Puchnerová](#) (assistant)
[MUDr. Michael Sekej](#) (assistant)
[MUDr. Filip Šustr](#) (assistant)
[Pavel Tinka](#) (assistant)
[MUDr. Veronika Tomášková](#) (assistant)
[Rudolf Traj](#) (assistant)

Supervisor

[prof. MUDr. Marie Nováková, Ph.D.](#)
[Department of Physiology - Theoretical Departments - Faculty of Medicine](#)
Contact Person: [MUDr. Zuzana Nováková, Ph.D.](#)
Supplier department: [Department of Physiology - Theoretical Departments - Faculty of Medicine](#)

Prerequisites

[VLFY0321c Physiology I - practice](#) && [VLFY0321s Physiology I - seminar](#)
Knowledge of medical biology and biophysics in the extent of subjects taught at Faculty of Medicine, Masaryk University.
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

To teach student clinically relevant examination methods and interpretation of their results in the context of physiology.

Learning outcomes

At the end of the course, students should be able to apply practically the methods used for examination of the functions of human organ systems. Students will be capable of interpreting the acquired records with respect to physiological processes taking place in human organisms. Next, the students will derive and calculate other parameters and indices routinely used in clinical practice. Students will be able to evaluate the results acquired both by measurement and by calculation, and to explain possible deviations.

Syllabus

- Evaluation of nutritional state. Evaluation of sensitivity of respiratory centre to hypercapnia. Recruitment and summation in skeletal muscle. Blood pressure in man. Non-invasive methods of blood pressure measurement. Measurement of basic metabolic rate (BMR). Energy output in change of body position. Repay of oxygen debt. Calculation of energy expenditure. Examination of pulse by palpation. Ergometry. ECG. Blood flow in forearm (Pletysmography). Digital model of aortic function (a simulation program). Blood flow in veins. Apex beat, heart sounds. Systolic time intervals. Measurement of pulse wave velocity. Sphygmography.

Literature

required literature

- NOVÁKOVÁ, Zuzana and Robert ROMAN. *Praktická cvičení z fyziologie a neurověd (Practicals in Physiology and Neuroscience)*. 1. vyd. Brno: Masarykova univerzita, 2013. 152 s. ISBN 9788021063723. [info](#)

Teaching methods

The course is organized in the form of laboratory practices where students examine each other by given method, and they prepare the report from measured data.

Assessment methods

Credits are given on the basis of full attendance in practices and handling of all laboratory reports and successfully passed credit test(70% and more). Knowledge can be tested (oral or written form).

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

Listed among pre-requisites of other courses

- [VLLP0532c Clinical Introduction II](#)
[VLLP0431c](#) && ([VLAN0222p](#) || [VSAN0333p](#)) && ([VLHE0322c](#) || [VSHE0322c](#))
&& ([VLBC0422c](#) || [VSBC041c](#)) && ([VLFY0422c](#) || [VSFY0422c](#)) ([Do I meet enrolment requirements?](#))

Teacher's information

<http://www.med.muni.cz/fyziol>

Rozpis témat praktických cvičení je vyvěšen na nástěnce Fyziologického ústavu, webových stránkách ústavu a v IS MUNI. Konzultace je možná po osobní domluvě s vyučujícími.

The course is also listed under the following terms [Spring 2019](#), [Accreditation spring](#).

VLFY0422p Physiology II - lecture ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

4/0/0. 7 credit(s). Recommended Type of Completion: zk (examination). Alternate Types of Completion: RZk (examination).

Teacher(s)

[prof. PharmDr. Petr Babula, Ph.D.](#) (lecturer)
[doc. MUDr. Markéta Bébarová, Ph.D.](#) (lecturer)
[prof. MUDr. Marie Nováková, Ph.D.](#) (lecturer)
[MUDr. Zuzana Nováková, Ph.D.](#) (lecturer)
[doc. MUDr. Milena Šimurdová, CSc.](#) (lecturer)
[Šárka Bébarová](#) (assistant)
[Mírka Hanousková](#) (assistant)
[Ing. Jana Hrušková](#) (assistant)
[Peter Matejovič](#) (assistant)
[Ing. Jiří Moudr](#) (assistant)
[Veronika Puchnerová](#) (assistant)
[MUDr. Tibor Stračina](#) (assistant)
[MUDr. Ivan Szadvári](#) (assistant)
[Branislava Vyoralová](#) (assistant)

Supervisor

[prof. MUDr. Marie Nováková, Ph.D.](#)
[Department of Physiology - Theoretical Departments - Faculty of Medicine](#)
Contact Person: [MUDr. Zuzana Nováková, Ph.D.](#)
Supplier department: [Department of Physiology - Theoretical Departments - Faculty of Medicine](#)

Prerequisites

[VLFY0321c Physiology I - practice](#) && [VLFY0321s Physiology I - seminar](#)

Knowledge of medical biology and biophysics in the extent of subjects taught at Faculty of Medicine, Masaryk University.

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

At the end of the course, students will have sufficient theoretical background required for profession of physician. Student should be able to recall principles of human body functions in detail - from a cell level, across particular organs to a complex human organism. Students will be able to explain relationships among chemical, physical and biological factors of living processes. An essential aim is that students acquire critical scientific thinking, ability of independent text analysis and fundamental information selection.

Learning outcomes

Ability to interpret physiological functions of human body with respect of further studied subjects.

Syllabus

- Skeletal, smooth and heart muscle. Respiratory functions. Pulmonary mechanics. Gas transport. Respiration under various physiological conditions. Regulation of respiration. Functional morphology of the kidney. Clearance. Counter-current system. Regulation of kidney functions. Metabolism of saccharides, lipids and proteins. Energy metabolism. Vitamins, minerals and water in nutrition. GIT - mechanical functions. GIT – secretory functions. GIT - resorption and other functions. Coordination in GIT. Regulation of food intake. Physiology of the heart. Conduction system. Cardiac electrophysiology. Electromechanical coupling. Electrocardiography. Arrhythmias. Cardiac mechanics. Heart cycle. Heart failure. Regulation of blood circulation, blood pressure. Variability of circulatory parameters. Rheology of the blood. Microcirculation. Circulatory failure. Regulation of blood flow. Coronary circulation. Regional circulation (pulmonary, skin, muscle, cerebral, splanchnic, renal, fetal). Circulatory reactions. Thermoregulation. Physiology of exercise. Physiology of adaptation. Kidney in regulation of homeostasis. Physiology of childhood and adolescence, aging.

Literature

required literature

- BORON, Walter F. and Emile L. BOULPAEP. *Medical physiology*. 3rd edition. Philadelphia: Elsevier, 2016. xii, 1297. ISBN 9781455743773. [info](#)

recommended literature

- HALL, John E. and Arthur C. GUYTON. *Guyton and Hall textbook of medical physiology*. 12th ed. Philadelphia, Pa.: Saunders/Elsevier, 2011. xix, 1091. ISBN 9781416045748. [info](#)
- *Lekárska fyziologia*. Edited by Kamil Javorka. 3. prep. a dopl. vyd. Martin: Vydavateľstvo Osveta, 2009. 742 s. ISBN 9788080632915. [info](#)
- KITTNAR, Otomar. *Lekárska fyziologie*. 1. vyd. Praha: Grada, 2011. 790 s. ISBN 9788024730684. [info](#)
- SILBERNAGL, Stefan and Agamemnon DESPOPOULOS. *Atlas fyziologie člověka : 201 barevných tabulí*. Translated by Otomar Kittnar. 4. české vydání. Praha: Grada Publishing, 2016. xv, 434. ISBN 9788024742717. [info](#)
- GANONG, William F. *Přehled lékařské fyziologie*. 20. vyd. Praha: Galén, 2005. xx, 890. ISBN 8072623117. [info](#)

Teaching methods

Lessons are led in the form of lectures.

Assessment methods

Final examination in Physiology consists of three parts:

- written multiple-choice test which consist of 20 questions evaluated by 20 points - students successfully pass the test if they reach at least 15 points;
- practical examination - students randomly choose one of the methods and practically demonstrate and explain the measured parameters;
- oral examination - students randomly choose 2 questions and answer them after 15 minutes of preparation.

Written test represents 10%, practical exam 20% and oral exam 70% of final grade.

Students pass the examination at Physiology on condition that they succeed in all three abovementioned parts.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course can also be completed outside the examination period.

The course is taught annually.

The course is taught: every week.

Listed among pre-requisites of other courses

- [VLIM051c Immunology - practice](#) ([VLBC0422p](#) || [VSBC0221p](#)) && ([VSFY0422p](#) || [VLFY0422p](#)) ([Do I meet enrolment requirements?](#))
- [VLIM051p Immunology - lecture](#) ([VLBC0422p](#) || [VSBC0221p](#)) && ([VSFY0422p](#) || [VLFY0422p](#)) ([Do I meet enrolment requirements?](#))
- [VLLP0633c Clinical Introduction III - practice](#) [VLLP0532c](#) && ([VLAN0222p](#) || [VSAN0333p](#)) && [VLHE0322p](#) && [VLBC0422p](#) && [VLFY0422p](#) ([Do I meet enrolment requirements?](#))
- [VLPA0521c Pathology I - practicals](#) ([VLFY0422p](#) || [VSFY0422p](#)) && ([VSBC041p](#) || [VLBC0422p](#)) && ([VLAN0222p](#) || [VSAN0333p](#)) && ([VLHE0322p](#) || [VSHE0322p](#)) && [VLLM0421c](#) ([Do I meet enrolment requirements?](#))

- [VLPA0521p Pathology I - lecture](#)
([VLFY0422p](#) || [VSFY0422p](#)) && ([VSBC041p](#) || [VLBC0422p](#)) && ([VLAN0222p](#) || [VSAN0333p](#)) && ([VLHE0322p](#) || [VSHE0322p](#)) && [VLLM0421c](#) ([Do I meet enrolment requirements?](#))
- [VLPF0521c Pathological physiology I - practice](#)
([VLFY0422p](#) || [VSFY0422p](#)) && ([VSBC041p](#) || [VLBC0422p](#)) && ([VLAN0222p](#) || [VSAN0333p](#)) && ([VLHE0322p](#) || [VSHE0322p](#)) && [VLLM0421c](#) ([Do I meet enrolment requirements?](#))
- [VLPF0521p Pathological Physiology I - lecture](#)
([VLFY0422p](#) || [VSFY0422p](#)) && ([VSBC041p](#) || [VLBC0422p](#)) && ([VLAN0222p](#) || [VSAN0333p](#)) && ([VLHE0322p](#) || [VSHE0322p](#)) && [VLLM0421c](#) ([Do I meet enrolment requirements?](#))

Teacher's information

<http://www.med.muni.cz/fyziol>

Rozpis témat přednášek je vyvěšen na nástěnce Fyziologického ústavu a v informačním systému MUNI.

The course is also listed under the following terms [Spring 2019](#), [Accreditation spring](#).

VLFY0422s Physiology II - seminar ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

0/1.5/0. 1 credit(s). Type of Completion: z (credit).

Teacher(s)

[Mgr. Jana Svačinová, Ph.D.](#) (lecturer)

[MUDr. Mohamed Al-Kubati, CSc.](#) (seminar tutor)

[prof. PharmDr. Petr Babula, Ph.D.](#) (seminar tutor)

[doc. MUDr. Markéta Bébarová, Ph.D.](#) (seminar tutor)

[MUDr. Jan Novák](#) (seminar tutor)

[prof. MUDr. Marie Nováková, Ph.D.](#) (seminar tutor)

[MUDr. Zuzana Nováková, Ph.D.](#) (seminar tutor)

[MUDr. Matej Pekař](#) (seminar tutor)

[MUDr. Anna Pekařová](#) (seminar tutor)

[MUDr. Tibor Stračina](#) (seminar tutor)

[Šárka Bébarová](#) (assistant)

[Mírka Hanousková](#) (assistant)

[Peter Matejovič](#) (assistant)

Supervisor

[prof. MUDr. Marie Nováková, Ph.D.](#)

[Department of Physiology - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [MUDr. Zuzana Nováková, Ph.D.](#)

Supplier department: [Department of Physiology - Theoretical Departments - Faculty of Medicine](#)

Prerequisites

[VLFY0321c Physiology I - practice](#) && [VLFY0321s Physiology I - seminar](#)

Knowledge of medical biology and biophysics in the extent of subjects taught at Faculty of Medicine, Masaryk University.

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

After finishing the course, students will be able to understand the terms used in general and systemic physiology of man. Students will acquire knowledge necessary for analysis and subsequent interpretation of phenomena taking place on cell, tissue and organ levels as well as on the level of whole human organism.

Learning outcomes

To teach students to understand and interpret various functions of human body.

Syllabus

- I. Ventilation of the lungs. Gas transport. Regulation of respiration. Assessment of respiratory functions. II. Body fluids. Renal blood flow. Renal functions. Glomerular filtration. Tubular processes. Countercurrent system. pH and its regulation by kidneys. III. Mechanical functions of GIT. GIT secretions. Co-ordination of GIT segments. IV. Cardiac conduction system and myocardial cellular electrophysiology. Action potential spreading through myocardium and its registration. ECG leads. ECG curve. ECG curve interpretation, arrhythmias. V. Heart as a muscle. Cardiac cycle. Polygraphy. Autoregulation of the heart. Coronary circulation. VI. Regulation and adaptation. Regulation and adaptation to exercise. Thermoregulation - the principles. Adaptation to heat or cold. Reactions to body posture changes. Reactions to bleeding.

Literature

required literature

- BORON, Walter F. and Emile L. BOULPAEP. *Medical physiology : a cellular and molecular approach*. 1st ed. Philadelphia: Saunders, 2003. xiii, 1319. ISBN 0721632564. [info](#)

recommended literature

- HALL, John E. and Arthur C. GUYTON. *Guyton and Hall textbook of medical physiology*. 12th ed. Philadelphia, Pa.: Saunders/Elsevier, 2011. xix, 1091. ISBN 9781416045748. [info](#)
- GANONG, William F. *Přehled lékařské fyziologie*. 20. vyd. Praha: Galén, 2005. xx, 890. ISBN 8072623117. [info](#)

- SILBERNAGL, Stefan and Agamemnon DESPOPOULOS. *Atlas fyziologie člověka*. 6. vyd., zcela přeprac. a r. Praha: Grada, 2004. xiii, 435. ISBN 802470630X. [info](#)

Teaching methods

Tuition is done in the form of seminar. Students should read the literature of particular area of physiology, and they eventually prepare their own presentation of the topic. During the seminars, students present the topics and intensify their knowledge in discussion with the teacher.

Assessment methods

The course-unit credit is conditioned by full attendance and 60% control of preparedness in the seminars (control test on the beginning of seminar - 6 and more points).

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

Teacher's information

<http://www.med.muni.cz/fyziol>

Rozpis témat seminářů je vyvěšen na nástěnce Fyziologického ústavu a v IS MUNI. Konzultace je možná po osobní domluvě s vyučujícím.

The course is also listed under the following terms [Spring 2019](#), [Accreditation spring](#).

VLFZ041 Selected lectures from Physiology ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

2/0/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[doc. MUDr. Markéta Bébarová, Ph.D.](#) (lecturer)

[MUDr. Kamil Ďuriš, Ph.D.](#) (lecturer)

[MUDr. Jaromír Gumulec, Ph.D.](#) (lecturer)

[RNDr. Michal Masařík, Ph.D.](#) (lecturer)

[prof. MUDr. Marie Nováková, Ph.D.](#) (lecturer)

[MUDr. Zuzana Nováková, Ph.D.](#) (lecturer)

[doc. Ing. Michal Pásek, Ph.D.](#) (lecturer)

[MUDr. Tibor Stračina](#) (lecturer)

[Mgr. Jana Svačinová, Ph.D.](#) (lecturer)

[Mirka Hanousková](#) (assistant)

[prof. PharmDr. Petr Babula, Ph.D.](#) (alternate examiner)

Supervisor

[doc. MUDr. Markéta Bébarová, Ph.D.](#)

[Department of Physiology - Theoretical Departments - Faculty of Medicine](#)

Prerequisites (in Czech)

[VLBI0222p Biology II-lect.](#) && [VLFY0321c Physiology I - practice](#)
(Do I meet enrolment requirements?)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

Goal of these lessons is to enlarge students' knowledge in selected physiological topics with partial overlap to pathophysiology and with elucidation of the clinical use of basic physiological knowledge.

Learning outcomes

Student should be able:

- to discuss aspects of physiological events at various organizational levels (e.g. cell death, circadian rhythm, highest function of the nervous system);
- to consider physiological aspects of some pathologies (e.g. arterial hypertension, ischemic heart disease, inherited arrhythmias);
- to describe study methods of cardiovascular physiology at various organizational levels (e.g. analysis of variability of circulatory parameters, recording of action potentials and ionic currents in cardiac cells, mathematical modelling of cardiac cell function);
- to consider the role of reactive oxygen species, cytoskeleton function and sigma receptors in physiological processes;

Syllabus

- Glandula pinealis, circadian rhythm; The highest functions of nervous system – psychological and social aspects; Cellular movement, function of cytoskeleton; Physiology of cell senescence and cell death; Methods of experimental cardiology ; Role of reactive oxygen species in physiological processes; Physiological aspects of major cardiovascular pathologies: arterial hypertension, ischemic heart disease ; Sigma receptors: history, function, clinical consequences; Cardiac action potential and underlying ionic currents: methods, physiology and selected pathologies; Mathematical modelling in physiology; Evaluation of variability of circulatory parameters; Examination's technique in cardiology

Literature

recommended literature

- BORON, Walter F. and Emile L. BOULPAEP. *Medical physiology*. 3rd edition. Philadelphia: Elsevier, 2016. xii, 1297. ISBN 9781455743773. [info](#)

Teaching methods

Teaching in the form of lectures.

Assessment methods

The presence list has to be signed by all participating students at each lecture. To obtain the credits, maximally 3 absences per semester are allowed.

Language of instruction

Czech

Teacher's information

Rozpis přednášek je dostupný v IS MUNI, na webových stránkách nebo na nástěnce Fyziologického ústavu.

The course is also listed under the following terms [Spring 2019](#), [Accreditation spring](#).

VLGE091 Geriatrics ✱

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Hana Matějovská Kubešová, CSc.](#) (lecturer), [prof. MUDr. Pavel Weber, CSc.](#) (deputy)

[MUDr. Hana Meluzínová](#) (lecturer), [MUDr. Katarína Bielaková, Ph.D.](#) (deputy)

[Mgr. Pavel Kellner](#) (assistant)

Supervisor

[prof. MUDr. Hana Matějovská Kubešová, CSc.](#)

[Department of Internal Medicine, Geriatrics and Practical Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Contact Person: [prof. MUDr. Hana Matějovská Kubešová, CSc.](#)

Supplier department: [Department of Internal Medicine, Geriatrics and Practical Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Prerequisites

for students of 7. - 12. semester of medical faculty

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of this course is to make students known with principles of the comprehensive approach, with differences of diagnostics and therapy of elderly people, with functional geriatric assessment and its followings for planning of further care to keep the independency and the ability of the elderly to remain in their own environment. At the end of the course students should be able to understand and explain the comprehensive approach to elder patients; work with information on peculiarities of pharmacotherapy of seniors for composition of effective and rational therapeutic scheme; to create the plan of further care on the ground of results of functional geriatric assessment.

Syllabus

- 1 Gerontology, geriatrics - history, development, education system in CR, principles of geriatric care 2 Complex geriatric assessment (CGA), communication basics, stress situation management 3 Screening of cognitive disturbances, depression 4 Geriatric syndromes, Specialities of diseases in elderly 5 Interdisciplinary syndromes – giants of geriatrics „4 I“ 6 Instability, falls, diagnostics, treatment 7 Intellectual disturbances 8 Inkontinentia - diagnostics, solutions 9 Skin integrity disorders 10 Immobilization 11 Psychological disturbances in elderly - depression, deliria 12 Principles of pharmacotherapy in elderly 13 Social topic in geriatrics 14 Successful ageing

Literature

- KALVACH, Zdeněk. *Geriatric a gerontologie*. 1. vyd. Praha: Grada, 2004. 861 s. ISBN 8024705486. [info](#)
- TOPINKOVÁ, Eva. *Geriatric pro praxi*. 1. vyd. Praha: Galén, 2005. 270 s. ISBN 8072623656. [info](#)
- [MATĚJOVSKÁ KUBEŠOVÁ, Hana](#), [Pavel WEBER](#), [Pavel ŠEVČÍK](#), [Michal MAŠEK](#), [Zdeněk KADAŇKA](#), [Blanka VEPŘEKOVÁ](#), [Vlasta POLCAROVÁ](#), [Roman GÁL](#), [Dagmar SEIDLOVÁ](#) and [Helena ONDRÁŠKOVÁ](#). *Akutní stavy v geriatricii (Emergencies in geriatrics)*. 1. vyd. Praha: Galén, 2009. 233 pp. akutní medicína, geriatric. ISBN 978-80-7262-620-5. [info](#)
- WEBER, Pavel. *Minimum z klinické gerontologie : pro lékaře a sestru v ambulanci*. 1. vyd. Brno: IDVPZ, 2000. 151 s. ISBN 8070133147. [info](#)

Teaching methods

lectures, training of complex geriatric assessment, geriatric syndromes simulation with models, composition of medications scheme for senior

Assessment methods

oral examination - case report

Language of instruction

Czech

Further comments (probably available only in Czech)

The course can also be completed outside the examination period.

The course is taught each semester.

The course is taught: every week.

Information on the extent and intensity of the course: e-learning.

The course is also listed under the following terms [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#), [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VLGE092 Geriatrics *

Faculty of Medicine

Spring 2018

Extent and Intensity

1/1. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Hana Matějovská Kubešová, CSc.](#) (lecturer), [prof. MUDr. Pavel Weber, CSc.](#) (deputy)

[MUDr. Hana Meluzínová](#) (lecturer), [MUDr. Katarína Bielaková, Ph.D.](#) (deputy)

Supervisor

[prof. MUDr. Hana Matějovská Kubešová, CSc.](#)

[Department of Internal Medicine, Geriatrics and Practical Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Contact Person: [prof. MUDr. Hana Matějovská Kubešová, CSc.](#)

Supplier department: [Department of Internal Medicine, Geriatrics and Practical Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Prerequisites

for students of 7. - 12. semester of medical faculty

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

The capacity limit for the course is 25 student(s).

Current registration and enrolment status: enrolled: 0/25, only registered: 0/25

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of this course is to make students known with principles of the comprehensive approach, with differences of diagnostics and therapy of elderly people, with functional geriatric assessment and its followings for planning of further care to keep the independency and the ability of the elderly to remain in their own environment. At the end of the course students should be able to understand and explain the comprehensive approach to elder patients; work with information on peculiarities of pharmacotherapy of seniors for composition of effective and rational therapeutic scheme; to create the plan of further care on the ground of results of functional geriatric assessment.

Syllabus

- 1 Gerontology, geriatrics - history, development, education system in CR, principles of geriatric care 2 Complex geriatric assessment (CGA) 3 Screening of cognitive disturbances, depression 4 Geriatric syndromes, Specialities of diseases in elderly 5 Interdisciplinary syndromes – giants of geriatrics „4 I“ 6 Instability, falls, diagnostics, treatment 7 Intellectual disturbances 8 Inkontinentia - diagnostics, solutions 9 Skin integrity disorders 10 Imobilization 11 Psychical disturbances in elderly - depression, deliria 12 Principles of pharmacotherapy in elderly 13 Social topic in geriatrics 14 Successful ageing

Literature

- KALVACH, Zdeněk. *Geriatric a gerontologie*. 1. vyd. Praha: Grada, 2004. 861 s. ISBN 8024705486. [info](#)
- TOPINKOVÁ, Eva. *Geriatric pro praxi*. 1. vyd. Praha: Galén, 2005. 270 s. ISBN 8072623656. [info](#)
- [MATĚJOVSKÁ KUBEŠOVÁ, Hana](#), [Pavel WEBER](#), [Pavel ŠEVČÍK](#), [Michal MAŠEK](#), [Zdeněk KADAŇKA](#), [Blanka VEPŘEKOVÁ](#), [Vlasta POLCAROVÁ](#), [Roman GÁL](#), [Dagmar SEIDLOVÁ](#) and [Helena ONDRÁŠKOVÁ](#). *Akutní stavy v geriatricii (Emergencies in geriatrics)*. 1. vyd. Praha: Galén, 2009. 233 pp. akutní medicína, geriatric. ISBN 978-80-7262-620-5. [info](#)
- WEBER, Pavel. *Minimum z klinické gerontologie : pro lékaře a sestru v ambulanci*. 1. vyd. Brno: IDVPZ, 2000. 151 s. ISBN 8070133147. [info](#)

Teaching methods

lectures, training of complex geriatric assessment, geriatric syndromes simulation with models, composition of medications scheme for senior

Assessment methods

oral examination - case report

Language of instruction

Czech

Further Comments

The course can also be completed outside the examination period.

The course is taught each semester.

The course is taught: every week.

The course is also listed under the following terms [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VLHE0221c Histology and Embryology I - practice ✳

Faculty of Medicine

Spring 2018

Extent and Intensity

0/3/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[MVDr. Martin Anger, CSc.](#) (seminar tutor)

[MUDr. Ivana Baltasová](#) (seminar tutor)

[prof. MUDr. RNDr. Svatopluk Čech, DrSc.](#) (seminar tutor)

[MUDr. Jana Dumková](#) (seminar tutor)

[doc. MVDr. Aleš Hampl, CSc.](#) (seminar tutor)

[Mgr. Michaela Kloučková](#) (seminar tutor)

[Mgr. Hana Kotasová, Ph.D.](#) (seminar tutor)

[doc. RNDr. Irena Krontorád Koutná, Ph.D.](#) (seminar tutor)

[MUDr. Irena Lauschová, Ph.D.](#) (seminar tutor)

[MVDr. Anna Mac Gillavry Danylevska, Ph.D.](#) (seminar tutor)

[MUDr. Eva Mecová](#) (seminar tutor)
[doc. MUDr. Miroslava Sedláčková, CSc.](#) (seminar tutor)
[MUDr. Veronika Sedláková](#) (seminar tutor)
[RNDr. Petr Vaňhara, Ph.D.](#) (seminar tutor)

Supervisor

[doc. MVDr. Aleš Hampl, CSc.](#)
[Department of Histology and Embryology - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [doc. MUDr. Miroslava Sedláčková, CSc.](#)

Supplier department: [Department of Histology and Embryology - Theoretical Departments - Faculty of Medicine](#)

Prerequisites (in Czech)

[VLAN0121s Anatomy I s](#) && [VLBI0121c Biology I -pract.](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

Course objectives

At the end of the course students should be able to:

1. Describe tissue processing for light and electron microscopy.
2. Understand and explain the structure of a cell, basic structural principles and function of connective tissues, features of epithelial tissue, structure of different types of muscle tissue, structure and function of nervous tissue.
3. Identify tissue types in histologic slides.
4. Characterize microscopic structure of some organs of human body and explain correlations of tissues within organs.
5. Describe gamete development, explain principle of meiosis and regulation of gametogenesis.
6. Define the early embryonic development as well as development of fetal membranes, placenta and umbilical cord.
7. Characterize stages of embryonic development.

Learning outcomes

At the end of the course students should be able to:

1. Describe tissue processing for light and electron microscopy.
2. Understand and explain the structure of a cell, basic structural principles and function of connective tissues, features of epithelial tissue, structure of different types of muscle tissue, structure and function of nervous tissue.
3. Identify tissue types in histologic slides.
4. Characterize microscopic structure of some organs of human body and explain correlations of tissues within organs.
5. Describe gamete development, explain principle of meiosis and regulation of gametogenesis.

6. Define the early embryonic development as well as development of fetal membranes, placenta and umbilical cord.
7. Characterize stages of embryonic development.

Syllabus

- 1. Introduction, organization of practicals, teaching aids. **Overview of histological methods.** Tissue processing for light and electron microscopy - explanation and film. Basic histochemistry and immunocytochemistry.
- 2. **Cytology:** Ultrastructure of the cell nucleus during interphase. Ultrastructure of cell organelles I (mitochondria, the Golgi apparatus, the endoplasmic reticulum, ribosomes, lysosomes).
- 3. Ultrastructure of cell organelles II (peroxisomes, and the centriol). Cell inclusions. The arrangement of cell surfaces: apical, lateral, and basal ones. Intercellular junctions: adhering, occluding, and communicating ones.
- 4. General embryology I. Aids: Set of embryological schemes and pictures (I).
- 5. General embryology II. Aids: Set of embryological schemes and pictures (II).
- 6. **General histology:** Use of the light microscope, common faults in microscopy. Results of basic staining methods in histology: Hematoxylin-eosine /HE/ (hepar), hematoxylin–eosine-saffron /HES/ (esophagus), AZAN (prostate), impregnation (cerebellum). Connective tissue proper - classification and examples. Slides: Funiculus umbilicalis, Esophagus, Posterior segment of the eye, Lien, Aorta.
- 7. Supporting tissues: cartilage and bone. Histogenesis of the bone tissue (ossification). Slides: Trachea, Auricula, Elastic cartilage, Lamellar bone, Chondrogenic ossification.
- 8. Epithelial tissue: epithelial membranes (covering epithelia) and glandular epithelium. Slides: Ren, Vesica fellea, Trachea, Esophagus, Ureter, Palpebra, Skin from the finger tip.
- 9. Glandular epithelium. Skides: Intestinum tenue, Glandula parotis, Glandula submandibularis.
- 10. Nerve tissue. Slides: Cortex cerebri, Cerebellum, Medulla spinalis, Ganglion spinale, Peripheral nerve, Motor end plate.
- 11. Muscle tissue. Slides: Apex linguae, Cardiac muscle tissue Intestinum tenue.
- 12. Blood cells: Preparation of blood smears and their staining. Cytology of formed elements of blood. Differential white cell count (dWCC) - average values, abnormalities and terminology of dWCC. Slide: A smear of peripheral blood stained by Pappenheim's method. Credits.

Literature

recommended literature

- [ČECH, Svatopluk](#), [Drahomír HORKÝ](#), [Irena LAUSCHOVÁ](#), [Miroslava SEDLÁČKOVÁ](#) and [Jitka ŠTASTNÁ](#). *Histologická praktika a metody vyšetřování tkání a orgánů (Histological practicals and methods of investigation of tissues and organs)*. 1. dotisk 1. vydání. Brno: Vydavatelství MU Brno-Kraví hora, 2002. 162 pp. ISBN 80-210-1774-0. [info](#)

- [VAŇHARA, Petr](#), [Miroslava SEDLÁČKOVÁ](#), [Irena LAUSCHOVÁ](#), [Svatopluk ČECH](#) and [Aleš HAMPL](#). *Guide to General Histology and Microscopic Anatomy*. 1. vyd. Brno: Masarykova univerzita, 2019. ISBN 978-80-210-8453-7. [info](#)

not specified

- MARTÍNEK, Jindřich and Zdeněk VACEK. *Histologický atlas*. 1. vyd. Praha: Grada, 2009. 134 s. ISBN 9788024723938. [info](#)

Teaching methods

Content of this course includes study of slides and electron micrographs in microscopic hall as well as class discussion on the base of materials in the text book.

Assessment methods

Rules and conditions applicable for practical training and for examining in Histology and Embryology can be found on the website of Department of Histology and Embryology (<http://www.med.muni.cz/histology/education>) as Provision of the Head of the department on the rules and conditions applicable for practical training and for examining in histology and embryology/en.

Testing of knowledge: Student must prove sufficient level of knowledge by written test examination. Each student completes 4 partial tests during semester. Tests are evaluated by point for correct answer. More than half number of correct answers (points) is evaluated as passed "P". All of these tests must be successful. In case of failure (evaluation not passed "N"), only 1 resit is possible. There is condition 4 from 4 (ie. 4 P / 4 regular tests) or 4 from 5 (ie. 3 P / 4 regular tests + 1 P / 1 resit). If student does not fulfill this condition, credit test follows in the relevant exam period. This test covers all topics studied during semester. In case of failure in credit test, credit will not be given and student **must enroll the course again**.

Conditions for obtaining credit: 1. Attendance at all practical exercises (100% participation, all absences must be regularly excused (in IS) and substituted).

2. Successful completion of all tests.

3. Submission of all protocols (correctly completed forms of protocols signed by teacher).

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

Listed among pre-requisites of other courses

- [VLHE0322c Histology and Embryology II - practice](#) ([VLHE0221c](#) || [VSHE0221c](#)) && ([VLBI0222c](#) || [VSBI0222c](#)) ([Do I meet enrolment requirements?](#))
- [VLHE0322p Histology and Embryology II - lecture](#) ([VLHE0221c](#) || [VSHE0221c](#)) && ([VLBI0222c](#) || [VSBI0222c](#)) ([Do I meet enrolment requirements?](#))

Teacher's information

<http://www.med.muni.cz/histology/education/>

Veškeré informace o výuce jsou zveřejněny na vývěsce Ústavu histologie a embryologie, Kamenice 3 před mikroskopickým sálem a rovněž na www stránkách ústavu.

Information about HE teaching is available on the Department board in front of the Microscopic Hall and on the web site <http://www.med.muni.cz/histology/education>

The course is also listed under the following terms [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VLHE0221p Histology and Embryology I - lecture ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

2/0/0. 0 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. RNDr. Svatopluk Čech, DrSc.](#) (lecturer)

[doc. MVDr. Aleš Hampl, CSc.](#) (lecturer)

[MUDr. Irena Lauschová, Ph.D.](#) (lecturer)

[doc. MUDr. Miroslava Sedláčková, CSc.](#) (lecturer)

[RNDr. Petr Vaňhara, Ph.D.](#) (lecturer)

[MUDr. Ivana Baltasová](#) (assistant)

[MUDr. Jana Dumková](#) (assistant)

[Mgr. Hana Kotasová, Ph.D.](#) (assistant)

[MUDr. Eva Mecová](#) (assistant)

Supervisor

[doc. MVDr. Aleš Hampl, CSc.](#)

[Department of Histology and Embryology - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [doc. MUDr. Miroslava Sedláčková, CSc.](#)

Supplier department: [Department of Histology and Embryology - Theoretical Departments - Faculty of Medicine](#)

Prerequisites (in Czech)

[VLAN0121s Anatomy I s](#) && [VLBI0121c Biology I -pract.](#)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

Course objectives

At the end of the course students should be able to:

1. Understand and explain the structure of a cell, basic structural principles and function of connective tissues, features of epithelial tissue, structure of different types of muscle tissue, structure and function of nervous tissue.
2. Identify tissue types in histologic slides.
3. Characterize microscopic structure of individual organs of human body and explain correlations of tissues within organs.
4. Describe gamete development, explain principle of meiosis and regulation of gametogenesis.
5. Define the early embryonic development as well as development of fetal membranes, placenta and umbilical cord.
6. Characterize stages of embryonic development, describe the development of individual organ systems of human body.
7. Explain the mechanism of the origin of some developmental anomalies.

Learning outcomes

At the end of the course students should be able to:

1. Understand and explain the structure of a cell, basic structural principles and function of connective tissues, features of epithelial tissue, structure of different types of muscle tissue, structure and function of nervous tissue.
2. Identify tissue types in histologic slides.
3. Characterize microscopic structure of individual organs of human body and explain correlations of tissues within organs.
4. Describe gamete development, explain principle of meiosis and regulation of gametogenesis.
5. Define the early embryonic development as well as development of fetal membranes, placenta and umbilical cord.
6. Characterize stages of embryonic development, describe the development of individual organ systems of human body.
7. Explain the mechanism of the origin of some developmental anomalies.

Syllabus

- 1. Introduction. The object and significance of histology. Relevance of histology to other biomedical disciplines. History, current state, and future of histology. Methodologies to study a structure of cells and tissues. **Cytology:** The cell - definition, characteristics, compartmentalization. Cell nucleus - ultrastructure and function, chromosomes, nucleolus. Introduction
- 2. Organelles - structure, localization, and function. Cell inclusions and pigments. Cytoskeleton - microfilaments, intermediate filaments and microtubules. Cell surface structures and intercellular bonds. Cell division cycle. Cell differentiation, cell migration, organization of cells into tissues and organs - general aspects.
- 3. **General embryology.** Definition. The object and significance of embryology. Overview of the early human development: The phases of the human ontogeny. Human gametes - their structure, physiology and origin (gametogenesis). Differences between spermatogenesis and oogenesis. Transport of gametes. Sperm capacitation. Fertilization and cleavage. Activation of the embryonal genome.

Nuclear transfer. Morula and blastocyst. Embryonic stem cells. Outline of the implantation. Abnormal sites of implantation (extrauterine pregnancies).

- 4. The development of the germ disc: origin of the intraembryonic mesoderm and notogenesis (development of the chorda dorsalis). Somites and their derivatives. Outline of the development of fetal membranes: amniotic sac, chorion, and placenta. Function of the placenta. The umbilical cord. Anomalies of the placenta and umbilical cord. Development of external shape of the embryo and fetus. The rule of Hasse. Uterine growth during pregnancy. Parturition. Marks of the mature and full-term fetus. Position, posture and presentation of the fetus. Multiple pregnancy: mono- and dizygotic twins; arrangement of fetal membranes in twins.
- 5. **General histology.** Tissues - definition, their origin, and classification. Connective and supporting tissue - general characteristics, their components and classification. The connective tissue proper - types, main distribution, and function.
- 6. Supporting tissues - cartilage and bone - types, main distribution, and function. Histogenesis and regeneration of connective tissues.
- 7. Epithelial tissue - definition, classification, and histogenesis. Epithelial membranes and glandular epithelium - an overview. Characteristics of glandular cells. Absorptive, respiratory, and sensory epithelia.
- 8. Neural tissue - general characteristics and classification. Neurons – structure and function. Synapse. Neuroglial cells - types and function. Sheaths of nerve fibres. Conduction of nerve impulses. Histogenesis and regeneration of the neural tissue.
- 9. Muscle tissue - general characteristics and classification. Smooth muscle tissue. Skeletal muscle tissue. Ultrastructure of the myofibrils. Mechanism of the muscle contraction. Cardiac muscle tissue. Inervation and vascularization of the muscle. Muscle histogenesis and regeneration.
- 10. Blood cell morphology: Erythrocytes, leukocytes and thrombocytes. Differential white cell count. Prenatal and postnatal hematopoiesis. Erythropoiesis, granulopoiesis, thrombopoiesis.
- 11. **Microscopic anatomy and special embryology.** Cardiovascular system. Microscopic structure of the heart, excitomotoric system - its structural peculiarities. Blood vessels - arteries and veins - structural differences. Capillary bed. Lymph vessels and capillaries.
- 12. Development of the heart. Primitive blood circulation in the embryo. Fetal blood circulation.

Literature

recommended literature

- ČECH, Svatopluk and Drahomír HORKÝ. *Přehled obecné histologie*. 1. vyd. Brno: Masarykova univerzita, 2005. 140 s. ISBN 8021038543. [info](#)
- HORKÝ, Drahomír and Svatopluk ČECH. *Mikroskopická anatomie*. 2. nezm. vyd. Brno: Masarykova univerzita, 2005. 353 s. ISBN 802103775X. [info](#)
- [ČECH, Svatopluk](#), [Drahomír HORKÝ](#) and [Miroslava SEDLÁČKOVÁ](#). *Přehled embryologie člověka*. 1. vyd. Brno: Masarykova univerzita, 2011. 187 pp. ISBN 978-80-210-5414-1. [info](#)

not specified

- MESCHER, Anthony L. *Junqueira's basic histology : text and atlas*. 13th ed. New York: McGraw-Hill Medical, 2013. xi, 544. ISBN 9781259072321. [info](#)
- LÜLLMANN-RAUCH, Renate. *Histologie*. Translated by Radomír Čihák. 1. české vyd. Praha: Grada, 2012. xx, 556. ISBN 9788024737294. [info](#)
- SADLER, T. W. *Langmanova lékařská embryologie*. 1. české vyd. Praha: Grada, 2011. xviii, 414. ISBN 9788024726403. [info](#)
- VACEK, Zdeněk. *Embryologie : učebnice pro studenty lékařství a oborů všeobecná sestra a porodní aistentka*. 1. vyd. Praha: Grada, 2006. 255 s. ISBN 9788024712673. [info](#)
- KAPELLER, Karol and Viera POSPÍŠILOVÁ. *Embryológia človeka: učebnica pre lekárske fakulty*. Martin: Osveta, 2001. 370 pp. ISBN 80-8063-072-0. [info](#)

Teaching methods

lecture

Assessment methods

Students will pass examination after finishing Histology and embryology II - lecture.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

Information on course enrolment limitations: Mimo studenty LF jen se souhlasem garanta oboru.

Teacher's information

<http://www.med.muni.cz/histology/education/>

Veškeré informace o výuce jsou zveřejněny na www stránkách ústavu a rovněž na vývěsce Ústavu histologie a embryologie, Kamenice 3 před mikroskopickým sálem.

Information about HE teaching is available on the Department poster in front of the Microscopic Hall and on the web site <http://www.med.muni.cz/histology/education>.

The course is also listed under the following terms [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VLHE0322c Histology and Embryology II - practice ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/3/0. 5 credit(s). Type of Completion: z (credit).

Teacher(s)

[MVDr. Martin Anger, CSc.](#) (seminar tutor)

[MUDr. Ivana Baltasová](#) (seminar tutor)

[prof. MUDr. RNDr. Svatopluk Čech, DrSc.](#) (seminar tutor)
[MUDr. Jana Dumková](#) (seminar tutor)
[doc. MVDr. Aleš Hampl, CSc.](#) (seminar tutor)
[Mgr. Michaela Kloučková](#) (seminar tutor)
[Mgr. Hana Kotasová, Ph.D.](#) (seminar tutor)
[doc. RNDr. Irena Krontorád Koutná, Ph.D.](#) (seminar tutor)
[MUDr. Irena Lauschová, Ph.D.](#) (seminar tutor)
[MVDr. Anna Mac Gillavry Danylevska, Ph.D.](#) (seminar tutor)
[MUDr. Eva Mecová](#) (seminar tutor)
[doc. MUDr. Miroslava Sedláčková, CSc.](#) (seminar tutor)
[MUDr. Veronika Sedláková](#) (seminar tutor)
[RNDr. Petr Vaňhara, Ph.D.](#) (seminar tutor)
[Mgr. Zuzana Koledová, Ph.D.](#) (assistant)

Supervisor

[doc. MVDr. Aleš Hampl, CSc.](#)
[Department of Histology and Embryology - Theoretical Departments - Faculty of Medicine](#)
Contact Person: [doc. MUDr. Miroslava Sedláčková, CSc.](#)
Supplier department: [Department of Histology and Embryology - Theoretical Departments - Faculty of Medicine](#)

Timetable of Seminar Groups

VLHE0322c/01: Fri 7:30–10:00 [N01026/26](#)
VLHE0322c/02: Fri 7:30–10:00 [N01026/26](#)
VLHE0322c/03: Fri 7:30–10:00 [N01026/26](#)
VLHE0322c/04: Wed 13:30–16:00 [N01026/26](#)
VLHE0322c/05: Wed 7:30–10:00 [N01026/26](#)
VLHE0322c/06: Wed 13:30–16:00 [N01026/26](#)
VLHE0322c/07: Wed 13:30–16:00 [N01026/26](#)
VLHE0322c/08: Mon 13:30–16:00 [N01026/26](#)
VLHE0322c/09: Mon 13:30–16:00 [N01026/26](#)
VLHE0322c/10: Mon 13:30–16:00 [N01026/26](#)
VLHE0322c/11: Mon 7:30–10:00 [N01026/26](#)
VLHE0322c/12: Mon 10:15–12:45 [N01026/26](#)
VLHE0322c/13: Mon 10:15–12:45 [N01026/26](#)
VLHE0322c/14: Mon 10:15–12:45 [N01026/26](#)
VLHE0322c/15: Wed 7:30–10:00 [N01026/26](#)
VLHE0322c/16: Wed 7:30–10:00 [N01026/26](#)
VLHE0322c/17: Mon 7:30–10:00 [N01026/26](#)
VLHE0322c/18: Mon 7:30–10:00 [N01026/26](#)

Prerequisites (in Czech)

([VLHE0221c Histology and Embryology I-p](#) || [VSHE0221c Histology and Embryology I-p](#)) && ([VLBI0222c Biology II-pract.](#) || [VSBI0222c Biology II-pract.](#))
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

Course objectives

At the end of the course students should be able to:

1. Understand and explain the structure of a cell, basic structural principles and function of connective tissues, features of epithelial tissue, structure of different types of muscle tissue, structure and function of nervous tissue.
2. Identify tissue types in histologic slides.
3. Characterize microscopic structure of individual organs of human body and explain correlations of tissues within organs.
4. Describe gamete development, explain principle of meiosis and regulation of gametogenesis.
5. Define the early embryonic development as well as development of fetal membranes, placenta and umbilical cord.
6. Characterize stages of embryonic development, describe the development of individual organ systems of human body.
7. Explain the mechanism of the origin of some developmental anomalies.

Learning outcomes

At the end of the course students should be able to:

1. Understand and explain the structure of a cell, basic structural principles and function of connective tissues, features of epithelial tissue, structure of different types of muscle tissue, structure and function of nervous tissue.
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5. Define the early embryonic development as well as development of fetal membranes, placenta and umbilical cord.
6. Characterize stages of embryonic development, describe the development of individual organ systems of human body.
7. Explain the mechanism of the origin of some developmental anomalies.

Syllabus

- 1. Microscopic structure of the cardiovascular system. Repetition of tissues. Slides: artery and vein, aorta, vena cava, myocardium.
- 2. Microscopic structure of the lymphatic organs. Slides: thymus, lymphonodus, lien, tonsillae (palatina et lingualis).
- 3. Microscopic structure of the respiratory system. Slides: concha nasi, epiglottis, larynx, trachea, pulmo.
- 4. Microscopic structure of the digestive system I. Slides: labium oris, apex linguae, papilla vallata, palatum molle, tooth.
- 5. Microscopic structure of the digestive system II. Slides: oesophagus, cardia, fundus ventriculi, pylorus, duodenum, intestinum tenue, intestinum crassum, appendix, anus.

- 6. Microscopic structure of the digestive system III. Slides: hepar, vesica fellea, pancreas, glandula parotis, gl. submandibularis, gl. sublingualis.
- 7. Microscopic structure of the urinary system. Slides: ren, calyx renalis, ureter, vesica urinialis, urethra feminina, pars cavernosa urethrae masculinae.
- 8. Microscopic structure of the male reproductive system. Slides: testis, epididymis, funiculus spermaticus, gl. vesiculosa, prostate, penis.
- 9. Microscopic structure of the female reproductive system I. Slides: ovarium, corpus luteum, tuba uterina - ampulla, tuba uterina - isthmus, uterus - proliferative and secretory phases.
- 10. Microscopic structure of the female reproductive system II. Slides: vagina, labium minus, placenta, funiculus umbilicalis.
- 11. Microscopic structure of endocrine glands. Slides: hypophysis cerebri, epiphysis, gl. thyreoidea, gl. parathyreoidea, gl. suprarenalis, islets of Langerhans.
- 12. Microscopic structure of the central and peripheral nervous system. Slides: cortex cerebri, cerebellum, medulla spinalis, ganglion spinale (the dorsal root ganglion), autonomic ganglion, peripheral nerves.
- 13. Microscopic structure of the sensory organs. The eye - slides: anterior eye segment, posterior eye segment, fasciculus opticus, palpebra, gl. lacrimalis. The ear - slides: cochlea, auricula.
- 14. Microscopic structure of the skin and skin derivatives. Slides: skin from the tips of the finger, skin from the axilla, skin with hairs, nail, mamma non lactans, mamma lactans. Credits

Literature

recommended literature

- [VAŇHARA, Petr](#), [Miroslava SEDLÁČKOVÁ](#), [Irena LAUSCHOVÁ](#), [Svatopluk ČECH](#) and [Aleš HAMPL](#). *Guide to General Histology and Microscopic Anatomy*. 1. vyd. Brno: Masarykova univerzita, 2019. ISBN 978-80-210-8453-7. [info](#)
- [ČECH, Svatopluk](#), [Drahomír HORKÝ](#), [Irena LAUSCHOVÁ](#), [Miroslava SEDLÁČKOVÁ](#) and [Jitka ŠŤASTNÁ](#). *Histologická praktika a metody vyšetřování tkání a orgánů (Histological practicals and methods of investigation of tissues and organs)*. 1. dotisk 1. vydání. Brno: Vydavatelství MU Brno-Kraví hora, 2002. 162 pp. ISBN 80-210-1774-0. [info](#)

Teaching methods

Content of this course includes study of slides and electron micrographs in microscopic hall as well as class discussion on the base of materials in the text book.

Assessment methods

Rules and conditions applicable for practical training and for examining in Histology and Embryology can be found on the website of Department of Histology and Embryology (<http://www.med.muni.cz/histology/education>) as Provision of the Head of the department on the rules and conditions applicable for practical training and for examining in histology and embryology/en.

Testing of knowledge: Student must prove sufficient level of knowledge by written test examination. Each student completes 4 partial tests during semester. Tests are evaluated by point for correct answer. More than half number of correct answers (points) is

evaluated as passed "P". All of these tests must be successful. In case of failure (evaluation not passed "N"), only 1 resit is possible. There is condition 4 from 4 (ie. 4 P / 4 regular tests) or 4 from 5 (ie. 3 P / 4 regular tests + 1 P / 1 resit). If student does not fulfill this condition, credit test follows in the relevant exam period. This test covers all topics studied during semester. In case of failure in credit test, credit will not be given and student **must enroll the course again**.

Conditions for obtaining credit: 1. Attendance at all practical exercises (100% participation, all absences must be regularly excused (in IS) and substituted).

2. Successful completion of all tests.

3. Submission of all protocols (correctly completed forms of protocols signed by teacher).

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

General note: Mimo studenty LF jen po dohodě s vedoucím ústavu.

Listed among pre-requisites of other courses

- [VLLP0532c Clinical Introduction II](#)
[VLLP0431c](#) && ([VLAN0222p](#) || [VSAN0333p](#)) && ([VLHE0322c](#) || [VSHE0322c](#))
&& ([VLBC0422c](#) || [VSBC041c](#)) && ([VLFY0422c](#) || [VSFY0422c](#)) ([Do I meet enrolment requirements?](#))

Teacher's information

<http://www.med.muni.cz/histology/education>

Veškeré informace o výuce včetně zkušebních termínů jsou zveřejněny na vývěsce Ústavu histologie a embryologie, Kamenice 3 před mikroskopickým sálem a rovněž na www stránkách ústavu.

Information about HE teaching is available on the Department poster in front of the Microscopic Hall and on the web site <http://www.med.muni.cz/histology/education>

The course is also listed under the following terms [Autumn 2016](#), [Accreditation autumn](#).

VLHE0322p Histology and Embryology II - lecture ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

2/0/0. 7 credit(s). Type of Completion: zk (examination).

Teacher(s)

[prof. MUDr. RNDr. Svatopluk Čech, DrSc.](#) (lecturer)

[doc. MUDr. Aleš Hampl, CSc.](#) (lecturer)

[MUDr. Irena Lauschová, Ph.D.](#) (lecturer)

[doc. MUDr. Miroslava Sedláčková, CSc.](#) (lecturer)

[RNDr. Petr Vaňhara, Ph.D.](#) (lecturer)

[MUDr. Ivana Baltasová](#) (assistant)
[MUDr. Jana Dumková](#) (assistant)
[Mgr. Hana Kotasová, Ph.D.](#) (assistant)
[MUDr. Eva Mecová](#) (assistant)
[MUDr. Veronika Sedláková](#) (assistant)

Supervisor

[doc. MVDr. Aleš Hampl, CSc.](#)
[Department of Histology and Embryology - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [doc. MUDr. Miroslava Sedláčková, CSc.](#)

Supplier department: [Department of Histology and Embryology - Theoretical Departments - Faculty of Medicine](#)

Timetable

Thu 9:30–11:20 [A22/116 aula](#)

Prerequisites (in Czech)

([VLHE0221c Histology and Embryology I-p](#) || [VSHE0221c Histology and Embryology I-p](#)) && ([VLBI0222c Biology II-pract.](#) || [VSBI0222c Biology II-pract.](#))
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

Course objectives.

At the end of the course students should be able to:

1. Understand and explain the structure of a cell, basic structural principles and function of connective tissues, features of epithelial tissue, structure of different types of muscle tissue, structure and function of nervous tissue.
2. Identify tissue types in histologic slides.
3. Characterize microscopic structure of individual organs of human body and explain correlations of tissues within organs.
4. Describe gamete development, explain principle of meiosis and regulation of gametogenesis.
5. Define the early embryonic development as well as development of fetal membranes, placenta and umbilical cord.
6. Characterize stages of embryonic development, describe the development of individual organ systems of human body.
7. Explain the mechanism of the origin of some developmental anomalies.

Learning outcomes

At the end of the course students should be able to:

1. Understand and explain the structure of a cell, basic structural principles and function of connective tissues, features of epithelial tissue, structure of different types of muscle tissue, structure and function of nervous tissue.
2. Identify tissue types in histologic slides.

3. Characterize microscopic structure of individual organs of human body and explain correlations of tissues within organs.
4. Describe gamete development, explain principle of meiosis and regulation of gametogenesis.
5. Define the early embryonic development as well as development of fetal membranes, placenta and umbilical cord.
6. Characterize stages of embryonic development, describe the development of individual organ systems of human body.
7. Explain the mechanism of the origin of some developmental anomalies.

Syllabus

- 1. Microscopic structure of the lymphatic system. Mononuclear phagocyte system.
- 2. Microscopic structure and development of respiratory system. Respiratory passages and lungs. Blood - air barrier.
- 3. Digestive tract (gastro-intestinal tract - GIT) I. Microscopic structure of the oral cavity - lips, cheeks, salivary glands, tongue, tooth.
- 4. GIT II. General structure of the wall of digestive tube. Microscopic structure of the oesophagus, stomach, and intestines. Histophysiology of the intestine and blood circulation.
- 5. GIT III. Microscopic structure of the liver, gallbladder, gall ducts, and pancreas. Overview of development of the gut.
- 6. Microscopic structure and development of the urinary system: Nephron - its structure, histotopography, and function. Blood circulation of kidneys. Urinary passages. Stages in development of kidneys (pro-, meso-, and metanephros).
- 7. Microscopic structure of the male reproductive system: Testis, excretory genital ducts, accessory genital glands, penis. Spermato- and spermiogenesis. Composition of the sperm (ejaculate).
- 8. Microscopic structure of the female reproductive system: Ovary, oviduct, uterus, vagina, external genitalia. Ovarian cycle, ovulation, atresia. Oogenesis. Menstrual cycle. Relations between the menstrual and ovarian cycle.
- 9. Development of internal and external sexual organs. General characteristics of the indifferent stage.
- 10. Microscopic structure, histophysiology and development of endocrine glands: Hypophysis, epiphysis, thyroid gland, parathyroid glands, adrenal gland, islets of Langerhans. Principles of humoral regulation.
- 11. Microscopic structure and development of the central and peripheral nervous system. Structure of gray matter in the CNS: Iso- and allocortex, cerebellar cortex, spinal cord. Meninges. Ganglia and peripheral nerves. Overview of development of the brain and spinal cord including histogenesis of the neural tube.
- 12. Microscopic structure of the organ of vision: The eye and its refractive (dioptric) media. Accessory structures of the eye. Microscopic structure of the ear (vestibulocochlear organ). Major structural differences between the statokinetic and acoustic compartments. Overview of development of the eye and vestibulocochlear organ.
- 13. Microscopic structure and development of the skin and skin derivatives. Mammary gland.

- 14. Development of body cavities and mesenteries. Development of the diaphragm. Development of the spleen.

Literature

recommended literature

- ČECH, Svatopluk and Drahomír HORKÝ. *Přehled obecné histologie*. 1. vyd. Brno: Masarykova univerzita, 2005. 140 s. ISBN 8021038543. [info](#)
- HORKÝ, Drahomír and Svatopluk ČECH. *Mikroskopická anatomie*. 2. nezm. vyd. Brno: Masarykova univerzita, 2005. 353 s. ISBN 802103775X. [info](#)
- ČECH, Svatopluk, Drahomír HORKÝ and Miroslava SEDLÁČKOVÁ. *Přehled embryologie člověka*. 1. vyd. Brno: Masarykova univerzita, 2011. 187 pp. ISBN 978-80-210-5414-1. [info](#)
- MESCHER, Anthony L. *Junqueira's basic histology : text and atlas*. 13th ed. New York: McGraw-Hill Medical, 2013. xi, 544. ISBN 9781259072321. [info](#)
- MOORE, Keith L., T. V. N. PERSAUD and Mark G. TORCHIA. *The developing human : clinically oriented embryology*. 9th ed. Philadelphia, PA: Saunders/Elsevier, 2013. xix, 540. ISBN 9781437720020. [info](#)

not specified

- VACEK, Zdeněk. *Embryologie : učebnice pro studenty lékařství a oborů všeobecná sestra a porodní aistentka*. 1. vyd. Praha: Grada, 2006. 255 s. ISBN 9788024712673. [info](#)
- SADLER, T. W. *Langmanova lékařská embryologie*. 1. české vyd. Praha: Grada, 2011. xviii, 414. ISBN 9788024726403. [info](#)
- KAPELLER, Karol and Viera POSPÍŠILOVÁ. *Embryológia človeka: učebnica pre lekárske fakulty*. Martin: Osveta, 2001. 370 pp. ISBN 80-8063-072-0. [info](#)
- LÜLLMANN-RAUCH, Renate. *Histologie*. Translated by Radomír Čihák. 1. české vyd. Praha: Grada, 2012. xx, 556. ISBN 9788024737294. [info](#)
- OVALLE, William K., Patrick C. NAHIRNEY and Frank H. NETTER. *Netter's essential histology*. 2nd ed. Philadelphia, PA: Elsevier/Saunders, 2013. xv, 517. ISBN 9781455706310. [info](#)
- YOUNG, Barbara. *Wheater's functional histology : a text and colour atlas*. 5th ed. [Oxford]: Churchill Livingstone, 2006. x, 437. ISBN 044306850X. [info](#)
- SADLER, T. W. and Jan LANGMAN. *Langman's medical embryology*. Illustrated by Jill Leland. 11th ed. Baltimore, Md.: Lippincott William & Wilkins, 2010. ix, 385. ISBN 9781605476568. [info](#)
- LOWE, James S. and Peter G. ANDERSON. *Stevens and Lowe's Human Histology*. 4th. : Elsevier, 2015. ISBN 978-0-7234-3502-0. [info](#)

Teaching methods

lectures

Assessment methods

Final examination is composed of the practical part (slide test) and the theoretical part that includes written test and oral exam. In practical part, student should identify minimally 7 out of 10 slides. Oral exam includes 2 questions (1 histology, 1 embryology). Rules and

conditions applicable for practical training and for examining in Histology and Embryology can be found on the website of Department of Histology and Embryology (<http://www.med.muni.cz/histology/education>) as Provision of the Head of the department on the rules and conditions applicable for practical training and for examining in histology and embryology/en.

A necessary condition for admission to exam is to obtain credit from the Histology and Embryology II-practice.

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

Listed among pre-requisites of other courses

- [VLLP0633c Clinical Introduction III - practice](#)
[VLLP0532c](#) && ([VLAN0222p](#) || [VSAN0333p](#)) && [VLHE0322p](#) && [VLBC0422p](#) && [VLFY0422p](#) ([Do I meet enrolment requirements?](#))
- [VLPA0521c Pathology I - practicals](#)
([VLFY0422p](#) || [VSFY0422p](#)) && ([VSBC041p](#) || [VLBC0422p](#)) && ([VLAN0222p](#) || [VSAN0333p](#)) && ([VLHE0322p](#) || [VSHE0322p](#)) && [VLLM0421c](#) ([Do I meet enrolment requirements?](#))
- [VLPA0521p Pathology I - lecture](#)
([VLFY0422p](#) || [VSFY0422p](#)) && ([VSBC041p](#) || [VLBC0422p](#)) && ([VLAN0222p](#) || [VSAN0333p](#)) && ([VLHE0322p](#) || [VSHE0322p](#)) && [VLLM0421c](#) ([Do I meet enrolment requirements?](#))
- [VLPF0521c Pathological physiology I - practice](#)
([VLFY0422p](#) || [VSFY0422p](#)) && ([VSBC041p](#) || [VLBC0422p](#)) && ([VLAN0222p](#) || [VSAN0333p](#)) && ([VLHE0322p](#) || [VSHE0322p](#)) && [VLLM0421c](#) ([Do I meet enrolment requirements?](#))
- [VLPF0521p Pathological Physiology I - lecture](#)
([VLFY0422p](#) || [VSFY0422p](#)) && ([VSBC041p](#) || [VLBC0422p](#)) && ([VLAN0222p](#) || [VSAN0333p](#)) && ([VLHE0322p](#) || [VSHE0322p](#)) && [VLLM0421c](#) ([Do I meet enrolment requirements?](#))

Teacher's information

<http://www.med.muni.cz/histology/multimedia-and-textbooks/>

Veškeré informace o výuce včetně zkušebních termínů jsou zveřejněny na vývěsce Ústavu histologie a embryologie, Kamenice 3 před mikroskopickým sálem a rovněž na [www. stránkách ústavu](http://www.med.muni.cz/histology/multimedia-and-textbooks/). Studenti mohou pro přípravu ke zkoušce využívat elektronické atlasy na adrese <http://www.med.muni.cz/histology/multimedia-and-textbooks/>

Zkoušku může student skládat až po získání zápočtu z~předmětu Histologie a embryologie II - cvičení.

Information about HE teaching is available on the Department poster in front of the Microscopic Hall and on the web site <http://www.med.muni.cz/histology/multimedia-and-textbooks/>

A necessary condition for admission to exam is to obtain credit from the Histology and Embryology II-practice.

The course is also listed under the following terms [Autumn 2016](#), [Accreditation autumn](#).

VLHZ021p Medical Humanities - lecture *

Faculty of Medicine

Spring 2018

Extent and Intensity

2/0/0. 3 credit(s). Type of Completion: k (colloquium).

Teacher(s)

[doc. Mgr. Josef Kuře, Dr. phil.](#) (lecturer)

[Mgr. Michaela Vaňharová, Ph.D.](#) (assistant)

Supervisor

[doc. Mgr. Josef Kuře, Dr. phil.](#)

[Department of Medical Ethics - Theoretical Departments - Faculty of Medicine](#)

Supplier department: [Department of Medical Ethics - Theoretical Departments - Faculty of Medicine](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

there are 21 fields of study the course is directly associated with, [display](#)

Course objectives

The course introduces to medical humanities, medical anthropology and foundations of medical ethics.

Syllabus

- 1. Homo sapiens patiens: antropological foundations of medicine 2. Illness and ill person: hermeneutics of health and disease 3. Soma and psyche (Psychosomatics): body and mind in medicine 4. Cure and healing: the nature of medical therapeutical procedure 5. Medical ontology: medicine - art and science, Evidence Based Medicine 6. Medical epistemology: medical knowledge and thinking 7. Goals of medicine 8. Between power and sickness (authority, autenticity, and power in medicine) 9. Medicine and existencial experience 10. Freedom, action, moral action 11. Moral norm and its justification 12. Consciousness and conscience 13. Moral normativity in medicine 14. Relationships and their changes in medicine 15. Biomedicine - challenge and subject of reflection

Literature

- *A reader in medical anthropology : theoretical trajectories, emergent realities.* Edited by Byron Good. Malden, Mass.: Wiley-Blackwell, 2010. xiv, 559. ISBN 9781405183147. [info](#)

- *Methods in medical ethics*. Edited by Jeremy Sugarman - Daniel P. Sulmasy. 2nd ed. Washington, D.C.: Georgetown University Press, 2010. xiii, 353. ISBN 9781589017016. [info](#)
- *The taste for knowledge : medical anthropology facing medical realities*. Edited by Sylvie Fainzang - Hans Einar Hem - Mette Bech Risr. Aarhus: Aarhus University Press, 2010. 258 p. ISBN 9788779345157. [info](#)
- *Understanding and applying medical anthropology*. Edited by Peter J. Brown - Ronald L. Barrett. 2nd ed. New York: McGraw-Hill Higher Education, 2010. xii, 468. ISBN 9780073405384. [info](#)
- *The Oxford handbook of bioethics*. Edited by Bonnie Steinbock. 1st pub. in pbk. Oxford: Oxford University Press, 2007. xviii, 747. ISBN 9780199562411. [info](#)
- *Medical anthropology*. Edited by Robert Pool - Wenzel Geissler. Maidenhead: Open University Press, 2005. viii, 172. ISBN 0335218504. [info](#)
- O'NEILL, Onora. *Autonomy and trust in bioethics*. New York: Cambridge University Press, 2002. xi, 213. ISBN 0521894530. [info](#)
- *Medical humanities*. Edited by Martyn Evans - Ilora G. Finlay. London: BMJ, 2001. xi, 312 p. ISBN 0727916106. [info](#)
- ANZENBACHER, Arno. *Úvod do etiky*. Vyd. 2. Praha: Academia, 2001. 292 s. ISBN 8020009175. [info](#)
- JONSEN, Albert R. *A short history of medical ethics*. New York: Oxford University Press, 2000. xi, 153. ISBN 0195134559. [info](#)
- JONAS, Hans. *Princip odpovědnosti : pokus o etiku pro technologickou civilizaci*. Translated by Břetislav Horyna - Zdeněk Bígl. Vyd. 1. Praha: Oikoymenh, 1997. 318 s. ISBN 80-86005-06-2. [info](#)
- RICKEN, Friedo. *Obecná etika*. Translated by Daniela Petříčková. 1. vyd. Praha: Oikoymenh, 1995. 165 s. [info](#)

Teaching methods

lecture

Assessment methods

written test

Language of instruction

Czech

Further Comments

The course is taught annually.

The course is taught: every week.

The course is also listed under the following terms [Spring 2019](#), [Accreditation spring](#).

VLHZ021s Medical Humanities - seminar ✳

Faculty of Medicine

Spring 2018

Extent and Intensity

0/2/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[doc. Mgr. Josef Kuře, Dr. phil.](#) (seminar tutor)
[Mgr. Michaela Vaňharová, Ph.D.](#) (seminar tutor)

Supervisor

[doc. Mgr. Josef Kuře, Dr. phil.](#)
[Department of Medical Ethics - Theoretical Departments - Faculty of Medicine](#)
Contact Person: [doc. Mgr. Josef Kuře, Dr. phil.](#)
Supplier department: [Department of Medical Ethics - Theoretical Departments - Faculty of Medicine](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

The capacity limit for the course is 15 student(s).

Current registration and enrolment status: enrolled: **0/15**, only registered: **0/15**, only registered with preference (fields directly associated with the programme): **0/15**

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)
- [Dentistry](#) (programme LF, M-ZL) (2)

Course objectives

The goal of the subject is to deepen the topics of the lectures in a seminar, based on the texts and their analysis.

Syllabus

- 1. Homo sapiens patiens: antropological foundations of medicine 2. Illness and ill person: hermeneutics of health and disease 3. Soma and psyche (Psychosomatics): body and mind in medicine 4. Cure and healing: the nature of medical therapeutical procedure 5. Medical ontology: medicine - art and science, Evidence Based Medicine 6. Medical epistemology: medical knowledge and thinking 7. Goals of medicine 8. Between power and sickness (authority, authenticity, and power in medicine) 9. Medicine and existential experience 10. Freedom, action, moral action 11. Moral norm and its justification 12. Consciousness and conscience 13. Moral normativity in medicine 14. Relationships and their changes in medicine 15. Biomedicine - challenge and subject of reflection

Teaching methods

seminar

Assessment methods

texts' analysis, essay

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

General note: Při zápisu předmětu mají přednost studenti vyšších ročníků.

Information on course enrolment limitations: Předmět si lze zapsat pouze při souběžném

zapsání přednášky VLHZ021p nebo při předchozím absolvování přednášky téhož předmětu (VLHZ021p).

Teacher's information

Každý účastník semináře písemně zpracuje analýzu vybraného textu relevantního pro dané téma. Tu následně v semináři prezentuje a diskutuje. Forma výuky odpovídá klasickému textovému semináři. Texty budou vybrány na prvním setkání na základě společné domluvy.

The course is also listed under the following terms [Spring 2019](#), [Accreditation spring](#).

VLCH0731c Surgery I -practicals ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/4/0. 4 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Ivan Čapov, CSc.](#) (lecturer)
[MUDr. Vladimír Bartl, CSc.](#) (seminar tutor)
[Mgr. MUDr. Štěpánka Bibrová, Ph.D.](#) (seminar tutor)
[MUDr. Ernest Biroš](#) (seminar tutor)
[doc. MUDr. Eva Brichtová, Ph.D.](#) (seminar tutor)
[prof. MUDr. Pavel Brychta, CSc.](#) (seminar tutor)
[MUDr. Jan Buček](#) (seminar tutor)
[MUDr. Robert Doušek](#) (seminar tutor)
[MUDr. Martin Dvořák, Ph.D.](#) (seminar tutor)
[prof. MUDr. Petr Gál, Ph.D.](#) (seminar tutor)
[doc. MUDr. Zdeněk Gregor, CSc.](#) (seminar tutor)
[prof. MUDr. Miloš Janeček, CSc.](#) (seminar tutor)
[doc. MUDr. Pavel Janíček, CSc.](#) (seminar tutor)
[doc. MUDr. Václav Jedlička, Ph.D.](#) (seminar tutor)
[MUDr. Jiří Jochymek, Ph.D.](#) (seminar tutor)
[prof. MUDr. Zdeněk Kala, CSc.](#) (seminar tutor)
[MUDr. Petra Kocourková](#) (seminar tutor)
[doc. MUDr. Ján Kočíš, Ph.D.](#) (seminar tutor)
[MUDr. Jan Konečný, Ph.D.](#) (seminar tutor)
[MUDr. Zdeněk Konečný](#) (seminar tutor)
[MUDr. Miroslav Krejčí, Ph.D.](#) (seminar tutor)
[MUDr. Pavel Mach, Ph.D.](#) (seminar tutor)
[doc. MUDr. Michal Mašek, CSc.](#) (seminar tutor)
[doc. MUDr. Ivan Müller, CSc.](#) (seminar tutor)
[MUDr. Tomáš Novotný, Ph.D.](#) (seminar tutor)
[doc. MUDr. Libor Paša, Ph.D.](#) (seminar tutor)
Doc. Paša (seminar tutor), [doc. MUDr. Libor Paša, Ph.D.](#) (deputy)
[doc. MUDr. Petr Piskač, CSc.](#) (seminar tutor)
[prof. MUDr. Ladislav Plánka, Ph.D.](#) (seminar tutor)

[doc. MUDr. Jiří Podlaha, CSc.](#) (seminar tutor)
[MUDr. Vladimír Procházka, Ph.D.](#) (seminar tutor)
[doc. MUDr. Zbyněk Rozkydal, Ph.D.](#) (seminar tutor)
[prof. MUDr. Robert Staffa, Ph.D.](#) (seminar tutor)
[MUDr. Andrea Suchomelová](#) (seminar tutor)
[MUDr. Otakar Teyschl, CSc.](#) (seminar tutor)
[MUDr. Richard Veselý](#) (seminar tutor)
[doc. MUDr. Lenka Veverková, Ph.D.](#) (seminar tutor)
[MUDr. Robert Vlachovský, Ph.D.](#) (seminar tutor)
[MUDr. Petr Vlček, Ph.D.](#) (seminar tutor)
[prof. MUDr. Jindřich Vomela, CSc., LL.M.](#) (seminar tutor)
[prof. MUDr. Peter Wendsche, CSc.](#) (seminar tutor)
[MUDr. Jan Žák, Ph.D.](#) (seminar tutor)
[prof. MUDr. Jan Žaloudík, CSc.](#) (seminar tutor)
[Hana Baráčková](#) (assistant)
[Veronika Bradáčková](#) (assistant)
[Lucie Kučerová](#) (assistant)
[Lea Müllerová](#) (assistant)
[Ivana Ondrášová](#) (assistant)
[Barbora Staňková](#) (assistant)

Supervisor

[MUDr. Vladimír Procházka, Ph.D.](#)
[Department of Surgery - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)
Contact Person: [Iveta Mášová](#)
Supplier department: [Department of Surgery - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Timetable of Seminar Groups

VLCH0731c/01: Mon 16. 10. to Fri 27. 10. each working day 7:30–12:20 [N03005](#)
VLCH0731c/02: Mon 2. 10. to Fri 13. 10. each working day 7:30–12:20 [N07191](#)
VLCH0731c/04: Mon 1. 1. to Fri 12. 1. each working day 7:30–12:20 [N01002](#)
VLCH0731c/05: Mon 11. 12. to Fri 22. 12. each working day 7:30–12:20 [N01002](#)
VLCH0731c/06: Mon 27. 11. to Fri 8. 12. each working day 7:30–12:20 [N07191](#)
VLCH0731c/07: Mon 13. 11. to Fri 24. 11. each working day 7:30–12:20 [N01002](#)
VLCH0731c/08: Mon 30. 10. to Fri 10. 11. each working day 7:30–12:20 [N07191](#)
VLCH0731c/09: Mon 27. 11. to Fri 8. 12. each working day 7:30–12:20 [N01002](#)
VLCH0731c/10: Mon 13. 11. to Fri 24. 11. each working day 7:30–12:20 [N07191](#)
VLCH0731c/11: Mon 30. 10. to Fri 10. 11. each working day 7:30–12:20 [N01002](#)
VLCH0731c/12: Mon 16. 10. to Fri 27. 10. each working day 7:30–12:20 [N07191](#)
VLCH0731c/15: Mon 1. 1. to Fri 12. 1. each working day 7:30–12:20 [N07191](#)
VLCH0731c/16: Mon 11. 12. to Fri 22. 12. each working day 7:30–12:20 [N03005](#)
VLCH0731c/30: Mon 2. 10. to Fri 13. 10. each working day 7:30–12:20 [N01002](#)
VLCH0731c/31: Mon 18. 9. to Fri 29. 9. each working day 7:30–12:20 [N01002](#)
VLCH0731c/32: Mon 18. 9. to Fri 29. 9. each working day 7:30–12:20 [N07191](#)
VLCH0731c/33: Mon 2. 10. to Fri 13. 10. each working day 7:30–12:20 [N07191](#)
VLCH0731c/35: No timetable has been entered into IS.

Prerequisites (in Czech)

[VSPF0622p Pathophysiol. II - lect.](#) && [VSPA0622p Pathology II - lecture](#) && [VLCP0622c Introduc. to surgery II -pr.](#) && [VSIP0622c Introduction to internal II-pr](#) && [VLFA0621c Pharmacology I - p](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The tuition in the 7th term is focused on the general surgery in its whole extent, supplemented with the lessons from orthopaedy, traumatology, surgery of burns and children surgery.

Learning outcomes (in Czech)

Student po absolvování předmětu bude schopen rozpoznat základní chirurgická onemocnění, doporučit diagnostický algoritmus a zahájit terapii.

Syllabus

- Head and neck surgery
- Chest wall, trauma of the chest, breast
- Surgery of the lungs and mediastinum
- Oesophageal surgery
- Vascular surgery: arteries
- Vascular surgery: veins
- Metabolism and critical care in surgery
- General traumatology
- Clavicle, scapula, humeroscapular joint
- Humerus, elbow joint
- Forearm, wrist, hand
- Revision lesson
- Traumatology: polytrauma, spinal cord trauma
- Children surgery: Abdominal children surgery including acute abdomen
- Congenital defects and its surgical treatment
- Children traumatology
- Children orthophedy
- Surgical oncology
- Burns: introduction, intensive care in the burn shock, skin replacement, plastic and reconstructive surgery in burns

Literature

required literature

- FERKO, Alexander, Zdeněk ŠUBRT and Tomáš DĚDEK. *Chirurgie v kostce. 2.*, doplněné a přepracova. Praha: Grada, 2015. 511 stran. ISBN 9788024710051. [info](#)

- ZEMAN, Miroslav. *Speciální chirurgie*. 2. vyd. Praha: Galén, 2004. xxiii, 575. ISBN 8072622609. [info](#)

not specified

- L.W. Way, *Současná chirurgická diagnostika a léčba*, 1998, Grada Publ., ISBN 80-7169/397/9, Sabiston- *Textbook of Surgery*, ISBN 0-7216-1259-8. Doplňky: Ján Černý, *Špeciálna chirurgia*, Osveta 1996, S. Schwartz: *Textbook of Surgery*, L.W. Way: *Current Surg.*
- [GÁL, Petr](#) and [František TECL](#). *Compartment syndrom - závažná komplikace chirurgie a traumatologie (Compartment syndrome - consequential complication of surgery and traumatology)*. 1. vyd. Brno: Masarykova univerzita, 1999. 41 pp. Edice kontinuálního vzdělávání v medicíně. ISBN 80-210-2152-7. [info](#)
- [PODLAHA, Jiří](#), [Zdeněk GREGOR](#), [Jindřich LEYPOLD](#) and [Petr ROUBAL](#). *Chirurgie bifurkace aorty (Surgery of aorta bifurcation)*. *Praktická flebologie*, Praha: Phlebomedica, 1998, vol. 7, 4-5, p. 99. ISSN 1210-5406. [info](#)
- [ŽALOUĐÍK, Jan](#). *Chirurgie v paliativní onkologické léčbě (Surgery in palliative oncology treatment)*. In *Paliativní medicína*. Praha: Grada Publishing, 1998. p. 165-182. ISBN 80-7169-437-1. [info](#)
- *Digestivní endoskopie a laparoskopická chirurgie*. Edited by Přemysl Frič - Miroslav Ryska. 1. vyd. Praha: Praha Publishing, 1996. 345 s. ISBN 80-902140-0-2. [info](#)
- DUDA, Miloslav and Stanislav CZUDEK. *Miniinvazivní chirurgie*. 1. vyd. Třinec: Nemocnice Podlesí, 1996. 231 s. : o. [info](#)
- *Úvod do miniinvazivní chirurgie*. Edited by Jiří Vokurka. 1. vyd. Brno: Institut pro další vzdělávání pracovníků ve zdravotnictví, 1996. 46 s. ISBN 80-7013-228-0. [info](#)
- LEYPOLD, Jindřich. *Chirurgie neúrazových ložiskových lézí jater*. [1. vyd.]. Brno: II. chirurgická klinika LF MU v Brně, 1995. 125 s. : b. [info](#)
- KUBÁČEK, Vojtěch. *Vybrané kapitoly z plastické chirurgie*. 2. vyd. Brno: Masarykova univerzita, 1992. 66 s. [info](#)
- [STAFFA, Robert](#). *Záchrana kriticky ischemické končetiny -pedální bypass (Salvage of critically ischemic limb - pedal bypass grafting)*. 1. vyd. Praha: Grada Publishing, a.s., 2005. 112 pp. Grada Publishing Avicenum 2090. ISBN 80-247-0957-0. [info](#)
- FIRT, Pavel. *Cévní chirurgie*. Praha: Avicenum, 1991. ISBN 80-201-0047-4. [info](#)
- SABISTON, David C. *Textbook of Surgery*. 1991. ISBN 0-7216-3492-3. [info](#)

Teaching methods

Classwork is provided by the combined way through presentations, bedside teaching, seminars with the discussion.

Assessment methods

The lessons attendance is obligatory, credits are given during the termination of the each semester. The tuition in surgery is finished with the State Exam of Surgery in the 6th year of tuition.

Language of instruction

Czech

Further comments (probably available only in Czech)

Study Materials

Information on completion of the course: Předložení prezentace na téma probírané v daném semestru. Nutná 100% účast. Nahrazování možné pouze po domluvě se zást. pro školství MUDr.V.Procházkou, PhD-vprochazka@fnbrno.cz

The course is taught annually.

General note: Pro výuku ve FN Brno Bohunice: nutné převlékání (bílý plášť a přezůvky) v šatně pro mediky v -1.NP lůžkového traktu; výuka probíhá i v posluchárnách jiných klinik ve FN Brno. Aktuální rozpis je zveřejněn na vývěsce pro studenty na CHK v 7.NP.

Listed among pre-requisites of other courses

- [VLAM9X1p Intensive Care Medicine - lectures](#) ([VLFA0822c](#) || [VLFA0722c](#)) && [VLCH0832c](#) && [VLCH0731c](#) && [VSPF0622p](#) && [VSIP0622c](#) && [VLCF0622p](#) && [VLDM7X1c](#) && [VSOT7X1c](#) && [VLIN7X21](#) (Do I meet enrolment requirements?)
- [VLCH0832c Surgery II - practice](#) [VLCH0731c](#) && [VLFA0621c](#) (Do I meet enrolment requirements?)
- [VLCH0832p Surgery II - lectures](#) [VLCH0731c](#) (Do I meet enrolment requirements?)

Teacher's information

Výuka probíhá na pracovištích I, II, chirurgické kliniky FN u sv. Anny, Chirurgické kliniky FN Brno-Bohunice Chirurgické kliniky FDN Černopolní, Ortopedické kliniky nemocnice u sv. Anny a Ortopedické kliniky FN Brno Bohunice, ARK kliniky FN u sv. Anny a KARIM FN Brno-Bohunice, Kliniky Plastické chirurgie FN: Berkova ul., Kliniky popáleninové medicíny FN Brno-Bohunice Kontaktní osoby pro jednotlivé předměty: I. chir: Doc. Veverková II.chir: prof. Staffa Chir.klinika Bohunice: prof. Kala Dětská ortopedie : Dr. Jochymek Dětská chirurgie: Dr. Teyschl Ortopedie FN u sv. Anny: Doc. Rozkydal Ortopedie FN Bohunice: Doc. Chaloupka KARIM: Dr. Maláska Plastická chirurgie: Dr. Dražan Medicína popálenin: Dr. Vokurková Další informace na vývěškách a sekretariátech příslušných pracovišť.

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#), [Accreditation autumn](#).

VLCH0731p Surgery I - lectures ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

1/0/0. 0 credit(s). Recommended Type of Completion: z (credit). Alternate Types of Completion: -.

Teacher(s)

[Mgr. MUDr. Štěpánka Bibrová, Ph.D.](#) (lecturer)
[doc. MUDr. Eva Brichtová, Ph.D.](#) (lecturer)
[prof. MUDr. Ivan Čapov, CSc.](#) (lecturer)
[MUDr. Robert Doušek](#) (lecturer)
[prof. MUDr. Ladislav Plánka, Ph.D.](#) (lecturer)
[MUDr. Vladimír Procházka, Ph.D.](#) (lecturer)
[doc. MUDr. Lenka Veverková, Ph.D.](#) (lecturer)
[prof. MUDr. Jindřich Vomela, CSc., LL.M.](#) (lecturer)
[prof. MUDr. Jan Žaloudík, CSc.](#) (lecturer)
[Hana Baráčková](#) (assistant)
[Lucie Kučerová](#) (assistant)

Supervisor

[MUDr. Vladimír Procházka, Ph.D.](#)
[Second Department of Surgery - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)
Supplier department: [Second Department of Surgery - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Timetable

Mon 23. 10. to Fri 15. 12. Wed 13:20–15:00 [A11/114](#)

- Timetable of Seminar Groups:

VLCH0731p/VLA: Mon 18. 9. to Fri 10. 11. Fri 13:20–15:00 [014](#)

Prerequisites (in Czech)

[VSPF0622p Pathophysiol. II - lect.](#) && [VSPA0622p Pathology II - lecture](#) &&
[VLCP0622c Introduc. to surgery II -pr.](#) && [VSIP0622c Introduction to internal II-pr](#) &&
[VLFA0621c Pharmacology I - p](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Main objectives of this lecture is to introduce the basic information about head, neck, thoracic (mediastinum, gullet, lungs) and abdominal (stomach, duodenum, small intestine, colon, rectum, pancreas, liver, billiary system, abdominal wall hernia) surgery - incidence rate, etiology, patogenesis, diagnosis, treatment, prognosis.

Syllabus

- Head and neck surgery
- Surgery of the breast, trauma of the chest wall
- Lung surgery, mediastinum, oesophagus
- Hernias of the abdomen, diaphragma

- Surgery of the spleen and pancreas
- Stomach, duodenum, intestinal surgery
- Colon, rectum and anus

Literature

required literature

- FERKO, Alexander, Zdeněk ŠUBRT and Tomáš DĚDEK. *Chirurgie v kostce. 2.*, doplněné a přepracováno. Praha: Grada, 2015. 511 stran. ISBN 9788024710051. [info](#)
- ZEMAN, Miroslav. *Speciální chirurgie. 2. vyd.* Praha: Galén, 2004. xxiii, 575. ISBN 8072622609. [info](#)

not specified

- Náhradní obsah: L.W. Way, *Současná chirurgická diagnostika a léčba*, 1998, Grada Publ., ISBN 80-7169/397/9, Sabiston- *Textbook of Surgery*, ISBN 0-7216-1259-8. Doplnky: Ján Černý, *Špeciálna chirurgia*, Osveta 1996, S. Schwartz: *Textbook of Surgery*, L.W. Way
- ŠNAJDAUF, Jiří and Richard ŠKÁBA. *Dětská chirurgie. 1. vyd.* Praha: Galén, 2005. 395 s. ISBN 807262329X. [info](#)
- [STAFFA, Robert](#). *Záchrana kriticky ischemické končetiny -pedální bypass (Salvage of critically ischemic limb - pedal bypass grafting)*. 1. vyd. Praha: Grada Publishing, a.s., 2005. 112 pp. Grada Publishing Avicenum 2090. ISBN 80-247-0957-0. [info](#)
- ŠNAJDAUF, Jiří, Karel CVACHOVEC and Tomáš TRČ. *Dětská traumatologie. 1. vyd.* Praha: Galén, 2002. xv, 180. ISBN 8072621521. [info](#)
- FIRT, Pavel. *Cévní chirurgie*. Praha: Avicenum, 1991. ISBN 80-201-0047-4. [info](#)
- SABISTON, David C. *Textbook of Surgery*. 1991. ISBN 0-7216-3492-3. [info](#)

Teaching methods

lecture

Assessment methods

This lecture is not credited, it is a part of continual preparation for state final examination in surgery at the end of the education.

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

Information on completion of the course: Předložení prezentace na téma probírané v daném semestru. Nutná 100% účast na stážích.

The course is taught annually.

General note: Pro výuku ve FN Brno Bohunice: nutné převlékání (bílý plášť a přezůvky) v šatně pro mediky v -1.NP lůžkového traktu; výuka probíhá i v posluchárnách jiných klinik ve FN Brno. Aktuální rozpis je zveřejněn na vývěsce pro studenty na CHK v 7.NP.

Teacher's information

Výuka je zajištěna pracovníky následujících klinik: I, II, chirurgické kliniky FN u sv. Anny, Chirurgické kliniky FN Brno-Bohunice Chirurgické kliniky a Ortopedické kliniky

FDN Černopolní, Ortopedické kliniky nemocnice u sv. Anny a Ortopedické kliniky FN Brno Bohunice, ARK kliniky FN u sv. Anny, Kliniky Plastické chirurgie FN: Berkova ul, Centrum kardiovaskulární a transplantační chirurgie Pekařská. Kontaktní osoby pro jednotlivé předměty: I. chir: Doc. Veverková II.chir: Dr Piskač Chir.klinika Bohunice: Prof. Kala Dětská ortopedie: Dr. Jochymek Dětská chirurgie: Dr. Teyschl Ortopedie FN u sv. Anny: Dr. Rozkydal Ortopedie FN Bohunice: Doc. Chaloupka Plastická chirurgie: Dr. Dražan CKTCH: Doc. Němec Další informace na vývěškách a sekretariátech příslušných pracovišť

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#), [Accreditation autumn](#).

VLCH0832c Surgery II - practice ✳

Faculty of Medicine

Spring 2018

Extent and Intensity

0/4/0. 4 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Vladimír Bartl, CSc.](#) (seminar tutor)

[Mgr. MUDr. Štěpánka Bibrová, Ph.D.](#) (seminar tutor)

[MUDr. Ernest Biroš](#) (seminar tutor)

[doc. MUDr. Eva Brichtová, Ph.D.](#) (seminar tutor)

[prof. MUDr. Pavel Brychta, CSc.](#) (seminar tutor)

[MUDr. Jan Buček](#) (seminar tutor)

[prof. MUDr. Ivan Čapov, CSc.](#) (seminar tutor)

[MUDr. Jan Doležel, Ph.D.](#) (seminar tutor)

[MUDr. Robert Doušek](#) (seminar tutor)

[MUDr. Martin Dvořák, Ph.D.](#) (seminar tutor)

[prof. MUDr. Petr Gál, Ph.D.](#) (seminar tutor)

[doc. MUDr. Zdeněk Gregor, CSc.](#) (seminar tutor)

[prof. MUDr. Miloš Janeček, CSc.](#) (seminar tutor)

[doc. MUDr. Pavel Janíček, CSc.](#) (seminar tutor)

[MUDr. Jiří Jeřábek, Ph.D.](#) (seminar tutor)

[MUDr. Jiří Jochymek, Ph.D.](#) (seminar tutor)

[prof. MUDr. Zdeněk Kala, CSc.](#) (seminar tutor)

[MUDr. Petra Kocourková](#) (seminar tutor)

[MUDr. Jan Konečný, Ph.D.](#) (seminar tutor)

[MUDr. Zdeněk Konečný](#) (seminar tutor)

[MUDr. Miroslav Krejčí, Ph.D.](#) (seminar tutor)

[doc. MUDr. Jindřich Leypold, CSc.](#) (seminar tutor)

[MUDr. Pavel Mach, Ph.D.](#) (seminar tutor)

[doc. MUDr. Michal Mašek, CSc.](#) (seminar tutor)

[doc. MUDr. Ivan Müller, CSc.](#) (seminar tutor)
[MUDr. Tomáš Novotný, Ph.D.](#) (seminar tutor)
[doc. MUDr. Igor Penka, CSc.](#) (seminar tutor)
[doc. MUDr. Petr Piskač, CSc.](#) (seminar tutor)
[prof. MUDr. Ladislav Plánka, Ph.D.](#) (seminar tutor)
[doc. MUDr. Jiří Podlaha, CSc.](#) (seminar tutor)
[MUDr. Vladimír Procházka, Ph.D.](#) (seminar tutor)
[MUDr. Ivo Rovný](#) (seminar tutor)
[doc. MUDr. Zbyněk Rozkydal, Ph.D.](#) (seminar tutor)
[prof. MUDr. Robert Staffa, Ph.D.](#) (seminar tutor)
[MUDr. Andrea Suchomelová](#) (seminar tutor)
[prof. MUDr. Pavel Ševčík, CSc.](#) (seminar tutor)
[MUDr. Zdeněk Šilhart](#) (seminar tutor)
[MUDr. Otakar Teyschl, CSc.](#) (seminar tutor)
[MUDr. Richard Veselý](#) (seminar tutor)
[doc. MUDr. Lenka Veverková, Ph.D.](#) (seminar tutor)
[MUDr. Robert Vlachovský, Ph.D.](#) (seminar tutor)
[MUDr. Petr Vlček, Ph.D.](#) (seminar tutor)
[prof. MUDr. Jindřich Vomela, CSc., LL.M.](#) (seminar tutor)
[prof. MUDr. Peter Wendsche, CSc.](#) (seminar tutor)
[MUDr. Jan Žák, Ph.D.](#) (seminar tutor)
[prof. MUDr. Jan Žaloudík, CSc.](#) (seminar tutor)
[Hana Baráčková](#) (assistant)
[Lucie Kučerová](#) (assistant)
[Lea Müllerová](#) (assistant)
[Ivana Ondrášová](#) (assistant)
[Barbora Staňková](#) (assistant)
[Věra Stejskalová](#) (assistant)

Supervisor

[prof. MUDr. Ladislav Plánka, Ph.D.](#)
[Department of Pediatric Surgery, Orthopedics and Traumatology - Institutions shared with the Faculty Hospital Brno \(paediatric medicine\) - Faculty of Medicine](#)
Contact Person: [doc. MUDr. Lenka Veverková, Ph.D.](#)
Supplier department: [Department of Pediatric Surgery, Orthopedics and Traumatology - Institutions shared with the Faculty Hospital Brno \(paediatric medicine\) - Faculty of Medicine](#)

Prerequisites (in Czech)

[VLCH0731c Surgery I - practicals](#) && [VLFA0621c Pharmacology I - p](#)
(Do I meet enrolment requirements?)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The tuition in the 8th term is focused on the general surgery in its whole extent, supplemented with the lessons from orthopaedy, traumatology, surgery of burns and children surgery. Classwork is provided by the combined way through presentations, bedside teaching, seminars with the discussion.

Syllabus

- Hernias
- Stomach and Duodenum
- Liver and biliary system
- Pancreas, Spleen
- Small intestine
- Colon, rectum & anus
- Acute Abdomen
- Traumatology (spine, pelvis)
- Coxa, proximal femur
- Diaphysis, distal femur
- Knee, leg shin and calf)
- Ankle, foot
- Traumatology: polytrauma, spinal cord trauma
- Children surgery: Abdominal children surgery including acute abdomen
Congenital defects and its surgical treatment Children traumatology Children orthophedy
- Surgical oncology
- Burns: introduction, intensive care in the burn shock, skin replacement, plastic and reconstructive surgery in burns.

Literature

recommended literature

- ZEMAN, Miroslav and Zdeněk KRŠKA. *Speciální chirurgie*. 3., dopl. a přeprac. vyd. Praha: Galén, 2014. xviii, 511. ISBN 9788074921285. [info](#)
- FERKO, Alexander, Zdeněk ŠUBRT and Tomáš DĚDEK. *Chirurgie v kostce*. 2., doplněné a přepracova. Praha: Grada, 2015. 511 stran. ISBN 9788024710051. [info](#)
- Clinical Surgery: With Student Consult Access, 3e Paperback – 13 Feb 2012

Teaching methods

Class discussion on the base of materials in the textbook.

Assessment methods

Giving the course-unit credit is conditioned by full attendance in the lessons.

Language of instruction

Czech

Further comments (probably available only in Czech)

Information on completion of the course: Předložení prezentace, vypracování chorobopisu, 100% účast na stážích

The course is taught annually.

The course is taught: in blocks.

General note: Pro výuku ve FN Brno Bohunice: nutné převlékání (bílý plášť a přezůvky) v šatně pro mediky v -1.NP lůžkového traktu; výuka probíhá i v posluchárnách jiných klinik ve FN Brno. Aktuální rozpis je zveřejněn na vývěsce pro studenty na CHK v 7.NP.

Listed among pre-requisites of other courses

- [VLAM9X1c Intensive Care Medicine - practice](#)
([VLFA0822c](#) || [VLFA0722c](#)) && [VLCH0832c](#) && [VSIP0622p](#) && [VLCPP0622p](#)
&& [VLDM7X1c](#) && [VSOT7X1c](#) && [VLIN7X21](#) (Do I meet enrolment requirements?)
- [VLAM9X1p Intensive Care Medicine - lectures](#)
([VLFA0822c](#) || [VLFA0722c](#)) && [VLCH0832c](#) && [VLCH0731c](#) && [VSPF0622p](#)
&& [VSIP0622c](#) && [VLCPP0622p](#) && [VLDM7X1c](#) && [VSOT7X1c](#) &&
[VLIN7X21](#) (Do I meet enrolment requirements?)
- [VLCH9X33c Surgery III - practice](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLCH0832c](#) && [VLOR7X1](#) (Do I meet enrolment requirements?)
- [VLCH9X33p Surgery III - lecture](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLCH0832c](#) && [VLOR7X1](#) (Do I meet enrolment requirements?)
- [VLKA091 Clinical anatomy](#)
[VLCH0832c](#) (Do I meet enrolment requirements?)
- [VLNE9X1c Neurology - practice](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VSIP0622c](#) && [VLDM7X1c](#) && [VLLO7X1a](#)
&& [VLCH0832c](#) && [VLNP081c](#) (Do I meet enrolment requirements?)
- [VLNE9X1p Neurology - lecture](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VSIP0622c](#) && [VLDM7X1c](#) && [VLLO7X1a](#)
&& [VLCH0832c](#) && [VLNP081c](#) (Do I meet enrolment requirements?)
- [VLON091 Clinical Oncology - lecture](#)
([VLFA0822c](#) || [VLFA0722c](#)) && [VSIP0622p](#) && [VLCPP0622p](#) && [VLCH0832c](#)
&& [VSOT7X1c](#) (Do I meet enrolment requirements?)
- [VLON091c Clinical Oncology - practice](#)
([VLFA0822c](#) || [VLFA0722c](#)) && [VSIP0622p](#) && [VLCPP0622p](#) && [VLCH0832c](#)
&& [VSOT7X1c](#) (Do I meet enrolment requirements?)

[Zobrazit další předměty](#)

Teacher's information

Výuka probíhá na pracovištích I, II, chirurgické kliniky FN u sv. Anny, Chirurgické kliniky FN Brno-Bohunice Chirurgické kliniky FDN Černopolní, Ortopedické kliniky nemocnice u sv. Anny a Ortopedické kliniky FN Brno Bohunice, ARK kliniky FN u sv. Anny a KARIM FN Brno-Bohunice, Kliniky Plastické chirurgie FN: Berkova ul., Kliniky popáleninové medicíny FN Brno-Bohunice.

Kontaktní osoby pro jednotlivé předměty: I. chir: Doc. Veverková

II.chir: prof. Staffa

Chir.klinika Bohunice: prof. Kala

Dětská ortopedie : Dr. Jochymek Dětská chirurgie: doc. Brichtová

Ortopedie FN u sv. Anny: Doc. Rozkydal

Ortopedie FN Bohunice: Doc. Muller ARK FN u sv. Anny: Dr. Dadák

KARIMFN Bohunice: prof. Ševčík

Plastická chirurgie: Dr. Dražan

Medicína popálenin: Dr. Vokurková

Další informace na vývěškách a sekretariátech příslušných pracovišť. Úprava doplňujících údajů předmětu

https://is.muni.cz/auth/predmety/sylaby_plneni.pl?kod=VLCH0731c;fak... 6 KDCHOT - studenti jsou očekáváni v 7:45 před knihovnou kliniky ve spojovacím krčku mezi pavilony B a C ve 2. patře, před tím je třeba se převléci v šatně mediků u hlavní vrátnice (přezůvky, plášť). Výuka nepediatrických kruhů probíhá na KDCHOT 3 dny vždy 7:45 - 12:20 v šesti základních blocích, kdy je vždy vysvětlena teorie, poté se učivo demonstruje u lůžka pacienta. Pediatrické kruhy jsou na KDCHOT 9 dnů dle každodenního rozpisu (7:45 - 10:30 v klinickém provozu - ambulance, sály; 11:00 - 12:20 přednáška).

The course is also listed under the following terms [Spring 2000](#), [Spring 2001](#), [Spring 2002](#), [Spring 2003](#), [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VLCH0832p Surgery II - lectures ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

1/0/0. 0 credit(s). Type of Completion: z (credit).

Teacher(s)

[doc. MUDr. Eva Brichtová, Ph.D.](#) (lecturer)

[prof. MUDr. Ivan Čapov, CSc.](#) (lecturer)

[MUDr. Robert Doušek](#) (lecturer)

[doc. MUDr. Jindřich Leypold, CSc.](#) (lecturer)

[doc. MUDr. Igor Penka, CSc.](#) (lecturer)

[prof. MUDr. Ladislav Plánka, Ph.D.](#) (lecturer)

[MUDr. Vladimír Procházka, Ph.D.](#) (lecturer)

[doc. MUDr. Lenka Veverková, Ph.D.](#) (lecturer)

[prof. MUDr. Jindřich Vomela, CSc., LL.M.](#) (lecturer)

[prof. MUDr. Jan Žaloudík, CSc.](#) (lecturer)
[Mgr. MUDr. Štěpánka Bibrová, Ph.D.](#) (seminar tutor)
[Lucie Kučerová](#) (assistant)
[Barbora Staňková](#) (assistant)

Supervisor

[prof. MUDr. Ladislav Plánka, Ph.D.](#)
[Department of Pediatric Surgery, Orthopedics and Traumatology - Institutions shared with the Faculty Hospital Brno \(paediatric medicine\) - Faculty of Medicine](#)
Contact Person: [doc. MUDr. Lenka Veverková, Ph.D.](#)
Supplier department: [Department of Pediatric Surgery, Orthopedics and Traumatology - Institutions shared with the Faculty Hospital Brno \(paediatric medicine\) - Faculty of Medicine](#)

Prerequisites (in Czech)

[VLCH0731c Surgery I - practicals](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Main objectives of this lecture is to introduce the basic information about acute abdomen, vascular surgery and complete traumatology - incidence rate, etiology, patogenesis, diagnosis, treatment, prognosis.

Syllabus

- Acute abdomen I
- Acute abdomen II
- Cardiovascular surgery I
- Cardiovascular surgery II
- Traumatology I-IV

Literature

- ZEMAN, Miroslav and Zdeněk KRŠKA. *Speciální chirurgie*. 3., dopl. a přeprac. vyd. Praha: Galén, 2014. xviii, 511. ISBN 9788074921285. [info](#)
- FERKO, Alexander, Zdeněk ŠUBRT and Tomáš DĚDEK. *Chirurgie v kostce*. 2., doplněné a přepracova. Praha: Grada, 2015. 511 stran. ISBN 9788024710051. [info](#)
- Clinical Surgery: With Student Consult Access, 3e Paperback – 13 Feb 2012

Teaching methods

Lecture

Assessment methods

This lecture is not credited, it is a part of continual preparation for state final examination in surgery at the end of the education.

Language of instruction

Czech

Further comments (probably available only in Czech)

Information on completion of the course: Předložení prezentace na téma probírané v daném semestru, vypracování chorobopisu, 100% účast na stážích.

The course is taught annually.

Note related to how often the course is taught: 8 týdnů po 2 hodinách.

General note: Pro výuku ve FN Brno Bohunice: nutné převlékání (bílý plášť a přezůvky) v šatně pro mediky v -1.NP lůžkového traktu; výuka probíhá i v posluchárnách jiných klinik ve FN Brno. Aktuální rozpis je zveřejněn na vývěsce pro studenty na CHK v 7.NP.

Teacher's information

Výuka probíhá na pracovištích I, II, chirurgické kliniky FN u sv. Anny, Chirurgické kliniky FN Brno-Bohunice Chirurgické kliniky FDN Černopolní, Ortopedické kliniky nemocnice u sv. Anny a Ortopedické kliniky FN Brno Bohunice, ARK kliniky FN u sv. Anny a KARIM FN Brno-Bohunice, Kliniky Plastické chirurgie FN: Berkova ul., Kliniky popáleninové medicíny FN Brno-Bohunice Kontaktní osoby pro jednotlivé předměty: I. chir: Doc. Veverková II.chir: prof. Staffa Chir.klinika Bohunice: prof. Kala Dětská ortopedie : Dr. Jochymek Dětská chirurgie: Dr. Teyschl Ortopedie FN u sv. Anny: Doc. Rozkydal Ortopedie FN Bohunice: Doc. Muller ARK: Dr. Dadák KARIM: prof. Ševčík Plastická chirurgie: Dr. Dražan Medicína popálenin: Dr. Vokurková Další informace na vývěskách a sekretariátech příslušných pracovišť. Úprava doplňujících údajů předmětu [https://is.muni.cz/auth/predmety/sylaby_plneni.pl?kod=VLCH0731c;fak... 6](https://is.muni.cz/auth/predmety/sylaby_plneni.pl?kod=VLCH0731c;fak...)

The course is also listed under the following terms [Spring 2000](#), [Spring 2001](#), [Spring 2002](#), [Spring 2003](#), [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VLCH11Xpp Surgery - Pre-graduation Practice ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/30/0. 16 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Ivan Čapov, CSc.](#) (lecturer)

[MUDr. Vladimír Bartl, CSc.](#) (seminar tutor)

[Mgr. MUDr. Štěpánka Bibrová, Ph.D.](#) (seminar tutor)

[doc. MUDr. Eva Brichtová, Ph.D.](#) (seminar tutor)

[prof. MUDr. Petr Gál, Ph.D.](#) (seminar tutor)

[MUDr. Pavel Gladiš, CSc.](#) (seminar tutor)

[Pavla Hanková](#) (seminar tutor)

[MUDr. Jaroslav Ivičič](#) (seminar tutor)

[prof. MUDr. Miloš Janeček, CSc.](#) (seminar tutor)

[doc. MUDr. Václav Jedlička, Ph.D.](#) (seminar tutor)
[prof. MUDr. Zdeněk Kala, CSc.](#) (seminar tutor)
[MUDr. Jan Konečný, Ph.D.](#) (seminar tutor)
[MUDr. Zdeněk Kříž](#) (seminar tutor)
[doc. MUDr. Jindřich Leypold, CSc.](#) (seminar tutor)
[MUDr. Pavel Mach, Ph.D.](#) (seminar tutor)
[doc. MUDr. Michal Mašek, CSc.](#) (seminar tutor)
[doc. MUDr. Libor Paša, Ph.D.](#) (seminar tutor)
[doc. MUDr. Petr Piskač, CSc.](#) (seminar tutor)
[prof. MUDr. Ladislav Plánka, Ph.D.](#) (seminar tutor)
[doc. MUDr. Jiří Podlaha, CSc.](#) (seminar tutor)
[MUDr. Mojmír Přivara](#) (seminar tutor)
[MUDr. Petr Roubal, CSc.](#) (seminar tutor)
[prof. MUDr. Robert Staffa, Ph.D.](#) (seminar tutor)
[MUDr. Roman Svatoň](#) (seminar tutor)
[MUDr. Otakar Teyschl, CSc.](#) (seminar tutor)
[doc. MUDr. Lenka Veverková, Ph.D.](#) (seminar tutor)
[MUDr. Petr Vlček, Ph.D.](#) (seminar tutor)
[prof. MUDr. Jindřich Vomela, CSc., LL.M.](#) (seminar tutor)
[MUDr. Jan Žák, Ph.D.](#) (seminar tutor)
[prof. MUDr. Jan Žaloudík, CSc.](#) (seminar tutor)
[Hana Baráčková](#) (assistant)
[Pavla Hanková](#) (assistant)
[Lenka Chrástová](#) (assistant)
[Lucie Kučerová](#) (assistant)
[Iveta Mášová](#) (assistant)
[Lea Müllerová](#) (assistant)
[Barbora Staňková](#) (assistant)
[prof. MUDr. Peter Wendsche, CSc.](#) (assistant)

Supervisor

[MUDr. Vladimír Procházka, Ph.D.](#)
[Second Department of Surgery - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)
Supplier department: [Second Department of Surgery - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The principle purpose of this lecture is to engage the medical students in daily condition of surgery department.

Syllabus

- The participation in morning visits
- polyclinic
- operating
- afternoon presentation
- special lectures and seminars

Literature

- ŠNAJDAUF, Jiří and Richard ŠKÁBA. *Dětská chirurgie*. 1. vyd. Praha: Galén, 2005. 395 s. ISBN 807262329X. [info](#)
- ZEMAN, Miroslav. *Speciální chirurgie*. 2. vyd. Praha: Galén, 2004. xxiii, 575. ISBN 8072622609. [info](#)

Teaching methods

practical training at the clinic

Assessment methods

State final examination - 5 theoretical questions (case report - diagnosis, differential diagnostics, treatment proposal - bandage, surgical instruments, X-ray imaging).

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

Information on completion of the course: Komise pro SRZ je studentovi přidělena

The course can also be completed outside the examination period.

The course is taught annually.

The course is taught: in blocks.

Note related to how often the course is taught: souvilsý blok 5 týdnů. Studentu jsou vypsáni na předpromoční praxi dle termínů a pracovišť.

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

VLCH11XX Surgery - State Exam ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/0/0. 0 credit(s). Type of Completion: SRZK (closing examination).

Teacher(s)

[Hana Baráčková](#) (seminar tutor)

[MUDr. Vladimír Bartl, CSc.](#) (seminar tutor)

[prof. MUDr. Ivan Čapov, CSc.](#) (seminar tutor)
[MUDr. Jan Doležel, Ph.D.](#) (seminar tutor)
[prof. MUDr. Petr Gál, Ph.D.](#) (seminar tutor)
[MUDr. Pavel Gladiš, CSc.](#) (seminar tutor)
[prof. MUDr. Miloš Janeček, CSc.](#) (seminar tutor)
[doc. MUDr. Václav Jedlička, Ph.D.](#) (seminar tutor)
[MUDr. Jiří Jeřábek](#) (seminar tutor)
[prof. MUDr. Zdeněk Kala, CSc.](#) (seminar tutor)
[MUDr. Jan Konečný, Ph.D.](#) (seminar tutor)
[MUDr. Zdeněk Kříž](#) (seminar tutor)
[doc. MUDr. Jindřich Leypold, CSc.](#) (seminar tutor)
[MUDr. Pavel Mach, Ph.D.](#) (seminar tutor)
[doc. MUDr. Michal Mašek, CSc.](#) (seminar tutor)
[doc. MUDr. Petr Piskač, CSc.](#) (seminar tutor)
[doc. MUDr. Jiří Podlaha, CSc.](#) (seminar tutor)
[MUDr. Mojmír Přivara](#) (seminar tutor)
[MUDr. Ivo Rovný](#) (seminar tutor)
[prof. MUDr. Robert Staffa, Ph.D.](#) (seminar tutor)
[MUDr. Otakar Teyschl, CSc.](#) (seminar tutor)
[doc. MUDr. Lenka Veverková, Ph.D.](#) (seminar tutor)
[MUDr. Petr Vlček, Ph.D.](#) (seminar tutor)
[doc. MUDr. Jiří Vokurka, CSc.](#) (seminar tutor)
[prof. MUDr. Jindřich Vomela, CSc., LL.M.](#) (seminar tutor)
[prof. MUDr. Jan Wechsler, CSc.](#) (seminar tutor)
[MUDr. Jan Žák, Ph.D.](#) (seminar tutor)
[prof. MUDr. Jan Žaloudík, CSc.](#) (seminar tutor)
[Lucie Kučerová](#) (assistant)

Supervisor

[MUDr. Vladimír Procházka, Ph.D.](#)

[Second Department of Surgery - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Contact Person: [doc. MUDr. Lenka Veverková, Ph.D.](#)

Supplier department: [Second Department of Surgery - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Prerequisites (in Czech)

([VLFA0822p Pharmacology II - L](#) || [VLFA0722p Pharmacology - L](#)) &&
[VLNE9X1p Neurology - lecture](#) && [VLPY9X1p Psychiatry - lect.](#) &&
[VLVZ9X1c Health Care and Policy](#) && [VSDV9X22p Dermatovenereology II-I](#) &&
[VLAM9X1p Intensive care med. - lect.](#) && ([VLVL7X61c Internal medicine part 1](#) ||
[VLVL9X61c Internal medicine part 1](#)) && [VLVL9X62c Internal medicine part 2](#) &&
[VLVL9X63c Internal medicine part 3](#) && [VLVL9X64c Internal medicine part 4](#) && ([VLVL9X65c Internal medicine part 5](#) || [VLVL7X65c Internal medicine part 5](#)) &&
[VLVL9X66c Internal medicine part 6](#) && [VLPD1033c Pediatrics III-practice](#) &&
[VLIN9X22 Infectious diseases II](#) && [VLS7X1p Forensic med.-lectures](#) &&
[VSEI7X1 EPI](#) && [VL0L7X1 Ophthalmology - lec.](#) &&
[VSOT7X1p Otorhinolaryngology-lect.](#) && [VSLP7X1 Medical Psychology](#) &&
[VLPL9X1 Prevent. Med.](#) && [VLON091 Clinical oncology](#) &&

[VLST7X1p stomatology -I](#) && [VSLE7X1p Medical Ethics 2 - lecture](#) && [VLPG1022c Gynecol. and obst. II- pract.](#) && VYCET (3 , [VLPS07X Posudkové lékařství](#) || [VLPS071 Medical Assessment Service](#) , [VSAT081 Fundament.of AntimicrobTherap](#) , [VLKA091 Clinical anatomy](#) , [VSNO071 Ophthalmology news](#) , [VSPM071 Palliative Medicine](#) , [VLKB091 Clinical Biochemistry](#) , [VLKF091 Clinical Pharmacology](#) , [BMBS051 Biostatistics - basic course](#) , [VLPM071 Legal Aspects in Medicine](#) , [VLEP041 The Economics of Health Care](#) , [VLIA081 Clin.immunol. alergol.](#) , [VLKM081 Commun.in medicine](#) , [VLRL041 Medicinal plants](#) , [VLTL081 Sports Medicine](#) , [VSDL071 Diagnostics and management in orthopaedic surgery](#) , [VSAL081 Anaesth. and Tr. of Pain I](#) , [VSFP071 Neonatal Physiology and Pathol](#)) && [VLCH9X33c Surgery III - practicals](#) && ([VLAJ0222 English 1 II -p](#) || [VSAJ0222 English 1 II -p](#) || [VSNJ0222 German 1 II -p](#)) && [VSSP03X Individual project](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the state exam of surgery is to verify the students knowledge of the general and special surgery in a full scale. Student has to be able to make clinical examination of the patient, differential diagnostics assessment and to propose next treatment. Student should be familiar with the acute surgical illness and its general treatment algorithm.

Syllabus

- State surgery exam
- general surgery
- special surgery
- clinical examination
- differential diagnostics assessment
- treatment proposition
- acute surgical illness

Literature

- PAFKO, Pavel. *Základy speciální chirurgie*. 1. vyd. Praha: Galén, 2008. 385 s. ISBN 9788072624027. [info](#)
- ŠNAJDAUF, Jiří and Richard ŠKÁBA. *Dětská chirurgie*. 1. vyd. Praha: Galén, 2005. 395 s. ISBN 807262329X. [info](#)
- HOCH, Jiří and Jan LEFFLER. *Speciální chirurgie : učebnice pro lékařské fakulty*. 2. vyd. Praha: Maxdorf, 2003. 224 s. ISBN 8085912066. [info](#)

- MARKO, Lubomír and Peter KOTHAJ. *Atlas miniinvazívnej chirurgie a chirurgickej endoskopie*. 1. vyd. Banská Bystrica: Marko, 1998. 156 s. ISBN 8096807609. [info](#)
- KABELKA, Miroslav. *Dětská chirurgie : učebnice pro lékařské fakulty*. 1. vyd. Praha: Karolinum, 1992. 320 s. ISBN 8070665610. [info](#)

Teaching methods

preparing for state examination

Assessment methods

State Exam of Surgery has practical and theoretical part. In the practical part the complete clinical examination including the elaboration of the clinical record is needed. Student must prove ability of the decision-making and orientation in the differential diagnostics. Theoretical part consists of 3 questions: one from general surgery and 2 from special surgery.

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

Information on completion of the course: Komise pro SRZ je studentovi přidělena

The course can also be completed outside the examination period.

The course is taught annually.

The course is taught: in blocks.

Note related to how often the course is taught: souvilsý blok 5 týdnů. Studentu jsou vypsáni na předpromoční praxi dle termínů a pracovišť.

Teacher's information

Rozpisy studentů do jednotlivých termínů SRZ a komisí jsou k dispozici na webových stránkách LF (studium-užitečné informace) The list of students for the state exam of surgery is available in the web of the medical faculty

The course is also listed under the following terms [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

VLCH9X33c Surgery III - practicals ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/3/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Olusegun Babajide Adedokun](#) (seminar tutor)

[doc. MUDr. Eva Brichtová, Ph.D.](#) (seminar tutor)

[MUDr. Aleš Čermák, Ph.D.](#) (seminar tutor)

[doc. MUDr. Luboš Dražan, Ph.D.](#) (seminar tutor)
[MUDr. Zdeněk Dvořák, Ph.D.](#) (seminar tutor)
[MUDr. Pavel Fadrus, Ph.D.](#) (seminar tutor)
[MUDr. Michal Fedorko, Ph.D., FEBU](#) (seminar tutor)
[MUDr. Petr Fila, Ph.D.](#) (seminar tutor)
[MUDr. Motasem Ghazal](#) (seminar tutor)
[MUDr. Michaela Heroutová](#) (seminar tutor)
[doc. MUDr. Jan Chrastina, Ph.D.](#) (seminar tutor)
[doc. MUDr. Radim Jančálek, Ph.D.](#) (seminar tutor)
[MUDr. Martin Knoz](#) (seminar tutor)
[MUDr. Tomáš Kubek, Ph.D.](#) (seminar tutor)
[MUDr. Mohamed Ismail Abdo Nussir, Ph.D.](#) (seminar tutor)
[prof. MUDr. Dalibor Pacík, CSc.](#) (seminar tutor)
[prof. MUDr. Martin Smrčka, Ph.D., MBA](#) (seminar tutor)
[MUDr. Šárka Stiborová](#) (seminar tutor)
[MUDr. Gabriel Varga, Ph.D.](#) (seminar tutor)
[prof. MUDr. Jiří Veselý, CSc.](#) (seminar tutor)
[MUDr. Vítězslav Vít](#) (seminar tutor)
[Hana Baráčková](#) (assistant)
[Iveta Králíková](#) (assistant)
[Magda Krčmářová](#) (assistant)
[Lea Müllerová](#) (assistant)
[Olga Pazderková](#) (assistant)
[Zdeňka Štikarová](#) (assistant)

Supervisor

[MUDr. Tomáš Novotný, Ph.D.](#)

[Second Department of Surgery - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Supplier department: [Second Department of Surgery - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Timetable of Seminar Groups

VLCH9X33c/09: Mon 18. 12. to Fri 22. 12. each working day 7:30–12:30 [Webová stránka](#)
[stránka LF - rozvrh](#), Mon 1. 1. to Fri 5. 1. each working day 7:30–12:30 [Webová stránka](#)
[LF - rozvrh](#)

VLCH9X33c/10: Mon 4. 12. to Fri 15. 12. each working day 7:30–12:30 [Webová stránka](#)
[LF - rozvrh](#)

VLCH9X33c/11: Mon 20. 11. to Fri 1. 12. each working day 7:30–12:30 [Webová stránka](#)
[LF - rozvrh](#)

VLCH9X33c/12: Mon 6. 11. to Fri 17. 11. each working day 7:30–12:30 [Webová stránka](#)
[LF - rozvrh](#)

VLCH9X33c/15: Mon 23. 10. to Fri 3. 11. each working day 7:30–12:30 [Webová stránka](#)
[LF - rozvrh](#)

VLCH9X33c/16: Mon 9. 10. to Fri 20. 10. each working day 7:30–12:30 [Webová stránka](#)
[LF - rozvrh](#)

VLCH9X33c/32: Mon 25. 9. to Fri 6. 10. each working day 7:30–12:20 [Webová stránka](#)
[LF - rozvrh](#)

VLCH9X33c/33: Mon 8. 1. to Fri 19. 1. each working day 7:30–12:20 [Webová stránka LF - rozvrh](#)

Prerequisites (in Czech)

([VLFA0822p Pharmacology II - L](#) || [VLFA0722p Pharmacology - L](#)) && [VLCH0832c Surgery II - practicals](#) && [VLOR7X1 Orthopaedics - practice](#) ([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The tuition in the 5th year takes its course in the fourteen days block. It includes 10 teaching hours of neurosurgery and plastic surgery, 8 hours of urology and 2 hours of cardiac surgery. Students should acquire basic knowledge and general view of mentioned surgical specialities.

Syllabus

- Neurosurgery: Introduction, wards and outpatients clinic, craniotomy, endoscopy, gamma knife, unconsciousness, intracranial hypertension, cerebral trauma, surgical neurooncology, vascular brain disease, surgery of epilepsy, hydrocephalus, degenerative backbone disease, surgery of the peripheral nerves, pain surgery, intracranial inflammatory disease.
- Urology: Introduction, wards and outpatients clinic, clinical investigation in urology, uroinfection, urolithiasis, renal colic, traumatology in urology, benign prostatic hyperplasia, urethral stricture, urinary incontinence, urooncology, erectile dysfunction.
- Plastic surgery: Introduction, wards and outpatients clinic, skin and musculocutaneous flaps, replantation, microsurgery, craniofacial surgery, hand surgery, children plastic surgery, congenital defects, reconstructive plastic in oncologic surgery, aesthetic surgery, breast reconstructive surgery.
- Cardiac surgery: Introduction, extracorporeal circuit, valvular defects, CABG, heart transplantation, surgery of the thoracic aorta, congenital defects of the heart and major vessels.

Literature

- HANUŠ, Tomáš and Petr MACEK. *Urologie pro mediky*. Vydání první. Praha: Galén, 2015. 305 stan. ISBN 9788024630083. [info](#)
- VESELÝ, Jiří. *Plastická chirurgie (Plastic surgery)*. Brno, 2007. [info](#)
- SMRČKA, Martin and Vladimír PŘIBÁŇ. *Vybrané kapitoly z neurochirurgie : pro studenty lékařské fakulty*. 1. vyd. Brno: Masarykova univerzita, 2005. 98 s. ISBN 8021037881. [info](#)

- ZEMAN, Miroslav. *Speciální chirurgie*. 2. vyd. Praha: Galén, 2004. xxiii, 575. ISBN 8072622609. [info](#)

Teaching methods

The tuition is provided in seminars with discussion, students are present during the surgical procedures in the operating room, bedside procedures and also in outpatient clinic.

Assessment methods

The written test in the end of the particular speciality is highly recommended. The credits are given on condition of the full training attendance and successful test results.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught each semester.

Listed among pre-requisites of other courses

- [VLCH11XX Surgery - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLT081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [VLPD11XX Paediatrics - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLT081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [VLPG11XX Obstetric and Gynaecology - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && [VLVL9X66c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VSNO071](#), [VLKA091](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#),

[VLPM071](#), [VLEP041](#), [VLTL081](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSDL071](#), [VLRL041](#), [VLIA081](#), [VLKM081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

- **[VLRL11XX](#) Family Medicine and Geriatrics**
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLIN9X22](#) && [VLPL9X1](#) && [VLON091](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTL081](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) (Do I meet enrolment requirements?)
- **[VLVL11XX](#) Internal Medicine - State Exam**
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLS7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- **[VLZP11XX](#) Public Health - State Exam**
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLS7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

Teacher's information

Programy jednotlivých stáží jsou uvedeny na vývěskách jednotlivých pracovišť. Stáže se odehrávají dle rozpisu na Klinice plastické a estetické chirurgie FN u sv. Anny (ul. Berkova), na Neurochirurgické klinice FN Brno a FN u sv. Anny, Urologické klinice FN Brno-Bohunice a v Centru kardiochirurgie a transplantační chirurgie FN u sv. Anny.

The course is also listed under the following terms [Autumn 1999](#), [Spring 2000](#), [Autumn 2000](#), [Spring 2001](#), [Autumn 2001](#), [Spring 2002](#), [Autumn 2002](#), [Spring 2003](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#),

[Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

VLCH9X33p Surgery III - lectures ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

1/0/0. 0 credit(s). Type of Completion: -.

Teacher(s)

[MUDr. Olusegun Babajide Adedokun](#) (lecturer)
[doc. MUDr. Eva Brichtová, Ph.D.](#) (lecturer)
[MUDr. Aleš Čermák, Ph.D.](#) (lecturer)
[doc. MUDr. Luboš Dražan, Ph.D.](#) (lecturer)
[MUDr. Zdeněk Dvořák, Ph.D.](#) (lecturer)
[MUDr. Pavel Fadrus, Ph.D.](#) (lecturer)
[MUDr. Michal Fedorko, Ph.D., FEBU](#) (lecturer)
[MUDr. Petr Fila, Ph.D.](#) (lecturer)
[MUDr. Motasem Ghazal](#) (lecturer)
[MUDr. Michaela Heroutová](#) (lecturer)
[doc. MUDr. Jan Chrastina, Ph.D.](#) (lecturer)
[doc. MUDr. Radim Jančálek, Ph.D.](#) (lecturer)
[MUDr. Martin Knoz](#) (lecturer)
[MUDr. Tomáš Kubek, Ph.D.](#) (lecturer)
[MUDr. Mohamed Ismail Abdo Nussir, Ph.D.](#) (lecturer)
[prof. MUDr. Dalibor Pacík, CSc.](#) (lecturer)
[prof. MUDr. Martin Smrčka, Ph.D., MBA](#) (lecturer)
[MUDr. Šárka Stiborová](#) (lecturer)
[MUDr. Gabriel Varga, Ph.D.](#) (lecturer)
[prof. MUDr. Jiří Veselý, CSc.](#) (lecturer)
[MUDr. Vítězslav Vít](#) (lecturer)

Supervisor

[MUDr. Tomáš Novotný, Ph.D.](#)
[Second Department of Surgery - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)
Supplier department: [Second Department of Surgery - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Timetable

Mon 18. 9. 14:40–17:00 [A11/114](#), Tue 19. 9. 14:40–17:00 [A11/114](#)

- Timetable of Seminar Groups:

VLCH9X33p/VLA: Mon 18. 9. 12:00–14:30 [A11/334](#), Tue 19. 9. 12:00–14:30 [A9/324](#)

Prerequisites (in Czech)

([VLFA0822p Pharmacology II - L](#) || [VLFA0722p Pharmacology - L](#)) &&
[VLCH0832c Surgery II - practicals](#) && [VSLE7X1p Medical Ethics 2 - lecture](#) &&
[VLOR7X1 Orthopaedics - practice](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The surgical lectures in the 5th year have a selective character. The aim is to present chosen topic more in detail, with respect to its significance. The topics of the lectures are selected by lecturers of the following surgical specialities: neurosurgery, plastic surgery, urology.

Syllabus

- Plastic surgery: Replantation and hand surgery, Reconstruction of the soft tissues in the extensive oncological surgery, Current possibilities in the aesthetic surgery
- Neurosurgery: Intracranial expansion - imaging and surgical treatment, Head trauma and the intracranial hypertension syndrome, Intracerebral aneurysm and its treatment
- Urology: Infections in urology Prostate carcinoma Erectile dysfunction

Literature

- HANUŠ, Tomáš and Petr MACEK. *Urologie pro mediky*. Vydání první. Praha: Galén, 2015. 305 stan. ISBN 9788024630083. [info](#)
- VESELÝ, Jiří. *Plastická chirurgie (Plastic surgery)*. Brno, 2007. [info](#)
- [SMRČKA, Martin](#), [Vladimír PRIBÁŇ](#), Roman GAL, [Pavel FADRUS](#) and [Libor PAŠA](#). *Vybrané kapitoly z neurochirurgie pro studenty lékařské fakulty*. Brno: Masarykova univerzita v Brně, 2005. 110 pp. ISBN 80-210-3788-1. [info](#)
- ZEMAN, Miroslav. *Speciální chirurgie*. 2. vyd. Praha: Galén, 2004. xxiii, 575. ISBN 8072622609. [info](#)

Teaching methods

The lectures have a form of the presentations of the selected topics by prominent experts. The discussion after the presentation is welcome.

Assessment methods

Subject Surgery composed of Surgery I, Surgery II and Surgery III is concluded by state examination.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

Information on the per-term frequency of the course: pouze v letním semestru.

Teacher's information

Přednášky v českém jazyce probíhají vždy v průběhu jarního semestru. Rozpis a termíny přednášek jsou uvedeny na webových stránkách LF a vývěskách jednotlivých pracovišť.

The lectures in English are given always during the autumn semester. The list and schedule of selected lectures is shown on the web-site of the medical faculty and on wall-posters of the individual department.

The course is also listed under the following terms [Autumn 1999](#), [Spring 2000](#), [Autumn 2000](#), [Spring 2001](#), [Autumn 2001](#), [Spring 2002](#), [Autumn 2002](#), [Spring 2003](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#).

VLIA081 Clinical Immunology and Alergology ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

3/0. 3 credit(s). Type of Completion: k (colloquium).

Teacher(s)

[doc. MUDr. Tomáš Freiburger, Ph.D.](#) (lecturer)

[prof. MUDr. Jiří Litzman, CSc.](#) (lecturer)

[prof. MUDr. Jindřich Lokaj, CSc.](#) (lecturer)

[prof. MUDr. Vojtěch Thon, Ph.D.](#) (lecturer)

[Miroslava Bučková](#) (assistant)

Supervisor

[prof. MUDr. Jiří Litzman, CSc.](#)

[Department of Clinical Immunology and Allergology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Contact Person: [prof. MUDr. Jiří Litzman, CSc.](#)

Supplier department: [Department of Clinical Immunology and Allergology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Prerequisites

[VLIM051p Immunology - lecture](#) && [VSPF0622c Pathophys. II - pract. train.](#) && [VSPA0622c Pathology - practice](#)

Passed examination in Immunology (3rd year)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the course is to get students acquainted with the most frequent immunopathological diseases, their pathophysiology, clinical symptoms and signs, diagnosis and treatment. The diseases caused by the deficiency of the immune system, autoimmunity, and immunological hypersensitivity are predominantly discussed. Various aspects of laboratory diagnosis of immunopathological diseases and interpretation of the laboratory tests are included in the lectures as well. The lectures broaden the knowledge obtained during the subject „immunology“ and prepares the students for the study of specialized clinical subjects dealing with various immunopathological diseases. At the end of the course student should be able to understand and explain basic symptomatology of the most important immunopathological diseases and interpret tests used for their diagnostics.

Learning outcomes

The student will be familiar with the manifestation, diagnosis and treatment of immunodeficiency states and autoimmune diseases;

The student will understand the principles of diagnosis and treatment of various allergic diseases;

The student will become acquainted with the organization of transplantation care, basic immunological aspects of organ transplantation;

The student will understand the principles of immunomodulatory treatment;

Syllabus

- Laboratory tests in clinical immunology, indications, limitations.
- Primary and secondary immune deficiencies. Frequent infections in infancy and childhood. Frequent infections in adults. HIV disease.
- Immune tolerance. Systemic autoimmune diseases.
- Organ-specific autoimmune diseases.
- Immune complex diseases. Vasculitic diseases.
- Pathophysiology of atopic diseases. Treatment of atopic diseases.
- Allergy of the respiratory tract. Food allergy. Drug intolerance.
- Organ transplantation.
- Treatment of immunopathological diseases.

Literature

recommended literature

- [SOUČEK, Miroslav](#), [Jindřich ŠPINAR](#), [Jiří VORLÍČEK](#), [Zdeněk ADAM](#), [Dagmar ADÁMKOVÁ KRÁKOROVÁ](#), Lenka BABIČKOVÁ, [Karola BALŠÍKOVÁ](#), [Drahomíra BARTOŠOVÁ](#), [Otakar BEDNAŘÍK](#), Richard BERGER, [Šárka BOHATÁ](#), [Petr BRHEL](#), Tomáš BRYCHTA, [Yvona BRYCHTOVÁ](#), [Alena BULIKOVÁ](#), [Petr BURKOŇ](#), [Ivan ČAPOV](#), [Aleš ČERMÁK](#), [Eva ČEŠKOVÁ](#), [Milan DASTYCH](#), [Regina DEMLOVÁ](#), [Petr DÍTĚ](#), [Jiří DOLINA](#), [Michael DOUBEK](#), [Martina DOUBKOVÁ](#), [Lenka DUBSKÁ](#), [Ladislav DUŠEK](#), [Pavel FABIAN](#), [Vuk FAIT](#), [Zdeněk FOJTÍK](#), [Lenka FORETOVÁ](#), [Tomáš FREIBERGER](#), [Renata GAILLYOVÁ](#), [Roman GÁL](#),

Ladislav GROCH, [Marek HAKL](#), [Jana HALÁMKOVÁ](#), [Aleš HEP](#), Jitka HILLOVÁ MANNOVÁ, Ota HLINOMAZ, Ivo HOFÍREK, [Jan HOLČÍK](#), [Alena HOLČÍKOVÁ](#), Alena HONDLOVÁ, [Anna HRAZDIROVÁ](#), Jan HRUDA, [Petr HUSA](#), Libuše HUSOVÁ, [Richard CHALOUPKA](#), Václav CHALOUPKA, [Josef CHOVANEC](#), Stanislav JANOUŠEK, Jana JURÁNKOVÁ, [Ladislav KABELKA](#), [Zdeněk KADAŇKA](#), [Bohdan KADLEC](#), [Zdeněk KALA](#), [Bohuslav KIANIČKA](#), Dagmar KINDLOVÁ, [Igor KISS](#), [Jarmila KISSOVÁ](#), [Martin KLABUSAY](#), [Ivo KOCÁK](#), Jiří KÖNIG, [Jana KOPTÍKOVÁ](#), [Zdeněk KOŘÍSTEK](#), [Zdeněk KRÁL](#), Milan KRATOCHVÍL, [Lenka KRBKOVÁ](#), [Marta KREJČÍ](#), Petr KRIFTA, Petr KROUPA, [Darja KRUSOVÁ](#), Lucie KŘIKAVOVÁ, [Růžena LÁBROVÁ](#), [Radek LAKOMÝ](#), Jan LATA, Jolana LIPOLDOVÁ, [Jiří LITZMAN](#), [Ondřej LUDKA](#), [Jan MALÁSKA](#), [Hana MATĚJOVSKÁ KUBEŠOVÁ](#), Jiří MATOUŠEK, Pavel MATUŠKA, Miloslava MATÝŠKOVÁ, [Jaroslav MELUZÍN](#), [Hana MELUZÍNOVÁ](#), [Zdeněk MERTA](#), [Blanka MIČÁNKOVÁ ADAMOVIČ](#), Miroslav MORÁN, [Vojtěch MORNSTEIN](#), [Jan MUŽÍK](#), Tomáš NEBESKÝ, Anna NEČASOVÁ, [Marta NEDBÁLKOVÁ](#), Miroslava NEKULOVÁ, [Petr NĚMEC](#), Jiří NEUBAUER, Pavel NOHEL, Jana BĚLOBRÁDKOVÁ, [Miroslav NOVÁK](#), [Bronislava NOVOTNÁ](#), [Petr ŠTOURAC](#) and [Vojtěch THON](#). *Vnitřní lékařství (Internal Medicine)*. 1. vyd. Praha, Brno: Grada, 2011. 1788 pp. Vnitřní lékařství. ISBN 978-80-247-2110-1. [info](#)

- DÍTĚ, Petr. *Vnitřní lékařství*. Druhé, doplněné a přepra. Praha: Galén, 2007. xx, 586. ISBN 9788072624966. [info](#)

not specified

- Fučíková T: *Klinická imunologie v praxi*, Galén, 1997

Teaching methods

The subject is given in a form of lectures.

Assessment methods

Written test

Language of instruction

Czech

Further comments (probably available only in Czech)

The course can also be completed outside the examination period.

The course is taught annually.

The course is taught: every week.

Listed among pre-requisites of other courses

- [VLCH11XX Surgery - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#)
&& [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) &&
[VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) ||
[VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) &&
[VLSD7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) &&
[VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) &&
VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#),

[VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

- **[VLPD11XX](#) Paediatrics - State Exam**

([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

- **[VLPG11XX](#) Obstetric and Gynaecology - State Exam**

([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && [VLVL9X66c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VSNO071](#), [VLKA091](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSDL071](#), [VLRL041](#), [VLIA081](#), [VLKM081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

- **[VLRL11XX](#) Family Medicine and Geriatrics**

([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLIN9X22](#) && [VLPL9X1](#) && [VLON091](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) (Do I meet enrolment requirements?)

- **[VLVL11XX](#) Internal Medicine - State Exam**

([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

- [VLZP11XX Public Health - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#)
&& [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) &&
[VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) ||
[VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) &&
[VLSD7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) &&
[VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3,
[VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#),
[VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#),
[VLT081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) ||
[VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

Teacher's information

Kontaktní osoba: prof MUDr. Jiří Litzman, CSc., tel 54318 3125 K získání kolokvia je nutno absolvovat úspěšně písemný test skládající se z~25 otázek. Podmínkou je správná odpověď na alespoň 20 otázek

The course is also listed under the following terms [Spring 2003](#), [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VLIM051c Immunology - practice ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[doc. MUDr. Tomáš Freiburger, Ph.D.](#) (seminar tutor)

[MUDr. Roman Hakl](#) (seminar tutor)

[MUDr. Eva Hlaváčková](#) (seminar tutor)

[MUDr. Zita Chovancová, Ph.D.](#) (seminar tutor)

[prof. MUDr. Jiří Litzman, CSc.](#) (seminar tutor)

[prof. MUDr. Jindřich Lokaj, CSc.](#) (seminar tutor)

[prof. MUDr. Vojtěch Thon, Ph.D.](#) (seminar tutor)

Supervisor

[prof. MUDr. Jiří Litzman, CSc.](#)

[Department of Clinical Immunology and Allergology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Contact Person: [prof. MUDr. Jiří Litzman, CSc.](#)

Supplier department: [Department of Clinical Immunology and Allergology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Timetable of Seminar Groups

VLIM051c/01: Mon 25. 9. to Fri 22. 12. Wed 10:10–11:50 [N01021](#)

VLIM051c/02: Mon 25. 9. to Fri 22. 12. Wed 10:10–11:50 [N01021](#)

VLIM051c/03: Mon 25. 9. to Fri 22. 12. Wed 8:00–9:40 [N01021](#)

VLIM051c/04: Mon 25. 9. to Fri 22. 12. Wed 8:00–9:40 [N01021](#)
VLIM051c/05: Mon 25. 9. to Fri 22. 12. Mon 10:10–11:50 [N01021](#)
VLIM051c/06: Mon 25. 9. to Fri 22. 12. Mon 10:10–11:50 [N01021](#)
VLIM051c/07: Mon 25. 9. to Fri 22. 12. Mon 8:00–9:40 [N01021](#)
VLIM051c/08: Mon 25. 9. to Fri 22. 12. Mon 8:00–9:40 [N01021](#)
VLIM051c/09: Mon 25. 9. to Fri 22. 12. Fri 10:10–11:50 [N01021](#)
VLIM051c/10: Mon 25. 9. to Fri 22. 12. Fri 10:10–11:50 [N01021](#)
VLIM051c/11: Mon 25. 9. to Fri 22. 12. Fri 8:00–9:40 [N01021](#)
VLIM051c/12: Mon 25. 9. to Fri 22. 12. Fri 8:00–9:40 [N01021](#)
VLIM051c/13: Mon 25. 9. to Fri 22. 12. Tue 10:10–11:50 [N01021](#)
VLIM051c/14: Mon 25. 9. to Fri 22. 12. Tue 10:10–11:50 [N01021](#)
VLIM051c/15: Mon 25. 9. to Fri 22. 12. Thu 8:00–9:40 [N01021](#)
VLIM051c/16: Mon 25. 9. to Fri 22. 12. Thu 8:00–9:40 [N01021](#)
VLIM051c/17: Mon 25. 9. to Fri 22. 12. Thu 10:10–11:50 [N01021](#)
VLIM051c/18: Mon 25. 9. to Fri 22. 12. Thu 10:10–11:50 [N01021](#)

Prerequisites (in Czech)

([VLBC0422p Biochemistry I -lect.](#) || [VSBC0221p Biochemistry I -lect.](#)) && ([VSFY0422p Physiology II - lecture](#) || [VLFY0422p Physiology II - lecture](#))
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

After finishing this course the student will understand the pathogenesis of immunopathological diseases and obtain the basic knowledge that he/she will apply in diagnosis and treatment of the most common disturbances of the immune system. In the laboratory part the students will be introduced to the techniques used in immunological laboratory, both serological (agglutination, precipitation, immunofluorescence, ELISA, RIA) and cellular (flow cytometry, lymphocyte proliferation tests, neutrophil function assessment) to allow him to interpret the most common laboratory immunology methods in medicine. In the clinical part the mechanisms leading to immunopathological diseases such as clinical manifestation of those diseases will be discussed to allow the students to apply their knowledge in clinical medicine. The student will also discuss immunological problems associated with transplantation and malignancies. Selected articles dealing with immunological topics will be analysed and critically interpreted by the students.

Learning outcomes

The student will get acquainted with the basic methods of serological immunological diagnostics;
The student will be acquainted with the basic methodologies for examining the number and function of the immune system cells;
The student will understand the importance, principle and clinical value of the diagnostic tests necessary for the diagnosis of allergic, autoimmune and immunodeficiency diseases;

The students will become acquainted with immunological laboratory aspects of transplantation and tumor growth.

Syllabus

- Significance of the past history and of basic clinical and laboratory investigations for indication of immunological tests. Blood count. Serum proteins. Laboratory markers of inflammation. Blood collection. Diagnostic antisera.
- Immunoglobulins and their biological functions. Monoclonal antibodies as diagnostic and therapeutic tools. Interaction between antigen and antibody in vitro. Primary and secondary immunological interactions.
- Serological reactions - overview. Specificity and sensitivity. Titration of serum. Direct and indirect agglutination. Precipitation. Double immune diffusion. Turbidimetry, nephelometry. Immunofluorescence tests. Enzyme analysis (ELISA). RIA. Blotting techniques. Circulating and localised immune complexes. Complement system evaluation
- Major histocompatibility complex: structure, function. HLA typing. Molecular genetic in immunology.
- Innate or natural immunity: phagocytosis, NK cells, cytotoxicity, interferon system, complement system, acute phase reaction, inflammation. Complement system evaluation.
- Cells of the immune system CD nomenclature of leukocyte antigens. Phenotyping of lymphocytes. Flow cytometry. Lymphocyte proliferation tests. Cytotoxicity. Evaluation of phagocytic cells.
- Primary and secondary immunodeficiency disorders. HIV disease.
- Active and passive immunisation. Immunoglobulin therapy. Immunostimulation.
- Autoimmunity and disease. Immunological tolerance. Autoantibodies and their laboratory detection. Clinically significant organ specific and organ non-specific autoantibodies.
- Hypersensitivity reactions - anaphylactic, cytotoxic, immune complex, T-cell-mediated.
- Clinical allergology. Allergic skin and exposition tests. Skin tests for early hypersensitivity. Delayed-type hypersensitivity tests. Anergy. Prevention and treatment of allergic diseases. Anaphylactic shock.
- Transfusion immunology. ABO system. Rh system. Transfusion reactions. Immunology of organ and bone marrow transplantation. Graft vs. host reaction
- Tumor immunology. Tumor antigens. Immune response to tumors. Immunodiagnosis of tumors. Immune-related malignancies. Paraproteins, detection, clinical significance. Electrophoresis, Immunoelectrophoresis, immunofixation. Immunophenotyping of leukemia. Clinical significance of paraproteinemia

Literature

recommended literature

- HOŘEJŠÍ, Václav, Jiřina BARTUŇKOVÁ, Tomáš BRDIČKA and Radek ŠPÍŠEK. *Základy imunologie*. 6., aktualizované vydání. V Praze: Stanislav Juhaňák - Triton, 2019. 297 stran. ISBN 9788075532503. [info](#)

- [LITZMAN, Jiří](#), [Zita CHOVANCOVÁ](#), [Vojtěch THON](#), [Marcela VLKOVÁ](#), [Vlastimil KRÁL](#) and [Tomáš FREIBERGER](#). *Základy vyšetření v klinické imunologii (Investigations in clinical immunology)*. 1. vyd. Brno: Masarykova univerzita, 2015. 71 pp. ISBN 978-80-210-7853-6. [info](#)

Teaching methods

The course is given in a form of seminars and demonstration of laboratory methods. A home reading of selected articles to prepare their presentations, discussion and critical assessment is also included.

Assessment methods

Credit

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

Teacher's information

Kontaktní osoba: Prof. MUDr. J. Litzman, CSc., tel: 05 4318 3125 K získání zápočtu je nutná účast na 90% vyučovacích hodin, aktivní účast na výuce i diskusi. Znalosti jsou průběžně kontrolovány ústními dotazy. Povinná je spoluúčast na přípravě prezentací odborných článků a kazuistik.

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#), [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VLIM051p Immunology - lecture ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

1/0/0. 3 credit(s). Type of Completion: zk (examination).

Teacher(s)

[prof. MUDr. Jiří Litzman, CSc.](#) (lecturer)

[prof. MUDr. Jindřich Lokaj, CSc.](#) (lecturer)

Supervisor

[prof. MUDr. Jiří Litzman, CSc.](#)

[Department of Clinical Immunology and Allergology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Contact Person: [prof. MUDr. Jiří Litzman, CSc.](#)

Supplier department: [Department of Clinical Immunology and Allergology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Timetable

Mon 18. 9. to Fri 10. 11. Mon 14:00–15:40 [014](#)

Prerequisites (in Czech)

([VLBC0422p Biochemistry I -lect.](#) || [VSBC0221p Biochemistry I -lect.](#)) && ([VSFY0422p Physiology II - lecture](#) || [VLFY0422p Physiology II - lecture](#))
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

The course covers basic aspects of the structure and function of the immune system in humans. Topics include mechanisms of non-specific immunity with main emphasis on the inflammatory process, such as humoral and cellular branches of the specific immune response. It includes mainly mechanisms of activation of the immune response and its regulation. Special emphasis is given to immune response to microbes and immunoprophylaxis to infectious and non-infectious diseases. After finishing the course the students will understand and be able to explain the mechanisms of the immune response in physiology, such as immune system disturbances leading to immunopathological diseases.

Learning outcomes

- Student will understand basic mechanisms of functioning of the immune system, functional characteristics of specific and non-specific immune response, and the interrelationship of these reactions;
- The student will understand the importance of the immune system in defense against microbes and tumor growth as well as the principles of active and passive artificial immunization;
- The student will become acquainted with the regional specificity of the individual compartments of the immune system;
- Student will be acquainted with the mechanisms of immune tolerance and the mechanisms of its breakdown leading to autoimmune diseases;
- The student will be familiar with the principles of immunological hypersensitivity and the consequences leading to the development of hypersensitivity reactions;
- Students will be acquainted with basic principles of pharmacological influence of immune reactivity;
- Students will be acquainted with the most important primary and secondary immunodeficiency states;

Syllabus

- Immunology in medicine. Medical subject allergology and clinical immunology. Physiology and pathology of the immune system.
- Immunological concept of “own”, “foreign”, “dangerous”.
- Anatomy and cellular elements of the immune system.
- Innate or natural immunity: phagocytosis, NK cells, cytotoxicity, interferon system, complement system, acute phase reaction, inflammation.
- B lymphocytes and immunoglobulins. Genetic basis of immunoglobulin heterogeneity. Biological properties of antibodies.

- T-lymphocytes, their development and effector functions. Polarisation of T-lymphocytes (T1, T2, Th17). Cytotoxicity. Cytokines. Major histocompatibility complex: structure, function.
- Activation of T and B cells by antigen. Interactions between antigen-presenting cells and T- and B-lymphocytes.
- Regulation of the immune reaction.
- Compartmentalization of the immune response. Mucosal immunity.
- Immunity against infectious agents. Microbial antigens.
- Active and passive immunisation.
- Age factor and immune system in humans

Literature

recommended literature

- HOŘEJŠÍ, Václav, Jiřina BARTUŇKOVÁ, Tomáš BRDIČKA and Radek ŠPÍŠEK. *Základy imunologie*. 6., aktualizované vydání. V Praze: Stanislav Juhaňák - Triton, 2019. 297 stran. ISBN 9788075532503. [info](#)
- ABBAS, Abul K., Andrew H. LICHTMAN and Shiv PILLAI. *Basic immunology : functions and disorders of the immune system*. Fifth edition. St. Louis: Elsevier, 2016. x, 335. ISBN 9780323390828. [info](#)

Teaching methods

The subject is given in a form of lectures

Assessment methods

Oral exam.

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

The course can also be completed outside the examination period.

The course is taught annually.

Listed among pre-requisites of other courses

- [BMBS051 Biostatistics - basic course](#)
[VLLM0522p](#) && [VLIM051p](#) && ([VSBC041p](#) || [VSBC0422p](#)) && [VSIP0622c](#) (Do I meet enrolment requirements?)
- [VLIA081 Clinical Immunology and Alergology](#)
[VLIM051p](#) && [VSPF0622c](#) && [VSPA0622c](#) (Do I meet enrolment requirements?)
- [VLIN7X21 Infectious Diseases I -practice](#)
[VSPF0622p](#) && [VSPA0622p](#) && [VLCP0622c](#) && [VSIP0622c](#) && [VLLM0522p](#) && [VLIM051p](#) && [VLFA0621c](#) (Do I meet enrolment requirements?)
- [VLKG7X1c Clinical Genetics - practice](#)
[VLLM0522p](#) && [VLIM051p](#) && [VSIP0622c](#) && [VLCP0622c](#) && [VLFA0621c](#) (Do I meet enrolment requirements?)

- [VLKG7X1p Clinical Genetics - lecture](#)
[VLLM0522p](#) && [VLIM051p](#) && [VSIP0622c](#) && [VLCP0622c](#) && [VLFA0621c](#) (Do I meet enrolment requirements?)
- [VL0L7X1 Ophthalmology - lecture](#)
[VSPF0622p](#) && [VSPA0622p](#) && [VSIP0622c](#) && [VLCP0622c](#) && [VLLM0522p](#) && [VLIM051p](#) && [VLFA0621c](#) (Do I meet enrolment requirements?)
- [VL0L7X1a Ophthalmology - practice](#)
[VSPF0622p](#) && [VSPA0622p](#) && [VSIP0622c](#) && [VLCP0622c](#) && [VLLM0522p](#) && [VLIM051p](#) && [VLFA0621c](#) (Do I meet enrolment requirements?)
- [VLPD7X31c Pediatrics I - practice](#)
[VSPF0622p](#) && [VSPA0622p](#) && [VLCP0622c](#) && [VSIP0622c](#) && [VLLM0522p](#) && [VLIM051p](#) && [VLFA0621c](#) (Do I meet enrolment requirements?)
- [VLPD7X31p Pediatrics](#)
[VLPF0622p](#) && [VLPA0622p](#) && [VLLP0633c](#) && [VLLM0522p](#) && [VLIM051p](#) (Do I meet enrolment requirements?)

[Zobrazit další předměty](#)

Teacher's information

Kontaktní osoba: Prof. MUDr. J. Litzman, CSc., tel: 05 4318 3125 Zkouška se skládá ze 2 otázek, jedna je z~oblasti teoretické imunologie, druhá z~oblasti patofyziologie imunitního systému Předpokladem je zápočet z~předmětu VLIM051c.

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#), [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VLIN7X21 Infectious diseases - practice ✱

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2/0. 1 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Petr Husa, CSc.](#) (seminar tutor)
[doc. MUDr. Lenka Krbková, CSc.](#) (seminar tutor)
[MUDr. Alena Holčíková, Ph.D.](#) (seminar tutor)
[MUDr. Svatava Snopková, Ph.D.](#) (seminar tutor)
[MUDr. Zuzana Rundesová](#) (seminar tutor)
[MUDr. Matúš Mihalčin](#) (seminar tutor)
[MUDr. Petr Husa](#) (seminar tutor)
[MUDr. Lukáš Homola, Ph.D.](#) (seminar tutor)
[MUDr. Tomáš Gergel](#) (seminar tutor)
[MUDr. Roman Stebel](#) (seminar tutor)
[MUDr. Lenka Vojtilová, Ph.D.](#) (seminar tutor)

[MUDr. Evelína Kováčsová](#) (seminar tutor)

[MUDr. Radek Svačinka](#) (seminar tutor)

[Markéta Pospíšilová](#) (assistant)

Supervisor

[prof. MUDr. Petr Husa, CSc.](#)

[Department of Infectious Diseases - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Supplier department: [Department of Infectious Diseases - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Timetable of Seminar Groups

VLIN7X21/09: Mon 2. 10. to Tue 3. 10. each working day 7:30–12:20 [N02205](#), Wed 4.

10. to Fri 6. 10. each working day 7:30–12:20 [N01062](#)

VLIN7X21/10: Mon 18. 9. to Tue 19. 9. each working day 7:30–12:20 [N02205](#), Wed 20.

9. to Fri 22. 9. each working day 7:30–12:20 [N01062](#)

VLIN7X21/11: Mon 1. 1. to Tue 2. 1. each working day 7:30–12:20 [N02205](#), Wed 3. 1. to

Fri 5. 1. each working day 7:30–12:20 [N01062](#)

VLIN7X21/12: Mon 11. 12. to Tue 12. 12. each working day 7:30–12:20 [N02205](#), Wed

13. 12. to Fri 15. 12. each working day 7:30–12:20 [N01062](#)

VLIN7X21/15: Mon 30. 10. to Tue 31. 10. each working day 7:30–12:20 [N02205](#), Wed 1.

11. to Fri 3. 11. each working day 7:30–12:20 [N01062](#)

VLIN7X21/16: Mon 16. 10. to Tue 17. 10. each working day 7:30–12:20 [N02205](#), Wed

18. 10. to Fri 20. 10. each working day 7:30–12:20 [N01062](#)

VLIN7X21/31: Mon 13. 11. to Tue 14. 11. each working day 7:30–12:20 [N02205](#), Wed

15. 11. to Fri 17. 11. each working day 7:30–12:20 [N01062](#)

VLIN7X21/33: Mon 4. 12. to Tue 5. 12. each working day 7:30–12:20 [N02205](#), Wed 6.

12. to Fri 8. 12. each working day 7:30–12:20 [N01062](#)

Prerequisites (in Czech)

[VSPF0622p Pathophysiol. II - lect.](#) && [VSPA0622p Pathology II - lecture](#) &&

[VLCP0622c Introduc. to surgery II -pr.](#) && [VSIP0622c Introduction to internal II-pr](#) &&

[VLLM0522p Medical Microbiology II - lect](#) && [VLIM051p Immunology - lecture](#) &&

[VLFA0621c Pharmacology I - p](#)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The concept of this course is introduction into the study of infectious disease. The aim of this course is to obtain basic information about infectious diseases - bacterial, viral, and parasitic, including travel-related disease. The stress is put on practical education with the patients. This practical course is combined with tutorials stressed on the most important infectious diseases.

Syllabus

- New infectious diseases. Viral hepatitis A,B,C,D,E,G; aetiology, pathology, epidemiology, clinical features including prodromal state, dynamic of the biochemical findings, aetiologic diagnostics direct and indirect (serology), treatment, sequelae, carrier state of the virus of hepatitis B and C, chronic hepatitis, treatment of them.
- GIT infections; pathology of the infectious diarrhoeas; salmonellosis, campylobacteriosis; clinical features, treatment.
- HIV/AIDS infection - stage, treatment, the principles of them.
- Respiratory infections, infectious mononucleosis, tonsillitis. Erysipelas, herpes zoster, infectious exanthema.
- Toxoplasmosis, tularemia.
- Infectious children`s ailments.
- The first information in neuroinfections.
- The antibiotic therapy by the infectious disease, antibiotic resistance, antibiotic policy.
- Antivirotic therapy.
- The strategy of vaccination - the present-day situation, the preview.
- Clinical demonstration of the patients.

Literature

required literature

- [HUSA, Petr](#), [Lenka KRBKOVÁ](#), [Drahomíra BARTOŠOVÁ](#), [Svatava SNOPKOVÁ](#), [Alena HOLČÍKOVÁ](#), [Pavel POLÁK](#), [Radek SVOBODA](#) and [Kateřina HAVLÍČKOVÁ](#). *Infekční lékařství. Učební text pro studenty všeobecného lékařství (Infectious Diseases. Textbook for students of general medicine.)*. 1. vyd. Brno: Masarykova univerzita, 2011. 159 pp. ISBN 978-80-210-5660-2. [info](#)

recommended literature

- Beneš, Jiří, hlavní autor a pořadatel. *Infekční lékařství*. 1. vyd. Praha: Galén 2009. 651 s. ISBN 978-80-7262-644-1

not specified

- *Infectious diseases for foreign students*. Edited by Petr Husa - Lenka Krbková. 1st ed. Brno: Masaryk University, 2013. 144 s. ISBN 9788021066304. [info](#)

Teaching methods

The stress is put on practical examination of the patients combined with lectures.

Assessment methods

Full attendance is necessary for giving course-unit credit.

Language of instruction

Czech

Further comments (probably available only in Czech)

Study Materials

The course is taught each semester.

Information on the extent and intensity of the course: týdenní blok 5x6 hodin.

Listed among pre-requisites of other courses

- [VLAM9X1c Intensive Care Medicine - practice](#)
([VLFA0822c](#) || [VLFA0722c](#)) && [VLCH0832c](#) && [VSIP0622p](#) && [VLCP0622p](#)
&& [VLDM7X1c](#) && [VSOT7X1c](#) && [VLIN7X21](#) (Do I meet enrolment requirements?)
- [VLAM9X1p Intensive Care Medicine - lectures](#)
([VLFA0822c](#) || [VLFA0722c](#)) && [VLCH0832c](#) && [VLCH0731c](#) && [VSPF0622p](#)
&& [VSIP0622c](#) && [VLCP0622p](#) && [VLDM7X1c](#) && [VSOT7X1c](#) &&
[VLIN7X21](#) (Do I meet enrolment requirements?)
- [VLIN9X22 Infectious Diseases II - lecture](#)
[VLIN7X21](#) && [VSIP0622c](#) && [VSEI7X1](#) (Do I meet enrolment requirements?)
- [VLIN9X22a Infectious Diseases II - practice](#)
[VLIN7X21](#) && [VSIP0622c](#) && [VSEI7X1](#) (Do I meet enrolment requirements?)
- [VLVL101p Internal medicine - lecture](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VSIP0622p](#) && [VLDM7X1p](#) &&
([VLVL7X65c](#) || [VLVL9X65c](#)) && [VSOT7X1c](#) && [VLIN7X21](#) (Do I meet enrolment requirements?)

The course is also listed under the following terms [Autumn 1999](#), [Spring 2000](#), [Autumn 2000](#), [Spring 2001](#), [Autumn 2001](#), [Spring 2002](#), [Autumn 2002](#), [Spring 2003](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#).

VLIN9X22 Infectious diseases II ✱

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2/0. 1 credit(s). Type of Completion: zk (examination).

Teacher(s)

[prof. MUDr. Petr Husa, CSc.](#) (seminar tutor)
[doc. MUDr. Lenka Krbková, CSc.](#) (seminar tutor)
[MUDr. Alena Holčíková, Ph.D.](#) (seminar tutor)
[MUDr. Svatava Snopková, Ph.D.](#) (seminar tutor)
[MUDr. Zuzana Rundesová](#) (seminar tutor)
[MUDr. Matúš Mihalčín](#) (seminar tutor)
[MUDr. Petr Husa](#) (seminar tutor)
[MUDr. Lukáš Homola, Ph.D.](#) (seminar tutor)

[MUDr. Tomáš Gergel](#) (seminar tutor)
[MUDr. Roman Stebel](#) (seminar tutor)
[MUDr. Lenka Vojtilová, Ph.D.](#) (seminar tutor)
[MUDr. Radek Svačinka](#) (seminar tutor)
[MUDr. Evelína Kováčsová](#) (seminar tutor)
[Markéta Pospíšilová](#) (assistant)

Supervisor

[prof. MUDr. Petr Husa, CSc.](#)
[Department of Infectious Diseases - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)
Supplier department: [Department of Infectious Diseases - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Prerequisites (in Czech)

[VLIN7X21 Infectious diseases - practice](#) && [VSIP0622c Introduction to internal II-pr](#)
&& [VSEI7X1 EPI](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The programme is the continuation of the lessons of INF 1 and enriches them; it is the preparation to the examination, too. The aim of this course is to spread the information about infectious diseases obtained during course VLIN7X21. The main stress is put on viral hepatitis, infectious of nervous and alimentary systems, Lyme diseases, sepsis, and differential diagnosis of infectious diseases.

Syllabus

- The carrier state (*Salmonella typhi abdominalis*, *Salmonella paratyphi B*, *Streptococcus pyogenes*, enteric salmonellae - aetiology, treatment, regimen measures), viral carrier state, prion infections.
- Differential diagnosis of viral hepatitis, diarrhoeas, tonsillitis, lymphadenopathy, infectious exanthema, fever.
- Neuroinfections; bacterial meningitis - aetiology, clinical features, treatment. The problem of the bacterial meningitis in the newborns, little babies and in the elderly.
- Serous meningitis. Tickborne encephalitis. Lyme boreliosis - stage, clinical features, treatment. The examination of the cerebrospinal fluid; differential diagnosis of meningitis.
- The infectious diseases in the pregnancy. The infectious disease and the corticosteroid therapy.
- Anthroozoonoses. Anaerobic infections, tetanus.

- The introduction to the problem of the geographic and travel medicine. Malaria, leishmaniasis, typhoid fever.
- Clinical demonstration of the patients.

Literature

required literature

- [HUSA, Petr](#), [Lenka KRBKOVÁ](#), [Drahomíra BARTOŠOVÁ](#), [Svatava SNOPKOVÁ](#), [Alena HOLČÍKOVÁ](#), [Pavel POLÁK](#), [Radek SVOBODA](#) and [Kateřina HAVLÍČKOVÁ](#). *Infekční lékařství. Učební text pro studenty všeobecného lékařství (Infectious Diseases. Textbook for students of general medicine.)*. 1. vyd. Brno: Masarykova univerzita, 2011. 159 pp. ISBN 978-80-210-5660-2. [info](#)

recommended literature

- Beneš, Jiří, hlavní autor a pořadatel. *Infekční lékařství*. 1. vyd. Praha: Galén 2009, 651 s. ISBN 978-80-7262-644-1

not specified

- *Infectious diseases for foreign students*. Edited by Petr Husa - Lenka Krbková. 1st ed. Brno: Masaryk University, 2013. 144 s. ISBN 9788021066304. [info](#)

Teaching methods

Seminar, clinical demonstrations of patients.

Assessment methods

For credit is necessary full presence. Before passing of oral examination is necessary to have credit.

Language of instruction

Czech

Further comments (probably available only in Czech)

Information on completion of the course: předmět lze ukončit po absolvování stáží I a II

The course can also be completed outside the examination period.

The course is taught each semester.

The course is taught: in blocks.

Information on the extent and intensity of the course: týdenní blok 5x6 hodin.

Listed among pre-requisites of other courses

- [VLCH11XX Surgery - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#)
&& [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) &&
[VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) ||
[VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) &&
[VLS7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) &&
[VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) &&
VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#),

[VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

- **[VLPD11XX](#) Paediatrics - State Exam**
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- **[VLPG11XX](#) Obstetric and Gynaecology - State Exam**
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && [VLVL9X66c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VSNO071](#), [VLKA091](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSDL071](#), [VLRL041](#), [VLIA081](#), [VLKM081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- **[VLRL11XX](#) Family Medicine and Geriatrics**
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLIN9X22](#) && [VLPL9X1](#) && [VLON091](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) (Do I meet enrolment requirements?)
- **[VLVL11XX](#) Internal Medicine - State Exam**
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

- [VLZP11XX Public Health - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#)
&& [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) &&
[VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) ||
[VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) &&
[VLSD7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) &&
[VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && [VYCET\(3,](#)
[VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#),
[VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#),
[VLT081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) ||
[VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

The course is also listed under the following terms [Autumn 1999](#), [Spring 2000](#), [Autumn 2000](#), [Spring 2001](#), [Autumn 2001](#), [Spring 2002](#), [Autumn 2002](#), [Spring 2003](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

VLIN9X22a Infectious diseases II ✱

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2/0. 1 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Petr Husa, CSc.](#) (seminar tutor)
[doc. MUDr. Lenka Krbková, CSc.](#) (seminar tutor)
[MUDr. Alena Holčíková, Ph.D.](#) (seminar tutor)
[MUDr. Svatava Snopková, Ph.D.](#) (seminar tutor)
[MUDr. Matúš Mihalčín](#) (seminar tutor)
[MUDr. Zuzana Rundesová](#) (seminar tutor)
[MUDr. Petr Husa](#) (seminar tutor)
[MUDr. Lukáš Homola, Ph.D.](#) (seminar tutor)
[MUDr. Tomáš Gergel](#) (seminar tutor)
[MUDr. Roman Stebel](#) (seminar tutor)
[MUDr. Lenka Vojtilová, Ph.D.](#) (seminar tutor)
[MUDr. Evelína Kováčsová](#) (seminar tutor)
[MUDr. Radek Svačinka](#) (seminar tutor)
[Markéta Pospíšilová](#) (assistant)

Supervisor

[prof. MUDr. Petr Husa, CSc.](#)
[Department of Infectious Diseases - Institutions shared with the Faculty Hospital Brno -
Adult Age Medicine - Faculty of Medicine](#)

Supplier department: [Department of Infectious Diseases - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Timetable of Seminar Groups

VLIN9X22a/01: Mon 20. 11. to Wed 22. 11. each working day 7:30–12:20 [N02205](#), Thu 23. 11. to Fri 24. 11. each working day 7:30–12:20 [N01062](#)
VLIN9X22a/02: Mon 6. 11. to Wed 8. 11. each working day 7:30–12:20 [N02205](#), Thu 9. 11. to Fri 10. 11. each working day 7:30–12:20 [N01062](#)
VLIN9X22a/03: Mon 23. 10. to Wed 25. 10. each working day 7:30–12:20 [N02205](#), Thu 26. 10. to Fri 27. 10. each working day 7:30–12:20 [N01062](#)
VLIN9X22a/04: Mon 9. 10. to Wed 11. 10. each working day 7:30–12:20 [N02205](#), Thu 12. 10. to Fri 13. 10. each working day 7:30–12:20 [N01062](#)
VLIN9X22a/05: Mon 25. 9. to Wed 27. 9. each working day 7:30–12:20 [N02205](#), Thu 28. 9. to Fri 29. 9. each working day 7:30–12:20 [N01062](#)
VLIN9X22a/06: Mon 8. 1. to Wed 10. 1. each working day 7:30–12:20 [N02205](#), Thu 11. 1. to Fri 12. 1. each working day 7:30–12:20 [N01062](#)
VLIN9X22a/30: Mon 27. 11. to Wed 29. 11. each working day 7:30–12:20 [N02205](#), Thu 30. 11. to Fri 1. 12. each working day 7:30–12:20 [N01062](#)
VLIN9X22a/31: Mon 18. 12. to Wed 20. 12. each working day 7:30–12:20 [N02205](#), Thu 21. 12. to Fri 22. 12. each working day 7:30–12:20 [N01062](#)
VLIN9X22a/34: No timetable has been entered into IS.

Prerequisites (in Czech)

[VLIN7X21 Infectious diseases - practice](#) && [VSIP0622c Introduction to internal II-pr](#) && [VSEI7X1 EPI](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The programme is the continuation of the lessons of INF 1 and enriches them; it is the preparation to the examination, too. The aim of this course is to spread the information about infectious diseases obtained during course VLIN7X21. The main stress is put on viral hepatitis, infectious of nervous and alimentary systems, Lyme diseases, sepsis, and differential diagnosis of infectious diseases.

Syllabus

- The carrier state (*Salmonella typhi abdominalis*, *Salmonella paratyphi B*, *Streptococcus pyogenes*, enteritic salmonellae - aetiology, treatment, regimen measures), viral carrier state, prion infections.
- Differential diagnosis of viral hepatitis, diarrhoeas, tonsillitis, lymphadenopathy, infectious exanthema, fever.

- Neuroinfections; bacterial meningitis - aetiology, clinical features, treatment. The problem of the bacterial meningitis in the newborns, little babies and in the elderly.
- Serous meningitis. Tickborne encephalitis. Lyme boreliosis - stage, clinical features, treatment. The examination of the cerebrospinal fluid; differential diagnosis of meningitis.
- The infectious diseases in the pregnancy. The infectious disease and the corticosteroid therapy.
- Anthroozoonoses. Anaerobic infections, tetanus.
- The introduction to the problem of the geographic and travel medicine. Malaria, leishmaniosis, typhoid fever.
- Clinical demonstration of the patients.

Literature

required literature

- [HUSA, Petr](#), [Lenka KRBKOVÁ](#), [Drahomíra BARTOŠOVÁ](#), [Svatava SNOPKOVÁ](#), [Alena HOLČÍKOVÁ](#), [Pavel POLÁK](#), [Radek SVOBODA](#) and [Kateřina HAVLÍČKOVÁ](#). *Infekční lékařství. Učební text pro studenty všeobecného lékařství (Infectious Diseases. Textbook for students of general medicine.)*. 1. vyd. Brno: Masarykova univerzita, 2011. 159 pp. ISBN 978-80-210-5660-2. [info](#)

recommended literature

- Beneš Jiří, hlavní autor a pořadatel. *Infekční lékařství*. 1. vyd. Praha: Galén 2009. ISBN 978-80-7262-644-1

not specified

- *Infectious diseases for foreign students*. Edited by Petr Husa - Lenka Krbková. 1st ed. Brno: Masaryk University, 2013. 144 s. ISBN 9788021066304. [info](#)

Teaching methods

The stress is put on practical examination of the patients combined with lectures.

Assessment methods

Full attendance is necessary for giving course-unit credit.

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught each semester.

Information on the extent and intensity of the course: týdenní blok 5x6 hodin.

The course is also listed under the following terms [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring](#)

[2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#).

VLIR051 Introduction to interventional radiology ✱

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2. 3 credit(s). Recommended Type of Completion: k (colloquium). Alternate Types of Completion: z (credit).

Teacher(s)

[MUDr. Tomáš Andrašina, Ph.D.](#) (lecturer)

[MUDr. Jakub Foukal, Ph.D.](#) (lecturer)

[MUDr. Jakub Hustý, Ph.D.](#) (lecturer)

[MUDr. Jiří Pánek](#) (lecturer)

[MUDr. Hana Petrášová](#) (lecturer)

[prof. MUDr. Vlastimil Válek, CSc., MBA, EBIR](#) (lecturer)

Supervisor

[prof. MUDr. Vlastimil Válek, CSc., MBA, EBIR](#)

[Department of Radiology and Nuclear Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Supplier department: [Department of Radiology and Nuclear Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Prerequisites

VLDM7X1c Diagnostic Imaging Methods - lecture

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

To provide an overview of radiological interventional methods including our own experience. At the end of this course the student will be able to: understand the possibilities offered by radiology and interventional radiology, an overview of the indications of intervention methods, have their first experience with the implementation of selected methods on the phantom (ultrasound, vascular intervention), to be able to collaborate on research projects in interventional radiology.

Learning outcomes

The output will be practical experience of students with miniinvasive methods performed in the field of interventional radiology.

Syllabus

- Introduction, history, the potential of interventional radiology, the future of IR
Image reconstructions Biopsy under ultrasound, 3D navigation Interventions under CT, C-arm Biliary intervention - an overview of tool box, options Biliary intervention RFA, choledochoscopy Percutaneous ablation methods. Alcoholization, RF, MW ablation, irreversible electroporation Vascular Intervention - Introduction, overview of tool box Vascular Intervention - training on the phantom Musculoskeletal Interventions

Literature

- [VÁLEK, Vlastimil](#), [Tomáš ANDRAŠINA](#), [Zdeněk KALA](#), [Igor KISS](#), [Jiří TOMÁŠEK](#) and Lenka OSTRŽÍKOVÁ. Intervenční radiologie u onkologických onemocnění (Interventional Radiology in Cancer Patients). *Čes. radiologie*, Galen, 2010, vol. 64, No 2, p. 93-102. ISSN 1210-7883. [info](#)
- [BENDA, Karel](#), [Daniel BARTUŠEK](#), [Šárka BOHATÁ](#), [Jaroslav BOUDNÝ](#), [Karel DVOŘÁK](#), [Marek MECHL](#), [Miloš KEŘKOVSKÝ](#), [Petr NÁDENÍČEK](#), [Sylva RYBNÍČKOVÁ](#), [Jarmila SKOTÁKOVÁ](#) and [Vlastimil VÁLEK](#). Současné metody diagnostického zobrazování a intervenční radiologie - co má vědět praktický lékař (principy, možnosti, indikace, limitace). *Praktický lékař*, 2006, roč.2006, 86/č.2, p. 96-97. [info](#)
- KRAJINA, Antonín and Jan H. PEREGRIN. *Intervenční radiologie : miniinvazivní terapie*. 1. vyd. Hradec Králové: Olga Čermáková, 2005. 835 s. ISBN 8086703088. [info](#)

Teaching methods

class discussion, group projects, presentations by professionals in the sectors

Assessment methods

written test

Language of instruction

Czech

The course is also listed under the following terms [Autumn 2013](#), [Autumn 2014](#), [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VLIZB021 Ionising radiation in biology and medicine ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

2/0/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[Mgr. Vladan Bernard, Ph.D.](#) (lecturer)

[prof. RNDr. Vojtěch Mornstein, CSc.](#) (lecturer)

[Marta Vágnerová](#) (assistant)

Supervisor

[prof. RNDr. Vojtěch Mornstein, CSc.](#)
[Department of Biophysics - Theoretical Departments - Faculty of Medicine](#)
Contact Person: [prof. RNDr. Vojtěch Mornstein, CSc.](#)

Prerequisites

Interest in deeper knowledge in the field of radiation biophysics.

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

The capacity limit for the course is 20 student(s).

Current registration and enrolment status: enrolled: 0/20, only registered: 0/20

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)
- [Dentistry](#) (programme LF, M-ZL)

Course objectives

Students interested in this field will get deeper knowledge in radioactivity, dosimetry and dosimetric quantities, radiochemistry of water and radiation damage of DNA. They also get deeper knowledge on various models of cellular radiation effects, including affection of radiosensitivity and radioresistance (with emphasis on oxygen effect). Detailed information will be given on stochastic and deterministic, acute and late effects on the cellular level, including tumour tissues. In the necessary extent will be given information about radiation cancerogenesis. The students will get acquainted with radionuclide metabolism, natural sources of radiation, and the impact of nuclear energy on the environment.

Learning outcomes

After finishing this course the students will be better prepared for the branches of medicine, in which the ionising radiation is commonly used (radiology, nuclear medicine, radiotherapy). They will have deeper knowledge about radioactivity, dosimetry, radiochemistry of water and radiation damage to DNA. Student will know about various models of radiation effects on cells, how to influence the radiosensitivity and radioresistance (with emphasis on oxygen effect). They will better differentiate the stochastic and deterministic, acute and late effects on the level of tissues, including tumour tissues. They will understand the principle of radiation cancerogenesis. They will be good informed about the metabolism of radionuclides, about the sources of radiation and their impact on environment.

Syllabus

- 1. Introduction. Standard model as a basic description of the microworld. 2. Radioactivity – types, description of radioactive decay, principles and knowledge important for biomedical sciences 3. Dosimetry: Interaction of radiation with matter, energy of radiation, main dosimetric quantities and methods 4. Chemistry of radiation: water radiolysis – yield of radiochemical reactions – Fricke dosimeter – direct and indirect effects – damage and repair of DNA – repair fidelity 5. Theories and models of cell survival: Survival curves and their mathematical models - single hit, multi-target – molecular model - linear-quadratic (LQ) model

6. Radiosensitivity and radioresistance: Modification of the response to radiation effects – influence of temperature, oxygen effect, thiols, aromatic nitrocompounds. Experimental approaches 7. Radiobiology of normal tissues: Stochastic and deterministic effects, acute and late effects. Cellular death, classification of tissues based on the response to irradiation. Experimental approaches. 8. Radiobiology of tumour tissues: theory of tumour population growth. Experimental approach. 9. Late effects on normal tissues: Effects on individual organs, effect of fractionation to protect normal tissues and for radiotherapy. 10. Radiation cancerogenesis (biophysical principle) 11. Metabolism of radionuclides, natural sources of radiation (radionuclides and other environmental sources of radiation) 12. What is necessary to know about nuclear energy, nuclear weapons and nuclear disasters?

Literature

recommended literature

- PODZIMEK, František. *Radiologická fyzika : fyzika ionizujícího záření*. 1. vydání. V Praze: České vysoké učení technické, 2013. 334 stran. ISBN 9788001053195. [info](#)
- KUNA, Pavel. *Klinická radiobiologie*. Edited by Leoš Navrátil. 1. vyd. Praha: Manus, 2005. 222 s. ISBN 8086571092. [info](#)

Teaching methods

lecture with discussion

Assessment methods

Credits will be given for the activity during lectures and good attendance. In case of need a simple credit test can be used.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

Teacher's information

<http://www.med.muni.cz/biofyz/radiologieBC.htm>

Studentům jsou poskytovány přednášky v elektronické podobě.

The course is also listed under the following terms [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VLKA091 Clinical anatomy ✱

Faculty of Medicine

Autumn 2019

Extent and Intensity

2/0/0. 3 credit(s). Type of Completion: k (colloquium).

Teacher(s)

[prof. RNDr. Petr Dubový, CSc.](#) (lecturer)
[MUDr. Ivana Hradilová Sviženská, CSc.](#) (lecturer)
[prof. MUDr. Zdeněk Kala, CSc.](#) (lecturer)
[doc. MUDr. Pavel Matonoha, CSc.](#) (lecturer)
[doc. MUDr. Marek Mechl, Ph.D., MBA](#) (lecturer)
[doc. MUDr. Jiří Prášek, CSc.](#) (lecturer)
[MUDr. Alena Štouračová, Ph.D.](#) (lecturer)
[MUDr. Jakub Foukal, Ph.D.](#) (seminar tutor)
[Jitka Halouzková](#) (assistant)
[Zdeňka Licková](#) (assistant)
[MUDr. Petr Nádeníček, Ph.D.](#) (assistant)
[Dana Procházková](#) (assistant)

Supervisor

[prof. MUDr. Vlastimil Válek, CSc., MBA, EBIR](#)
[Department of Radiology and Nuclear Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)
Contact Person: [prof. MUDr. Vlastimil Válek, CSc., MBA, EBIR](#)
Supplier department: [Department of Radiology and Nuclear Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Prerequisites (in Czech)

[VLCH0832c Surgery II - practicals](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

Clinical anatomy: The concept of this course is improving knowledge in clinical and topographic anatomy in X-ray, CT, MR a and US imaging. Students should know anatomy of different body systems with the emphasis of topographic anatomy in CT and MR imaging.

Syllabus

- Topics: Skull, brain, meninges, cerebrospinal fluid spaces. Circle of Willis (including the distribution of artery segments). Spine, spinal canal, spinal cord. Neck - spaces in the neck, lymph nodes groups in the neck Lungs - segments of the lungs, bronchi and vessels in the CT image, microarchitecture of lung in HRCT. Lungs - anatomy and lung segments in X-ray image, mediastinum in X-ray. Mediastinum - the various components of the mediastinum, lymph nodes groups in the mediastinum, pleura Development of the peritoneal cavity, spaces of the peritoneal cavity, peritoneal folds. Abdominal organs - the liver (segments of the liver), spleen + digestive tract. Vascular supply of bowel from the perspective of the surgeon. Retroperitoneum and its components, fascias, RTP organs - kidneys, adrenals, pancreas. Pelvis - borders, pelvic organs and their anatomy,

pelvic floor, rectum and anal channel. The aorta and its main branches, pelvic arteries, arteries of the limbs, variants

Literature

- Clinical anatomy: Diagnostic and surgical imaging anatomy – musculoskeletal; Diagnostic and surgical imaging anatomy- knee, ankle and foot; Diagnostic and surgical imaging anatomy – brain, head, neck and spine; Diagnostic and surgical imaging anatomy – c
- Harnsberger RH., Osborn AG., Ross J., Macdonald A.: Diagnostic and Surgical Imaging Anatomy: Brain, Head and Neck, Spine. Amirsys Hardbound, 2007, Canada, Manitoba
- NEKULA, Josef. *Radiologie*. 3. vyd. V Olomouci: Univerzita Palackého v Olomouci, 2008. 205 s. ISBN 9788024410117. [info](#)
- NEUWIRTH, Jiří. *Anatomia neuro radiologica basalis*. 1. vyd. Praha: Triton, 2006. 122 s. ISBN 8072548441. [info](#)
- NEUWIRTH, Jiří. *Anatomia radiologica thoracica basalis*. 1. vyd. Praha: Triton, 2006. 66 s. ISBN 807254831X. [info](#)
- NEUWIRTH, Jiří. *Kompendium diagnostického zobrazování*. 1. vyd. Praha: Triton, 1998. 835 s. ISBN 8085875861. [info](#)

Teaching methods

seminars atlas of radiological anatomy in is.muni.cz

Assessment methods

Seminars is basic of intensive course.

Full attendance is necessary for giving course-unit credit.

colloquium

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

The course can also be completed outside the examination period.

The course is taught annually.

The course is taught: every week.

Listed among pre-requisites of other courses

- [VLCH11XX Surgery - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#)
&& [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) &&
[VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) ||
[VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) &&
[VLSD7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) &&
[VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) &&
VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#),
[VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#),
[VLRL041](#), [VLT081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) &&

[\(VLAJ0222 || VSAJ0222 || VSNJ0222\)](#) && [VSSP03X](#) (Do I meet enrolment requirements?)

- **[VLPD11XX](#)** Paediatrics - State Exam

[\(VLFA0822p || VLFA0722p\)](#) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && [\(VLVL7X61c || VLVL9X61c\)](#) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && [\(VLVL9X65c || VLVL7X65c\)](#) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && [\(VLAJ0222 || VSAJ0222 || VSNJ0222\)](#) && [VSSP03X](#) (Do I meet enrolment requirements?)

- **[VLPG11XX](#)** Obstetric and Gynaecology - State Exam

[\(VLFA0822p || VLFA0722p\)](#) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && [VLVL9X66c](#) && [\(VLVL9X65c || VLVL7X65c\)](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VSNO071](#), [VLKA091](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSDL071](#), [VLRL041](#), [VLIA081](#), [VLKM081](#), [VSFP071](#)) && [VLCH9X33c](#) && [\(VSAJ0222 || VSNJ0222\)](#) && [VSSP03X](#) (Do I meet enrolment requirements?)

- **[VLRL11XX](#)** Family Medicine and Geriatrics

[\(VLFA0822p || VLFA0722p\)](#) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && [\(VLVL7X61c || VLVL9X61c\)](#) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && [\(VLVL9X65c || VLVL7X65c\)](#) && [VLVL9X66c](#) && [VLIN9X22](#) && [VLPL9X1](#) && [VLON091](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSFP071](#)) && [VLCH9X33c](#) && [\(VLAJ0222 || VSAJ0222 || VSNJ0222\)](#) (Do I meet enrolment requirements?)

- **[VLVL11XX](#)** Internal Medicine - State Exam

[\(VLFA0822p || VLFA0722p\)](#) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && [\(VLVL7X61c || VLVL9X61c\)](#) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && [\(VLVL9X65c || VLVL7X65c\)](#) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && [\(VLAJ0222 || VSAJ0222 || VSNJ0222\)](#) && [VSSP03X](#) (Do I meet enrolment requirements?)

- **[VLZP11XX](#)** Public Health - State Exam

[\(VLFA0822p || VLFA0722p\)](#) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#)

&& [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPD1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLR041](#), [VLT081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

Teacher's information

Informace o termínech seminářů budou zaslány studentům mailem před začátkem výuky.
Předpokádaný termín - úterý od 14h. Kontakt: Radiologická klinika FN Brno, Jihlavská
20 Tel.: 532 233 007 (sekretariát)

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#), [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VLKB091 Clinical Biochemistry ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2/0. 3 credit(s). Type of Completion: k (colloquium).

Teacher(s)

[MUDr. Dana Bučková, Ph.D.](#) (lecturer)
[MUDr. Zdeňka Čermáková, Ph.D.](#) (lecturer)
[doc. MUDr. Milan Dastyh, CSc., MBA](#) (lecturer)
[MUDr. Milan Dastyh](#) (lecturer)
[MUDr. Miroslava Hlaváčová](#) (lecturer)
[MUDr. Michaela Králíková, Ph.D.](#) (lecturer)
[prof. MUDr. Vladimír Soška, CSc.](#) (lecturer)
[prof. RNDr. Eva Táborská, CSc.](#) (lecturer)
[doc. RNDr. Josef Tomandl, Ph.D.](#) (lecturer)
[MUDr. Hana Vinohradská](#) (lecturer)
[Mgr. Radomíra Bednářová](#) (assistant)
[doc. RNDr. Jiří Dostál, CSc.](#) (assistant)
[Mgr. Miroslav Fiala](#) (assistant)
[Mgr. et Mgr. Zuzana Handlová](#) (assistant)
[Lenka Nerudová](#) (assistant)
[Mgr. Ladislav Václavík, Ph.D.](#) (assistant)

Supervisor

[doc. MUDr. Milan Dastyh, CSc., MBA](#)
[Department of Biochemistry - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [Lenka Nerudová](#)

Supplier department: [Department of Biochemistry - Theoretical Departments - Faculty of Medicine](#)

Timetable

Mon 2. 10. to Fri 8. 12. Mon 14:00–16:30 [A11/114](#)

- Timetable of Seminar Groups:

VLKB091/VLA: Mon 2. 10. to Fri 8. 12. Tue 12:30–15:00 [A16/213](#)

Prerequisites (in Czech)

([VLFA0822p Pharmacology II - L](#) || [VLFA0722p Pharmacology - L](#)) &&

[VLVL7X65c Internal medicine part 5](#)

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

After this course the participant should be able to: - choose biochemical tests suitable for diagnostics of diseases - know the basic problems of common biochemical diagnostic tests - know how to collect biological material and how to treat it to prevent false results - to assess reliability of laboratory results.

Learning outcomes

Student will be able to:

purposefully indicate laboratory biochemical tests

correctly interpret laboratory results

evaluate laboratory tests with regard to their sensitivity and specificity

use knowledge of the uncertainty of the evaluated parameter

to focus on possible pre-analytical influences and interferences

Syllabus

- Analytical sources of variation, accuracy and precision. Diagnostic accuracy, sensitivity, specificity, and efficiency of diagnostic tests. Reference ranges, decision values. Collection and processing of specimens, special requirements, general safety rules.
- Assessment and monitoring of nutritional status. Blood plasma proteins. Acute-phase reactants. Principles of nutritional support, enteral and parenteral nutrition. Dietary constituents providing a sufficient energy intake.
- Energy output, nitrogen balance. Indications for nutritional support. Oxygen, transport and metabolism, tissue hypoxia.
- Disorders of lipid and lipoprotein metabolism.
- Ischemic heart disease, congestive cardiac failure. Potassium and magnesium homeostasis.

- Iron and essential microelements metabolism.
- Disturbances of water and sodium balance. Plasma and urine osmolality. Plasma electrolytes in acid-base disorders.
- Assessment of acid-base balance. Investigating an acid-base status, indications for blood acid-base and oxygen measurements, interpretation of results.
- Laboratory evaluation of kidney function. Biochemical monitoring of acute and chronic renal failure, and of patients receiving haemodialysis. Urine sediment.
- Investigation of liver and biliary tract diseases. Signs of the liver injury, differentiating of hyperbilirubinaemias, syndrome of biliary obstruction.
- Clinical biochemistry of the GIT. Gastric acid secretion, maldigestion and malabsorption, assessment of pancreatic function.
- Disorders of saccharide metabolism, diabetes mellitus.
- Calcium and phosphate metabolism. Biochemical markers of bone metabolism (in the assessment of osteoporosis).
- Uric acid, hyperuricaemia. Renal tract stones.
- Laboratory assessment of thyroid and adrenal functions.
- Tumour markers. Biological causes of variation of test results, effects of drugs on chemical tests.

Literature

required literature

- RACEK, Jaroslav. *Klinická biochemie. 2.*, přeprac. vyd. Praha: Galén, 2006. 329 s. ISBN 8072623249. [info](#)

recommended literature

- SCHNEIDERKA, Petr. *Kapitoly z klinické biochemie. 1.* vyd. V Praze: Karolinum, 2000. 284 s. ISBN 8024601400. [info](#)
- JABOR, A. *Vnitřní prostředí. 1.* vyd. Praha: Grada Publishing,a.s., 2008, 2009. 560 pp. ISBN 978-80-247-1221-5. [info](#)
- MASOPUST, Jaroslav. *Klinická biochemie. Požadování a hodnocení biochemických vyšetření. (Clinical chemistry.). 1.* vyd. Praha: Karolinum, 1998. 832 pp. část I. a část II. ISBN 80-7184-649-3. [info](#)
- *Tietz fundamentals of clinical chemistry.* Edited by Carl A. Burtis - Edward R. Ashwood - David E. Bruns - Barbara G. Sawye. 6th ed. St. Louis, Mo.: Saunders/Elsevier, 2008. xx, 952. ISBN 9780721638652. [info](#)
- *Clinical chemistry : techniques, principles, correlations.* Edited by Michael L. Bishop - Edward P. Fody - Larry E. Schoeff. 6th ed. Philadelphia: Wolters Kluwer Health/Lippincott Williams & Wilkins, 2010. xx, 732. ISBN 9780781790451. [info](#)

Teaching methods

lectures, audio-visual study materials, pp-presentations,commentated videos, interactive inputs

Assessment methods

written test, the test consists of 40 questions,25 correct answers is needed to pass;
colloquium

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

Information on course enrolment limitations: kromě studentů LF maximálně 3 studenti MU v jednom běhu

Listed among pre-requisites of other courses

- [VLCH11XX Surgery - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [VLPD11XX Paediatrics - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [VLPG11XX Obstetric and Gynaecology - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && [VLVL9X66c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VSNO071](#), [VLKA091](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSDL071](#), [VLRL041](#), [VLIA081](#), [VLKM081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [VLRL11XX Family Medicine and Geriatrics](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) &&

[VLVL9X66c](#) && [VLIN9X22](#) && [VLPL9X1](#) && [VLON091](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) (Do I meet enrolment requirements?)

- **[VLVL11XX](#) Internal Medicine - State Exam**
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- **[VLZP11XX](#) Public Health - State Exam**
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#), [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VLKF091 Clinical Pharmacology ✱

Faculty of Medicine

Autumn 2019

Extent and Intensity

1.3/0/0. 3 credit(s). Type of Completion: k (colloquium).

Teacher(s)

[doc. MUDr. Regina Demlová, Ph.D.](#) (lecturer)

[PharmDr. Milan Juhás](#) (lecturer)

[MUDr. Petra Řiháčková, MBA](#) (lecturer)

[PharmDr. Lenka Součková, Ph.D.](#) (lecturer)

[MUDr. Jana Vinklerová, Ph.D.](#) (lecturer)

Supervisor

[doc. MUDr. Regina Demlová, Ph.D.](#)

[Department of Pharmacology - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [Renata Bláblová](#)

Supplier department: [Department of Pharmacology - Theoretical Departments - Faculty of Medicine](#)

Timetable

Mon 9. 10. to Fri 15. 12. Thu 15:45–17:25 [A11/234](#)

Prerequisites (in Czech)

(VLFA08222p || [VLFA0722p Pharmacology - L](#))

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [Stomatology](#) (programme LF, M-ST)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The subject is supported by possibility of consultations with authors of individual topics. It provides surveys of current trends in pharmacotherapy of pain, carcinomas, heart failure, hypertension, respiratory diseases, and in paediatric and elderly patients.

Syllabus

- 12.10.2019 - Clinically relevant drug interactions 19.10.2019 - Patient with thromboembolic disease - treatment options 26.10.2019 - Pharmacotherapy of heart failure 2.11.2019 - Treatment of acute coronary syndrome 9.11.2019 - Treatment of hypertension - simply and effectively 16.11.2019 - Clinical Pharmacology in Diabetes Mellitus 23.11.2019 - Treatment of an oncological patient 30.11.2019 - Pharmacotherapy in a patient with chronic obstructive pulmonary disease (COPD) and bronchial asthma 7.12.2019 - Principles of antibiotics treatment in the ICU 14.12.2019 - Colloquium (Department of Pharmacology)

Literature

recommended literature

- Učební texty předmětu VLKF091 jsou dostupné přímo v IS MU ve studijních materiálech předmětu Vybrané kapitoly z klinické farmakologie. Vlastní studijní materiály se otevírají pouze studentům do předmětu zapsaným.

Teaching methods

During the studying the students can acquire the knowledge of clinical pharmacology at the lectures given by professionals in the sectors.

Assessment methods

The students have to pass the colloquium. The final multiple-choice test consists out of 27 questions. Minimum 19 of the test questions have to be answered correctly.

Language of instruction

Czech

Further comments (probably available only in Czech)

Information on completion of the course: Zápočtový test, studijní materiály v IS pod kódem předmětu.

The course can also be completed outside the examination period.

The course is taught annually.

General note: Sylaby předmětu jsou dostupné v IS MU ve studijních materiálech předmětu VLKF091-Vybrané kapitoly z klinické farmakologie. Studijní materiály v IS pod kódem předmětu. Vlastní studijní materiály se otevrou pouze studentům do předmětu zapsaným.

Information on course enrolment limitations: Předmět si mohou zapsat pouze studenti LF v 8.-12.semestru studia.

Listed among pre-requisites of other courses

- [VLCH11XX Surgery - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [VLPD11XX Paediatrics - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [VLPG11XX Obstetric and Gynaecology - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && [VLVL9X66c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#)

&& [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VSNO071](#), [VLKA091](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSDL071](#), [VRL041](#), [VLIA081](#), [VLKM081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

- **[VLRL11XX](#) Family Medicine and Geriatrics**
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLIN9X22](#) && [VLPL9X1](#) && [VLON091](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) (Do I meet enrolment requirements?)
- **[VLVL11XX](#) Internal Medicine - State Exam**
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLS7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- **[VLZP11XX](#) Public Health - State Exam**
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLS7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

Teacher's information

Za organizování kolokvia a udělení kreditu zodpovídá MUDr. Regina Demlová, Ph.D.,
Farmakologický ústav LF MU, tel: 54949 6526, demlova@med.muni.cz.

Úřední hodiny sekretariátu Farmakologického ústavu, UKB, Kamenice 5, pavilon A19

denně od 13.00 do 14.00 hod, tel: 54949 3070.

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#), [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VLKG7X1c Clinical Genetics - practice ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/1/0. 1 credit(s). Recommended Type of Completion: z (credit). Alternate Types of Completion: k (colloquium).

Teacher(s)

[MUDr. Renata Gaillyová, Ph.D.](#) (lecturer)
[MUDr. Šárka Prášilová](#) (seminar tutor)
[MUDr. Jana Šoukalová](#) (seminar tutor)
[RNDr. Iveta Valášková, Ph.D.](#) (seminar tutor)
[Mgr. Marta Hanáková](#) (seminar tutor)
[Mgr. Hana Filková](#) (seminar tutor)
[Mgr. Silvie Dudová](#) (seminar tutor)
[Mgr. Kateřina Kašíková, Ph.D.](#) (seminar tutor)
[Mgr. Martina Vráblíková](#) (assistant)
[Mgr. Kateřina Vopěnková, Ph.D.](#) (assistant)
[prof. MUDr. Michael Doubek, Ph.D.](#) (seminar tutor)

Supervisor

[prof. MUDr. Michael Doubek, Ph.D.](#)
[Department of Internal Medicine, Hematology and Oncology - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)
Supplier department: [Department of Internal Medicine, Hematology and Oncology - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Timetable of Seminar Groups

VLKG7X1c/09: Mon 9. 10. to Tue 10. 10. each working day 7:30–12:20 [N01062](#), Wed 11. 10. each working day 7:30–9:45 [N01062](#)
VLKG7X1c/10: Mon 25. 9. to Tue 26. 9. each working day 7:30–12:20 [N01062](#); and Wed 27. 9. 7:30–9:45 [N01062](#)
VLKG7X1c/11: Mon 8. 1. to Tue 9. 1. each working day 7:30–12:20 [N01062](#); and Wed 10. 1. 7:30–9:45 [N01062](#)
VLKG7X1c/12: Mon 18. 12. to Tue 19. 12. each working day 7:30–12:20 [N01062](#); and Wed 20. 12. 7:30–9:45 [N01062](#)
VLKG7X1c/15: Mon 6. 11. to Tue 7. 11. each working day 7:30–12:20 [N01062](#); and Wed 8. 11. 7:30–9:45 [N01062](#)
VLKG7X1c/16: Mon 23. 10. to Tue 24. 10. each working day 7:30–12:20 [N01062](#); and Wed 25. 10. 7:30–9:45 [N01062](#)
VLKG7X1c/30: Mon 27. 11. to Fri 1. 12. each working day 7:30–12:20 [N01062](#)

VLKG7X1c/34: Mon 27. 11. to Fri 1. 12. each working day 7:30–12:20 [N01062](#)

VLKG7X1c/35: Mon 27. 11. to Fri 1. 12. each working day 7:30–12:20 [N01062](#)

Prerequisites (in Czech)

[VLLM0522p Medical Microbiology II - lect](#) && [VLIM051p Immunology - lecture](#) && [VSIP0622c Introduction to internal II-pr](#) && [VLCP0622c Introd. to surgery II -pr.](#) &&

[VLFA0621c Pharmacology I - p](#)

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The course provides an overview of the methods used in laboratories of clinical genetics including prenatal cytogenetics, postnatal cytogenetics, cytogenetics in oncology, molecular cytogenetics and modern DNA and RNA diagnostic methods. In addition, genetic counseling and selected model case reports are presented to students. The subject matter presented in this course will help to better understand other medical subjects including internal medicine, neurology, surgery etc. Visit to Mendel's museum in Brno.

Syllabus

- Principles of clinical genetics - standard karyotype and its abnormalities - indication criteria for prenatal and postnatal karyotype examination - prenatal cytogenetic methods - prenatal screening examinations – chromosomal aberrations – chromosome instability – principles of DNA diagnostics - prenatal diagnostics using methods of molecular genetics – gene therapy and mapping of the human genome – principles of oncocytogenetics – genetic counseling - case reports.

Literature

- Základem studia je látka přednášená na přednáškách a probíraná na seminářích a stážích z klinické genetiky a materiály v IS.
- D.J.Pritchard, B.R.Korf: *Základy lékařské genetiky*, Galén 2007
- Nussbaum, Mc Illnes, :Thompson & Thompson: *Klinická genetiká*, 2004
- SRŠEŇ, Štefan and Klára SRŠŇOVÁ. *Základy klinickej genetiky*. 2. preprac. a rozš. vyd. Martin: Vydavateľstvo Osveta, 1995. 259 s. ISBN 8021704772. [info](#)
- KUČEROVÁ, Maria. *Vrozené a získané poruchy lidských chromosomů [Kučerová, 1988]*. Praha: Avicenum, 1988. [info](#)
- HYÁNEK, Josef. *Klinické a biochemické aspekty vrozených metabolických poruch*. 1. vyd. Praha: Avicenum, 1980. 280 s. [info](#)
- MICHALOVÁ, Kyra. *Úvod do lidské cytogenetiky*. Vyd. 1. V Brně: Institut pro další vzdělávání pracovníků ve zdravotnictví v Brně, 1999. 172 s. ISBN 8070132817. [info](#)
- Vojtíšková M.: *Klinická molekulární genetiká*, IDVPZ Brno, 1999

- [ŠMARDA, Jan](#). *Člověk v proudu dědičnosti (Geny v lidském zdraví a nemoci) (Man in the stream of heredity)*. Praha: Grada-Avicenum, 1999. 136 pp. ISBN 80-7169-768-0. [info](#)
- *Pokroky v lékařské genetice*. Edited by Jan Kapras. 1. vyd. Praha: Avicenum, 1992. 141 s. ISBN 80-85047-10-1. [info](#)
- ŽIŽKA, Jan. *Diagnostika syndromů a malformací*. 1. vyd. Praha: Galén, 1994. 414 s. ISBN 80-85824-04-3. [info](#)
- *Practical genetic counselling*. Edited by Peter S. Harper. 4th ed. Oxford: Butterworth-Heinemann, 1993. 348 s. ISBN 0-7506-0928-1. [info](#)
- *Atlas klinických syndromů :pro kliniku a praxi*. Edited by H.-R Wiedemann - J. Kunze - F.-R Grosse, Translated by Miloslav Navrá. 1. vyd. Martin: Osveta, 1996. xxvii, 684. ISBN 80-217-0517-5. [info](#)
- George H. Sack, Jr. : Medical Genetics

Teaching methods

practise

Assessment methods

for giving of course-unit credit is necessary full attendance in the lessons

Language of instruction

Czech

Further Comments

[Study Materials](#)

Listed among pre-requisites of other courses

- [VLDP0932c Pediatrics II - practice](#)
[VLFA0722p](#) && [VLPD7X31c](#) && [VSOT7X1c](#) && [VLDM7X1c](#) && [VSIP0622p](#)
&& [VLCP0622p](#) && [VLKG7X1c](#) (Do I meet enrolment requirements?)
- [VLDP0932p Pediatrics II - lectures](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLPD7X31c](#) && [VSOT7X1c](#) && [VLDM7X1c](#)
&& [VSIP0622p](#) && [VLCP0622p](#) && [VLKG7X1c](#) (Do I meet enrolment requirements?)

The course is also listed under the following terms [Autumn 1999](#), [Spring 2000](#), [Autumn 2000](#), [Spring 2001](#), [Autumn 2001](#), [Spring 2002](#), [Autumn 2002](#), [Spring 2003](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

VLKG7X1p Clinical Genetics - lecture ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

1/0/0. 1 credit(s). Type of Completion: k (colloquium).

Teacher(s)

[MUDr. Renata Gaillyová, Ph.D.](#) (lecturer)
[MUDr. Šárka Prášilová](#) (seminar tutor)
[MUDr. Jana Šoukalová](#) (seminar tutor)
[RNDr. Iveta Valášková, Ph.D.](#) (seminar tutor)
[Mgr. Marta Hanáková](#) (seminar tutor)
[Mgr. Hana Filková](#) (seminar tutor)
[Mgr. Silvie Dudová](#) (seminar tutor)
[Mgr. Kateřina Kašíková, Ph.D.](#) (seminar tutor)
[Mgr. Martina Vráblíková](#) (assistant)
[Mgr. Kateřina Vopěnková, Ph.D.](#) (assistant)
[prof. MUDr. Michael Doubek, Ph.D.](#) (lecturer)
[doc. RNDr. Lenka Fajkusová, CSc.](#) (lecturer)
[doc. MUDr. Lenka Foretová, Ph.D.](#) (lecturer)
[prof. MVDr. RNDr. Petr Hořín, CSc.](#) (lecturer)
MUDr. Věra Hořínová (lecturer)
[doc. MUDr. Hana Ošlejšková, Ph.D.](#) (lecturer)
[MUDr. Petr Smejkal, Ph.D.](#) (lecturer)

Supervisor

[prof. MUDr. Michael Doubek, Ph.D.](#)
[Department of Internal Medicine, Hematology and Oncology - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)
Supplier department: [Department of Internal Medicine, Hematology and Oncology - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Timetable

Mon 25. 9. to Fri 24. 11. Mon 17:00–17:50 [A11/234](#), Mon 4. 12. to Fri 22. 12. Mon 13:30–14:20 [N01062](#); and Mon 27. 11. 13:30–14:20 [N01051](#)

Prerequisites (in Czech)

[VLLM0522p Medical Microbiology II - lect](#) && [VLIM051p Immunology - lecture](#) && [VLCP0622c Introduc. to surgery II -pr.](#) && [VSIP0622c Introduction to internal II-pr](#) && [VLFA0621c Pharmacology I - p](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The course provides an overview of the current knowledge of clinical genetics and its interdisciplinary character. Recent and modern concepts of genetic disorders, prevention of genetic diseases and congenital defects and relevant modern diagnostic methods are presented to students. As an extension of these topics, ethical, juridical and psychosocial

issues are discussed. The subject matter presented in this course will help to better understand other medical subjects including internal medicine, neurology, surgery etc.

Syllabus

- Principles of clinical genetics - standard karyotype and its abnormalities - indication criteria for prenatal and postnatal karyotype examination - prenatal cytogenetic methods - prenatal screening examinations – chromosomal aberrations – chromosome instability – principles of DNA diagnostics - prenatal diagnostics using methods of molecular genetics – gene therapy and mapping of the human genome – principles of oncocytogenetics – genetic counseling - case reports.

Literature

- Základem studia je látka přednášená na přednáškách a probíraná na seminářích a stážích z klinické genetiky a materiály v IS.
- D.J.Pritchard, B.R.Korf: Základy lékařské genetiky, Galén 2007
- Nussbaum, Mc Illnes, :Thompson & Thompson: Klinická genetiky, 2004
- SRŠEŇ, Štefan and Klára SRŠŇOVÁ. *Základy klinické genetiky*. 2. preprac. a rozš. vyd. Martin: Vydavatel'stvo Osveta, 1995. 259 s. ISBN 8021704772. [info](#)
- KUČEROVÁ, Maria. *Vrozené a získané poruchy lidských chromosomů [Kučerová, 1988]*. Praha: Avicenum, 1988. [info](#)
- HYÁNEK, Josef. *Klinické a biochemické aspekty vrozených metabolických poruch*. 1. vyd. Praha: Avicenum, 1980. 280 s. [info](#)
- MICHALOVÁ, Kyra. *Úvod do lidské cytogenetiky*. Vyd. 1. V Brně: Institut pro další vzdělávání pracovníků ve zdravotnictví v Brně, 1999. 172 s. ISBN 8070132817. [info](#)
- Vojtíšková M.: *Klinická molekulární genetiky*, IDVPZ Brno, 1999
- [ŠMARDA, Jan](#). *Člověk v proudu dědičnosti (Geny v lidském zdraví a nemoci) (Man in the stream of heredity)*. Praha: Grada-Avicenum, 1999. 136 pp. ISBN 80-7169-768-0. [info](#)
- *Pokroky v lékařské genetice*. Edited by Jan Kapras. 1. vyd. Praha: Avicenum, 1992. 141 s. ISBN 80-85047-10-1. [info](#)
- ŽIŽKA, Jan. *Diagnostika syndromů a malformací*. 1. vyd. Praha: Galén, 1994. 414 s. ISBN 80-85824-04-3. [info](#)
- *Practical genetic counselling*. Edited by Peter S. Harper. 4th ed. Oxford: Butterworth-Heinemann, 1993. 348 s. ISBN 0-7506-0928-1. [info](#)
- *Atlas klinických syndromů :pro kliniku a praxi*. Edited by H.-R Wiedemann - J. Kunze - F.-R Grosse, Translated by Miloslav Navrá. 1. vyd. Martin: Osveta, 1996. xxvii, 684. ISBN 80-217-0517-5. [info](#)
- George H. Sack, Jr. : *Medical Genetics*

Teaching methods

one-hour lecture per week

Assessment methods

written colloquium, for giving of course-unit credit is necessary full attendance in the lessons

Language of instruction

Czech

Further Comments

Study Materials

The course is also listed under the following terms [Autumn 1999](#), [Spring 2000](#), [Autumn 2000](#), [Spring 2001](#), [Autumn 2001](#), [Spring 2002](#), [Autumn 2002](#), [Spring 2003](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

VLKM0311c Communication and selfexperience - practice ✳

Faculty of Medicine

Autumn 2015

Extent and Intensity

0/2/0. 2 credit(s). Type of Completion: k (colloquium).

Teacher(s)

[Mgr. Terézia Knejzlíková](#) (seminar tutor)

[Mgr. MVDr. Leoš Landa, Ph.D.](#) (seminar tutor)

[PhDr. Hana Neudertová, Ph.D.](#) (seminar tutor)

[Mgr. Lucie Strachotová](#) (seminar tutor)

[Mgr. Daniela Velíšková](#) (seminar tutor)

Supervisor

[prof. MUDr. Tomáš Kašpárek, Ph.D.](#)

[Department of Psychology and Psychosomatics - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [Vlasta Břicháčková](#)

Supplier department: [Department of Psychology and Psychosomatics - Theoretical Departments - Faculty of Medicine](#)

Timetable of Seminar Groups

VLKM0311c/01: Thu 14:00–15:40 [KOM S116](#)

VLKM0311c/02: Thu 14:00–15:40 [KOM S117](#)

VLKM0311c/03: Thu 14:00–15:40 [KOM S117](#)

VLKM0311c/04: Fri 7:20–9:10 [A11/327](#)

VLKM0311c/05: Fri 7:20–9:10 [A11/327](#)

VLKM0311c/06: Thu 14:00–15:40 [409](#)

VLKM0311c/07: Thu 14:00–15:40 [409](#)

VLKM0311c/08: Thu 14:05–15:45 [KOM 257](#)

VLKM0311c/09: Thu 14:05–15:45 [KOM 257](#)

VLKM0311c/10: Thu 14:00–15:40 [KOM S116](#)

VLKM0311c/11: Thu 16:30–18:10 [KOM S116](#)

VLKM0311c/12: Thu 16:30–18:10 [KOM S117](#)

VLKM0311c/13: Thu 16:30–18:10 [KOM S117](#)

VLKM0311c/14: Fri 9:20–11:10 [A11/327](#); and Fri 16. 10. 11:10–13:20 [A11/334](#), Fri 23.

10. 9:20–13:20 [A11/334](#), Fri 6. 11. 9:20–13:20 [A11/334](#), Fri 20. 11. 9:20–13:20 [A11/334](#)
VLKM0311c/15: Fri 9:20–11:10 [A11/327](#); and Fri 16. 10. 11:10–13:20 [A11/334](#), Fri 23.
10. 9:20–13:20 [A11/334](#), Fri 6. 11. 9:20–13:20 [A11/334](#), Fri 20. 11. 9:20–13:20 [A11/334](#)
VLKM0311c/16: Thu 16:30–18:10 [409](#)
VLKM0311c/17: Thu 16:30–18:10 [409](#)
VLKM0311c/18: Thu 16:30–18:10 [KOM S116](#)

Prerequisites (in Czech)

[VSPO011p First Aid - lecture](#) && [VSET021 Medical Ethics I](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

The capacity limit for the course is 450 student(s).

Current registration and enrolment status: enrolled: **299**/450, only registered: **0**/450

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Main objectives can be summarized as follows: basic communication skills - work with empathy, selfreflexion an trust in medical field and basic selfexploration - work with emotions and individual and group work within study groups in model situations.

Syllabus

- Communication - definition, information, rules. Theoretical principals of communication, transactional analysis, Rogers approach. Basic communication skills - listening, empathy, respect, interest, support, interpretation. Non-verbal communication - - senses, proxemic patterns, haptic patterns, postural patterns, movements, gestures. Verbal communication skills - dialogue, kinds of questions, sharing emotions. Structured doctor - patient dialogue I., II.- psychotherapeutic approach. Motivation, compliance, therapeutical relationship. Communication during mental crisis. Communication with pediatric patient. Psychological approaches to various groups of patients - anxiety, fear, uncertainty, hostility, depression, mental illness. Communication with sense disorders patients. Communication with geriatric patients. Communicaton with oncology patients. Breaking bad news, communication with relatives. Relaxation techniques - Autogenous training, assertiveness techniques, burn out synrome prevention, Balint groups.

Literature

required literature

- LINHARTOVÁ, Věra. *Praktická komunikace v medicíně : pro mediky, lékaře a ošetřující personál*. 1. vyd. Praha: Grada, 2007. 152 s. ISBN 9788024717845. [info](#)

- VYMĚTAL, Jan. *Lékařská psychologie*. 3. aktualiz. vyd. Praha: Portál, 2003. 397 s. ISBN 80-7178-740-X. [info](#)

recommended literature

- Hájek K.:Práce s emocemi pro pomáhající profese, Praha, Portál, 2007
- HONZÁK, Radkin. *Komunikační pasti v medicíně : praktický manuál komunikace lékaře s pacientem*. 2. dopl. vyd. Praha: Galén, 1999. 165 s. ISBN 8072620320. [info](#)

Teaching methods

There are used group activities and individual work as well during the course. Crucial is selfexploration. Students will learn relaxation techniques. Audio and video material is used during lessons.

Assessment methods

The subject is ended by colloquium - final project, attendance, test and final discussion is required.

Language of instruction

Czech

Further Comments

[Study Materials](#)

The course is taught annually.

The course is also listed under the following terms [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#).

VLKP061 Selected Chapters from Pathological Physiology *

Faculty of Medicine

Spring 2018

Extent and Intensity

0/2/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Anna Vašků, CSc.](#) (seminar tutor)

[Věra Ježková](#) (assistant)

Supervisor

[prof. MUDr. Anna Vašků, CSc.](#)

[Department of Pathological Physiology - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [prof. MUDr. Anna Vašků, CSc.](#)

Supplier department: [Department of Pathological Physiology - Theoretical Departments - Faculty of Medicine](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

News in profile pathophysiological questions will be discussed.

Teaching methods

Lectures with large discussion

Assessment methods

Credits will be given to the students with at least 5 lessons attendance.

Language of instruction

Czech

Further Comments

The course is taught annually.

The course is also listed under the following terms [Accreditation spring](#).

VLKP07X Clinical practice ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/60/0. 5 credit(s). Type of Completion: z (credit).

Teacher(s)

[doc. MUDr. Eva Brichtová, Ph.D.](#) (seminar tutor)

[doc. MUDr. Lubomír Křivan, Ph.D.](#) (seminar tutor)

[MUDr. Hana Nechutová, Ph.D.](#) (seminar tutor)

[doc. MUDr. Petr Štourač, Ph.D.](#) (seminar tutor)

[Hana Zemanová](#) (seminar tutor)

[Hana Baráčková](#) (assistant)

[Yveta Břenková](#) (assistant)

[Lenka Chrástová](#) (assistant)

[prof. MUDr. Hana Matějovská Kubešová, CSc.](#) (assistant)

[Lea Müllerová](#) (assistant)

[Jana Pazderová](#) (assistant)

[Eva Podborská](#) (assistant)

Supervisor

[prof. MUDr. Ladislav Plánka, Ph.D.](#)

[Faculty of Medicine](#)

Supplier department: [Faculty of Medicine](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of this subject is to offer students first contact with primary care, to connect theoretical knowledge with practical skills

Syllabus

- The general practitioner office basic diagnostic and therapeutic procedures at GPs office long-term ill patient in his own environment emergencies in primary care

Literature

- SEIFERT, Bohumil. *Primární péče. Praktické lékařství : výukový text pro studenty magisterského studia lékařství*. 1. vyd. Praha: Karolinum, 2004. 156 s. ISBN 8024608839. [info](#)
- [KUBEŠOVÁ, Hana](#), [Josef HOLÍK](#) and [Ivana BOGROVÁ](#). *Praktické lékařství pro magisterské studium lékařských věd*. : Masarykova univerzita v Brně, Lékařská fakulta, 2002. 75 pp. [info](#)

Teaching methods

practical exercise

Assessment methods

case description

Language of instruction

Czech

Further comments (probably available only in Czech)

The course can also be completed outside the examination period.

The course is taught each semester.

Note related to how often the course is taught: dle dohody na klinice.

General note: zápočet z předmětu zadá studijní referentka na základě potvrzení přednosta kliniky.

Information on the extent and intensity of the course: stáž na klinice v odpoledních nebo nočních hodinách, nejméně 60h.

Information on course enrolment limitations: Organizují všechny kliniky s nepřetržitým provozem. Student může předmět zapsat pouze po předchozí domluvě na příslušné klinice, na základě souhlasu přednosta kliniky.

The course is also listed under the following terms [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

VLLF111 Medical physics - advanced exercises ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

0/2. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. RNDr. Vojtěch Mornstein, CSc.](#) (lecturer)

[Mgr. Daniel Vlk, CSc.](#) (lecturer)

[Mgr. Vladan Bernard, Ph.D.](#) (seminar tutor)

[MUDr. Věra Maryšková](#) (seminar tutor)

Supervisor

[Mgr. Daniel Vlk, CSc.](#)

[Department of Biophysics - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [Mgr. Daniel Vlk, CSc.](#)

Supplier department: [Department of Biophysics - Theoretical Departments - Faculty of Medicine](#)

Prerequisites

[VLBF011p Biophysics-lect.](#)

Biophysics exam

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

The capacity limit for the course is 24 student(s).

Current registration and enrolment status: enrolled: **0/24**, only registered: **0/24**, only registered with preference (fields directly associated with the programme): **0/24**

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

At the end of the course students should be able: use informatics for search and sorting of professional informations; operate advanced diagnostic and laboratory devices; evaluate obtained data by the biophysical methods in light of a scientific, effective, safe and efficient attitude to their use; discriminate possible usage of the biophysical techniques and medical devices in practice;

Learning outcomes

At the end of the course students should be able: use informatics for search and sorting of professional informations; operate advanced diagnostic and laboratory devices; evaluate obtained data by the biophysical methods in light of a scientific, effective, safe and efficient attitude to their use; discriminate possible usage of the biophysical techniques and medical devices in practice;

Syllabus

- **Practical exercises.**
- Future of informatics in medicine. Searching of a scientific informations.
- Safe and effective usage of a diagnostics and therapeutic methods.
- Computerised simulations in medical education.
- Nanotechnology in medicine.
- Luminiscence and lasers in medicine. Fluorescent microscopy.
- Experimental tasks:

- 1. Measuring of a elektromagnetical parameters of environment – measuring of magnetic field and kvantification of a external sources of elektromagnetical radiation.
- 2. Measuring of a blood flow velocity in peripheral arterias.
- 3. Diagnostics ultrasound with the model for duplex imaging.
- 4. Diagnostic ultrasound - 3D imaging; controlled cathetrisation of a model of vessel.
- 5. Termography – cooling test.
- 6. Termography – emissivity measuring.
- 7. Evaluation of parameters of X-rays.
- 8. Perimetry and Cornea topography.
- 9. Spektrophotometry and elektrophoresis of nucleic acids.

Literature

recommended literature

- HRAZDIRA, Ivo, Vojtech MORNSTEIN, Aleš BOUREK and Jiřina ŠKORPÍKOVÁ. *Fundamentals of Biophysics and Medical Technology*. 1. vydání 1. dotisk. Brno: Muni Press, 2009. 317 pp. ISBN 978-80-210-4228-5. [info](#)
- MORNSTEIN, Vojtěch, Ivo HRAZDIRA and Aleš BOUREK. *Lékařská fyzika a informatika : (se zaměřením na zubní lékařství)*. [1. vydání]. Brno: Neptun, 2007. 352 stran. ISBN 9788086850023. [info](#)
- [HRAZDIRA, Ivo](#) and [Vojtěch MORNSTEIN](#). *Lékařská biofyzika a přístrojová technika (Medical biophysics and technology)*. 1. vyd. Brno: Neptun, 2001. 395 pp. ISBN 80-902896-1-4. [info](#)

Teaching methods

Practical exercises and seminars

Assessment methods

Basic fulfilling requirements are the full atendance in the lessons. For all tasks students must elaborate report including critical assessment used methods.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

Information on course enrolment limitations: 2 skupiny

Teacher's information

Předmět doporučen pro studenty prvních až třetích ročníků LF MU.

The course is also listed under the following terms [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VLLM0421c Medical Microbiology I - practice ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

0/3/0. 4 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Ondřej Zahradníček](#) (lecturer)

[MUDr. Lenka Černohorská, Ph.D.](#) (seminar tutor)

[Mgr. Milada Dvořáčková](#) (seminar tutor)

[Mgr. Monika Dvořáková Heroldová, Ph.D.](#) (seminar tutor)

[Ing. Veronika Holá, Ph.D.](#) (seminar tutor)

[Mgr. Ing. Veronika Lýčková](#) (seminar tutor)

[Mgr. Katarína Rebrošová](#) (seminar tutor)

[doc. MUDr. Filip Růžička, Ph.D.](#) (seminar tutor)

[Mgr. Lukáš Vacek](#) (seminar tutor)

Supervisor

[doc. MUDr. Filip Růžička, Ph.D.](#)

[Department of Microbiology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Contact Person: [MUDr. Ondřej Zahradníček](#)

Supplier department: [Department of Microbiology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Prerequisites

([VSBI0222p Biology II-lect.](#) || [VLBI0222p Biology II-lect.](#)) && (

[VSBF011p Biophysics](#) || [VLBF011p Biophysics-lect.](#))

Students are supposed to have considerable knowledge of anatomy, histology, biology, biochemistry and physiology.

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

At the end of this course, students should be able:

to prepare wet mount, Gram stained preparation, to observe the results in a microscope, to list other staining methods

to list culture media, their use, differences between them, to reinoculate a strain/specimen to a culture medium

to identify bacteria and yeasts by means of various methods of biochemical identification and other identification methods

to describe antibiotic susceptibility/resistance testing methods and to read their results

to describe animal experiment (only basically)

to read results of nucleic acid detection in microbiology (only basically)

to describe methods detecting antigens or antibodies, their use for antibody

detection/antigen detection in specimen/antigen analysis of a strain; to read the results of these methods including titers, titer dynamics, detection of IgM/IgA/IgG; to interpret the results; to describe precipitation, agglutination, agglutination on carriers, complementfixing test, neutralisation reaction, immunofluorescence, radioimmunoassay, ELISA, Western blotting

Besides that, students will be able to describe the basic of medical virology

Syllabus

- J01 Safety in laboratory, technique of work with loop, wet mount. Gram staining, demonstration of more staining methods. Demonstration of pictures of various organisms and structures in Gram staining.
- J02 Bacterial culture
- J03 Physiology of bacteria, identification according to biochemical activity and virulence factor determination
- J04 Microbes and outer influences, decontamination methods
- J05 Testing of bacterial susceptibility to antimicrobial drugs, detection of resistance factors
- J06 Introduction to serology, agglutination and precipitation, dilution and measuring titres
- J07 Following dynamics of titres, complement fixing test, neutralisation
- J08 Reactions with labelled components (IMF, RIA, ELISA) including immunoblotting
- J09 Molecular methods in microbiology
- J10 Medical virology I (influenza, respiratory viruses, tick-borne encefalitis)
- J11 Medical virology II (hepatitis and HIV))
- J12 Medical parasitology (basics)
- J13 Medical mycology (basics)
- J14 Biofilm infections
- J15 No practical sessions (only exceptionally individual substitutions)

Literature

- [VOTAVA, Miroslav](#). *Lékařská mikrobiologie obecná. (General Medical Microbiology)*. 1. vyd. Brno: Neptun, 2001. 247 pp. ISBN 80-902896-2-2. [info](#)
- [VOTAVA, Miroslav](#). *Lékařská mikrobiologie speciální (Medical microbiology special)*. 1. vyd. Brno: NEPTUN, Březová 18, 637 00 Brno, 2003. 495 pp. ISBN 80-902896-6-5. [info](#)
- [VOTAVA, Miroslav](#), [Filip RŮŽIČKA](#), [Vladana WOZNICOVÁ](#), [Lenka ČERNOHORSKÁ](#), [Milada DVOŘÁČKOVÁ](#), [Monika DVOŘÁKOVÁ](#), [HEROLDOVÁ, Veronika HOLÁ](#) and [Ondřej ZAHRADNÍČEK](#). *Lékařská mikrobiologie: Vyšetřovací metody (Medical Microbiology: Laboratory Procedures)*. 1. vyd. Brno: Neptun, 2010. 495 pp. ISBN 978-80-86850-04-7. [info](#)
- GREENWOOD, David. *Lékařská mikrobiologie : přehled infekčních onemocnění : patogeneze, imunita, laboratorní diagnostika a epidemiologie*. 1. vyd. Praha: Grada Publishing, 1999. 686 s. ISBN 80-7169-365-0. [info](#)
- RULÍK, Martin, [Veronika HOLÁ](#), [Filip RŮŽIČKA](#), [Miroslav VOTAVA](#), Dana BAUDIŠOVÁ, Jiří GALLO, Simona KAPRÁLOVÁ, Kateřina KOHUŠOVÁ,

Dagmar KOUKALOVÁ, Václav KÚDELA, Jiří MIKEŠ, Radko NOVOTNÝ, Martina SIGLOVÁ, Věra TORŠOVÁ and Jiří ZIMÁK. *Mikrobiální biofilmy (Microbial Biofilms)*. 1. vydání. Olomouc: Univerzita Palackého v Olomouci, 2011. 448 pp. Monografie. ISBN 978-80-244-2747-8. [info](#)

- *Medical microbiology : a guide to microbial infections : pathogenesis, immunity, laboratory diagnosis and control*. Edited by David Greenwood. 18th ed. Edinburgh: Churchill Livingstone, 2012. xvi, 778. ISBN 9780702040900. [info](#)
- MURRAY, Patrick R., Ken S. ROSENTHAL and George S., et al. KOBAYASHI. *Medical microbiology*. 6th ed. St. Louis: Mosby, 2008. 960 pp. ISBN 0-323-05470-6. [info](#)
- BJARNSHOLT, Thomas, Claus MOSER and Niels HØIBY. *Biofilm Infections*. : Springer, 2011. ISBN 978-1-4419-6084-9. [e-book](#) [info](#)
- Tituly 1, 2, přednášky v IS MU a veškeré materiály z praktik jsou základní studijní materiály ke zkoušce, ostatní jsou doplňkové.

Teaching methods

practical training in lab
self-study with use of e-learning materials

Assessment methods

Conditions for credits:

(1) absolving all practicals, with following notes:

- two justified absences or absences approved by teacher are allowed; students are obliged to show that they completed the knowledge (in laboratory reports and in their heads)
- more absences than two require a substitution
- not justified absences are not allowed

(2) complete laboratory report (signature of teacher is not necessary)

(3) succesfully written final test (usually 10 multiple choice questions, each for one point; 7 points needed)

(4) all ROPOT questionnaires completed succesfully; if they are always fulfilled in time (prior to particular lab session), the student has a bonus of one point for final test

Language of instruction

Czech

Follow-Up Courses

- [VLLM0522p Medical Microbiology II - lecture](#)

Further comments (probably available only in Czech)

Information on completion of the course: Podmínky udělení zápočtu viz Doplňkové údaje o předmětu

The course is taught annually.

The course is taught: every week.

Listed among pre-requisites of other courses

- [aVLLM0522c Medical Microbiology II - practice](#)
([VLLM0421c](#) || [aVLLM0421c](#)) && ([aVLBC0422c](#) || [VSBC041c](#)) &&
([aVLBC0422s](#) || [VSBC041s](#)) ([Do I meet enrolment requirements?](#))

- [aVLLM0522p Medical Microbiology II - lecture](#)
([VLLM0421c](#) || [aVLLM0421c](#)) && ([aVLBC0422p](#) || [VSBC041p](#)) ([Do I meet enrolment requirements?](#))
- [aVLPA0521c Pathology I - practice](#)
([aVLAN0222p](#) || [VSAN0333p](#)) && ([aVLHE0322p](#) || [VSHE0322p](#)) && ([aVLLM0421c](#) || [VLLM0421c](#)) ([Do I meet enrolment requirements?](#))
- [aVLPA0521p Pathology I - lecture](#)
([aVLAN0222p](#) || [VSAN0333p](#)) && ([aVLHE0322p](#) || [VSHE0322p](#)) && ([aVLLM0421c](#) || [VLLM0421c](#)) ([Do I meet enrolment requirements?](#))
- [aVLPF0521c Pathological physiology I - practice](#)
([aVLFY0422p](#) || [VSFY0422p](#)) && ([VSBC041p](#) || [aVLBC0422p](#)) && ([VLLM0421c](#) || [aVLLM0421c](#)) ([Do I meet enrolment requirements?](#))
- [aVLPF0521p Pathological Physiology I - lecture](#)
([aVLFY0422p](#) || [VSFY0422p](#)) && ([VSBC041p](#) || [aVLBC0422p](#)) && ([VLLM0421c](#) || [aVLLM0421c](#)) ([Do I meet enrolment requirements?](#))
- [VLAT081 Fundamentals of Antimicrobial Therapy](#)
([VLLM0421c](#) && [VLLM0522c](#)) ([Do I meet enrolment requirements?](#))
- [VLLM0522c Medical Microbiology II - practice](#)
[VLLM0421c](#) && ([VLBC0422c](#) || [VSBC041c](#)) && ([VLBC0422s](#) || [VSBC041s](#)) ([Do I meet enrolment requirements?](#))
- [VLLM0522p Medical Microbiology II - lecture](#)
[VLLM0421c](#) && ([VLBC0422p](#) || [VSBC041p](#)) ([Do I meet enrolment requirements?](#))

[Zobrazit další předměty](#)

Teacher's information

E-mailový a telefonický kontakt:

Doc. MUDr. Filip Růžička, PhD: fruzic@fnusa.cz, TEL 543 183 090, (přednosta ústavu)

Sekretariát: 543 183 091

prof. MUDr. Miroslav Votava, CSc.: miroslav.votava@fnusa.cz, TEL 543 183 117

doc. MUDr. Vladana Woznicová, PhD: vladana.woznicova@gmail.com

as. MUDr. Ondřej Zahradníček: zahradnicek@fnusa.cz, TEL 543 183 113

odb. as. MUDr. Lenka Černohorská, PhD.: lenka.cernohorska@fnusa.cz, TEL 543 183 092

odb. as. Mgr. Monika Dvořáková Heroldová, PhD: monika.heroldova@fnusa.cz

odb. as. Ing. Veronika Holá, PhD.: veronika.hola@fnusa.cz

as. Mgr. Milada Dvořáčková: milada.dvorackova@fnusa.cz

as. Mgr. Lukáš Vacek: vacek.lukas.88@gmail.com

as. Mgr. Veronika Lýčková: 324090@mail.muni.cz

Další informace jsou průběžně zveřejňovány na nástěnce v~praktikárně ústavu.

The course is also listed under the following terms [Spring 2000](#), [Spring 2001](#), [Spring 2002](#), [Spring 2003](#), [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VLLM0421p Medical Microbiology I - lecture ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

1/0/0. 0 credit(s). Recommended Type of Completion: z (credit). Alternate Types of Completion: -.

Teacher(s)

[MUDr. Lenka Černohorská, Ph.D.](#) (lecturer)

[Mgr. Monika Dvořáková Heroldová, Ph.D.](#) (lecturer)

[Ing. Veronika Holá, Ph.D.](#) (lecturer)

[doc. MUDr. Filip Růžička, Ph.D.](#) (lecturer)

[prof. MUDr. Miroslav Votava, CSc.](#) (lecturer)

[doc. MUDr. Vladana Woznicová, Ph.D.](#) (lecturer)

[Mgr. Ing. Veronika Lýčková](#) (seminar tutor)

[Mgr. Lukáš Vacek](#) (seminar tutor)

[MUDr. Ondřej Zahradníček](#) (seminar tutor)

Supervisor

[doc. MUDr. Filip Růžička, Ph.D.](#)

[Department of Microbiology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Contact Person: [MUDr. Ondřej Zahradníček](#)

Supplier department: [Department of Microbiology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Prerequisites

[VSBI0222p Biology II-lect.](#) || [VLBI0222p Biology II-lect.](#) && [VLBF011p Biophysics-lect.](#)

Students are supposed to have considerable knowledge of anatomy, histology, biology, biochemistry and physiology.

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

At the end of the course student should be able to:
define microbial morphology and physiology, basics of microbial genetics
describe microbial biofilm and its properties
define pathogenicity and virulence, factors of pathogenicity and virulence, pathogenesis and course of infection
discuss antimicrobial immunity, active and passive immunisation
describe tenacity of microorganisms, basic principles and practical use of decontamination methods

Syllabus

- 1. Introduction to microbiology
- 2. Bacterial cell and growth
- 3. Microbes and environment
- 4. Pathogenicity and virulence
- 5. Microbial biofilm
- 6. Microbes and the host
- 7. Microbes and host immunity
- 8. Antibiotics I.
- 9. Antibiotics II.
- 10. Antibiotics III.
- 11. Other antimicrobials
- 12. Principles of antimicrobial treatment
- 13. Notes to special microbiology I.
- 14. Notes to special microbiology II.

Literature

required literature

- [VOTAVA, Miroslav](#). *Lékařská mikrobiologie obecná. (General Medical Microbiology.)*. 1. vyd. Brno: Neptun, 2001. 247 pp. ISBN 80-902896-2-2. [info](#)
- [VOTAVA, Miroslav](#). *Lékařská mikrobiologie speciální (Medical microbiology special)*. 1. vyd. Brno: NEPTUN, Březová 18, 637 00 Brno, 2003. 495 pp. ISBN 80-902896-6-5. [info](#)

recommended literature

- [VOTAVA, Miroslav](#), [Filip RŮŽIČKA](#), [Vladana WOZNICOVÁ](#), [Lenka ČERNOHORSKÁ](#), [Milada DVOŘÁČKOVÁ](#), [Monika DVOŘÁKOVÁ](#), [HEROLDOVÁ, Veronika HOLÁ](#) and [Ondřej ZAHRADNÍČEK](#). *Lékařská*

mikrobiologie: Vyšetřovací metody (Medical Microbiology: Laboratory Procedures). 1. vyd. Brno: Neptun, 2010. 495 pp. ISBN 978-80-86850-04-7. [info](#)

- GREENWOOD, David. *Lékařská mikrobiologie : přehled infekčních onemocnění : patogeneze, imunita, laboratorní diagnostika a epidemiologie*. 1. vyd. Praha: Grada Publishing, 1999. 686 s. ISBN 80-7169-365-0. [info](#)
- RULÍK, Martin, [Veronika HOLÁ](#), [Filip RŮŽIČKA](#), [Miroslav VOTAVA](#), Dana BAUDIŠOVÁ, Jiří GALLO, Simona KAPRÁLOVÁ, Kateřina KOHUŠOVÁ, Dagmar KOUKALOVÁ, Václav KŮDELA, Jiří MIKEŠ, Radko NOVOTNÝ, Martina SIGLOVÁ, Věra TORŠOVÁ and Jiří ZIMÁK. *Mikrobiální biofilmy (Microbial Biofilms)*. 1. vydání. Olomouc: Univerzita Palackého v Olomouci, 2011. 448 pp. Monografie. ISBN 978-80-244-2747-8. [info](#)
- GOERING, Richard V., Hazel M. DOCKRELL, Mark A. ZUCKERMAN, Ivan M. ROITT and Peter L. CHIODINI. *Mimsova lékařská mikrobiologie*. Translated by Jaroslav Julák - Jan Bobek - Renáta Čermáková - Karel Holada. Praha: Stanislav Juhaňák - Triton, 2016. xiv, 568. ISBN 9788073879280. [info](#)
- Tituly 1, 2, přednášky v IS MU a veškeré materiály z praktik jsou základní studijní materiály ke zkoušce, ostatní jsou doplňkové.

Teaching methods

lecture

Assessment methods

This is the first part of lectures, no specific end. After the second block of lectures (VLLM0522p) there is the practical and theoretical examination.

Language of instruction

Czech

Follow-Up Courses

- [VLLM0522p Medical Microbiology II - lecture](#)

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

Teacher's information

E-mailový a telefonický kontakt

doc. MUDr. Filip Růžička, PhD: fruzic@fnusa.cz, TEL 543 183 090, (přednosta ústavu)

Sekretariát: 543 183 091

prof. MUDr. Miroslav Votava, CSc.: miroslav.votava@fnusa.cz, TEL 543 183 117

doc. MUDr. Vladana Woznicová, PhD: vladana.woznicova@gmail.com

as. MUDr. Ondřej Zahradníček: zahradnicek@fnusa.cz, TEL 543 183 113

odb. as. MUDr. Lenka Černohorská, PhD.: lenka.cernohorska@fnusa.cz, TEL 543 183 092

odb. as. Mgr. Monika Dvořáková Heroldová, PhD: monika.heroldova@fnusa.cz

odb. as. Ing. Veronika Holá, PhD.: veronika.hola@fnusa.cz

Další informace jsou průběžně zveřejňovány na nástěnce v~praktikárně ústavu.

The course is also listed under the following terms [Spring 2000](#), [Spring 2001](#), [Spring 2002](#), [Spring 2003](#), [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VLLM0522c Medical Microbiology II - practice ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/3/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Ondřej Zahradníček](#) (lecturer)

[MUDr. Lenka Černohorská, Ph.D.](#) (seminar tutor)

[Mgr. Milada Dvořáčková](#) (seminar tutor)

[Mgr. Monika Dvořáková Heroldová, Ph.D.](#) (seminar tutor)

[Ing. Veronika Holá, Ph.D.](#) (seminar tutor)

[Mgr. Ing. Veronika Lýčková](#) (seminar tutor)

[Mgr. Katarína Rebrošová](#) (seminar tutor)

[doc. MUDr. Filip Růžička, Ph.D.](#) (seminar tutor)

[MUDr. Alena Siváková](#) (seminar tutor)

[Mgr. Petra Šišková, Ph.D.](#) (seminar tutor)

[Mgr. Lukáš Vacek](#) (seminar tutor)

[doc. MUDr. Vladana Woznicová, Ph.D.](#) (seminar tutor)

[Iva Holešovská](#) (assistant)

Supervisor

[doc. MUDr. Filip Růžička, Ph.D.](#)

[Department of Microbiology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Contact Person: [MUDr. Ondřej Zahradníček](#)

Supplier department: [Department of Microbiology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Timetable of Seminar Groups

VLLM0522c/Uzn: No timetable has been entered into IS., Virtuální skupina pouze pro studenty, jimž byl předmět uznán

VLLM0522c/01_02: Wed 7:30–10:00 [N02112](#), *O. Zahradníček*

VLLM0522c/03_04: Wed 10:20–12:50 [N02112](#), L. Vacek
VLLM0522c/05_06: Mon 7:30–10:00 [N02112](#), M. Dvořáčková
VLLM0522c/07_08: Mon 10:20–12:50 [N02112](#), O. Zahradníček
VLLM0522c/09_10: Fri 7:30–10:00 [N02112](#), A. Siváková
VLLM0522c/11_12: Fri 10:20–12:50 [N02112](#), O. Zahradníček
VLLM0522c/13_14: Tue 7:30–10:00 [N02112](#), M. Dvořáková Heroldová
VLLM0522c/15_16: Thu 10:20–12:50 [N02112](#), L. Černožorská
VLLM0522c/17_18: Tue 11:00–13:30 [N02112](#), M. Dvořáková Heroldová
VLLM0522c/98: No timetable has been entered into IS. V. Lýčková
VLLM0522c/99: No timetable has been entered into IS. V. Lýčková

Prerequisites

[VLLM0421c Med.Microbiol.](#) && ([VLBC0422c Biochemistry II](#) || [VSBC041c Biochemistry II -pract.](#)) && ([VLBC0422s Biochemistry II sem](#) || [VSBC041s Biochemistry II -s](#))

Necessary for subject absolution is knowledge of topics from VLLM0421c. This knowledge is considered obvious and topics of first semester will not be explained repeatedly.

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

At the end of the course student

- * defines microbial findings in different localisations
- * defines the difference between common microbial flora, temporary findings, contaminants and pathogens in various localisations
- * records infections that are rare and the rather common ones
- * defines basics of diagnostic and therapeutic approach in the most typical microbial disease; here, basis is only supposed, more enlargement is supposed in other subjects, namely *Infectology*

Namely student defines normal flora (if it does exist)/transitory findings/contaminants/pathogens in

- * individual parts of upper and lower respiratory ways, lungs and middle ear
- * different parts of gastrointestinal tract, livers, bile bladder and pancreas
- * individual parts of uropoetic system
- * individual parts of reproductive system
- * individual parts of central and peripheral neural system
- * bloodstream, bones, muscles and different tissues
- * skin, eyes, external ear

Student also describes specific problems of microbial infections

- * during pregnancy and delivery and during first days after delivery

* in hospitalized, especially immunocompromised persons (healthcare associated infections)

Student also composes the basic facts in in

* problematics of biofilm detection (including testing of effectivity of antibiotics to biofilm)

* basic processi of clinical microbiology (indication, sampling, material transport, specimen processing, result releasing, result interpretation)

Those interested in deeper knowledge in antibiotic problematic and clinical microbiology may later register to the subject VSAT081 (Basics of antimicrobial therapy)

Syllabus

- **Curriculum of lessons in Medical Microbiology II (3rd year, autumn term)**
-
- **Practical lessons**
- P01 Diagnostics of staphylococci
- P02 Diagnostics of streptococci
- P03 Diagnostics of other G+ bacteria
- P04 Diagnostics of enterobacteriaceae
- P05 Diagnostics of G- bacteria II
- P06 Diagnostics of G- bacteria III
- P07 Diagnostics of anaerobic bacteria
- P08 Diagnostics of acid-fast bacteria
- P09 Diagnostics of spiral bacteria
- P10 Clinical microbiology I (general principles)
- P11 Clinical microbiology II (examination in respiratory and gastrointestinal infections)
- P12 Clinical microbiology III (examination in urogenital infections)
- P13 Clinical microbiology IV (examination in wound and bloodstream infections)
- P14 Review
- Teacher informs students about eventual imparities

Literature

- [VOTAVA, Miroslav](#). *Lékařská mikrobiologie obecná. (General Medical Microbiology.)*. 1. vyd. Brno: Neptun, 2001. 247 pp. ISBN 80-902896-2-2. [info](#)
- [VOTAVA, Miroslav](#). *Lékařská mikrobiologie speciální (Medical microbiology special)*. 1. vyd. Brno: NEPTUN, Březová 18, 637 00 Brno, 2003. 495 pp. ISBN 80-902896-6-5. [info](#)
- [VOTAVA, Miroslav](#), [Filip RŮŽIČKA](#), [Vladana WOZNICOVÁ](#), [Lenka ČERNOHORSKÁ](#), [Milada DVOŘÁČKOVÁ](#), [Monika DVOŘÁKOVÁ](#), [HEROLDOVÁ, Veronika](#) [HOLÁ](#) and [Ondřej ZAHRADNÍČEK](#). *Lékařská mikrobiologie: Vyšetřovací metody (Medical Microbiology: Laboratory Procedures)*. 1. vyd. Brno: Neptun, 2010. 495 pp. ISBN 978-80-86850-04-7. [info](#)
- GREENWOOD, David. *Lékařská mikrobiologie : přehled infekčních onemocnění : patogeneze, imunita, laboratorní diagnostika a epidemiologie*. 1. vyd. Praha: Grada Publishing, 1999. 686 s. ISBN 80-7169-365-0. [info](#)

- RULÍK, Martin, [Veronika HOLÁ](#), [Filip RŮŽIČKA](#), [Miroslav VOTAVA](#), Dana BAUDIŠOVÁ, Jiří GALLO, Simona KAPRÁLOVÁ, Kateřina KOHUŠOVÁ, Dagmar KOUKALOVÁ, Václav KŮDELA, Jiří MIKEŠ, Radko NOVOTNÝ, Martina SIGLOVÁ, Věra TORŠOVÁ and Jiří ZIMÁK. *Mikrobiální biofilmy (Microbial Biofilms)*. 1. vydání. Olomouc: Univerzita Palackého v Olomouci, 2011. 448 pp. Monografie. ISBN 978-80-244-2747-8. [info](#)
- *Medical microbiology : a guide to microbial infections : pathogenesis, immunity, laboratory diagnosis and control*. Edited by David Greenwood. 18th ed. Edinburgh: Churchill Livingstone, 2012. xvi, 778. ISBN 9780702040900. [info](#)
- MURRAY, Patrick R., Ken S. ROSENTHAL and George S., et al. KOBAYASHI. *Medical microbiology*. 6th ed. St. Louis: Mosby, 2008. 960 pp. ISBN 0-323-05470-6. [info](#)
- BJARNSHOLT, Thomas, Claus MOSER and Niels HØIBY. *Biofilm Infections*. : Springer, 2011. ISBN 978-1-4419-6084-9. [e-book](#) [info](#)
- Náhradní obsah: Pro české studium jsou základní tituly 1, 2 a protokoly z IS MU, ostatní jsou doplňkové. For English study, title No. 6 is essential, plus protocols on IS MU. Titles No. 7 and 8 are supplementary.

Teaching methods

practical training
self-study with e-learning materials

Assessment methods

Conditions for credits:

(1) absolving all practicals, with following notes:

- two justified absences or absences approved by teacher are allowed; students are obliged to show that they completed the knowledge (by showing regularly filled-in protocol and eventually also showing the knowledge of the missed practical session)

- more absences than two (although justified!) require a substitution; substitutions in the week of tuition may be performed without formalities with respect with the capacity of the room, other substitutions (e. g. after the end of the semester) are possible only exceptionally and after agreement with a teacher

- not justified absences are not allowed (**EXTRA PAYMENT IS REQUIRED FOR EVENTUAL SUBSTITUTION!!!**)

(2) complete laboratory protocol (signed by the teacher; teacher would not sign a protocol that is not satisfactory; if so, student has to redo it)

(3) successfully filled in ROPOT questions to all topics (full number of points)

(4) successfully written final test, date of the credit test will be declared in time. Number of questions 8 to 12, mostly "single best answer" type, partially also filling in missing word or other type questions, more than 50 % correct answers required.

Language of instruction

Czech

Follow-Up Courses

- [VLLM0522p Medical Microbiology II - lecture](#)

Further comments (probably available only in Czech)

Study Materials

Information on completion of the course: Podmínky zápočtu jsou uvedeny v Doplnkových údajích k předmětu

The course is taught annually.

Listed among pre-requisites of other courses

- [VLAT081 Fundamentals of Antimicrobial Therapy](#) ([VLLM0421c](#) && [VLLM0522c](#)) ([Do I meet enrolment requirements?](#))
- [VLOZ0642c Public Health II - practice](#) ([VLOZ0241c](#) || [VLOZ0141c](#)) && [VLLM0522c](#) && [VLLM0522p](#) && [VLBC0422p](#) ([Do I meet enrolment requirements?](#))
- [VLOZ0642p Public Health II - lecture](#) ([VLOZ0241p](#) || [VLOZ0141p](#)) && [VLLM0522c](#) && [VLLM0522p](#) && [VLBC0422p](#) ([Do I meet enrolment requirements?](#))
- [VSAT081 Fundamentals of Antimicrobial Therapy](#) ([VLLM0421c](#) && [VLLM0522c](#)) || ([STLM0421c](#) && [STLM0522c](#)) ([Do I meet enrolment requirements?](#))

Teacher's information

E-mailový a telefonický kontakt – E-mail and phone contact:

Doc. MUDr. Filip Růžička, PhD: fruzic@fnusa.cz, TEL 543 183 090 (přednosta ústavu/head)

prof. MUDr. Miroslav Votava, CSc.: miroslav.votava@fnusa.cz, TEL 543 183 117

as. MUDr. Ondřej Zahradníček: zahradnicek@fnusa.cz, TEL 543 183 113

odb. as. MUDr. Lenka Černohorská, PhD.: lenka.cernohorska@fnusa.cz, TEL 543 183 093

odb. as. Mgr. Monika Dvořáková Heroldová, PhD: monika.heroldova@fnusa.cz

as. Mgr. Petra Šišková: 151271@mail.muni.cz

as. Mgr. Katarína Mlynáriková: 358289@mail.muni.cz

Další informace jsou průběžně zveřejňovány na nástěnce v~praktikárně ústavu. More information in Practical Hall.

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#), [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VLLM0522p Medical Microbiology II - lecture ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

1/0/0. 4 credit(s). Type of Completion: zk (examination).

Teacher(s)

[MUDr. Lenka Černohorská, Ph.D.](#) (lecturer)
[doc. MUDr. Filip Růžička, Ph.D.](#) (lecturer)
[prof. MUDr. Miroslav Votava, CSc.](#) (lecturer)
[doc. MUDr. Vladana Woznicová, Ph.D.](#) (lecturer)
[Mgr. Monika Dvořáková Heroldová, Ph.D.](#) (seminar tutor)
[Ing. Veronika Holá, Ph.D.](#) (seminar tutor)
[MUDr. Ondřej Zahradníček](#) (seminar tutor)
[Iva Holešovská](#) (assistant)

Supervisor

[doc. MUDr. Filip Růžička, Ph.D.](#)
[Department of Microbiology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)
Contact Person: [MUDr. Ondřej Zahradníček](#)
Supplier department: [Department of Microbiology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Timetable

Mon 13. 11. to Fri 22. 12. Mon 14:00–15:40 [014](#)

Prerequisites

[VLLM0421c Med.Microbiol.](#) && ([VLBC0422p Biochemistry I -lect.](#) || [VSBC041p Biochemistry II -I](#))

Students are supposed to understand topics of first term (subject VLLM0421p).

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

At the end of this course, student

- * defines importance of individual bacterial findings in different clinical materials
- * analyzes the difference between common microbial flora, transient findings, contamination and pathogens in different localisations
- * judges what infections are rather rare and what infections use to be common
- * describes basic approaches of diagnostics and treatment of the most typical microbial diseases; nevertheless, here only basis can be given, and more detailed knowledge should be given in clinical subjects, especially *Infectology*

Namely, student is able to define common microflora (if present)/transient findings/common contaminants/pathogens of

- * different parts of upper and lower respiratory ways, lungs and middle ear
- * different parts of gastrointestinal tract, liver, bile bladder and pancreas
- * different parts of urinary tract
- * different parts of genital system
- * different parts of central and peripheral nervous system
- * bloodstream, bones, muscles and various tissues
- * skin, eyes, external ear

Student also will know specific problems of microbial infections

- * during pregnancy, during birth and in first days after birth
- * of in-patients, especially immunocompromised (hospital infections)

Syllabus

- 1. Agents of respiratory infections I
- 2. Agents of respiratory infections II
- 3. Agents of digestive infections I
- 4. Agents of digestive infections II
- 5. Agents of neuroinfections
- 6. Agents of UTI
- 7. Agents of classical venereal diseases
- 8. Agents of other STDs
- 9. Agents of wound infections
- 10. Agents of skin infections
- 11. Agents of septicaemiae I
- 12. Agents of septicaemiae II
- 13. Agents of congenital and neonatal infections
- 14. Agents of healthcare associated infections

Literature

required literature

- [VOTAVA, Miroslav](#). *Lékařská mikrobiologie obecná. (General Medical Microbiology)*. 1. vyd. Brno: Neptun, 2001. 247 pp. ISBN 80-902896-2-2. [info](#)
- [VOTAVA, Miroslav](#). *Lékařská mikrobiologie speciální (Medical microbiology special)*. 1. vyd. Brno: NEPTUN, Březová 18, 637 00 Brno, 2003. 495 pp. ISBN 80-902896-6-5. [info](#)

recommended literature

- [VOTAVA, Miroslav](#), [Filip RŮŽIČKA](#), [Vladana WOZNICOVÁ](#), [Lenka ČERNOHORSKÁ](#), [Milada DVOŘÁČKOVÁ](#), [Monika DVOŘÁKOVÁ](#), [HEROLDOVÁ, Veronika](#) [HOLÁ](#) and [Ondřej ZAHRADNÍČEK](#). *Lékařská mikrobiologie: Vyšetřovací metody (Medical Microbiology: Laboratory Procedures)*. 1. vyd. Brno: Neptun, 2010. 495 pp. ISBN 978-80-86850-04-7. [info](#)

- GREENWOOD, David. *Lékařská mikrobiologie : přehled infekčních onemocnění : patogeneze, imunita, laboratorní diagnostika a epidemiologie*. 1. vyd. Praha: Grada Publishing, 1999. 686 s. ISBN 80-7169-365-0. [info](#)
- RULÍK, Martin, [Veronika HOLÁ](#), [Filip RŮŽIČKA](#), [Miroslav VOTAVA](#), Dana BAUDIŠOVÁ, Jiří GALLO, Simona KAPRÁLOVÁ, Kateřina KOHUŠOVÁ, Dagmar KOUKALOVÁ, Václav KŮDELA, Jiří MIKEŠ, Radko NOVOTNÝ, Martina SIGLOVÁ, Věra TORŠOVÁ and Jiří ZIMÁK. *Mikrobiální biofilmy (Microbial Biofilms)*. 1. vydání. Olomouc: Univerzita Palackého v Olomouci, 2011. 448 pp. Monografie. ISBN 978-80-244-2747-8. [info](#)
- GOERING, Richard V., Hazel M. DOCKRELL, Mark A. ZUCKERMAN, Ivan M. ROITT and Peter L. CHIODINI. *Mimsova lékařská mikrobiologie*. Translated by Jaroslav Julák - Jan Bobek - Renáta Čermáková - Karel Holada. Praha: Stanislav Juhaňák - Triton, 2016. xiv, 568. ISBN 9788073879280. [info](#)
- Tituly 1, 2, přednášky v IS MU a veškeré materiály z praktik jsou základní studijní materiály ke zkoušce, ostatní jsou doplňkové.

Teaching methods

lecture

Assessment methods

Attendance at lectures is not checked, but is recommended.

The subject is finished by the exam that has three parts. A student that is not successful at any of the parts does not continue to other parts. The exception is a student coming to his/her last resit. Such student always absolves all three parts, and a co-examiner is present at the third part.

(1) **Written admission test** consists of 20 questions, mostly "single best answer" type, partially also filling in missing word or other type questions. Students having at least 14 correct answers are considered having successfully done this part. Students coming to a resit term and having the test successfully completed in one of previous attempts do not have to redo the test again.

(2) **Practical examination** means doing a task picked by a student, or given to him by a teacher. Students coming for a resit term do not have to absolve the practical part repeatedly if they have got value "A" or "B" at one of previous attempts.

(3) **Theoretical part** means that student picks one question for each of three groups of questions. The total number of questions is approximately 180. The student elaborates the questions in written form, signs them and gives them to the teacher. The teacher asks additional questions to them orally. After that, the student is evaluated.

Warning 1: At any part of the exam the student may be told to show his/her protocols from practical sessions. The quality of the protocols may be taken into account at the final evaluation.

Warning 2: Skipping the test and/or the practical part cannot be done in case of students coming again for their regular exam term in a repeatedly registered subject.

Note: Student that failed at part (1) and (2) and feel disadvantaged may appeal to the head-examiner during next 60 minutes.

Language of instruction

Czech

Follow-Up Courses

- [VLLM0522p Medical Microbiology II - lecture](#)

Further comments (probably available only in Czech)

[Study Materials](#)

Information on completion of the course: Zkušební otázky budou uveřejněny ve Studijních materiálech předmětu

The course can also be completed outside the examination period.

The course is taught annually.

Listed among pre-requisites of other courses

- [BMBS051 Biostatistics - basic course](#)
[VLLM0522p](#) && [VLIM051p](#) && ([VSBC041p](#) || [VSBC0422p](#)) && [VSIP0622c](#) (Do I meet enrolment requirements?)
- [VLIN7X21 Infectious Diseases I -practice](#)
[VSPF0622p](#) && [VSPA0622p](#) && [VLCP0622c](#) && [VSIP0622c](#) && [VLLM0522p](#) && [VLIM051p](#) && [VLFA0621c](#) (Do I meet enrolment requirements?)
- [VLKG7X1c Clinical Genetics - practice](#)
[VLLM0522p](#) && [VLIM051p](#) && [VSIP0622c](#) && [VLCP0622c](#) && [VLFA0621c](#) (Do I meet enrolment requirements?)
- [VLKG7X1p Clinical Genetics - lecture](#)
[VLLM0522p](#) && [VLIM051p](#) && [VSIP0622c](#) && [VLCP0622c](#) && [VLFA0621c](#) (Do I meet enrolment requirements?)
- [VL0L7X1 Ophthalmology - lecture](#)
[VSPF0622p](#) && [VSPA0622p](#) && [VSIP0622c](#) && [VLCP0622c](#) && [VLLM0522p](#) && [VLIM051p](#) && [VLFA0621c](#) (Do I meet enrolment requirements?)
- [VL0L7X1a Ophthalmology - practice](#)
[VSPF0622p](#) && [VSPA0622p](#) && [VSIP0622c](#) && [VLCP0622c](#) && [VLLM0522p](#) && [VLIM051p](#) && [VLFA0621c](#) (Do I meet enrolment requirements?)
- [VLOZ0642c Public Health II - practice](#)
([VLOZ0241c](#) || [VLOZ0141c](#)) && [VLLM0522c](#) && [VLLM0522p](#) && [VLBC0422p](#) (Do I meet enrolment requirements?)
- [VLOZ0642p Public Health II - lecture](#)
([VLOZ0241p](#) || [VLOZ0141p](#)) && [VLLM0522c](#) && [VLLM0522p](#) && [VLBC0422p](#) (Do I meet enrolment requirements?)
- [VLPD7X31c Pediatrics I - practice](#)
[VSPF0622p](#) && [VSPA0622p](#) && [VLCP0622c](#) && [VSIP0622c](#) && [VLLM0522p](#) && [VLIM051p](#) && [VLFA0621c](#) (Do I meet enrolment requirements?)

[Zobrazit další předměty](#)

Teacher's information

E-mailový a telefonický kontakt – E-mail and phone contact:

Doc. MUDr. Filip Růžička, PhD: fruzic@fnusa.cz, TEL 543 183 090 (přednosta ústavu/head)

prof. MUDr. Miroslav Votava, CSc.: miroslav.votava@fnusa.cz, TEL 543 183 117

as. MUDr. Ondřej Zahradníček: zahradnicek@fnusa.cz, TEL 543 183 113

odb. as. MUDr. Lenka Černohorská, PhD.: lenka.cernohorska@fnusa.cz, TEL 543 183 093

odb. as. Mgr. Monika Dvořáková Heroldová, PhD: monika.heroldova@fnusa.cz

Další informace jsou průběžně zveřejňovány na nástěnce v~praktikárně ústavu. More information in Practical Hall.

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#), [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VLLP0431c Clinical Introduction I - practice ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

0/1.3/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[Ing. Martina Čarnecká, Ph.D.](#) (seminar tutor)
[doc. RNDr. Jiří Dostál, CSc.](#) (seminar tutor)
[MUDr. Lenka Fědorová](#) (seminar tutor)
[Mgr. Jana Gregorová, Ph.D.](#) (seminar tutor)
[MUDr. Miroslava Hlaváčová](#) (seminar tutor)
[Mgr. Katarína Kostolanská](#) (seminar tutor)
[MUDr. Michaela Králíková, Ph.D.](#) (seminar tutor)
[Mgr. Lucie Novotná](#) (seminar tutor)
[RNDr. Hana Paulová, CSc.](#) (seminar tutor)
[Mgr. Ondřej Peš, Ph.D.](#) (seminar tutor)
[Mgr. Anna Pleskačová](#) (seminar tutor)
[MUDr. RNDr. Michal Řiháček](#) (seminar tutor)
[Mgr. Roman Sándor](#) (seminar tutor)
[Mgr. Jiří Slanina, Ph.D.](#) (seminar tutor)
[prof. MUDr. Miroslav Souček, CSc.](#) (seminar tutor)
[prof. RNDr. Eva Táborská, CSc.](#) (seminar tutor)
[doc. RNDr. Josef Tomandl, Ph.D.](#) (seminar tutor)
[Mgr. Marie Tomandlová, Ph.D.](#) (seminar tutor)
[Lenka Nerudová](#) (assistant)

Supervisor

[MUDr. Jan Konečný, Ph.D.](#)
[First Department of Surgery - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Contact Person: [prof. RNDr. Eva Táborská, CSc.](#)

Supplier department: [Department of Biochemistry - Theoretical Departments - Faculty of Medicine](#)

Prerequisites (in Czech)

[VLFY0321c Physiology I - practice](#) && [VLFY0321s Physiology I - seminar](#) &&
[VLBC0321s Biochemistry I sem](#) && [VLBC0321c Biochemistry I](#) &&
[VLAN0222c Anatomy II p](#) && [VLAN0222s Anatomy II s](#)
(Do I meet enrolment requirements?)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives (in Czech)

Předmět je úvodem do klinické propedeutiky. Cílem je propojení znalostí z preklinických oborů, zejména biochemie a fyziologie, s praktickým využitím. Student by měl získat představu o významu klinicko-biochemických vyšetření, jejich provádění, faktorech ovlivňujících výsledky a jejich kontrole. Dále o biologické variabilitě a hodnocení výsledků a diagnostické efektivitě laboratorních vyšetření. Podrobněji se seznámí s biochemickými vyšetřeními u jaterních onemocnění, u poruch metabolismu sacharidů a u kardiovaskulárních onemocnění. Bude obeznámen s vyšetřeními ledvinných funkcí, acidobazické rovnováhy a jejich poruch, vyšetřením moči a mozkomíšního moku.

Syllabus

- Biochemical investigations in clinical medicine and their significance. Biochemical analysers, point of care testing. Factors influencing results of laboratory examinations. Blood collection and processing. Laboratory tests in clinical biochemistry. Sources of error, assessing the significance of a test result. System of quality control. Biological and analytical variations, critical difference. Reference intervals. Interpretation of results. Diabetes mellitus - laboratory diagnosis. Hypoglycaemia, hyperglycaemia, screening and monitoring, oGTT test. Glycosuria, fructosamine, haemoglobin, microalbuminuria, insulin, C-peptide, autoantibodies. Biochemical diagnosis of liver diseases. Tests for the integrity of hepatocytes. The tests for hepatocellular cholestasis. Tests of the liver's biosynthetic capacity. Laboratory diagnosis of jaundice. Laboratory tests of specific liver diseases. Biochemical markers of myocardial injury - cardiac troponin, myoglobin, CK-MB mass. Laboratory tests in heart failure - natriuretic peptides. Tests for homocysteine, hsCRP, lipid spectrum. Sampling and urine collection for physical, chemical, microbiological and microscopic examination. Physical examination of urine (pH, density, osmolality). Chemical examination of urine. Glomerular filtration rate (creatinine, cystatin). Morphological analysis of urine. Examination of urine sediment. Kidney stones analysis – classification of kidney stones according to the composition, factors affecting their formation, methods of analysis. Cerebrospinal fluid (CSF) analysis. Indications, puncture,

basic and special examination, typical findings in some neurological diseases, markers of CSF leakage.

Literature

required literature

- Podklady k seminářům dostupné v Informačním systému

recommended literature

- [ŠPINAR, Jindřich](#) and [Ondřej LUDKA](#). *Propedeutika a vyšetřovací metody vnitřních nemocí*. 2., přeprac. a dopl. vyd. Praha: Grada, 2013. 336 pp. ISBN 978-80-247-4356-1. [URL info](#)
- ZEMAN, Miroslav and Zdeněk KRŠKA. *Chirurgická propedeutika*. Třetí, přepracované a do. Praha: Grada Publishing, 2011. 512 stran. ISBN 9788024737706. [info](#)

Teaching methods (in Czech)

Probíhá formou semináře s praktickými vstupy a ukázkami. Studenti dostávají písemné podklady pro přípravu a současně soubor otázek a problémů k řešení. Seminář probíhá aktivní formou, diskuze k zadaným problémům.

Assessment methods (in Czech)

Podmínkou udělení zápočtu je absolvování cvičení v plném rozsahu.

Language of instruction

Czech

Further Comments

The course is taught annually.

Listed among pre-requisites of other courses

- [VLLP0532c Clinical Introduction II](#)
[VLLP0431c](#) && [VLAN0222p](#) || [VSAN0333p](#)) && [VLHE0322c](#) || [VSHE0322c](#)
&& [VLBC0422c](#) || [VSBC041c](#)) && [VLFY0422c](#) || [VSFY0422c](#)) ([Do I meet enrolment requirements?](#))

The course is also listed under the following terms [Spring 2019](#), [Accreditation spring](#).

VLLP0431p Clinical Introduction I - lecture ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

2.3/0/0. 0 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. RNDr. Petr Dubový, CSc.](#) (lecturer)

[MUDr. Marek Joukal, Ph.D.](#) (lecturer)

[MUDr. Jan Konečný, Ph.D.](#) (lecturer)

Supervisor

[MUDr. Jan Konečný, Ph.D.](#)

[First Department of Surgery - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Prerequisites (in Czech)

[VLFY0321c Physiology I - practice](#) && [VLFY0321s Physiology I - seminar](#) &&

[VLBC0321s Biochemistry I sem](#) && [VLBC0321c Biochemistry I](#) &&

[VLAN0222c Anatomy II p](#) && [VLAN0222s Anatomy II s](#)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives (in Czech)

Předmět je úvodem do klinických oborů. V první části je kladen důraz na propojení znalostí z anatomie s praxí. Dále jsou vysvětleny základy vyšetření pacienta a probána úvodní témata z chirurgie, interny a neurologie.

Syllabus (in Czech)

- Nervové dráhy Topografická anatomie - hlava a krk Topografická anatomie - hrudník, páteř Topografická anatomie - břicho a pánev Topograficko-anatomický základ některých výkonů Neurologie - anamnéza v neurologii, základy neurologického vyšetření, vyšetření hlavových nervů, reflexologie, typy paréz, svalový tonus Řízení motoriky, řeč, paměť a jejich poruchy Chirurgie – náplň a historie, chirurgické pracoviště, operační sály, typy operací, pooperační péče Asepsy, antisepsy, dezinfekce, atb prevence, předoperační příprava. Anamnéza, subjektivní a objektivní symptomy. Vyšetření hlavy a krku, vyšetření plic. Vyšetření srdce. Vyšetření břicha, zažívací trakt. Vyšetření pohybového aparátu, vyšetření ledvin.

Literature

recommended literature

- ŠPINAR, Jindřich and Ondřej LUDKA. *Propedeutika a vyšetřovací metody vnitřních nemocí*. 2., přeprac. a dopl. vyd. Praha: Grada, 2013. 336 s. ISBN 9788024743561. [info](#)
- ZEMAN, Miroslav and Zdeněk KRŠKA. *Chirurgická propedeutika*. Třetí, přepracované a do. Praha: Grada Publishing, 2011. 512 stran. ISBN 9788024737706. [info](#)
- [ŠTOURAC, Pavel](#), [Josef BEDNAŘÍK](#), [Milan BRÁZDIL](#), [Zdeněk KADAŇKA](#), [Petr KAŇOVSKÝ](#), [Marek MECHL](#), [Jiří PRÁŠEK](#), [Ivan REKTOR](#), [Irena](#)

[REKTOROVÁ](#) and [Radomír ŠLAPAL](#). *Učebnice obecné neurologie (Textbook of General Neurology)*. 2., přepracované. Brno: Masarykova universita v Brně, 2003. 197 pp. ISBN 80-210-3309-6. [info](#)

Language of instruction

Czech

The course is also listed under the following terms [Spring 2019](#), [Accreditation spring](#).

VLLP0532c Clinical Introduction II ✱

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/7/0. 5 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Jan Konečný, Ph.D.](#) (seminar tutor)

[MUDr. Milan Sepši, Ph.D.](#) (seminar tutor)

[prof. MUDr. Zdeněk Adam, CSc.](#) (seminar tutor)

[MUDr. Lukáš Dadák, Ph.D.](#) (seminar tutor)

[MUDr. Michal Eid](#) (seminar tutor)

[MUDr. František Folber, Ph.D.](#) (seminar tutor)

[MUDr. Tomáš Horňák](#) (seminar tutor)

[MUDr. Štěpán Hrabovský](#) (seminar tutor)

[MUDr. Darja Krusová, Ph.D.](#) (seminar tutor)

[MUDr. Jana Křivánková](#) (seminar tutor)

[MUDr. Andrea Křivanová, Ph.D.](#) (seminar tutor)

[MUDr. Jan Maláska, Ph.D.](#) (seminar tutor)

[MUDr. Róbert Mazúr](#) (seminar tutor)

[MUDr. Jozef Michalka](#) (seminar tutor)

[doc. MUDr. Helena Němcová, CSc.](#) (seminar tutor)

[MUDr. Lucie Němcová](#) (seminar tutor)

[MUDr. Monika Ondráčková](#) (seminar tutor)

[MUDr. Yvona Pospíšilová](#) (seminar tutor)

[prof. MUDr. Miroslav Souček, CSc.](#) (seminar tutor)

[MUDr. Martin Štork](#) (seminar tutor)

[doc. MUDr. Miroslav Tomáška, CSc.](#) (seminar tutor)

[MUDr. Jakub Trizuljak](#) (seminar tutor)

[Hana Baráčková](#) (assistant)

[Zdeňka Dvořáková](#) (assistant)

[Jitka Firešová](#) (assistant)

[Eva Kašpárková](#) (assistant)

[Lucie Kučerová](#) (assistant)

[Barbora Staňková](#) (assistant)

[Alena Stodůlková](#) (assistant)

[Hana Zemanová](#) (assistant)

Supervisor

[MUDr. Milan Sepši, Ph.D.](#)

[Department of Internal Cardiology Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Supplier department: [Department of Internal Cardiology Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Timetable of Seminar Groups

VLLP0532c/01: Mon 9:30–12:25 [C-6.034](#), Tue 10:10–13:05 [N04001](#)

VLLP0532c/02: Tue 9:30–12:25 [N14190](#), Thu 7:20–10:15 [N07191](#)

VLLP0532c/03: Tue 10:05–13:00 [C-6.034](#), Thu 10:10–13:05 [N04001](#)

VLLP0532c/04: Tue 10:05–13:00 [N04001](#), Thu 10:10–13:05 [N01002](#)

VLLP0532c/05: Wed 8:00–10:55 [N07191](#), Thu 9:30–12:25 [N14190](#)

VLLP0532c/06: Wed 8:00–10:55 [N04001](#), Thu 9:30–12:25 [N14190](#)

VLLP0532c/07: Thu 7:20–10:15 [N01002](#), Thu 10:30–13:25 [N04001](#)

VLLP0532c/08: Tue 10:10–13:05 [N03005](#), Thu 9:30–12:25 [N14190](#)

VLLP0532c/09: Mon 7:30–10:25 [N03005](#), Wed 9:30–12:25 [N14190](#)

VLLP0532c/10: Mon 7:30–10:25 [N01002](#), Wed 10:05–13:00 [C-6.034](#)

VLLP0532c/11: Mon 10:30–13:25 [N04001](#), Wed 10:05–13:00 [N04001](#)

VLLP0532c/12: Mon 10:30–13:25 [N07191](#), Wed 9:30–12:25 [N14190](#)

VLLP0532c/13: Mon 9:30–12:25 [N14190](#), Fri 10:10–13:05 [N07191](#)

VLLP0532c/14: Fri 8:00–10:55 [N04001](#), Fri 11:10–14:05 [C-6.034](#)

VLLP0532c/15: Mon 9:30–12:25 [N14190](#), Fri 10:10–13:05 [N01002](#)

VLLP0532c/16: Fri 7:20–10:15 [N01002](#), Fri 10:30–13:25 [N04001](#)

VLLP0532c/17: Tue 7:20–10:15 [N03005](#), Fri 9:30–12:25 [N14190](#)

VLLP0532c/18: Tue 7:20–10:15 [N07191](#), Fri 9:30–12:25 [N14190](#)

Prerequisites

[VLLP0431c Clinical Introduction I -prac.](#) && ([VLAN0222p Anatomy II I](#) || [VSAN0333p Anatomy III - lec.](#)) && ([VLHE0322c Histology and embryology II -p](#) || [VSHE0322c Histology and embryology II -p](#)) && ([VLBC0422c Biochemistry II](#) || [VSBC041c Biochemistry II -pract.](#)) && ([VLFY0422c Physiology II - practicals](#) || [VSFY0422c Physiology II - practicals](#))

Fulfil the prerequisites, examination of anatomy, physiology, and biochemistry.

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

Learning outcomes of the course: the aim is to teach students the basics of the physical examination of patients in surgery and internal medicine.

Learning outcomes

After completing the subject Propaedeutics the student will be able to take complete patient history, to perform general physical examination of the patient, to perform basic internal, neurological and surgical examination of the patient. Student will be familiar

with basic laboratory and other diagnostic tests. Student will be able to perform and evaluate the ECG, will be able to recognize basic pathological ECG findings. He will be able to describe the physiological findings on chest and abdominal X-rays. He will be familiar with basic surgical instruments together with their use, will be familiar with immobilization technique, with basic technique of sewing, punching, cannulation, preparation, catheterization. Student will master the theoretical knowledge of these topics in accordance with the results of the Optimed 2 project.

Syllabus

- 1st week Getting to know the workplace, ethical and professional way of contacting patients. Basic administration. 2nd week Basic investigation procedures internally. Practicing anamnesis in internal patients. 3rd week. Proper and optimal examination procedures for head and neck examination, practice. Week 4 Theoretical rehearsals and practical examination of the chest. Examination of the lungs by listening and tapping. 5th week Special medical history of lung disease 6th week theoretical prerequisites for correct examination of the cardiovascular system. Examination of the heart by listening, basic physiological findings 7th week - Special history according to lung diseases 8th week - Special history according to heart diseases 9th week - Special history according to renal diseases 10th week - Special history according to gastrointestinal and hepatic diseases 11th week - Special history according to endocrine diseases 12th week - Special history according to hematological diseases 13th week - Special history according to peripheral arteries and veins diseases 14th week - Special history according to rheumatic and immunological diseases 15th week - Review of special histories, credit

Literature

required literature

- [ŠPINAR, Jindřich](#) and [Ondřej LUDKA](#). *Propedeutika a vyšetřovací metody vnitřních nemocí*. 2., přeprac. a dopl. vyd. Praha: Grada, 2013. 336 pp. ISBN 978-80-247-4356-1. [URL](#) [info](#)
- ZEMAN, Miroslav and Zdeněk KRŠKA. *Chirurgická propedeutika*. Třetí, přepracované a do. Praha: Grada Publishing, 2011. 512 stran. ISBN 9788024737706. [info](#)
- ČAPOV, Ivan and Miroslav SOUČEK. *Základy diferenciální diagnostiky : (určeno pro studenty LF MU)*. 1. vyd. Brno: Masarykova univerzita, 2014. 230 s. ISBN 9788021076129. [info](#)

recommended literature

- [ŠTOURAC, Pavel](#), [Josef BEDNAŘÍK](#), [Milan BRÁZDIL](#), [Zdeněk KADAŇKA](#), [Petr KAŇOVSKÝ](#), [Marek MECHL](#), [Jiří PRÁŠEK](#), [Ivan REKTOR](#), [Irena REKTOROVÁ](#) and [Radomír ŠLAPAL](#). *Učebnice obecné neurologie (Textbook of General Neurology)*. 2., přepracované. Brno: Masarykova universita v Brně, 2003. 197 pp. ISBN 80-210-3309-6. [info](#)

not specified

- CHROBÁK, Ladislav. *Propedeutika vnitřního lékařství*. Illustrated by Josef Bavor. Nové, zcela přeprac. vyd. Praha: Grada, 2007. 246 s. ISBN 9788024713090. [info](#)
- <https://el.lf1.cuni.cz/neurologie>
- <http://www.websurg.com>
- <http://www.medscape.com/generalsurgery>

Teaching methods

Practicals always has a theoretical and practical part. The theoretical part is devoted to the above-mentioned topic, practical (for which the main emphasis is placed) – at the patient (taking of personal and medical history, examination of individual organs), basic examination methods (ultrasound, X-ray, laboratory findings, ECG).

Assessment methods

The credit is given for an active approach, based on proven ability to examine the patient. The theoretical knowledge required by the lecturer or self-study required is also required. The final evaluation has two parts: 1. Practical, 2. Oral. Practical part contains a written personal history and physical examination of a particular patient, cognition of surgical instruments, bandage of wound. The oral examination part is tested by 2 examiners: 1 internist and 1 surgeon together.

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

Listed among pre-requisites of other courses

- [VLLP0633c Clinical Introduction III - practice](#)
[VLLP0532c](#) && [\(VLAN0222p || VSAN0333p\)](#) && [VLHE0322p](#) &&
[VLBC0422p](#) && [VLFY0422p](#) ([Do I meet enrolment requirements?](#))

Teacher's information

V prvním týdnu výuky se studenti dostaví podle rozpisu na vybranou kliniku Fakultní nemocnice u sv. Anny či Chirurgickou kliniku FN Brno. Rozdělení interní propedeutiky na konkrétní kliniky Ve FN Brno se studenti dozví na první stáži v den podle rozpisu na IHOK FN Brno (14. patro, as. MUDr. Pospíšilová). Studenti potřebují zájem o problematiku, bílý plášť, přezůvky a fonendoskop. Nahrazování výuky či drobné změny studenti řeší s konkrétním vyučujícím. 1st day the students will bring the white coat, slippers, phonendoscope and interest in the issue! The teaching takes place at the individual departments of the clinic.

The course is also listed under the following terms [Accreditation autumn](#).

VLLP0633c Clinical Introduction III - practice ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

0/7/0. 5 credit(s). Type of Completion: zk (examination).

Teacher(s)

[MUDr. Lukáš Dadák, Ph.D.](#) (seminar tutor)

[MUDr. Jan Konečný, Ph.D.](#) (seminar tutor)

[MUDr. Jan Maláška, Ph.D.](#) (seminar tutor)

[MUDr. Jan Žák, Ph.D.](#) (seminar tutor)

Supervisor

[MUDr. Jan Žák, Ph.D.](#)

[First Department of Surgery - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Supplier department: [First Department of Surgery - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Prerequisites (in Czech)

[VLLP0532c Clinical Introduction II](#) && ([VLAN0222p Anatomy II I](#) ||

[VSAN0333p Anatomy III - lec.](#)) && [VLHE0322p Histology and embryology II -I](#) &&

[VLBC0422p Biochemistry I -lect.](#) && [VLFY0422p Physiology II - lecture](#)

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Language of instruction

Czech

Listed among pre-requisites of other courses

- [VLPD7X31p Pediatrics](#)
[VLPF0622p](#) && [VLPA0622p](#) && [VLLP0633c](#) && [VLLM0522p](#) && [VLIM051p](#) ([Do I meet enrolment requirements?](#))
- [VLTTL081 Sports Medicine](#)
[VLPF0622p](#) && [VLPA0622p](#) && [VLLP0633c](#) ([Do I meet enrolment requirements?](#))

The course is also listed under the following terms [Accreditation spring](#).

VLLT0121c Basic Medical Terminology - practice ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/1/0. 1 credit(s). Type of Completion: z (credit).

Teacher(s)

[Mgr. Zdeněk Kubík](#) (seminar tutor)
[Mgr. Zuzana Lukšová](#) (seminar tutor)
[Mgr. Kamila Novotná](#) (seminar tutor)
[PhDr. Renata Prucklová](#) (seminar tutor)
[Mgr. Jan Slíva](#) (seminar tutor)
[Mgr. Tereza Ševčíková](#) (seminar tutor)
[Mgr. Libor Švanda, Ph.D.](#) (seminar tutor)
[Mgr. Kateřina Pořízková, Ph.D.](#) (assistant)
[Mgr. Veronika Tománková, Ph.D.](#) (assistant)
[PhDr. Jana Vyorálková](#) (assistant)
[Mgr. Lucie Mazalová, Ph.D.](#) (alternate examiner)
[Mgr. Marie Okáčová, Ph.D.](#) (alternate examiner)

Supervisor

[Mgr. Libor Švanda, Ph.D.](#)
[Language Centre, Faculty of Medicine Division - Faculty Branches of University Departments - Faculty of Medicine](#)
Contact Person: [Mgr. Libor Švanda, Ph.D.](#)
Supplier department: [Language Centre, Faculty of Medicine Division - Language Centre](#)

Timetable of Seminar Groups

VLLT0121c/01: Wed 15:30–17:10 [A11/211](#), *Z. Lukšová*
VLLT0121c/02: Wed 13:40–15:20 [A11/211](#), *L. Švanda*
VLLT0121c/03: Wed 13:40–15:20 [A11/327](#), *T. Ševčíková*
VLLT0121c/04: Thu 11:20–13:00 [A9/324](#), *R. Prucklová*
VLLT0121c/05: Thu 13:10–14:50 [KOM S116](#), *K. Novotná*
VLLT0121c/06: Thu 11:20–13:00 [A11/327](#), *Z. Kubík*
VLLT0121c/07: Tue 14:00–15:40 [A11/211](#), *K. Novotná*
VLLT0121c/08: Tue 13:00–14:40 [A11/327](#), *T. Ševčíková*
VLLT0121c/09: Fri 8:00–9:40 [KOM S116](#), *K. Novotná*
VLLT0121c/10: Tue 9:20–11:00 [A11/211](#), *J. Slíva*
VLLT0121c/11: Tue 12:10–13:50 [A11/228](#), *J. Slíva*
VLLT0121c/12: Thu 10:30–12:10 [A11/228](#), *L. Švanda*
VLLT0121c/13: Tue 7:30–9:10 [A11/211](#), *J. Slíva*
VLLT0121c/14: Thu 15:45–17:25 [KOM S116](#), *K. Novotná*
VLLT0121c/15: Tue 7:30–9:10 [A11/327](#), *T. Ševčíková*
VLLT0121c/16: Tue 9:20–11:00 [A11/327](#), *T. Ševčíková*

Prerequisites

Basic knowledge of Latin will facilitate the study of the subject and may be regarded as a useful component of the educational outfit of students when entering the faculty, though it is no obligatory prerequisite for the acquisition of the university subject matter in the introductory phase.

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

Greek-Latin medical terminology is one of the relevant means for acquisition of the target knowledge of medical students. The tuition is of both theoretic and practical character, conceived as a preparatory course *sui generis*, introducing the students into the study of medicine by means of its language.

The content of tuition is, like the set of knowledge postulated in the examination, exclusively determined by the needs of the discipline and medical practice. In the first place it provides such knowledge of Latin and/or Greek as enables the student to master quickly and purposefully the semantic aspect of terms, their grammatical form, and word-forming structure. Simultaneously it provides systematic instruction to independent solution of current terminological problems consisting in understanding of the technical content of the terms and in the formation of medical terms. Besides this it opens a view of the wider historical and linguistic fundamentals of medical terminology as well as its general theoretical contexts.

Learning outcomes

At the end of the course students should be able to:

- use Latin and Greek-Latin medical terminology and expressions correctly and understand them;
- recognize and explain grammatical devices and rules relevant for acquisition of Greek-Latin medical terminology;
- explain syntactic structure of complex terms;
- recognize the semantic structure of selected anatomical and clinical one-word terms;
- form compound words applying the most used word-formation principles;
- translate selected expressions from anatomy and pre-clinical and clinical fields of study.

Syllabus

- **Syllabus - practice:**
- *1st week:* Pronunciation and its practising on a Latin text; exercises: nouns and adjectives of the 1st declension.
- *2nd week:* Exercises: nouns and adjectives of the 1st declension; agreed and non-agreed attributes; prepositional phrases (prepositions *ad, e/ex, in, post, sub*); nouns and adjectives of the 1st and 2nd declension.
- *3rd week:* Exercises: nouns and adjectives of the 1st and 2nd declension; agreed and non-agreed attributes; prepositional phrases (prepositions *ante, cum, pro*); nouns and adjectives of the 3rd declension (especially phrases with nouns of the 3rd declension together with adjectives of the 1st and 2nd declension).
- *4th week:* Exercises: 1st-3rd declension of nouns and 1st-2nd declension of adjectives together in one term (various types of declining); prepositional phrases (prepositions *contra, per*).
- *5th week:* Translation of multiple terms with nouns and adjectives of various declensions. Exercise: 3rd declension i-stem nouns of the Greek origin.
- *6th week:* Repetition and summary: 1st-3rd declension substantives, 1st and 2nd declensions adjectives; prepositional phrases (prepositions *extra, inter, intra,*

propter, sine, supra); summary of the prepositional phrases; preparation for the Progress test.

- *7th week*: Progress test (Lesson 1-4 of the textbook); exercise: 3rd declension adjectives.
- *8th week*: Progress test overview, commentary and evaluation; exercise: regular derivation of 3rd declension adjectives; translating and declining terms with nouns and adjectives of various declensions.
- *9th week*: Exercise: 1st-3rd declension adjectives; 4th and 5th declension substantives.
- *10th week*: Exercise: 4th and 5th declension substantives together with 1st-3rd declension adjectives; prepositional phrases (prepositions *a/ab, adversus, apud, circum, de, infra, praeter, prope, secundum, trans*); derivation of regular comparative and superlative forms of adjectives.
- *11th week*: Exercise: derivation of regular comparative and superlative forms of adjectives; translation of terms containing comparative and superlative adjective forms.
- *12th week*: Exercise: irregular, defective and periphrastic forms of comparatives and superlatives; 1st-5th declension substantives (repetition).
- *13th week*: Repetition: substantive and adjective declension system; prepositional phrases with accusative and ablative; mock Final test
- *14th week*: Final test (Lesson 1-7 of the textbook).

Literature

required literature

- [MAREČKOVÁ, Elena](#), [Hana REICHOVÁ](#), [Libor ŠVANDA](#), [Natália GACHALLOVÁ](#), [Tereza ŠEVČÍKOVÁ](#), [Kamila NOVOTNÁ](#), [Jan SLÍVA](#) and [Lucie MAZALOVÁ](#). *Úvod do lékařské terminologie. Základy latiny s přihlédnutím k řečtině*. 7., přeprac. vydání. Brno: Masarykova univerzita, 2019. 226 pp. ISBN 978-80-210-8699-9. [info](#)

recommended literature

- KÁBRT, Jan and Jan KÁBRT JR. *Lexicon medicum*. Druhé, dopl. a přeprac. vyd. Praha: Galén, 2004. 1136 pp. ISBN 80-7262-235-8. [info](#)

Teaching methods

- Lectures, translation and grammar exercises, drills.
- Links to the parallel anatomy classes.
- Switching from frontal instruction to group work and self-study. Group discussion.
- Homework and self-preparation for the class work is required.
- Class test in the middle of the semester.

Assessment methods

- Practical examination (demonstration of proficiency)
- Final examination - written form

Language of instruction

Czech
Follow-Up Courses

- [VLLT0222c Basic Medical Terminology II - practice](#)

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

Information on the extent and intensity of the course: cvičení.

Listed among pre-requisites of other courses

- [VLLT0222c Basic Medical Terminology II - practice](#)
[VLLT0121c \(Do I meet enrolment requirements?\)](#)
- [VLLT0222s Basic Medical Terminology II - seminar](#)
[VLLT0121c \(Do I meet enrolment requirements?\)](#)

Teacher's information

Požadavky pro získání zápočtu: pravidelná docházka, aktivní účast ve výuce, průběžná příprava, absolvování průběžného a zápočtového testu. Základní hranici u~všech testů představuje dosažení min. 75 % úspěšnosti. Úspěšné složení průběžného testu, který je povinný, snižuje tuto hranici u~zápočtového testu o~5 %. Povolena je pouze jedna neomluvená absence, každá další musí být řádně omluvena (prostřednictvím Studijního oddělení LF).

Aktuální informace o~předmětu, konzultačních hodinách atd. jsou zveřejňovány prostřednictvím IS MU.

Kontakt s vyučujícími zajišťuje sekretariát pracoviště: UKB, Kamenice 5, pavilon A15, tel. 549498170; úřední hodiny: pondělí 10.00-12.00, středa 10.00-12.00, pátek 9.00-11.00. Možná je také e-mailová komunikace.

Requirements for gaining the credit: regular class attendance, active participation in class, preparation for classes, sitting a class test and a credit test. The basic limit for passing all tests is 75%. Passing the class test, which is obligatory for all students, reduces the basic limit in the credit test by 5%. Only one unexcused absence will be tolerated; further absences must be properly excused (i.e. via the Study Department of the Faculty of Medicine).

Updated information on the course, office hours, etc. is available in IS MU.

Contact person: secretary of the Language Centre (UKB, Kamenice 5, Pavilion A15), phone: 549498170; office hours: Monday 10.00-12.00, Wednesday 10.00-12.00, Friday 9.00-11.00. Individual lecturers can also be contacted via e-mail.

The course is also listed under the following terms [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VLLT0121s Basic Medical Terminology I - seminar ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/0/1. 1 credit(s). Type of Completion: z (credit).

Teacher(s)

[Mgr. Zdeněk Kubík](#) (seminar tutor)
[Mgr. Zuzana Lukšová](#) (seminar tutor)
[Mgr. Kamila Novotná](#) (seminar tutor)
[PhDr. Renata Prucklová](#) (seminar tutor)
[Mgr. Jan Slíva](#) (seminar tutor)
[Mgr. Tereza Ševčíková](#) (seminar tutor)
[Mgr. Libor Švanda, Ph.D.](#) (seminar tutor)
[Mgr. Kateřina Pořízková, Ph.D.](#) (assistant)
[Mgr. Veronika Tománková, Ph.D.](#) (assistant)
[PhDr. Jana Vyorálková](#) (assistant)
[Mgr. Lucie Mazalová, Ph.D.](#) (alternate examiner)
[Mgr. Marie Okáčová, Ph.D.](#) (alternate examiner)

Supervisor

[Mgr. Libor Švanda, Ph.D.](#)
[Language Centre, Faculty of Medicine Division - Faculty Branches of University Departments - Faculty of Medicine](#)
Contact Person: [Mgr. Libor Švanda, Ph.D.](#)
Supplier department: [Language Centre, Faculty of Medicine Division - Language Centre](#)

Timetable of Seminar Groups

VLLT0121s/01: No timetable has been entered into IS.
VLLT0121s/02: No timetable has been entered into IS.
VLLT0121s/03: No timetable has been entered into IS.
VLLT0121s/04: No timetable has been entered into IS.
VLLT0121s/05: No timetable has been entered into IS.
VLLT0121s/06: No timetable has been entered into IS.
VLLT0121s/07: No timetable has been entered into IS.
VLLT0121s/08: No timetable has been entered into IS.
VLLT0121s/09: No timetable has been entered into IS.
VLLT0121s/10: No timetable has been entered into IS.
VLLT0121s/11: No timetable has been entered into IS.
VLLT0121s/12: No timetable has been entered into IS.
VLLT0121s/13: No timetable has been entered into IS.
VLLT0121s/14: No timetable has been entered into IS.
VLLT0121s/15: No timetable has been entered into IS.
VLLT0121s/16: No timetable has been entered into IS.

Prerequisites

Basic knowledge of Latin will facilitate the study of the subject and may be regarded as a useful component of the educational outfit of students when entering the faculty, though it is no obligatory prerequisite for the acquisition of the university subject matter in the introductory phase.

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

Greek-Latin medical terminology is one of the relevant means for acquisition of the target knowledge of medical students. The tuition is of both theoretic and practical character, conceived as a preparatory course sui generis, introducing the students into the study of medicine by means of its language.

The content of tuition is, like the set of knowledge postulated in the examination, exclusively determined by the needs of the discipline and medical practice. In the first place it provides such knowledge of Latin and/or Greek as enables the student to master quickly and purposefully the semantic aspect of terms, their grammatical form, and word-forming structure. Simultaneously it provides systematic instruction to independent solution of current terminological problems consisting in understanding of the technical content of the terms and in the formation of medical terms. Besides this it opens a view of the wider historical and linguistic fundamentals of medical terminology as well as its general theoretical contexts.

Learning outcomes

At the end of the course students should be able to:

- use Latin and Greek-Latin medical terminology and expressions correctly and understand them;
- recognize and explain grammatical devices and rules relevant for acquisition of Greek-Latin medical terminology;
- explain syntactic structure of complex terms;
- recognize the semantic structure of selected anatomical and clinical one-word terms;
- form compound words applying the most used word-formation principles;
- translate selected expressions from anatomy and pre-clinical and clinical fields of study.

Syllabus

- **Syllabus - seminar:**
- *1st week:* Introduction to the study of the subject: significance and contents of the course, methodological instructions, study literature. Latin alphabet, pronunciation rules, Greek phones and their transcription into Latin. Basic nominal categories and their specifics in medical terminology. Latin and Greek substantives of the 1st declension (a-stems), adjectives of the 1st declension.

- *2nd week:* Latin and Greek 2nd declension nouns (o-stems), 1st and 2nd declension adjectives. Syntactic structure of multiple terms, agreed and non-agreed attributes, word order.
- *3rd week:* Latin 3rd declension nouns (consonant stems and i-stems).
- *4th week:* Summary of the 1st-3rd declension nouns and 1st-2nd declension adjectives. Exceptions in declensions.
- *5th week:* Greek 3rd declension nouns (consonant stems and i-stems). Word-formation: names for inflammatory, non-inflammatory and tumorous diseases.
- *6th week:* Additional comments to 1st and 2nd declension adjectives and 3rd declension nouns.
- *7th week:* 3rd declension adjectives (adjectives of three terminations, of two terminations, of one termination).
- *8th week:* Additional comments to 3rd declension adjectives. Similarities and differences in declining 3rd declension nouns and adjectives.
- *9th week:* Latin 4th and 5th declension nouns (u-stems and e-stems). Prepositional phrases overview.
- *10th week:* Regular comparative and superlative forms of adjectives and their declension.
- *11th week:* Irregular, defective and periphrastic forms of comparatives and superlatives. Differences in translation of comparatives and superlatives in medical terms.
- *12th week:* Latin noun declension system overview. Particularities of some nouns of the Greek origin.
- *13th week:* Latin adjective declension system overview (including comparative and superlative forms). Use of comparatives and superlatives in Latin and Czech medical terminology.
- *14th week:* Questions about grammar and vocabulary before the final test.

Literature

required literature

- [MAREČKOVÁ, Elena](#), [Hana REIČHOVÁ](#), [Libor ŠVANDA](#), [Natália GACHALLOVÁ](#), [Tereza ŠEVČÍKOVÁ](#), [Kamila NOVOTNÁ](#), [Jan SLÍVA](#) and [Lucie MAZALOVÁ](#). *Úvod do lékařské terminologie. Základy latiny s přihlédnutím k řečtině*. 7., přeprac. vydání. Brno: Masarykova univerzita, 2019. 226 pp. ISBN 978-80-210-8699-9. [info](#)

recommended literature

- KÁBRT, Jan and Jan KÁBRT JR. *Lexicon medicum*. Druhé, dopl. a přeprac. vyd. Praha: Galén, 2004. 1136 pp. ISBN 80-7262-235-8. [info](#)

Teaching methods

- Lectures, translation and grammar exercises, drills.
- Links to the parallel anatomy classes.
- Switching from frontal instruction to group work and self-study. Group discussion.

- Homework and self-preparation for the class work is required.
- Class test in the middle of the semester.

Assessment methods

- Practical examination (demonstration of proficiency)
- Final examination - written form

Language of instruction

Czech

Follow-Up Courses

- [VLLT0222s Basic Medical Terminology II - seminar](#)

Further comments (probably available only in Czech)

The course is taught annually.

Information on the extent and intensity of the course: seminář.

Teacher's information

Požadavky pro získání zápočtu: pravidelná docházka (povolena je pouze jedna neomluvená absence, každá další musí být řádně omluvena prostřednictvím Studijního oddělení LF), aktivní účast ve výuce, průběžná příprava, úspěšné absolvování průběžného testování.

Aktuální informace o~předmětu, konzultačních hodinách atd. jsou zveřejňovány prostřednictvím IS MU.

Kontakt s vyučujícími zajišťuje sekretariát pracoviště: UKB, Kamenice 5, pavilon A15, tel. 549498170; úřední hodiny: pondělí 10.00-12.00, středa 10.00-12.00, pátek 9.00-11.00. Možná je také e-mailová komunikace.

First-term credit requirements: regular class attendance (only one unexcused absence will be tolerated; further absences must be properly excused via the Study Department of the Faculty of Medicine), active class participation, class preparation, passing the class tests.

Updated information on the course, office hours, etc. is available in IS MU.

Contact person: secretary of the Language Centre (UKB, Kamenice 5, Pavilion A15), phone: 549498170; office hours: Monday 10.00-12.00, Wednesday 10.00-12.00, Friday 9.00-11.00. Individual lecturers can also be contacted via e-mail.

The course is also listed under the following terms [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VLLT0222c Basic Medical Terminology II - practice ❄

Faculty of Medicine

Spring 2018

Extent and Intensity

0/1/0. 1 credit(s). Type of Completion: z (credit).

Teacher(s)

[Mgr. Natálie Gachallová](#) (seminar tutor)

[Mgr. Soňa Hudíková, Ph.D.](#) (seminar tutor), [Mgr. Libor Švanda, Ph.D.](#) (deputy)

[Mgr. Lucie Mazalová, Ph.D.](#) (seminar tutor)

[Mgr. Kamila Novotná](#) (seminar tutor)

[Mgr. Kateřina Pořízková, Ph.D.](#) (seminar tutor)

[PhDr. Renata Prucklová](#) (seminar tutor)

[Mgr. Jan Slíva](#) (seminar tutor), [Mgr. Kateřina Pořízková, Ph.D.](#) (deputy)

[Mgr. Tereza Ševčíková](#) (seminar tutor), [Mgr. Kateřina Pořízková, Ph.D.](#) (deputy)

[Mgr. Libor Švanda, Ph.D.](#) (seminar tutor)

[Mgr. Veronika Tománková, Ph.D.](#) (assistant)

[PhDr. Jana Vyorálková](#) (assistant)

Supervisor

[Mgr. Libor Švanda, Ph.D.](#)

[Language Centre, Faculty of Medicine Division - Language Centre](#)

Contact Person: [Mgr. Libor Švanda, Ph.D.](#)

Supplier department: [Language Centre, Faculty of Medicine Division - Language Centre](#)

Prerequisites

[VLLT0121c Basic Med. Terminology -p](#)

Passing the course Basic medical Terminology I

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

Greek-Latin medical terminology is one of the relevant means for acquisition of the target knowledge of medical students. The tuition is of both theoretic and practical character, conceived as a preparatory course sui generis, introducing the students into the study of medicine by means of its language.

The content of tuition is, like the set of knowledge required in the examination, exclusively determined by the needs of the discipline and medical practice. First of all, it provides such knowledge of Latin and Greek which enables the student to master quickly and purposefully the semantic aspect of terms, their grammatical form, and word-forming structure. At the same time, it provides systematic instruction to independent solution of current terminological problems consisting in understanding of the technical content of the terms and in the formation of medical terms. Furthermore, it opens a view of the wider historical and linguistic fundamentals of medical terminology as well as its general theoretical contexts.

Learning outcomes

At the end of the course students should be able to:

- understand and use Latin and Greek-Latin medical terms and expressions correctly
- explain and apply grammatical devices and rules relevant for acquisition of Greek-Latin medical terminology
- recognize the syntactic structure of complex terms
- describe the semantic structure of one-word terms
- form compound words applying the most used word-formation principles
- translate selected expressions from anatomy, pre-clinical and clinical fields of study, medical prescriptions, and pharmacology
- deduce the meaning of unknown terms on the basis of semantic, grammatical and logical relations

Syllabus

- BASIC MEDICAL LATIN - practice
- The course is complementary to VLLT0222s Basic Medical Terminology II - seminar.
- *1st week:* Instructions for the course. Revision of substantive and adjective declensions. Numerals.
- *2nd week:* Numerals: objects next to numerals.
- *3rd week:* Verbs (1): infinitive, imperative, present passive subjunctive.
- *4th week:* Verbs (2): present active and perfect passive participles, gerundive, gerund.
- *5th week:* Revision of numerals and verbs.
- *6th week:* Progress test.
- *7th week:* Word Formation (1): basic rules of derivation. Latin prefixes, their meanings and mutual relations.
- *8th week:* Latin suffixes (substantival, adjectival).
- *9th week:* Greek prefixes, their meanings and mutual relations. Synonymy, antonymy, polysemy, and homonymy of prefixes.
- *10th week:* Greek suffixes, polysemy of suffixes.
- *11th week:* Word Formation (2): basic rules of composition, combining morphemes. Latin compound words, hybrid words.
- *12th week:* Greek compound words, productive word-forming components. Latin and Greek equivalents of basic medical terms.
- *13th week:* Revision for the credit test.
- *14th week:* Credit test.

Literature

required literature

- [MAREČKOVÁ, Elena](#), [Hana REICHOVÁ](#), [Libor ŠVANDA](#), [Natália GACHALLOVÁ](#), [Tereza ŠEVČÍKOVÁ](#), [Kamila NOVOTNÁ](#), [Jan SLÍVA](#) and [Lucie MAZALOVÁ](#). *Úvod do lékařské terminologie. Základy latiny s přihlédnutím k řečtině*. 7., přeprac. vydání. Brno: Masarykova univerzita, 2019. 226 pp. ISBN 978-80-210-8699-9. [info](#)

recommended literature

- KÁBRT, Jan. *Lexicon medicum*. Třetí, doplněné a přepr. Praha: Galén, 2015. 917 stran. ISBN 9788074922008. [info](#)

Teaching methods

lectures, translation and grammar exercises, drills, group work, homework, presentation

Assessment methods

- Practical examination (demonstration of proficiency)
- Final examination - written form
- Final examination - oral form

Language of instruction

Czech

Further comments (probably available only in Czech)

The course can also be completed outside the examination period.

The course is taught annually.

The course is taught: every week.

Information on the extent and intensity of the course: cvičení.

Teacher's information

Požadavky pro získání zápočtu: pravidelná docházka (povolena je jedna neomluvená absence, každá další musí být řádně omluvena prostřednictvím Studijního oddělení LF), aktivní účast ve výuce, průběžná příprava, absolvování průběžného testu (zaměřen na číslovky a slovesa), klauzurní test (zaměřen na slovtvorbu, částečně na jmennou a slovesnou flexi)

Hranici úspěšnosti je v~případě obou testů dosažení min. 75~% bodů. Úspěšné absolvování průběžného testu snižuje hranici úspěšnosti u~klauzurního testu o~5~%.

Konzultační hodiny jednotlivých vyučujících najdete na jejich osobní stránce v ISu.

Aktuální informace o~předmětu, konzultačních hodinách atd. jsou zveřejňovány mimo jiné na nástěnce Centra jazykového vzdělávání MU, oddělení na LF (UKB, budova A15, přízemí).

Kontakt na jednotlivé vyučující předmětu naleznete na

<http://www.med.muni.cz/cjv/index.php?id=790> ; sekretariát pracoviště: tel. 549498170.

Credit requirements: regular class attendance (one unexcused absence will be tolerated, further absences must be properly excused via the Study Department of the Faculty of Medicine), active participation in class, preparation for classes, progress test (focused on numerals and verbs), credit test (focused on word-formation, partially also nominal and verbal inflexion)

The limit for passing the test is always 75~%. Passing the progress test reduces the limit for the credit test by 5~%.

For office hours see the teacher's personal web pages in IS.

For up-to-date information on the course, office hours etc. see also the notice board of the Masaryk University Language Centre, Faculty of Medicine Division (UKB, building A15, ground floor).

All lecturers can also be contacted via e-mail, see <http://www.med.muni.cz/cjv/index.php?id=790> ; department secretary: phone 549498170.

The course is also listed under the following terms [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VLLT0222s Basic Medical Terminology II - seminar ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

0/1/0. 2 credit(s). Type of Completion: zk (examination).

Teacher(s)

[Mgr. Natálie Gachallová](#) (seminar tutor), [Mgr. Kateřina Pořízková, Ph.D.](#) (deputy)

[Mgr. Soňa Hudíková, Ph.D.](#) (seminar tutor), [Mgr. Libor Švanda, Ph.D.](#) (deputy)

[Mgr. Lucie Mazalová, Ph.D.](#) (seminar tutor)

[Mgr. Kamila Novotná](#) (seminar tutor), [Mgr. Libor Švanda, Ph.D.](#) (deputy)

[Mgr. Kateřina Pořízková, Ph.D.](#) (seminar tutor)

[PhDr. Renata Prucklová](#) (seminar tutor)

[Mgr. Jan Slíva](#) (seminar tutor), [Mgr. Kateřina Pořízková, Ph.D.](#) (deputy)

[Mgr. Tereza Ševčíková](#) (seminar tutor), [Mgr. Kateřina Pořízková, Ph.D.](#) (deputy)

[Mgr. Libor Švanda, Ph.D.](#) (seminar tutor)

[Mgr. Veronika Tománková, Ph.D.](#) (assistant)

[PhDr. Jana Vyorálková](#) (assistant)

Supervisor

[Mgr. Libor Švanda, Ph.D.](#)

[Language Centre, Faculty of Medicine Division - Language Centre](#)

Contact Person: [Mgr. Libor Švanda, Ph.D.](#)

Supplier department: [Language Centre, Faculty of Medicine Division - Language Centre](#)

Prerequisites

[VLLT0121c Basic Med. Terminology -p](#)

Passing the course Basic medical Terminology I

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

Greek-Latin medical terminology is one of the relevant means for acquisition of the target knowledge of medical students. The tuition is of both theoretic and practical character, conceived as a preparatory course sui generis, introducing the students into the study of medicine by means of its language.

The content of tuition is, like the set of knowledge required in the examination, exclusively determined by the needs of the discipline and medical practice. First of all, it provides such knowledge of Latin and Greek which enables the student to master quickly and purposefully the semantic aspect of terms, their grammatical form, and word-forming structure. At the same time, it provides systematic instruction to independent solution of current terminological problems consisting in understanding of the technical content of the terms and in the formation of medical terms. Furthermore, it opens a view of the wider historical and linguistic fundamentals of medical terminology as well as its general theoretical contexts.

Learning outcomes

At the end of the course students should be able to:

- understand and use Latin and Greek-Latin medical terms and expressions correctly
- explain and apply grammatical devices and rules relevant for acquisition of Greek-Latin medical terminology
- recognize the syntactic structure of complex terms
- describe the semantic structure of one-word terms
- form compound words applying the most used word-formation principles
- translate selected expressions from anatomy, pre-clinical and clinical fields of study, medical prescriptions, and pharmacology
- deduce the meaning of unknown terms on the basis of semantic, grammatical and logical relations

Syllabus

- BASIC MEDICAL TERMINOLOGY - seminar
- The course is complementary to VLLT0222s Basic Medical Terminology II - practice.
- *1st week:* Numerals in clinical diagnoses. Terminology related to fractures.
- *2nd week:* Case history and its components. Lexical devices for expressing colour.
- *3rd week:* Terminology prerequisites of professional communication between a doctor and a pharmacist. Terminology related to sex.
- *4th week:* Factual and formal grammatical structure of a medical prescription. Terminology related to age and stages of life.
- *5th week:* Basic vocabulary from pharmacology: subscription, forms of pharmaceutical preparations, groups of medicaments, pharmaceutical substances. Terms describing facial expressions.
- *6th week:* Progress test. Terms describing various types of wounds and injuries.

- *7th week:* Specific features of clinical terminology. Terms denoting various types of fever.
- *8th week:* Post-mortem diagnosis as an example of authentic application of Latin in medical practice. Phrases related to death.
- *9th week:* Examples of autopsy protocols. Terms used for expressing location and position.
- *10th week:* Terms for various types of diagnoses and prognoses. Terms related to heartbeat.
- *11th week:* Terms for various types of therapies. Terms denoting inflammations.
- *12th week:* Examples from clinical documentation. Terms denoting anatomical planes.
- *13th week:* Borrowed words of Latin and Greek origin: sound adaptation and orthography. Revision.
- *14th week:* Credit test.

Literature

required literature

- [MAREČKOVÁ, Elena](#), [Hana REICHOVÁ](#), [Libor ŠVANDA](#), [Natália GACHALLOVÁ](#), [Tereza ŠEVČÍKOVÁ](#), [Kamila NOVOTNÁ](#), [Jan SLÍVA](#) and [Lucie MAZALOVÁ](#). *Úvod do lékařské terminologie. Základy latiny s přihlédnutím k řečtině*. 7., přeprac. vydání. Brno: Masarykova univerzita, 2019. 226 pp. ISBN 978-80-210-8699-9. [info](#)

recommended literature

- KÁBRT, Jan. *Lexicon medicum*. Třetí, doplněné a přepr. Praha: Galén, 2015. 917 stran. ISBN 9788074922008. [info](#)

Teaching methods

lectures, translation and grammar exercises, drills, group work, homework, presentation

Assessment methods

- Practical examination (demonstration of proficiency)
- Student presentation in seminar
- Final examination - written form
- Final examination - oral form

Language of instruction

Czech

Further comments (probably available only in Czech)

The course can also be completed outside the examination period.

The course is taught annually.

The course is taught: every week.

Information on the extent and intensity of the course: seminář.

Information on course enrolment limitations: Seminář se vyučuje společně s cvičením, dle rozvrhu cvičení.

Listed among pre-requisites of other courses

- [VLPX042t](#) [Vacational Training in Nursing](#)
[VLBF011p](#) && [VLPO011p](#) && [VLLT0222s](#) ([Do I meet enrolment requirements?](#))

Teacher's information

Zkouška (zk) zahrnuje písemnou a ústní část. Písemná část spočívá v~překladu klinických a recepturních termínů z~češtiny do latiny. Obsah ústní části: mluvnický rozbor vybraných latinských anatomických a klinických termínů, určování a obměňování základních gramatických kategorií, výklad odborně relevantního gramatického jevu a úkoly prověřující znalosti z~tvoření slov. Doplnkovou součástí zkoušky mohou tvořit otázky z~teorie terminologie (historické aspekty, současný stav vývoje, charakteristické znaky apod.). Předpokladem přípuštění ke zkoušce je úspěšné absolvování klazurního testu, zaměřeného hlavně na slovtvorbu.

Povolena je pouze jedna neomluvená absence, každá další musí být řádně omluvena (prostřednictvím Studijního oddělení LF).

Konzultační hodiny jednotlivých vyučujících najdete na jejich osobní stránce v ISu.

Aktuální informace o~předmětu, konzultačních hodinách atd. jsou zveřejňovány mimo jiné na nástěnce Centra jazykového vzdělávání MU, oddělení na LF (UKB, budova A15, přízemí).

Kontakt na jednotlivé vyučující předmětu naleznete na <http://www.med.muni.cz/cjv/index.php?id=790> ; sekretariát pracoviště: tel. 549498170.

Examination (zk) consists of written and oral part. The written part focuses on translating clinical and prescription terms from Czech into Latin. The oral part contains grammatical analysis of selected Latin anatomical and clinical terms, recognition of various grammatical forms, variation of basic grammatical categories, explanation of a technically relevant grammatical phenomenon, and tasks which check knowledge of word formation. The exam may be supplemented with questions from the theory of terminology (historical aspects, contemporary state of development, characteristic features, etc.). A prerequisite for admission to the examination is successful completion of the final written test focused especially on word-formation.

Only one unexcused absence will be tolerated; further absences must be properly excused (i.e. via the Study Department of the Faculty of Medicine).

For office hours see the teacher's personal web pages in IS.

For up-to-date information on the course, office hours etc. see also the notice board of the Masaryk University Language Centre, Faculty of Medicine Division (UKB, building A15, ground floor).

All lecturers can also be contacted via e-mail, see
<http://www.med.muni.cz/cjv/index.php?id=790> ; department secretary: phone 549498170.

The course is also listed under the following terms [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VLMB011 Introduction to theoretical biology ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/0/2. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. Ing. Petr Dvořák, CSc.](#) (lecturer)
[Mgr. Hana Hříbková](#) (lecturer)
[Mgr. Pavel Němec, Ph.D.](#) (lecturer)
[doc. MUDr. Iva Slaninová, Ph.D.](#) (lecturer)
[Mgr. Michal Strouhal, Ph.D.](#) (lecturer)
[Mgr. Miroslav Vařecha, Ph.D.](#) (lecturer)
[Mgr. Kateřina Cetkovská, Ph.D.](#) (assistant)
[Mgr. Kateřina Straková, Ph.D.](#) (assistant)
[Mgr. Kateřina Vopěnková, Ph.D.](#) (assistant)
[Mgr. Martina Vráblíková](#) (assistant)

Supervisor

[prof. Ing. Petr Dvořák, CSc.](#)
[Department of Biology - Theoretical Departments - Faculty of Medicine](#)
Contact Person: [Mgr. Kateřina Vopěnková, Ph.D.](#)
Supplier department: [Department of Biology - Theoretical Departments - Faculty of Medicine](#)

Prerequisites

[VLBI0222p Biology II-lect.](#) || [ZLBI0222p Biology II -lect.](#) || [PřF:Bi1700 Cell Biology](#) || [VSBI0222p Biology II-lect.](#)

Students need to have cell biology knowledge at the level of 1st year of university, proven with an exam (VLBI0222p, ZLBI0222p or Bi1700), knowledge of Czech language.
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

The capacity limit for the course is 15 student(s).

Current registration and enrolment status: enrolled: **15/15**, only registered: **0/15**

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)
- [Dentistry](#) (programme LF, M-ZL)

Course objectives

After completion of the course student: gets an overview of currently used methods of molecular and cell imaging and analysis; and will see some of their applications in practice. Student will see following laboratories and devices in operation: imaging of biomolecules in cells and tissues (cell-imaging); electron microscopy; flow-cytometry; whole genome sequencing; and DNA microarray analysis. Student will understand the principle and possibilities of application of these methods; will be more familiar with the modern study of biological material and their use in biomedical research and modern medicine, and will be capable of basic interpretation of results obtained from these methods.

Learning outcomes

Student will understand the principle and possibilities of application of these methods; will be more familiar with the modern study of biological material and their use in biomedical research and modern medicine, and will be capable of basic interpretation of results obtained from these methods.

Syllabus

- Visualization of biomolecules at the cellular level
- Cell ultrastructure analysis using electron microscopy
- Flow-cytometry: analysis of cell populations
- Analysis and annotation of whole genome DNA sequencing
- DNA microarrays in gene expression analysis

Literature

recommended literature

- prezentace z přednášek

Teaching methods

seminar, lab demonstration

Assessment methods

Course completion requires full attendance in the seminars and passin a final written test (5 questions on understanding the principle and use of illustrated methods - student answer in their own words, credit is awarded in case of answering at least 4 questions out of 5).

Attendance at all seminars is mandatory

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: in blocks.

Information on the extent and intensity of the course: celkem 12 hodin.

Information on course enrolment limitations: Pokud nemá student zkoušku z Biologie II, musí mít absolvovaný předmět Bunečná biologie Bi1700 na PřF.

Teacher's information

<https://is.muni.cz/auth/el/1411/podzim2019/VLMB011/index.qwapr>

Výuka probíhá blokově ve dnech 3. a 10. 11. 2019 ve výše uvedených časech v

univerzitním kampusu, budova A3, zasedací místnost v přízemí. Studenti jsou povinni přijít do výuky včas.

The course is also listed under the following terms [Autumn 2016](#), [Accreditation autumn](#).

VLNE9X1c Neurology - practice ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

1/4/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Martin Bareš, Ph.D.](#) (lecturer)
[prof. MUDr. Josef Bednařík, CSc.](#) (lecturer)
[prof. MUDr. Ivan Rektor, CSc.](#) (lecturer)
[prof. MUDr. Zdeněk Kadaňka, CSc.](#) (lecturer)
[prof. MUDr. Milan Brázdil, Ph.D.](#) (lecturer)
[prof. MUDr. Irena Rektorová, Ph.D.](#) (lecturer)
[doc. MUDr. Pavel Štourač, Ph.D.](#) (lecturer)
[doc. MUDr. Blanka Adamová, Ph.D.](#) (seminar tutor)
[MUDr. Eva Vlčková, Ph.D.](#) (seminar tutor)
[MUDr. Stanislav Vohánka, CSc., MBA](#) (seminar tutor)
[PhDr. Mgr. Milena Košťálová, Ph.D.](#) (seminar tutor)
[Hana Božková](#) (assistant)
[Jitka Smejkalová](#) (assistant)
[doc. MUDr. Marek Baláž, Ph.D.](#) (seminar tutor)
[MUDr. Yvonne Benešová, Ph.D.](#) (seminar tutor)
[Mgr. Zuzana Hummelová, Ph.D.](#) (seminar tutor)
[Dana Chalupová, DiS.](#) (seminar tutor)
[Jana Aberlová](#) (assistant)
Dana Chalupová (assistant)
[Klára Marečková, Ph.D., M.Sc.](#) (assistant)
[Jaromíra Saláková](#) (assistant)

Supervisor

[prof. MUDr. Irena Rektorová, Ph.D.](#)
[Department of Neurology - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)
Supplier department: [Department of Neurology - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Timetable of Seminar Groups

VLNE9X1c/09: Mon 23. 10. to Fri 3. 11. each working day 7:30–12:20 [B-5.022](#)
VLNE9X1c/10: Mon 9. 10. to Fri 20. 10. each working day 7:30–12:20 [B-5.022](#)
VLNE9X1c/11: Mon 25. 9. to Fri 6. 10. each working day 7:30–12:20 [N12190](#)
VLNE9X1c/12: Mon 8. 1. to Fri 19. 1. each working day 7:30–12:20 [B-5.022](#)
VLNE9X1c/15: Mon 18. 12. to Fri 5. 1. each working day 7:30–12:20 [N12190](#)
VLNE9X1c/16: Mon 4. 12. to Fri 8. 12. each working day 7:30–12:20 [D.G.4.85](#), Mon 11.

12. to Fri 15. 12. each working day 7:30–12:20 [B-5.022](#)

VLNE9X1c/32: No timetable has been entered into IS.

VLNE9X1c/33: No timetable has been entered into IS.

Prerequisites (in Czech)

([VLFA0822p Pharmacology II - L](#) || [VLFA0722p Pharmacology - L](#)) &&

[VSIP0622c Introduction to internal II-pr](#) && [VLDM7X1c Diagn.imaging - practice](#) &&

[VL0L7X1a Ophthalmology - practice](#) && [VLCH0832c Surgery II - practicals](#) &&

[VLNP081c Introduction to Neurology -pr](#)

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

At the end of the course students should be able to: understand and explain the basics and principles of neurology; work with information on the neurological examination to create the symptoms, syndromes of the neurological disorders; make reasoned decisions about the topical diagnosis and differential diagnosis based on the symptomatology. make deductions based on acquired knowledge in the field of neurology interpret paraclinical examinations.

Learning outcomes

At the end of the course students should be able to: understand and explain the basics and principles of neurology; work with information on the neurological examination to create the symptoms, syndromes of the neurological disorders; make reasoned decisions about the topical diagnosis and differential diagnosis based on the symptomatology. make deductions based on acquired knowledge in the field of neurology interpret paraclinical examinations.

Syllabus

- General neurology Neurological syndromology and neurological evaluation. The practical lectures in the lecture hall and bedside examination of the patients. Day 1. neurological history taking. Reflexology. Palsies, pyramidal signs. Day 2. Cranial nerves examination. Sensitivity and its affections. Day 3. Extrapyramidal and cerebellar signs. Spine examination. Disorders of the stance and walking. Meningeal syndrome. Uncsciousness. Day 4. aphasias, alexia, agraphia and other higher central nervous system disorders Day 5. neurological paraclinical examinations, Neurological examination and notes. Neurological diagnosis. Days 6-7. Pediatric neurology, the principles. Special Neurology Day 3-5. Focus on main nosological units and syndromes in neurology. The practical lectures in the lecture hall and bedside examination of the patients. Day 8. stroke, multiple sclerosis. Day 9. Epilepsy, tumors, vertebrogenic disorders, movement disorders, headache, dementias. Day 10. Neuromuscular disorders, critical illness patient.

Classified credit (practical exam with written neurological examination of the patient).

Literature

required literature

- ŠPINAR, Jindřich and Ondřej LUDKA. *Propedeutika a vyšetřovací metody vnitřních nemocí*. 2., přeprac. a dopl. vyd. Praha: Grada, 2013. 336 s. ISBN 9788024743561. [info](#)
- ŠTOURAC, Pavel, Josef BEDNAŘÍK, Milan BRÁZDIL, Zdeněk KADAŇKA, Petr KAŇOVSKÝ, Marek MECHL, Jiří PRÁŠEK, Ivan REKTOR, Irena REKTOROVÁ and Radomír ŠLAPAL. *Učebnice obecné neurologie (Textbook of General Neurology)*. 2., přepracované. Brno: Masarykova universita v Brně, 2003. 197 pp. ISBN 80-210-3309-6. [info](#)

recommended literature

- *Učebnice speciální neurologie*. Edited by Zdeněk Kadaňka. 3., přeprac. vyd. Brno: Masarykova univerzita, 2010. 302 s. ISBN 9788021053205. [info](#)
- *Učebnice speciální dětské neurologie : pro studenty 4. a 5. ročníku LF MU s rozšířenou výukou pediatrie (Special Pediatric Neurology for students of the 4th and 5th years, Medical Faculty, Masaryk University, with extended education in pediatrics)*. Edited by Hana Ošlejšková. 1. vyd. Brno: Masarykova univerzita, 2011. 123 s. ISBN 9788021056596. [info](#)
- John Morris, Joseph Jankovic: *Neurological Clinical Examination*, Hodler Arnold Co, 2012
- *International Neurology: A clinical approach*: by Robert P. Lisak, Daniel D Truong, William M Carroll, Roongroj Bhidayasiri, Blackwell Publishing Ltd 2010, ISBN 9781444317008

not specified

- Merritt's Neurology, 13th Edition is edited by by Elan D. Louis MD MS (Author), Stephan A. Mayer MD (Author), Lewis P. Rowland MD (Author) ISBN-13: 978-1451193367, ISBN-10: 145119336X

Teaching methods

seminary lectures, internship

Assessment methods

credit, classified, ongoing written tests final oral exam

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

Information on completion of the course: po blokové atáži praktická zkouška, po úspěšném složení zápočet

The course is taught each semester.

Teacher's information

Informace jsou vyvěšeny na nástěnkách I., II. a dětské neurologické kliniky LFMU

Kontaktní osoby:

1.neurologická klinika LF MU (FN u sv. Anny, Pekařská): Prof. MUDr. Irena Rektorová, irena.rektorova@fnusa.cz
2.neurologická klinika LF MU (FN Brno, Jihlavská): Prof. MUDr. Josef Bednařík, CSc., jbednar@fnbrno.cz
Dětská neurologická klinika LF MU a FN Brno (FN Černopolní): Doc. MUDr. Hana Ošlejšková, hoslej@fnbrno.cz

The course is also listed under the following terms [Autumn 1999](#), [Spring 2000](#), [Autumn 2000](#), [Spring 2001](#), [Autumn 2001](#), [Spring 2002](#), [Autumn 2002](#), [Spring 2003](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

VLNE9X1p Neurology - lecture ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

1/0/0. 4 credit(s). Recommended Type of Completion: zk (examination). Alternate Types of Completion: RZk (examination).

Teacher(s)

[prof. MUDr. Martin Bareš, Ph.D.](#) (lecturer)
[prof. MUDr. Josef Bednařík, CSc.](#) (lecturer)
[prof. MUDr. Milan Brázdil, Ph.D.](#) (lecturer)
[prof. MUDr. Zdeněk Kadaňka, CSc.](#) (lecturer)
[doc. MUDr. Hana Ošlejšková, Ph.D.](#) (lecturer)
[prof. MUDr. Ivan Rektor, CSc.](#) (lecturer)
[prof. MUDr. Irena Rektorová, Ph.D.](#) (lecturer)
[doc. MUDr. Marek Baláž, Ph.D.](#) (seminar tutor)
[Dana Chalupová, DiS.](#) (seminar tutor)
[Jitka Smejkalová](#) (seminar tutor)
[Jana Aberlová](#) (assistant)
Dana Chalupová (assistant)
[Klára Marečková, Ph.D., M.Sc.](#) (assistant)
[Jaromíra Saláková](#) (assistant)
[Hana Božková](#) (alternate examiner)

Supervisor

[prof. MUDr. Irena Rektorová, Ph.D.](#)
[Department of Neurology - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)
Contact Person: [doc. MUDr. Hana Ošlejšková, Ph.D.](#)

Supplier department: [Department of Neurology - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Timetable

Wed 20. 9. 12:00–14:30 [A11/114](#), Thu 21. 9. 12:00–14:30 [A11/114](#)

- Timetable of Seminar Groups:

VLNE9X1p/VLA: Wed 20. 9. 7:30–9:35 [A9/324](#), Thu 21. 9. 14:40–17:10 [A11/234](#), Fri 22. 9. 14:40–15:25 [A11/234](#)

Prerequisites (in Czech)

([VLFA0822p Pharmacology II - L](#) || [VLFA0722p Pharmacology - L](#)) && [VSIP0622c Introduction to internal II-pr](#) && [VLDM7X1c Diagn.imaging - practice](#) && [VL0L7X1a Ophthalmology - practice](#) && [VLCH0832c Surgery II - practicals](#) && [VLNP081c Introduction to Neurology -pr](#)
(Do I meet enrolment requirements?)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

At the end of the course students should be able to: understand and explain modern diagnosis and treatment of different neurological conditions. work with information on special neurology to make correct diagnosis; create differential diagnosis; make reasoned decisions about diagnosis and treatment plans; make deductions based on acquired knowledge in the field of neurology.

Learning outcomes

At the end of the course students should be able to: understand and explain modern diagnosis and treatment of different neurological conditions. work with information on special neurology to make correct diagnosis; create differential diagnosis; make reasoned decisions about diagnosis and treatment plans; make deductions based on acquired knowledge in the field of neurology.

Syllabus

- Oral lectures on different and updated topics in neurology: Neurological complications of spondylosis Epilepsy Subarachnoid hemorrhage Behavioral Neurology Stroke Parkinsons disease Migraine Myasthenia gravis Autoimmune neuropathies Multiple sclerosis Developmental Neurology Dementia Brain Tumors Pain

Literature

required literature

- [ŠTOURAC, Pavel](#), [Josef BEDNAŘÍK](#), [Milan BRÁZDIL](#), [Zdeněk KADAŇKA](#), [Petr KAŇOVSKÝ](#), [Marek MECHL](#), [Jiří PRÁŠEK](#), [Ivan REKTOR](#), [Irena REKTOROVÁ](#) and [Radomír ŠLAPAL](#). *Učebnice obecné neurologie (Textbook of General Neurology)*. 2., přepracované. Brno: Masarykova universita v Brně, 2003. 197 pp. ISBN 80-210-3309-6. [info](#)
- ŠPINAR, Jindřich and Ondřej LUDKA. *Propedeutika a vyšetřovací metody vnitřních nemocí*. 2., přeprac. a dopl. vyd. Praha: Grada, 2013. 336 s. ISBN 9788024743561. [info](#)

recommended literature

- Kolektiv autorů Kliniky děské neurologie a dalších pracovišť LF and Kolektiv autorů Kliniky děské neurologie a dalších pracovišť LF. *Učebnice speciální děské neurologie pro studenty 4. a 5.ročníku LF MU s rozšířenou výukou pediatrie (Textbook of Pediatric Neurology for special students of the 4th LF MU and 5th year with extended teaching of pediatrics)*. 1. vydání. Brno: Masarykova univerzita Brno, 2011. 123 pp. ISBN 978-80-210-5659-6. [info](#)
- John Morris, Joseph Jankovic: *Neurological Clinical Examination*, Hodler Arnold Co, 2012
- *International Neurology: A clinical approach*: by Robert P. Lisak, Daniel D Truong, William M Carroll, Roongroj Bhidayasiri, Blackwell Publishing Ltd 2010, ISBN 9781444317008
- *Merritt's Neurology*, 13th Edition is edited by by Elan D. Louis MD MS (Author), Stephan A. Mayer MD (Author), Lewis P. Rowland MD (Author) ISBN-13: 978-1451193367, ISBN-10: 145119336X
- *Child neurology*. Edited by John H. Menkes - Harvey B. Sarnat - Bernard L. Maria. Seventh edition. Philadelphia: Lippincott Williams & Wilkins, 2006. xiii, 1186. ISBN 9780781751049. [info](#)

not specified

- *Učebnice speciální neurologie*. Edited by Zdeněk Kadaňka. 3., přeprac. vyd. Brno: Masarykova univerzita, 2010. 302 s. ISBN 9788021053205. [info](#)
- HOFFMANN, Georg Friedrich. *Dědičné metabolické poruchy*. Vyd. 1. Praha: Grada, 2006. 416 s. ISBN 8024708310. [info](#)

Teaching methods

Oral lectures on different and updated topics in neurology. Presentations by professionals in neurology

Assessment methods

Graded credit. Ongoing written tests. The course is finished by oral examination.

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

The course can also be completed outside the examination period.

The course is taught annually.

Information on the per-term frequency of the course: jenom v podzimním semestru.

Listed among pre-requisites of other courses

- [VLCH11XX Surgery - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [VLPD11XX Paediatrics - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [VLPG11XX Obstetric and Gynaecology - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && [VLVL9X66c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VSNO071](#), [VLKA091](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLTL081](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSDL071](#), [VLRL041](#), [VLIA081](#), [VLKM081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [VLRL11XX Family Medicine and Geriatrics](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLIN9X22](#) && [VLPL9X1](#) && [VLON091](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTL081](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) (Do I meet enrolment requirements?)

- [VLVL11XX Internal Medicine - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#)
&& [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) &&
[VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) ||
[VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) &&
[VLSD7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) &&
[VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) &&
VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#),
[VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#),
[VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) &&
([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment
requirements?)
- [VLZP11XX Public Health - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#)
&& [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) &&
[VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) ||
[VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) &&
[VLSD7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) &&
[VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3,
[VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#),
[VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#),
[VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) ||
[VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

Teacher's information

Informace jsou vyvěšeny na nástěnkách I., II. a dětské neurologické kliniky LFMU
Kontaktní osoby:

1. neurologická klinika LF MU (FN u sv. Anny, Pekařská): Prof. MUDr. Irena Rektorová,
irena.rektorova@fnusa.cz 2. neurologická klinika LF MU (FN Brno, Jihlavská): Prof.
MUDr. Josef Bednařík, CSc., jbednar@fnbrno.cz Dětská neurologická klinika LF MU a
FN Brno (FN Černopolní): Doc. MUDr. Hana Ošlejšková, hoslej@fnbrno.cz

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#),
[Autumn 2002](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring](#)
[2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#),
[Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn](#)
[2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#),
[Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#), [Accreditation autumn](#), [Accreditation](#)
[spring](#).

VLNO071 News in ophthalmology ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

2/0/0. 3 credit(s). Type of Completion: k (colloquium).

Teacher(s)

[MUDr. Karolína Skorkovská, Ph.D.](#) (lecturer)

[doc. MUDr. Šárka Skorkovská, CSc.](#) (lecturer)

[doc. MUDr. Svatopluk Synek, CSc.](#) (alternate examiner)

Supervisor

[doc. MUDr. Svatopluk Synek, CSc.](#)

[Department of Ophthalmology and Optometry - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Supplier department: [Department of Ophthalmology and Optometry - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Prerequisites (in Czech)

[VL0L7X1a Ophthalmology - practice](#)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

Annotation: survey of new moderne diagnostic and therapeutic methods in ophthalmology

Syllabus

- survey of new moderne diagnostic and therapeutic methods in ophthalmology

Literature

- ROZSÍVAL, Pavel. *Oční lékařství*. Vyd. 1. Praha: Karolinum, 2006. 373 s. ISBN 8024612135. [info](#)
- KRAUS, Hanuš. *Kompendium očního lékařství*. Vyd. 1. Praha: Grada, 1997. 341 s. ISBN 8071690791. [info](#)

Teaching methods

lecture

Assessment methods

Prerequisite is credit of ophthalmology lesson. The credit is given for attendance in the lesson.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

Teacher's information

Podmínkou pro účast je absolvování stáží z~očního lékařství. Předmět je ukončen zápočtem za absolvování přednášky. Prerequisite is credit of ophthalmology lesson. The credit is given for attendance in the lesson.

The course is also listed under the following terms [Accreditation autumn](#).

VLNP081c Clinical Introduction to Neurology - practice ✳

Faculty of Medicine

Spring 2018

Extent and Intensity

0/0.8/0. 1 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Ivan Rektor, CSc.](#) (lecturer)
[prof. MUDr. Martin Bareš, Ph.D.](#) (lecturer)
[prof. MUDr. Josef Bednařík, CSc.](#) (lecturer)
[prof. MUDr. Milan Brázdil, Ph.D.](#) (lecturer)
[prof. MUDr. Zdeněk Kadaňka, CSc.](#) (lecturer)
[doc. MUDr. Hana Ošlejšková, Ph.D.](#) (lecturer)
[prof. MUDr. Irena Rektorová, Ph.D.](#) (lecturer)
[doc. MUDr. Marek Baláž, Ph.D.](#) (seminar tutor)
[MUDr. Yvonne Benešová, Ph.D.](#) (seminar tutor)
[MUDr. Magda Horáková](#) (seminar tutor)
[MUDr. Martin Pail, Ph.D.](#) (seminar tutor)
[Jaromíra Saláková](#) (seminar tutor)
[doc. MUDr. Pavel Štourač, Ph.D.](#) (seminar tutor)
[MUDr. Stanislav Vohánka, CSc., MBA](#) (seminar tutor)
[Jana Aberlová](#) (assistant)
[Hana Božková](#) (assistant)
[Dana Chalupová, DiS.](#) (assistant)
[Bc. Lenka Padrtová](#) (assistant)
[Jitka Smejkalová](#) (assistant)

Supervisor

[prof. MUDr. Irena Rektorová, Ph.D.](#)
[First Department of Neurology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)
Supplier department: [First Department of Neurology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Prerequisites (in Czech)

[VSIP0622c Introduction to internal II-pr](#) && [VLCP0622c Introd. to surgery II -pr.](#) &&
[VLFA0621c Pharmacology I - p](#)
(Do I meet enrolment requirements?)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

At the end of the course students should be able to: understand and explain syndromological diagnosis based on various neurological symptoms. work with information on neurology to make correct topical diagnosis to create differential diagnosis; make reasoned decisions about diagnosis make deductions based on acquired knowledge in the field of neurology

Learning outcomes

At the end of the course students should be able to: understand and explain syndromological diagnosis based on various neurological symptoms. work with information on neurology to make correct topical diagnosis to create differential diagnosis; make reasoned decisions about diagnosis make deductions based on acquired knowledge in the field of neurology

Syllabus

- General neurology, day 1 and 2. neurological syndromology and neurological evaluation. The practical lectures in the lecture hall and bedside examination of the patients. Day 1. neurological history taking. Reflexology. Palsies, pyramidal signs, cranial nerves examination. Sensitivity and its affections.. Day 2. Extrapyramidal and cerebellar signs. Spine examination. Disorders of the stance and walking. Meningeal syndrome. Unconsciousness.

Literature

required literature

- ŠPINAR, Jindřich and Ondřej LUDKA. *Propedeutika a vyšetřovací metody vnitřních nemocí*. 2., přeprac. a dopl. vyd. Praha: Grada, 2013. 336 s. ISBN 9788024743561. [info](#)
- [ŠTOURAČ, Pavel](#), [Josef BEDNAŘÍK](#), [Milan BRÁZDIL](#), [Zdeněk KADAŇKA](#), [Petr KAŇOVSKÝ](#), [Marek MECHL](#), [Jiří PRÁŠEK](#), [Ivan REKTOR](#), [Irena REKTOROVÁ](#) and [Radomír ŠLAPAL](#). *Učebnice obecné neurologie (Textbook of General Neurology)*. 2., přepracované. Brno: Masarykova universita v Brně, 2003. 197 pp. ISBN 80-210-3309-6. [info](#)
- *Učebnice speciální neurologie*. Edited by Zdeněk Kadaňka. 3., přeprac. vyd. Brno: Masarykova univerzita, 2010. 302 s. ISBN 9788021053205. [info](#)

recommended literature

- Merritt's Neurology, 13th Edition is edited by by Elan D. Louis MD MS (Author), Stephan A. Mayer MD (Author), Lewis P. Rowland MD (Author) ISBN-13: 978-1451193367, ISBN-10: 145119336X
- John Morris, Joseph Jankovic: Neurological Clinical Examination, Hodler Arnold Co, 2012

- International Neurology: A clinical approach: by Robert P. Lisak, Daniel D Truong, William M Carroll, Roongroj Bhidayasiri, Blackwell Publishing Ltd 2010, ISBN 9781444317008

Teaching methods

The practical lectures in the lecture hall and bedside examination of the patients.

Assessment methods

credit after full participation in seminars

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: in blocks.

Information on the extent and intensity of the course: 2 dny v týdnu (po, út).

Listed among pre-requisites of other courses

- [VLNE9X1c Neurology - practice](#) ([VLFA0822p](#) || [VLFA0722p](#)) && [VSIP0622c](#) && [VLDM7X1c](#) && [VLLO7X1a](#) && [VLCH0832c](#) && [VLNP081c](#) (Do I meet enrolment requirements?)
- [VLNE9X1p Neurology - lecture](#) ([VLFA0822p](#) || [VLFA0722p](#)) && [VSIP0622c](#) && [VLDM7X1c](#) && [VLLO7X1a](#) && [VLCH0832c](#) && [VLNP081c](#) (Do I meet enrolment requirements?)
- [VLPY9X1c Psychiatry - practice](#) ([VLFA0822p](#) || [VLFA0722p](#)) && [VLNP081c](#) (Do I meet enrolment requirements?)
- [VLPY9X1p Psychiatry - lecture](#) ([VLFA0822p](#) || [VLFA0722p](#)) && [VLNP081c](#) (Do I meet enrolment requirements?)

Teacher's information

Informace jsou vyvěšeny na nástěnkách I., II. a dětské neurologické kliniky LFMU

Kontaktní osoby:

1. neurologická klinika LF MU (FN u sv. Anny, Pekařská): Prof. MUDr. Irena Rektorová, irena.rektorova@fnusa.cz
 2. neurologická klinika LF MU (FN Brno, Jihlavská): Prof. MUDr. Josef Bednařík, CSc., jbednar@fnbrno.cz
 Dětská neurologická klinika LF MU a FN Brno (FN Černopolní): Doc. MUDr. Hana Ošlejšková, hoslej@fnbrno.cz

The course is also listed under the following terms [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#), [Spring 2019](#).

VLNP081p Clinical Introduction to Neurology - lecture ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

0.3/0/0. 0 credit(s). Type of Completion: -.

Teacher(s)

[prof. MUDr. Ivan Rektor, CSc.](#) (lecturer)
[doc. MUDr. Marek Baláž, Ph.D.](#) (lecturer)
[prof. MUDr. Martin Bareš, Ph.D.](#) (lecturer)
[prof. MUDr. Josef Bednařík, CSc.](#) (lecturer)
[prof. MUDr. Milan Brázdil, Ph.D.](#) (lecturer)
[MUDr. Magda Horáková](#) (lecturer)
[prof. MUDr. Zdeněk Kadaňka, CSc.](#) (lecturer)
[doc. MUDr. Hana Ošlejšková, Ph.D.](#) (lecturer)
[MUDr. Martin Pail, Ph.D.](#) (lecturer)
[prof. MUDr. Irena Rektorová, Ph.D.](#) (lecturer)
[doc. MUDr. Pavel Štourač, Ph.D.](#) (lecturer)
[Jana Aberlová](#) (assistant)
[Hana Božková](#) (assistant)
[Dana Chalupová, DiS.](#) (assistant)
[Bc. Lenka Padrtová](#) (assistant)
[Jitka Smejkalová](#) (assistant)

Supervisor

[prof. MUDr. Irena Rektorová, Ph.D.](#)
[First Department of Neurology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)
Supplier department: [First Department of Neurology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Prerequisites (in Czech)

[VSIP0622c Introduction to internal II-pr](#) && [VLCP0622c Introduc. to surgery II -pr.](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Oral lectures on different and updated topics in neurology. Focus on modern diagnosis and treatment of different neurological conditions. The students will be able to understand basics of neurology, to establish a diagnosis based on clinical examination and syndromes and also to think of the spatial location of the distinct lesion/lesions involved. This will help to make a differential diagnosis and then the final probable or possible clinical diagnosis.

Learning outcomes

Oral lectures on different and updated topics in neurology. Focus on modern diagnosis and treatment of different neurological conditions. The students will be able to understand basics of neurology, to establish a diagnosis based on clinical examination and syndromes and also to think of the spatial location of the distinct lesion/lesions involved. This will help to make a differential diagnosis and then the final probable or possible clinical diagnosis.

Syllabus

- Oral lectures on different and updated topics in neurology: Neurological complications of spondylosis Epilepsy Subarachnoid hemorrhage Behavioral Neurology Stroke Parkinsons disease Migraine Myasthenia gravis Autoimmune neuropathies Multiple sclerosis Developmental Neurology Dementia Brain Tumors Pain

Literature

required literature

- [ŠTOURAČ, Pavel](#), [Josef BEDNAŘÍK](#), [Milan BRÁZDIL](#), [Zdeněk KADAŇKA](#), [Petr KAŇOVSKÝ](#), [Marek MECHL](#), [Jiří PRÁŠEK](#), [Ivan REKTOR](#), [Irena REKTOROVÁ](#) and [Radomír ŠLAPAL](#). *Učebnice obecné neurologie (Textbook of General Neurology)*. 2., přepracované. Brno: Masarykova universita v Brně, 2003. 197 pp. ISBN 80-210-3309-6. [info](#)

recommended literature

- ŠPINAR, Jindřich and Ondřej LUDKA. *Propedeutika a vyšetřovací metody vnitřních nemocí*. 2., přeprac. a dopl. vyd. Praha: Grada, 2013. 336 s. ISBN 9788024743561. [info](#)
- John Morris, Joseph Jankovic: Neurological Clinical Examination, Hodler Arnold Co, 2012
- *Učebnice speciální neurologie*. Edited by Zdeněk Kadaňka. 3., přeprac. vyd. Brno: Masarykova univerzita, 2010. 302 s. ISBN 9788021053205. [info](#)
- Merritt's Neurology, 13th Edition is edited by by Elan D. Louis MD MS (Author), Stephan A. Mayer MD (Author), Lewis P. Rowland MD (Author) ISBN-13: 978-1451193367, ISBN-10: 145119336X
- International Neurology: A clinical approach: by Robert P. Lisak, Daniel D Truong, William M Carroll, Roongroj Bhidayasiri, Blackwell Publishing Ltd 2010, ISBN 9781444317008

not specified

- Aicardi J.: Diseases of the Nervous System in Childhood, 2nd ed., Mac Keith Press, Cambridge University Press, London 1998
- Swainman, K.F.: Pediatric Neurology: Principles and Practice, 2nd ed., Mosby, St. Louis, 1994

- *Child neurology*. Edited by John H. Menkes - Harvey B. Sarnat - Bernard L. Maria. Seventh edition. Philadelphia: Lippincott Williams & Wilkins, 2006. xiii, 1186. ISBN 9780781751049. [info](#)
- *Základy dětské neurologie*. Edited by Suresh Kotagal, Translated by Jan Hadač. [1. vyd.]. Praha: Triton, 1996. 205 s., ob. ISBN 80-85875-06-3. [info](#)

Teaching methods

lecture

Assessment methods

classified credit

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

Teacher's information

Informace jsou vyvěšeny na nástěnkách I., II. a dětské neurologické kliniky LFMU
Kontaktní osoby:

1.neurologická klinika LF MU (FN u sv. Anny, Pekařská): Prof. MUDr. Irena Rektorová, irena.rektorova@fnusa.cz
2.neurologická klinika LF MU (FN Brno, Jihlavská): Prof. MUDr. Josef Bednařík, CSc., jbednar@fnbrno.cz
Dětská neurologická klinika LF MU a FN Brno (FN Černopolní): Doc. MUDr. Hana Ošlejšková, hoslej@fnbrno.cz

The course is also listed under the following terms [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#), [Spring 2019](#).

VL0L7X1 Ophthalmology - lecture ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/3/0. 2 credit(s). Recommended Type of Completion: zk (examination). Alternate Types of Completion: RZk (examination).

Teacher(s)

[prof. MUDr. Rudolf Autrata, CSc., MBA](#) (lecturer)

[MUDr. Hana Došková, Ph.D.](#) (lecturer)

[MUDr. Radek Girgle](#) (lecturer)

[doc. MUDr. Zuzana Hlinomazová, Ph.D.](#) (lecturer)

[MUDr. Michala Karkanová, Ph.D.](#) (lecturer)

[doc. MUDr. Petr Kolář, Ph.D.](#) (lecturer)

[MUDr. Veronika Matušková, Ph.D., FEBO](#) (lecturer)

[doc. MUDr. Šárka Pitrová, CSc.](#) (lecturer)

[prof. MUDr. Eva Vlčková, CSc.](#) (lecturer)

[MUDr. Daniela Vysloužilová, Ph.D.](#) (lecturer)
[Jaroslava Bukačová](#) (assistant)

Supervisor

[MUDr. Daniela Vysloužilová, Ph.D.](#)
[Department of Ophthalmology - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)
Contact Person: [MUDr. Veronika Matušková, Ph.D., FEBO](#)
Supplier department: [Department of Ophthalmology - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Prerequisites (in Czech)

[VSPF0622p Pathophysiol. II - lect.](#) && [VSPA0622p Pathology II - lecture](#) && [VSIP0622c Introduction to internal II-pr](#) && [VLLM0522p Medical Microbiology II - lect](#) && [VLIM051p Immunology - lecture](#) && [VLFA0621c Pharmacology I - p](#) && [VLCP0622c Introduc. to surgery II -pr.](#)
(Do I meet enrolment requirements?)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Annotation: the aim of subject is to inform the students about ocular diseases on the basis of their previous knowledge of anatomy and physiology of the eye, and to give the review of diagnostic and therapeutical methods in ophthalmology essential for the doctor of general medicine.

Syllabus

- The 1 day Introduction in ophthalmology, history of ophthalmology, and the relation of ophthalmology to other medical fields, the review of anatomy and physiology of the visual system, practical lesson in ophthalmic examination (Úvod do stáží, organizace výuky, historie očního lékařství a vztah k ostatním medicinským oborům, přehled anatomie a fyziologie oka, praktická cvičení - základní vyšetřovací metody) The 2 day The diseases of the orbit nad anterior segment of the eye, cataract surgery, implantation of intraocular lenses, practical lesson- ophthalmoscopy, slit lamp examination, demonstration of the patients (Onemocnění předního segmentu oka, problematika transplantace rohovky, chirurgie katarakty, implantologie, praktická cvičení - keratometrie, topografie rohovky, oftalmoskopie přímá a nepřímá, demonstrace nemocných) The 3 day Glaucoma- definition, diagnosis and therapy, practical lesson- intraocular pressure measurement, gonioscopy, perimetry, demonstration of the patients (Glaukom - diagnostika, terapie, dispenzarizace, praktická cvičení - měření nitroočního tlaku, gonioskopie, perimetrie, demonstrace nemocných) The 4 day The lesson of pediatric ophthalmology- ocular diseases in the childhood (Stáž ve FDN, brno, Černopolní ul. - problematika dětské oftalmologie) The 5 day The

diseases of the retina and uvea, eye and systemic diseases, vitreoretinal surgery, practical lesson- diagnostic imaging methods in ophthalmology, demonstration of the patients (Onemocnění sítnice a uvey, oko a celkové choroby, vitreoretinální chirurgie, praktická cvičení-diagnostické zobrazovací metody v oftalmologii, demonstrace nemocných) The 6 day Refractive errors, diagnosis and therapy, modern refractive surgery, blindness and purblindness, practical lesson- lasers in ophthalmology, demonstration of patients. (Refrakční vady, výskyt v populaci, diagnostika a léčba, současný stav refrakční chirurgie, slepota a slabozrakost, praktická cvičení-lasery v oftalmologii, demonstrace nemocných) The 7 day Ocular trauma, the causes of the red eye, neuroophthalmology, practical lesson- color vision, contrast sensitivity, electrophysiology of the eye, demonstration of patients The 8 day Examination of the patients, tutorials, final test, course-unit credit.

Literature

- KRAUS, Hanuš. *Kompendium očního lékařství*. Vyd. 1. Praha: Grada, 1997. 341 s. ISBN 8071690791. [info](#)
- ROZSÍVAL, Pavel. *Oční lékařství*. Vyd. 2. Praha: Karolinum, 2006. 373 s. ISBN 8024612135.

Teaching methods

Class discussion on the base of materials in the textbook.

Assessment methods

Giving the course-unit credit is conditioned by full attendance in the lessons. The lessons in ophthalmology will be finished with exam.

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

The course can also be completed outside the examination period.

The course is taught each semester.

The course is taught: in blocks.

Listed among pre-requisites of other courses

- [VLCH11XX Surgery - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) ([Do I meet enrolment requirements?](#))

- [**VLPD11XX Paediatrics - State Exam**](#)
[\(VLFA0822p || VLFA0722p\) && VLNE9X1p && VLPY9X1p && VLVZ9X1c](#)
[&& VSDV9X22p && VLAM9X1p && \(VLVL7X61c || VLVL9X61c \) &&](#)
[VLVL9X62c && VLVL9X63c && VLVL9X64c && \(VLVL9X65c ||](#)
[VLVL7X65c\) && VLVL9X66c && VLPD1033c && VLIN9X22 &&](#)
[VLSD7X1p && VSEI7X1 && VLLO7X1&& VSOT7X1p && VSLP7X1 &&](#)
[VLPL9X1 && VLON091 && VLST7X1p && VSLE7X1p && VLPG1022c &&](#)
[VYCET\(3, VLPS07X || VLPS071, VSAT081, VLKA091, VSNO071, VSPM071,](#)
[VLKB091, VLKF091, BMBS051, VLPM071, VLEP041, VLIA081, VLKM081,](#)
[VLRL041, VLTL081, VSDL071, VSAL081, VSFP071\) && VLCH9X33c &&](#)
[\(VLAJ0222 || VSAJ0222 || VSNJ0222\) && VSSP03X \(Do I meet enrolment](#)
[requirements?\)](#)
- [**VLPG11XX Obstetric and Gynaecology - State Exam**](#)
[\(VLFA0822p || VLFA0722p\) && VLNE9X1p && VLPY9X1p && VLVZ9X1c](#)
[&& VSDV9X22p && VLAM9X1p && VLVL9X66c && \(VLVL9X65c ||](#)
[VLVL7X65c\) && VLPD1033c && VLIN9X22 && VLSD7X1p && VSEI7X1](#)
[&& VLLO7X1&& VSOT7X1p && VLPL9X1 && VLON091 && VLST7X1p](#)
[&& VSLE7X1p && VLPG1022c && VYCET\(3, VLPS07X || VLPS071,](#)
[VSAT081, VSNO071, VLKA091, VSPM071, VLKB091, VLKF091, BMBS051,](#)
[VLPM071, VLEP041, VLTL081, VSDL071, VSAL081, VSAL082, VSDL071,](#)
[VLRL041, VLIA081, VLKM081, VSFP071\) && VLCH9X33c && \(VSAJ0222 ||](#)
[VSNJ0222\) && VSSP03X \(Do I meet enrolment requirements?\)](#)
- [**VLVL11XX Internal Medicine - State Exam**](#)
[\(VLFA0822p || VLFA0722p\) && VLNE9X1p && VLPY9X1p && VLVZ9X1c](#)
[&& VSDV9X22p && VLAM9X1p && \(VLVL7X61c || VLVL9X61c \) &&](#)
[VLVL9X62c && VLVL9X63c && VLVL9X64c && \(VLVL9X65c ||](#)
[VLVL7X65c\) && VLVL9X66c && VLPD1033c && VLIN9X22 &&](#)
[VLSD7X1p && VSEI7X1 && VLLO7X1&& VSOT7X1p && VSLP7X1 &&](#)
[VLPL9X1 && VLON091 && VLST7X1p && VSLE7X1p && VLPG1022c &&](#)
[VYCET\(3, VLPS07X || VLPS071, VSAT081, VLKA091, VSNO071, VSPM071,](#)
[VLKB091, VLKF091, BMBS051, VLPM071, VLEP041, VLIA081, VLKM081,](#)
[VLRL041, VLTL081, VSDL071, VSAL081, VSFP071\) && VLCH9X33c &&](#)
[\(VLAJ0222 || VSAJ0222 || VSNJ0222\) && VSSP03X \(Do I meet enrolment](#)
[requirements?\)](#)
- [**VLZP11XX Public Health - State Exam**](#)
[\(VLFA0822p || VLFA0722p\) && VLNE9X1p && VLPY9X1p && VLVZ9X1c](#)
[&& VSDV9X22p && VLAM9X1p && \(VLVL7X61c || VLVL9X61c \) &&](#)
[VLVL9X62c && VLVL9X63c && VLVL9X64c && \(VLVL9X65c ||](#)
[VLVL7X65c\) && VLVL9X66c && VLPD1033c && VLIN9X22 &&](#)
[VLSD7X1p && VSEI7X1 && VLLO7X1&& VSOT7X1p && VLPL9X1 &&](#)
[VLON091 && VLST7X1p && VSLE7X1p && VLPG1022c && VYCET\(3,](#)
[VLPS07X || VLPS071, VSAT081, VLKA091, VSNO071, VSPM071, VLKB091,](#)
[VLKF091, BMBS051, VLPM071, VLEP041, VLIA081, VLKM081, VLRL041,](#)
[VLTL081, VSDL071, VSAL081, VSFP071\) && VLCH9X33c && \(VLAJ0222 ||](#)
[VSAJ0222 || VSNJ0222\) && VSSP03X \(Do I meet enrolment requirements?\)](#)

Teacher's information

Studenti se dostaví v 8 hod do výukové místnosti Oční kliniky FN Brno, 16. patro. Ve čtvrtek probíhá výuka na Oční klinice ve Fakultní dětské nemocnici. Od 8- do 9:30 hod je teoretická část, následuje do 12:30 část praktická, kromě prvního pondělí stáže a pátku, kdy je teoretická část od 8-12 hod. S sebou přezůvky, plášť. Převlečení je možné ve výukové místnosti.

The course is also listed under the following terms [Autumn 2000](#), [Spring 2001](#), [Autumn 2001](#), [Spring 2002](#), [Autumn 2002](#), [Spring 2003](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

VL0L7X1a Ophthalmology - practice ✱

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/3/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Rudolf Autrata, CSc., MBA](#) (seminar tutor)

[MUDr. Hana Došková, Ph.D.](#) (seminar tutor)

[MUDr. Radek Girgle](#) (seminar tutor)

[doc. MUDr. Zuzana Hlinomazová, Ph.D.](#) (seminar tutor)

[MUDr. Michala Karkanová, Ph.D.](#) (seminar tutor)

[doc. MUDr. Petr Kolář, Ph.D.](#) (seminar tutor)

[MUDr. Veronika Matušková, Ph.D., FEBO](#) (seminar tutor)

[prof. MUDr. Eva Vlková, CSc.](#) (seminar tutor)

[MUDr. Daniela Vysloužilová, Ph.D.](#) (seminar tutor)

[Jaroslava Bukačová](#) (assistant)

Supervisor

[MUDr. Daniela Vysloužilová, Ph.D.](#)

[Department of Ophthalmology - Institutions shared with the Faculty Hospital Brno -](#)

[Adult Age Medicine - Faculty of Medicine](#)

Contact Person: [MUDr. Veronika Matušková, Ph.D., FEBO](#)

Supplier department: [Department of Ophthalmology - Institutions shared with the Faculty](#)

[Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Timetable of Seminar Groups

VL0L7X1a/01: Mon 30. 10. to Wed 8. 11. each working day 7:30–12:30 [P01016](#), Thu 2.

11. each working day 7:30–12:30 [N16190](#)

VL0L7X1a/02: Mon 16. 10. to Wed 25. 10. each working day 7:30–12:30 [N16190](#); and

Thu 19. 10. 7:30–12:30 [P01016](#)

VL0L7X1a/04: Mon 18. 9. to Wed 27. 9. each working day 7:30–12:30 [N16190](#); and Thu

21. 9. 7:30–12:30 [P01016](#)

VL0L7X1a/05: Mon 1. 1. to Wed 10. 1. each working day 7:30–12:30 [N16190](#); and Thu

4. 1. 7:30–12:30 [P01016](#)

VL0L7X1a/06: Mon 11. 12. to Fri 15. 12. each working day 7:30–12:30 [N16190](#), Mon 18. 12. to Wed 20. 12. each working day 7:30–12:30 [N16190](#); and Thu 14. 12. 7:30–12:30 [P01016](#)

VL0L7X1a/07: Mon 27. 11. to Wed 6. 12. each working day 7:30–12:30 [N16190](#); and Thu 30. 11. 7:30–12:30 [P01016](#)

VL0L7X1a/08: Mon 13. 11. to Wed 22. 11. each working day 7:30–12:30 [N16190](#); and Thu 16. 11. 7:30–12:30 [P01016](#)

VL0L7X1a/33: Mon 30. 10. to Fri 10. 11. each working day 7:30–12:20 [N16190](#)

VL0L7X1a/34: Mon 2. 10. to Fri 13. 10. each working day 7:30–12:20 [N16190](#)

Prerequisites (in Czech)

[VSPF0622p Pathophysiol. II - lect.](#) && [VSPA0622p Pathology II - lecture](#) && [VSIP0622c Introduction to internal II-pr](#) && [VLLM0522p Medical Microbiology II - lect](#) && [VLIM051p Immunology - lecture](#) && [VLFA0621c Pharmacology I - p](#) && [VLCP0622c Introd. to surgery II -pr.](#)
(Do I meet enrolment requirements?)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of subject is the understanding and application of diagnostic examination methods in ophthalmology and the understanding of treatment procedures.

Syllabus

- The 1 day Introduction in ophthalmology, history of ophthalmology, and the relation of ophthalmology to other medical fields, the review of anatomy and physiology of the visual system, practical lesson in ophthalmic examination The 2 day The diseases of the orbit and anterior segment of the eye, cataract surgery, implantation of intraocular lenses, practical lesson- ophthalmoscopy, slit lamp examination, demonstration of the patients The 3 day Glaucoma- definition, diagnosis and therapy, practical lesson- intraocular pressure measurement, gonioscopy, perimetry, demonstration of the patients The 4 day The lesson of pediatric ophthalmology- ocular diseases in the childhood The 5 day The diseases of the retina and uvea, eye and systemic diseases, vitreoretinal surgery, practical lesson- diagnostic imaging methods in ophthalmology, demonstration of the patients The 6 day Refractive errors, diagnosis and therapy, modern refractive surgery, blindness and purblindness, practical lesson- lasers in ophthalmology, demonstration of patients. The 7 day Ocular trauma, the causes of the red eye, neuroophthalmology, practical lesson- color vision, contrast sensitivity, electrophysiology of the eye, demonstration of patients The 8 day Examination of the patients, tutorials, final test, course-unit credit.

Literature

- ROZSÍVAL, Pavel. *Oční lékařství*. Vyd. 1. Praha: Karolinum, 2006. 373 s. ISBN 8024612135. [info](#)
- KRAUS, Hanuš. *Kompendium očního lékařství*. Vyd. 1. Praha: Grada, 1997. 341 s. ISBN 8071690791. [info](#)

Teaching methods

practice

Assessment methods

Class discussion on the base of materials in the textbook. Giving the course-unit credit is conditioned by full attendance in the lessons. The lessons in ophthalmology will be finished with exam.

Language of instruction

Czech

Further Comments

The course can also be completed outside the examination period.

The course is taught each semester.

Listed among pre-requisites of other courses

- [VLNE9X1c Neurology - practice](#) ([VLFA0822p](#) || [VLFA0722p](#)) && [VSIP0622c](#) && [VLDM7X1c](#) && [VLLO7X1a](#) && [VLCH0832c](#) && [VLNP081c](#) ([Do I meet enrolment requirements?](#))
- [VLNE9X1p Neurology - lecture](#) ([VLFA0822p](#) || [VLFA0722p](#)) && [VSIP0622c](#) && [VLDM7X1c](#) && [VLLO7X1a](#) && [VLCH0832c](#) && [VLNP081c](#) ([Do I meet enrolment requirements?](#))
- [VLNO071 News in ophthalmology](#) [VLLO7X1a](#) ([Do I meet enrolment requirements?](#))
- [VSNO071 News in ophthalmology](#) [VLLO7X1a](#) ([Do I meet enrolment requirements?](#))

The course is also listed under the following terms [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#).

VLON091 Clinical oncology ✱

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2/0. 2 credit(s). Type of Completion: zk (examination).

Teacher(s)

[prof. MUDr. Zdeněk Adam, CSc.](#) (lecturer)
[MUDr. Otakar Bednařík](#) (lecturer)
[MUDr. Dagmar Brančíková, Ph.D.](#) (lecturer)
[Mgr. Petra Bučková](#) (lecturer)
[prof. MUDr. Michael Doubek, Ph.D.](#) (lecturer)
[doc. MUDr. Vuk Fait, CSc.](#) (lecturer)
[doc. MUDr. Lenka Foretová, Ph.D.](#) (lecturer)
[MUDr. Peter Grell, Ph.D.](#) (lecturer)
[MUDr. Jana Halámková, Ph.D.](#) (lecturer)
[MUDr. Josef Chovanec, Ph.D.](#) (lecturer)
[MUDr. Lenka Jakubíková, Ph.D.](#) (lecturer)
[doc. MUDr. Andrea Janíková, Ph.D.](#) (lecturer)
[doc. MUDr. Igor Kiss, Ph.D.](#) (lecturer)
[doc. MUDr. Ilona Kocáková, Ph.D.](#) (lecturer)
[MUDr. Radek Lakomý, Ph.D.](#) (lecturer)
[MUDr. Radim Němeček, Ph.D.](#) (lecturer)
[MUDr. Lenka Ostřížková](#) (lecturer)
[MUDr. Katarína Petránková, Ph.D.](#) (lecturer)
[prof. MUDr. Jana Skříčková, CSc.](#) (lecturer)
[MUDr. Ondřej Sláma, Ph.D.](#) (lecturer)
[doc. MUDr. Marek Svoboda, Ph.D.](#) (lecturer)
[doc. MUDr. Petr Szturz, Ph.D.](#) (lecturer)
[prof. MUDr. Pavel Šlampa, CSc.](#) (lecturer)
[prof. MUDr. Jaroslav Štěrba, Ph.D.](#) (lecturer)
[MUDr. Jiří Tomášek, Ph.D.](#) (lecturer)
[doc. MUDr. Miroslav Tomiška, CSc.](#) (lecturer)
[MUDr. Štěpán Tuček, Ph.D.](#) (lecturer)
[prof. MUDr. Rostislav Vyzula, CSc.](#) (lecturer)

Supervisor

[prof. MUDr. Zdeněk Adam, CSc.](#)
[Department of Internal Medicine, Hematology and Oncology - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)
Contact Person: [Eva Čechmanová](#)
Supplier department: [Department of Internal Medicine, Hematology and Oncology - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Timetable

Mon 18. 9. 9:45–11:50 [A11/114](#), Tue 19. 9. 9:45–11:50 [A11/114](#), Wed 20. 9. 9:45–11:50 [A11/114](#), Thu 21. 9. 9:45–11:50 [A11/114](#), Fri 22. 9. 9:45–11:50 [A11/334](#)

- Timetable of Seminar Groups:

VLON091/VLA: Mon 18. 9. 7:30–9:35 [A11/334](#), Tue 19. 9. 7:30–9:35 [A9/324](#), Wed 20. 9. 12:00–14:30 [A9/324](#), Thu 21. 9. 7:30–9:35 [A11/234](#), Fri 22. 9. 12:00–14:30 [A11/234](#)

Prerequisites (in Czech)

([VLFA0822c Pharmacology II - p](#) || [VLFA0722c Pharmacology IIp](#)) &&
[VSIP0622p Introduction to internal II-pr](#) && [VLCP0622p Introduc. to surgery II -lec.](#)
&& [VLCH0832c Surgery II - practicals](#) && [VSOT7X1c Otorhinolaryngology - practice](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The main objectives can be summarized as follow: to understand the basis teaching of oncology, supportive care and treatment of all frequent oncologic diseases

Learning outcomes

The main objectives can be summarized as follow: to understand the basis teaching of oncology, supportive care and treatment of all frequent oncologic diseases

Syllabus

- **General oncology**
- Tumor development. Nutritional factors in tumor development. Nutritional issues in cancer patients. Morphological and clinical classifications. Anticancer chemotherapy, hormonotherapy and biotherapy. Radiotherapy. Oncological surgery. Use of radionuclides in diagnostics and therapy. Infectious complications in immunocompromised hosts, treatment of febrile neutropenia and sepsis. Palliative, supportive and analgesic care. Acute complications in oncological patients. Thrombophilia, coagulopathies, hypercalcemia, malignant osteolysis, hyperleukocytosis and hyperviscosity syndrome. Psychological support for cancer patients, their relatives and nursing staff. Hematopoietic stem cell transplantation.
- **Special oncology**
- Head and neck cancer. Skin tumors. Breast cancer. Digestive tract cancers. Urinary tract tumors. Tumors of the pleura, mediastinum and lungs. Malignant hematological diseases.

Literature

- [ADAM, Zdeněk](#), [Marta KREJČÍ](#), [Jiří VORLÍČEK](#), Zuzana ADAMOVÁ, Jaroslav BAČOVSKÝ, [Viera BAJČIOVÁ](#), [Otakar BEDNARÍK](#), [Jan BLATNÝ](#), Tomáš BÜCHLER, [Igor CRHA](#), [Aleš ČERMÁK](#), [Hana DOLEŽELOVÁ](#), [Ladislav DUŠEK](#), [Karel DVORÁK](#), [Pavel FABIAN](#), [Vuk FAIT](#), [Antonín FASSMANN](#), [Jindřich FIALA](#), Lukáš FIALA, Jindřich FÍNEK, [Lenka FORETOVÁ](#), [Radim GROSMAN](#), [Jana HALÁMKOVÁ](#), Miroslav HEŘMAN, [Martin HUSER](#), [Ludmila HYNKOVÁ](#), [Richard CHALOUPKA](#), [Libuše KALVODOVÁ](#), [Igor KISS](#), [Iva KOČMANOVÁ](#), [Martin KOMENDA](#), [Jana KOPTÍKOVÁ](#), [Zdeněk KOŘÍSTEK](#), Renata KOUKALOVÁ, [Zdeněk KRÁL](#), [Eva LÉTALOVÁ](#), [Milan MACHÁLKA](#), Josef MALIŠ, [Miloslava MATÝŠKOVÁ](#), [Jiří MAYER](#), [Vojtěch](#)

[MORNSTEIN](#), [Mojmír MOULIS](#), [Jan MUŽÍK](#), Miroslav MYSLIVEČEK, Milan NAVRÁTIL, Tomáš NEBESKÝ, [Miroslav NEČAS](#), [Rudolf NENUTIL](#), [Jiří NEUBAUER](#), Martin ONDRÁK, [Zdeněk PAVELKA](#), [Miroslav PENKA](#), [Vojtěch PEŘINA](#), [Katarína PETRÁKOVÁ](#), [Petr POKORNÝ](#), [Luděk POUR](#), [Jiří PRÁŠEK](#), [Zdeněk RÁČIL](#), [Martin REPKO](#), Zdeněk ŘEHÁK, Jiří SCHOVANEC, [Ondřej SLÁMA](#), Petr SMÍŠEK, Jan STARÝ, [Petr SZTURZ](#), [Marek SVOBODA](#), Vlastimil ŠČUDLA, [Roman ŠEFR](#), [Pavel ŠEVČÍK](#), [Pavel ŠLAMPA](#), [Lenka ŠMARDOVÁ](#), Jiří ŠNAJDAUF, [Jaroslav ŠTĚRBA](#), Michal TICHÝ, [Jiří TOMÁŠEK](#), [Miroslav TOMIŠKA](#), [Marcela TOMIŠKOVÁ](#), [Vít UNZEITIG](#), [Jiří VANÍČEK](#), [Vladimír VAŠKŮ](#), [Rostislav VYZULA](#), Barbora WEINBERGEROVÁ, Marie ZÍTKOVÁ and [Karel ZITTERBART](#). *Obecná onkologie (General oncology)*. První vydání. Praha: Galén, 2011. 394 pp. ISBN 978-80-7262-715-8. [URL info](#)

- [ADAM, Zdeněk](#), [Marta KREJČÍ](#) and [Jiří VORLÍČEK](#). *Speciální onkologie. Příznaky, diagnostika a léčba maligních chorob (Special oncology. Symptoms, diagnostics and therapy of malignant disease)*. 1. vyd. Praha: Galén, 2010. 418 pp. Med. ISBN 978-80-7262-648-9. [info](#)

Teaching methods

lecture

Assessment methods

Oncology for students of general medicine ends with oral examination.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course can also be completed outside the examination period.

The course is taught annually.

Listed among pre-requisites of other courses

- [VLCH11XX Surgery - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) ([Do I meet enrolment requirements?](#))
- [VLPD11XX Paediatrics - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) &&

[VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

- **[VLPG11XX](#)** Obstetric and Gynaecology - State Exam
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && [VLVL9X66c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLOL7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VSNO071](#), [VLKA091](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSDL071](#), [VLRL041](#), [VLIA081](#), [VLKM081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- **[VLRL11XX](#)** Family Medicine and Geriatrics
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLIN9X22](#) && [VLPL9X1](#) && [VLON091](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) (Do I meet enrolment requirements?)
- **[VLVL11XX](#)** Internal Medicine - State Exam
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLOL7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- **[VLZP11XX](#)** Public Health - State Exam
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLOL7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#),

[VLTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

Teacher's information

Přednášky probíhají v Masarykově onkologickém ústavu.

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#).

VLON091c Clinical oncology - practice ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2/0. 1 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Zdeněk Adam, CSc.](#) (seminar tutor)
[MUDr. Otakar Bednařík](#) (seminar tutor)
[MUDr. Dagmar Brančíková, Ph.D.](#) (seminar tutor)
[doc. MUDr. Oldřich Coufal, Ph.D.](#) (seminar tutor)
[doc. MUDr. Jan Doležel, Ph.D.](#) (seminar tutor)
[Ing. Dana Dvořáková, CSc.](#) (seminar tutor)
[MUDr. Zdeněk Eber](#) (seminar tutor)
[doc. MUDr. Vuk Fait, CSc.](#) (seminar tutor)
[doc. MUDr. Lenka Foretová, Ph.D.](#) (seminar tutor)
[MUDr. Peter Grell, Ph.D.](#) (seminar tutor)
[MUDr. Jana Halámková, Ph.D.](#) (seminar tutor)
[MUDr. Josef Chovanec, Ph.D.](#) (seminar tutor)
[doc. MUDr. Andrea Janíková, Ph.D.](#) (seminar tutor)
[doc. MUDr. Igor Kiss, Ph.D.](#) (seminar tutor)
[MUDr. Jarmila Kissová, Ph.D.](#) (seminar tutor)
[MUDr. Ivo Kocák, Ph.D.](#) (seminar tutor)
[doc. MUDr. Ilona Kocáková, Ph.D.](#) (seminar tutor)
[MUDr. Radek Lakomý, Ph.D.](#) (seminar tutor)
[MUDr. Radim Němeček, Ph.D.](#) (seminar tutor)
[MUDr. Ivo Novotný, CSc.](#) (seminar tutor)
[MUDr. Radka Obermannová, Ph.D.](#) (seminar tutor)
[MUDr. Lenka Ostřížková](#) (seminar tutor)
[MUDr. Martina Palacková](#) (seminar tutor)
[MUDr. Katarína Petráková, Ph.D.](#) (seminar tutor)
[MUDr. Markéta Protivánková](#) (seminar tutor)
[prof. MUDr. Jana Skříčková, CSc.](#) (seminar tutor)

[MUDr. Ondřej Sláma, Ph.D.](#) (seminar tutor)
[doc. MUDr. Marek Svoboda, Ph.D.](#) (seminar tutor)
[prof. MUDr. Jaroslav Štěrba, Ph.D.](#) (seminar tutor)
[MUDr. Jiří Tomášek, Ph.D.](#) (seminar tutor)
[MUDr. Štěpán Tuček, Ph.D.](#) (seminar tutor)
[prof. MUDr. Jiří Vorlíček, CSc.](#) (seminar tutor)
[prof. MUDr. Rostislav Vyzula, CSc.](#) (seminar tutor)
[prof. MUDr. Jan Žaloudík, CSc.](#) (seminar tutor)
[Eva Čechmanová](#) (assistant)
[Jitka Firešová](#) (assistant)
[Ing. Daniela Kodytková](#) (assistant)
[Hana Novotná](#) (assistant)

Supervisor

[prof. MUDr. Zdeněk Adam, CSc.](#)
[Department of Internal Medicine, Hematology and Oncology - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)
Contact Person: [Eva Čechmanová](#)
Supplier department: [Department of Internal Medicine, Hematology and Oncology - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Timetable of Seminar Groups

VLON091c/01: Mon 25. 9. to Fri 29. 9. each working day 7:30–12:20 [N02901](#)
VLON091c/02: Mon 8. 1. to Fri 12. 1. each working day 7:30–12:20 [N02901](#)
VLON091c/03: Mon 18. 12. to Fri 22. 12. each working day 7:30–12:20 [N02901](#)
VLON091c/04: Mon 4. 12. to Fri 8. 12. each working day 7:30–12:20 [N02901](#)
VLON091c/05: Mon 20. 11. to Fri 24. 11. each working day 7:30–12:20 [N02901](#)
VLON091c/06: Mon 6. 11. to Fri 10. 11. each working day 7:30–12:20 [N02901](#)
VLON091c/30: Mon 9. 10. to Fri 13. 10. each working day 7:30–12:20 [N02901](#)
VLON091c/31: Mon 23. 10. to Fri 27. 10. each working day 7:30–12:20 [N02901](#)

Prerequisites (in Czech)

([VLFA0822c Pharmacology II - p](#) || [VLFA0722c Pharmacology Iip](#)) &&
[VSIP0622p Introduction to internal II-pr](#) && [VLCP0622p Introduc. to surgery II -lec.](#)
&& [VLCH0832c Surgery II - practicals](#) && [VSOT7X1c Otorhinolaryngology - practice](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Main objective of Oncology can be summarized as follow: to learn, how is possible to avoid development of cancer, To learn all, what is necessary for early detection of every malignant disease in early stage and early refer the patients to the specialised oncologic therapy. All doctors has to know, how to treat usually and anusually complication of

malignant disease and complication of therapy. Therefore great attention is given to the supportive, symptomatic and paliative therapy.

Learning outcomes

Main outcome of Oncology can be summarized as follow: to learn, how is possible to avoid development of cancer, To learn all, what is necessary for early detection of every malignant disease in early stage and early refer the patients to the specialised oncologic therapy. All doctors has to know, how to treat usually and anusually complication of malignant disease and complication of therapy. Therefore great attention is given to the supportive, symptomatic and paliative therapy.

Syllabus

- Pathogenesis of malignant disease. Chemotherapy, biotherapy and hormonotherapy. Radiotherapy. Histological and clinical staging. Bone marrow transplantation. Psychological problems of cancer patient. Basic information about the most frequent cancer: Breast cancer and other gynecological cancer, lung cancer, gastrointestinal tumors, cancer of kidney and bladder. Malignant hematological diseases.

Literature

- [ADAM, Zdeněk](#), [Marta KREJČÍ](#), [Jiří VORLÍČEK](#), Zuzana ADAMOVÁ, Jaroslav BAČOVSKÝ, [Viera BAJČIOVÁ](#), [Otakar BEDNARÍK](#), [Jan BLATNÝ](#), Tomáš BÜCHLER, [Igor CRHA](#), [Aleš ČERMÁK](#), [Hana DOLEŽELOVÁ](#), [Ladislav DUŠEK](#), [Karel DVOŘÁK](#), [Pavel FABIAN](#), [Vuk FAIT](#), [Antonín FASSMANN](#), [Jindřich FIALA](#), Lukáš FIALA, Jindřich FÍNEK, [Lenka FORETOVÁ](#), [Radim GROSMAN](#), [Jana HALÁMKOVÁ](#), Miroslav HEŘMAN, [Martin HUSER](#), [Ludmila HYNKOVÁ](#), [Richard CHALOUPKA](#), [Libuše KALVODOVÁ](#), [Igor KISS](#), [Iva KOCMANOVÁ](#), [Martin KOMENDA](#), [Jana KOPTÍKOVÁ](#), [Zdeněk KOŘÍSTEK](#), Renata KOUKALOVÁ, [Zdeněk KRÁL](#), [Eva LÉTALOVÁ](#), [Milan MACHÁLKA](#), Josef MALIŠ, [Miloslava MATÝŠKOVÁ](#), [Jiří MAYER](#), [Vojtěch MORNSTEIN](#), [Mojmír MOULIS](#), [Jan MUŽÍK](#), Miroslav MYSLIVEČEK, Milan NAVRÁTIL, Tomáš NEBESKÝ, [Miroslav NEČAS](#), [Rudolf NENUTIL](#), [Jiří NEUBAUER](#), Martin ONDRÁK, [Zdeněk PAVELKA](#), [Miroslav PENKA](#), [Vojtěch PEŘINA](#), [Katarína PETRÁKOVÁ](#), [Petr POKORNÝ](#), [Luděk POUR](#), [Jiří PRÁŠEK](#), [Zdeněk RÁČIL](#), [Martin REPKO](#), Zdeněk ŘEHÁK, Jiří SCHOVANEK, [Ondřej SLÁMA](#), Petr SMÍŠEK, Jan STARÝ, [Petr SZTURZ](#), [Marek SVOBODA](#), Vlastimil ŠČUDLA, [Roman ŠEFR](#), [Pavel ŠEVČÍK](#), [Pavel ŠLAMPA](#), [Lenka ŠMARDOVÁ](#), Jiří ŠNAJDAUF, [Jaroslav ŠTĚRBA](#), Michal TICHÝ, [Jiří TOMÁŠEK](#), [Miroslav TOMIŠKA](#), [Marcela TOMÍŠKOVÁ](#), [Vít UNZEITIG](#), [Jiří VANÍČEK](#), [Vladimír VAŠKŮ](#), [Rostislav VYZULA](#), Barbora WEINBERGEROVÁ, Marie ZÍTKOVÁ and [Karel ZITTERBART](#). *Obecná onkologie (General oncology)*. První vydání. Praha: Galén, 2011. 394 pp. ISBN 978-80-7262-715-8. [URL info](#)
- [ADAM, Zdeněk](#), [Marta KREJČÍ](#) and [Jiří VORLÍČEK](#). *Speciální onkologie. Příznaky, diagnostika a léčba maligních chorob (Special oncology. Symptoms, diagnostics and therapy of malignant disease)*. 1. vyd. Praha: Galén, 2010. 418 pp. Med. ISBN 978-80-7262-648-9. [info](#)

Teaching methods

practical training at the clinic

Assessment methods

Credit

Language of instruction

Czech

Further comments (probably available only in Czech)

The course can also be completed outside the examination period.

The course is taught annually.

Teacher's information

Výuka v posledních letech probíhá v posluchárně Masarykova onkologického ústavu na Žlutém kompci (MOU), nutno sledovat aktuální rozvrh, plantý pro aktuální semestr nebo se informovat na sekretariátě na MOU 54313-1111.

The course is also listed under the following terms [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

VLOR7X1 Orthopaedics - practice ✱

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[doc. MUDr. Richard Chaloupka, CSc.](#) (lecturer)

[MUDr. Jiří Jochymek, Ph.D.](#) (lecturer)

[doc. MUDr. Ivan Müller, CSc.](#) (lecturer)

[doc. MUDr. Zbyněk Rozkydal, Ph.D.](#) (lecturer)

[MUDr. Bořek Crha](#) (seminar tutor), [prof. MUDr. Jan Poul, CSc.](#) (deputy)

[MUDr. Jan Emmer](#) (seminar tutor), [doc. MUDr. Martin Repko, Ph.D.](#) (deputy)

[MUDr. Jaroslav Motyčka](#) (seminar tutor)

[MUDr. Miroslav Nýdrle](#) (seminar tutor)

[MUDr. Jakub Rapi](#) (seminar tutor), [doc. MUDr. Pavel Janíček, CSc.](#) (deputy)

[doc. MUDr. Martin Repko, Ph.D.](#) (seminar tutor)

[MUDr. Luděk Ryba, Ph.D.](#) (seminar tutor)

[MUDr. Miroslav Straka](#) (seminar tutor)

[MUDr. Tomáš Tomáš, Ph.D.](#) (seminar tutor)

[Veronika Bradáčková](#) (assistant), [MUDr. Tomáš Kovanda](#) (deputy)

[Barbora Staňková](#) (assistant), [MUDr. Lukáš Pazourek](#) (deputy)

Supervisor

[doc. MUDr. Martin Repko, Ph.D.](#)

[Department of Orthopedic Surgery - Institutions shared with the Faculty Hospital Brno -](#)

Adult Age Medicine - Faculty of Medicine

Contact Person: [doc. MUDr. Zbyněk Rozkydal, Ph.D.](#)

Supplier department: [Department of Orthopedic Surgery - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Timetable of Seminar Groups

VLOR7X1/01A: Mon 18. 12. to Fri 22. 12. each working day 7:30–12:20 [N01901](#)

VLOR7X1/01B: Mon 18. 12. to Fri 22. 12. each working day 7:30–12:20 [N08191](#)

VLOR7X1/02A: Mon 4. 12. to Fri 8. 12. each working day 7:30–12:20 [N01901](#)

VLOR7X1/02B: Mon 4. 12. to Fri 8. 12. each working day 7:30–12:20 [N08191](#)

VLOR7X1/04A: Mon 6. 11. to Fri 10. 11. each working day 7:30–12:20 [N01901](#)

VLOR7X1/04B: Mon 6. 11. to Fri 10. 11. each working day 7:30–12:20 [N08191](#)

VLOR7X1/05A: Mon 23. 10. to Fri 27. 10. each working day 7:30–12:20 [N01901](#)

VLOR7X1/05B: Mon 23. 10. to Fri 27. 10. each working day 7:30–12:20 [N08191](#)

VLOR7X1/06A: Mon 9. 10. to Fri 13. 10. each working day 7:30–12:20 [N01901](#)

VLOR7X1/06B: Mon 9. 10. to Fri 13. 10. each working day 7:30–12:20 [N08191](#)

VLOR7X1/07A: Mon 25. 9. to Fri 29. 9. each working day 7:30–12:20 [N01901](#)

VLOR7X1/07B: Mon 25. 9. to Fri 29. 9. each working day 7:30–12:20 [N08191](#)

VLOR7X1/08A: Mon 8. 1. to Fri 12. 1. each working day 7:30–12:20 [N01901](#)

VLOR7X1/08B: Mon 8. 1. to Fri 12. 1. each working day 7:30–12:20 [N08191](#)

VLOR7X1/31A: Mon 27. 11. to Fri 1. 12. each working day 7:30–12:20 [N01901](#)

VLOR7X1/31B: Mon 27. 11. to Fri 1. 12. each working day 7:30–12:20 [N08191](#)

VLOR7X1/32A: Mon 13. 11. to Fri 17. 11. each working day 7:30–12:20 [N01901](#)

VLOR7X1/32B: Mon 13. 11. to Fri 17. 11. each working day 7:30–12:20 [N08191](#)

VLOR7X1/33A: Mon 11. 12. to Fri 15. 12. each working day 7:30–12:20 [N01901](#)

VLOR7X1/33B: Mon 11. 12. to Fri 15. 12. each working day 7:30–12:20 [N08191](#)

VLOR7X1/34A: Mon 20. 11. to Fri 24. 11. each working day 7:30–12:20 [N01901](#)

VLOR7X1/34B: Mon 20. 11. to Fri 24. 11. each working day 7:30–12:20 [N08191](#)

Prerequisites

[VSPF0622p Pathophysiol. II - lect.](#) && [VSPA0622p Pathology II - lecture](#) &&

[VLCP0622c Introduc. to surgery II -pr.](#) && [VSIP0622c Introduction to internal II-pr](#) &&

[VLFA0621c Pharmacology I - p](#)

Prerequisites is knowledge of anatomy and fysiology of locomotor apparatus.

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

At the end of the course students should be able to understand how to examine the orthopaedic patient (history, objective examination of the locomotor apparatus), should be able to apply imaging methods and laboratory tests leading to establishing of the diagnosis, should be able to distinguish among other conditions and to suggest the

management of the condition. The student would be able to assess the prognosis of the condition.

Learning outcomes

The student will be able to examine orthopaedic patient, to perform clinical examination, to use laboratory test and to advise imaging methods, to establish diagnosis and to suggest the therapy.

Syllabus

- Programme of the course: Orthopaedics and rehabilitation The fourth school year of the general medicine, VLOR7X1. The course is divided into a theoretical introduction and to presentation of cases in the ward.
- Clinical methods - history (family, personal) symptoms of the disease, analysis of the pain, mechanism of injury, any treatment of the disease, the effect of drugs. Impairment of the function, deformity, analysis of the gait.
- objective examination: inspection, palpation, percussion, auscultation, range of motion, examination of the spine, of upper and lower extremity. - additional examination methods (X-ray, radiological stress tests, arthrography, fistulography, myelography, angiography, CT, MRI, scintigraphy, ultrasonography, densitometry etc). Laboratory methods: aspiration of the joint fluid, blood tests. Electromyography. Topics:
- Degenerative diseases (osteoarthritis, pathological anatomy, clinical symptoms and findings, radiological examination). Conservative and operative treatment.
- Malalignment of extremities (coxa valga, coxa vara, anteverta, genua vara, valga). Static deformities of foot (flat foot, talipes calcaneus, equinovarus, excavatus). Deformity of upper extremity (cubitus varus, valgus, Madelung deformity, etc).
- Artificial joints. Hip arthroplasty (materials, bone cement, types, procedures, physiotherapy after the operation, complications). Knee arthroplasty. Arthroplasty in other joints.
- Musculoskeletal tumors. Methods of examination, biopsy. Staging and grading. Benign and malignant tumors. Operative treatment, chemotherapy, radiotherapy. Treatment of bone metastase.
- Bone and joint infections. Acute osteomyelitis (symptoms, examination, treatment). Chronic osteomyelitis. Acute arthritis (symptoms, examination, treatment). Chronic arthritis. TB osteomyelitis and arthritis, actinomycosis).
- Deformities of the spine. Scoliosis (types, Cobb measurement, methods of examination), conservative and operative treatment. Kyphosis (types, treatment). Lordosis (types, treatment). Spondylolysis and spondylolisthesis (symptoms, types, management).
- Low back pain (types, sciatica, spinal stenosis, failed back surgery syndrom etc.). Ankylosing spondylitis. Pain in cervical spine.
- Injury of the spine (fractures of thoracolumbar spine, fractures of cervical spine). Conservative and operative management. - Congenital diseases (types, symptoms, management). Developmental dislocation of the hip joint (types, symptoms, management, consequences). Club foot deformity, torticollis muscularis etc..

Literature

required literature

- JANÍČEK, Pavel. *Ortopedie (Orthopedics)*. 3., přeprac. vyd. Brno: Masarykova univerzita, 2012. 112 s. ISBN 9788021059719. [info](#)
- CHALOUPKA, Richard. *Vyšetřovací metody v ortopedii (Methods of diagnosis in orthopaedics)*. Edited by Zbyněk Rozkydal. 2. vyd. Brno: Masarykova univerzita, 2012. 70 s. ISBN 9788021059023. [info](#)

recommended literature

- GALLO, Jiří. *Ortopedie pro studenty lékařských a zdravotnických fakult*. 1. vyd. Olomouc: Univerzita Palackého v Olomouci, 2011. 211 s. ISBN 9788024424866. [info](#)
- Willmott, H.: *Trauma and Orthopaedics at a glance*. Willy -Blackwell, 2015, ISBN 978-1-118-80249-6, s144

not specified

- Solomon, L.: *Apley's concise system of Orthopaedics and fractures*, third Edition, ISBN 978-0-340-80984-6, 2005, s.1-406

Teaching methods

The course is divided into a theoretical introduction with case reports and into presentation of the patients in the wards focused on the use of examination methods, on establishing of the diagnosis and the management of the conditions.

Assessment methods

The students are examined from this subject at the rigorous examination from surgery in the sixth school year. The knowledge of recommended literature and power point presentations on IS portal are required.

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

Information on completion of the course: Zápočet bude udělen po absolvování blokové stáže a po splnění písemného testu.

The course can also be completed outside the examination period.

The course is taught each semester.

Listed among pre-requisites of other courses

- [VLCH9X33c Surgery III - practice](#) (VLFA0822p || VLFA0722p) && [VLCH0832c](#) && [VLOR7X1](#) (Do I meet enrolment requirements?)
- [VLCH9X33p Surgery III - lecture](#) (VLFA0822p || VLFA0722p) && [VLCH0832c](#) && [VLOR7X1](#) (Do I meet enrolment requirements?)

The course is also listed under the following terms [Autumn 1999](#), [Spring 2000](#), [Autumn 2000](#), [Spring 2001](#), [Autumn 2001](#), [Spring 2002](#), [Autumn 2002](#), [Spring 2003](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#),

[Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#).

VLOZ0141c Public Health I - practice ✱

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/1/0. 1 credit(s). Type of Completion: z (credit).

Teacher(s)

[Mgr. Pavlína Kaňová, Ph.D.](#) (seminar tutor)

[Mgr. Helena Klimusová, Ph.D.](#) (seminar tutor)

[prof. MUDr. Bc. Zuzana Derflerová Brázdová, DrSc.](#) (seminar tutor)

[Mgr. Jana Fialová, Ph.D.](#) (seminar tutor)

[Mgr. Martin Forejt, Ph.D.](#) (seminar tutor)

[MUDr. Marie Kolářová, CSc.](#) (seminar tutor)

[MVDr. Halina Matějová](#) (seminar tutor)

[Mgr. Aleš Peřina, Ph.D.](#) (seminar tutor)

[MUDr. Kräuff Rainer Schwanhaeuser Wulff, MBA, Ph.D. et Ph.D., M.A.](#) (seminar tutor)

[MUDr. Miroslava Zavřelová](#) (seminar tutor)

[Zdeňka Jochová](#) (assistant)

Supervisor

[prof. MUDr. Bc. Zuzana Derflerová Brázdová, DrSc.](#)

[Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [Mgr. Pavlína Kaňová, Ph.D.](#)

Supplier department: [Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Timetable of Seminar Groups

VLOZ0141c/01: each even Wednesday 13:20–15:00 [A15/333](#)

VLOZ0141c/02: each even Friday 8:00–9:40 [A15/333](#)

VLOZ0141c/03: each even Tuesday 10:10–11:50 [A15/333](#)

VLOZ0141c/04: each odd Wednesday 13:20–15:00 [A15/333](#)

VLOZ0141c/05: each even Wednesday 15:10–16:50 [A15/333](#)

VLOZ0141c/06: each odd Wednesday 15:10–16:50 [A15/333](#)

VLOZ0141c/07: each even Thursday 8:00–9:40 [A15/333](#)

VLOZ0141c/08: each odd Thursday 8:00–9:40 [A15/333](#)

VLOZ0141c/09: each odd Tuesday 10:10–11:50 [A15/333](#)

VLOZ0141c/10: each odd Friday 8:00–9:40 [A15/333](#)

VLOZ0141c/11: each odd Friday 10:10–11:50 [A15/333](#)

VLOZ0141c/12: each even Friday 10:10–11:50 [A15/333](#)

VLOZ0141c/13: each even Thursday 10:10–11:50 [A15/333](#)

VLOZ0141c/14: each odd Thursday 10:10–11:50 [A15/333](#)

VLOZ0141c/15: each even Wednesday 11:30–13:10 [A15/333](#)

VLOZ0141c/16: each odd Wednesday 11:30–13:10 [A15/333](#)

Prerequisites

No prerequisites.

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

The course introduces the students to the content, mission, basic theories and methods of Public Health. After successfully completing the course, students will know the basic concepts and methods in the field of Public Health. Students will be able to explain the benefits of population approach to the study of health and disease, and will be familiarized with the approaches, contents and basic concepts and methods of epidemiology. Students will be able to search and interpret relevant data and use methods of descriptive and analytic epidemiology to describe and assess population health status.

Learning outcomes

After successfully completing the course, students will know the basic concepts and methods in the field of Public Health.

Students will be able to explain the benefits of population approach to the study of health and disease, and will be familiarized with the approaches, contents and basic concepts and methods of epidemiology.

Students will be able to search and interpret relevant data and use methods of descriptive and analytic epidemiology to describe and assess population health status.

Syllabus

- 1. General information about the course Public health I. Introduction to public health.
- 2. Introduction to epidemiology (definition of basic terms).
- 3. Measuring health and disease.
- 4. Levels of prevention. Primary, secondary and tertiary prevention. Screening and validity of tests.
- 5. Epidemiological studies - Types.
- 6. Epidemiological studies - Evaluation.
- 7. Causation in epidemiology.

Literature

required literature

- Holčík J, Žáček A, Koupilová I: Sociální lékařství. 3. nezměněné. vydání. Brno - Česká republika: Masarykova univerzita; 2011. 137 s. ISBN 978-80-8719215-3.

recommended literature

- Bonita R, Beaglehole R, Kjellström: Basic epidemiology. 2nd edition. Geneva - Switzerland: World Health Organization; 2006. 212 pages. ISBN 978-92-4-154707-9.
- WHO: Zdraví 2020. Osnova evropské politiky pro 21. století. Geneva - Switzerland: World Health Organization; 2013. 182 pages. ISBN 978-80-85047-48-6
- Holčík J: Systém péče o zdraví a zdravotní gramotnost: k teoretickým základům cesty ke zdraví. 1. vydání. Brno - Česká republika: Masarykova univerzita; 2011. 293 stran. ISBN 978-80-7-392129-3.
- Gerylovová A, Holčík J: Úvod do základů statistiky: text pro semináře. 1. Vydání. Brno - Česká republika: Masarykova univerzita; 2011. 50 s. ISBN 978-80-2105661-9.

Teaching methods

Seminars / practices and class discussion.

Reading and studying ALL REQUIRED LITERATURE.

Assessment methods

REQUIREMENTS TO OBTAIN THE CREDIT:

1. 100 % attendance to seminars / practices during the semester.
2. Absences will be tolerated just due to medical reasons - Students must provide appropriate documentation or medical excuse.
+ Students must be aware that even with justified absences (medical excuse), a minimum of 80% attendance is required to obtain the credit. In case a student will have more than 20 % justified / unjustified absences, he / she will have to repeat the course in the following school year.
3. Fulfilment of given tasks:
+ In case of unjustified absence (per each one), a 1,500-2,000 word seminar paper and a 5-8 minutes power point presentation on the seminar paper topic will be given. If the seminar paper is rejected due to deficiencies and it is not corrected and submitted again, the student will not fulfil with the subject's requirements, and he / she will not get the credit (See Absence and latecomer policy, Academic misconduct, plagiarism detection and unethical issues).
4. Active participation during the seminars / practices / lectures.

*** This subject is part of the Public Health State Examination ***

See VLZP11XX - Public Health State Examination.

Language of instruction

Czech

Further Comments

[Study Materials](#)

Listed among pre-requisites of other courses

- [VLOZ0642c Public Health II - practice](#)
([VLOZ0241c](#) || [VLOZ0141c](#)) && [VLLM0522c](#) && [VLLM0522p](#) &&
[VLBC0422p](#) ([Do I meet enrolment requirements?](#))

The course is also listed under the following terms [Accreditation autumn](#).

VLOZ0141p Public Health I - lecture ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

0.5/0/0. 2 credit(s). Type of Completion: k (colloquium).

Teacher(s)

[Mgr. Pavlína Kaňová, Ph.D.](#) (lecturer)

[MUDr. Miroslava Zavřelová](#) (lecturer)

[prof. MUDr. Bc. Zuzana Derflerová Brázdová, DrSc.](#) (seminar tutor)

[Zdeňka Jochová](#) (assistant)

Supervisor

[prof. MUDr. Bc. Zuzana Derflerová Brázdová, DrSc.](#)

[Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [Mgr. Pavlína Kaňová, Ph.D.](#)

Supplier department: [Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Timetable

Mon 18. 9. to Sun 8. 10. Wed 8:00–9:15 [A22/116 aula](#), Mon 16. 10. to Sun 29. 10. Wed 8:00–9:15 [A22/116 aula](#)

Prerequisites

No prerequisites.

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

After successfully completing the course, students will know the basic concepts and methods in the field of Public Health.

Students will be able to explain the benefits of population approach to the study of health and disease, and will be familiarized with the approaches, contents and basic concepts and methods of epidemiology.

Students will be able to search and interpret relevant data and use methods of descriptive and analytic epidemiology to describe and assess population health status.

Learning outcomes

After successfully completing the course, students will know the basic concepts and methods in the field of Public Health.

Students will be able to explain the benefits of population approach to the study of health and disease, and will be familiarized with the approaches, contents and basic concepts and methods of epidemiology.

Students will be able to search and interpret relevant data and use methods of descriptive and analytic epidemiology to describe and assess population health status.

Syllabus

- 1. Introduction to public health I - orientation, development, contents and methods. Contribution of the population approach to health.
- 2. Health and population. Healthcare system in the society.
- 3. Health and its determinants. Social determinants of health.
- 4. Epidemiology as the basis of health policy.
- 5. International cooperation in preventing the spread of infections, eradication programs.

Literature

required literature

- Holčík J, Žáček A, Koupilová I: Sociální lékařství. 3. nezměněné. vydání. Brno - Česká republika: Masarykova univerzita; 2011. 137 s. ISBN 978-80-8719215-3.

recommended literature

- Bonita R, Beaglehole R, Kjellström: Basic epidemiology. 2nd edition. Geneva - Switzerland: World Health Organization; 2006. 212 pages. ISBN 978-92-4-154707-9.
- WHO: Zdraví 2020. Osnova evropské politiky pro 21. století. Geneva - Switzerland: World Health Organization; 2013. 182 pages. ISBN 978-80-85047-48-6
- Holčík J: Systém péče o zdraví a zdravotní gramotnost: k teoretickým základům cesty ke zdraví. 1. vydání. Brno - Česká republika: Masarykova univerzita; 2011. 293 stran. ISBN 978-80-7-392129-3.
- Gerylovová A, Holčík J: Úvod do základů statistiky: text pro semináře. 1. Vydání. Brno - Česká republika: Masarykova univerzita; 2011. 50 s. ISBN 978-80-2105661-9.
- -

Teaching methods

Lectures.

Reading and studying ALL REQUIRED LITERATURE.

Assessment methods

COLLOQUIUM INFORMATION:

1. To sit for colloquium, it will be required to have obtained the subject's credit - aVLOZ0141c.
2. Each student must register in the Information System (IS) in one of the offered colloquium / examination terms. The colloquium has fixed colloquium / examination terms / dates - (Only during the examination period, except the examination pre-term). No extra-terms will be given.
3. Students registered to a colloquium term will fail the term if:
 - a-) arrive late. No late arrival will be allowed after the start of the colloquium.
 - b-) they are not present and previously did not cancel the term in the stipulated periods (see IS).
4. In case of failure, EACH STUDENT CAN RETAKE THE COLLOQUIUM TWO MORE TIMES, only in given terms (according to Masaryk University study rules).
5. In case of failure during the third term (second resit), the student must repeat the course in the following school year.
6. All colloquium questions are based on ALL REQUIRED LITERATURE, seminars and lectures.

Colloquium → Written examination → 20 multiple choice question test, with only one correct answer - (to pass the test, it is required a minimum of 14 correct answers / points).

SCORE:

- Passed → 14 and more correct answers / points.
- Failed → 13,5 or less correct answers / points.

*** This subject is part of the Public Health State Examination ***
See VLZP11XX - Public Health State Examination.

ACADEMIC MISCONDUCT, PLAGIARISM DETECTION AND ETHICAL ISSUES:

1. Any attempts of ACADEMIC MISCONDUCT, such as cheating or assisting someone else to cheat during the colloquium, will result in disciplinary actions, such as:
 - a-) You will be required to hand over your examination paper and asked to leave the examination room. This means, you failed the examination (examination term), with the respective score F / 4, on your academic records in the information system.
 - b-) Opening disciplinary proceedings.

- c-) Failing the subject / course.
 - d-) Expulsion from university.
2. During the colloquium, it is forbidden to use items such as:
- a-) Smart phones / Tablets.
 - b-) Laptops.
 - c-) To wear earphones or headphones (if not medical prescribed).
 - d-) To talk.

*In such cases, disciplinary actions will be taken (See above numeral 1).

Language of instruction

Czech

Further Comments

[Study Materials](#)

Listed among pre-requisites of other courses

- [VLOZ0642p Public Health II - lecture](#)
([VLOZ0241p](#) || [VLOZ0141p](#)) && [VLLM0522c](#) && [VLLM0522p](#) &&
[VLBC0422p](#) ([Do I meet enrolment requirements?](#))

The course is also listed under the following terms [Accreditation autumn](#).

VLOZ0241c Public Health I - practice *

Faculty of Medicine

Spring 2019

Extent and Intensity

0/1/0. 1 credit(s). Type of Completion: z (credit).

Teacher(s)

[RNDr. Ondřej Zvěřina, Ph.D.](#) (lecturer)

[prof. MUDr. Bc. Zuzana Derflerová Brázdová, DrSc.](#) (seminar tutor)

[Mgr. Jana Fialová, Ph.D.](#) (seminar tutor)

[Mgr. Martin Forejt, Ph.D.](#) (seminar tutor)

[Mgr. Pavlína Kaňová, Ph.D.](#) (seminar tutor)

[Mgr. Helena Klimusová, Ph.D.](#) (seminar tutor)

[MUDr. Marie Kolářová, CSc.](#) (seminar tutor)

[MVDr. Halina Matějová](#) (seminar tutor)

[Mgr. Aleš Peřina, Ph.D.](#) (seminar tutor)

[MUDr. Kräuff Rainer Schwanhaeuser Wulff, MBA, Ph.D. et Ph.D., M.A.](#) (seminar tutor)

[MUDr. Miroslava Zavřelová](#) (seminar tutor)

[Zdeňka Jochová](#) (assistant)

Supervisor

[prof. MUDr. Bc. Zuzana Derflerová Brázdová, DrSc.](#)

[Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [Mgr. Martin Forejt, Ph.D.](#)

Supplier department: [Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Timetable of Seminar Groups

VLOZ0241c/01: each even Wednesday 15:45–17:25 [A21/111](#)
VLOZ0241c/02: each even Tuesday 15:20–17:00 [A21/111](#)
VLOZ0241c/03: each even Monday 15:20–17:00 [A21/111](#)
VLOZ0241c/04: each even Wednesday 13:30–15:10 [A21/111](#)
VLOZ0241c/05: each even Tuesday 13:30–15:10 [A21/111](#)
VLOZ0241c/06: each even Thursday 15:20–17:00 [A21/111](#)
VLOZ0241c/07: each even Thursday 13:30–15:10 [A21/111](#)
VLOZ0241c/08: each even Friday 13:30–15:10 [A21/111](#)
VLOZ0241c/09: each even Monday 13:30–15:10 [A21/111](#)
VLOZ0241c/10: each odd Monday 13:30–15:10 [A21/111](#)
VLOZ0241c/11: each odd Tuesday 13:30–15:10 [A21/111](#)
VLOZ0241c/12: each odd Monday 15:20–17:00 [A21/111](#)
VLOZ0241c/13: each odd Wednesday 13:30–15:10 [A21/111](#)
VLOZ0241c/14: each odd Thursday 15:20–17:00 [A21/111](#)
VLOZ0241c/15: each odd Wednesday 15:20–17:00 [A21/111](#)
VLOZ0241c/16: each odd Thursday 13:30–15:10 [A21/111](#)
VLOZ0241c/17: each odd Friday 13:30–15:10 [A21/111](#)
VLOZ0241c/18: each odd Tuesday 15:20–17:00 [A21/111](#)

Prerequisites

No prerequisites.

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

After successfully completing the course, students will know the basic concepts and methods in the field of Public Health.

Students will be able to explain the benefits of population approach to the study of health and disease, and will be familiarized with the approaches, contents and basic concepts and methods of epidemiology.

Students will be able to search and interpret relevant data and use methods of descriptive and analytic epidemiology to describe and assess population health status.

Learning outcomes

After successfully completing the course, students will know the basic concepts and methods in the field of Public Health.

Students will be able to explain the benefits of population approach to the study of health and disease, and will be familiarized with the approaches, contents and basic concepts and methods of epidemiology.

Students will be able to search and interpret relevant data and use methods of descriptive and analytic epidemiology to describe and assess population health status.

Syllabus

- 1. General information about the course Public health I. Introduction to public health.
- 2. Introduction to epidemiology (definition of basic terms).
- 3. Measuring health and disease.
- 4. Levels of prevention. Primary, secondary and tertiary prevention. Screening and validity of tests.
- 5. Epidemiological studies - Types.
- 6. Epidemiological studies - Evaluation.
- 7. Causation in epidemiology.

Literature

required literature

- Holčík J, Žáček A, Koupilová I: Sociální lékařství. 3. nezměněné. vydání. Brno - Česká republika: Masarykova univerzita; 2011. 137 s. ISBN 978-80-8719215-3.

recommended literature

- Bonita R, Beaglehole R, Kjellström: Basic epidemiology. 2nd edition. Geneva - Switzerland: World Health Organization; 2006. 212 pages. ISBN 978-92-4-154707-9.
- WHO: Zdraví 2020. Osnova evropské politiky pro 21. století. Geneva - Switzerland: World Health Organization; 2013. 182 pages. ISBN 978-80-85047-48-6
- Holčík J: Systém péče o zdraví a zdravotní gramotnost: k teoretickým základům cesty ke zdraví. 1. vydání. Brno - Česká republika: Masarykova univerzita; 2011. 293 stran. ISBN 978-80-7-392129-3.
- Gerylovová A, Holčík J: Úvod do základů statistiky: text pro semináře. 1. Vydání. Brno - Česká republika: Masarykova univerzita; 2011. 50 s. ISBN 978-80-2105661-9.

Teaching methods

Seminars / practices and class discussion.

Reading and studying ALL REQUIRED LITERATURE.

For those who will have to write research projects and seminar papers during third, fourth and fifth year, it is strongly recommended to enrol the following courses:

VSIL021 - Information literacy - (3 credits) - e-learning.

VSKP041 - A course of working with information sources and tools (4 credits).

Assessment methods

REQUIREMENTS TO OBTAIN THE CREDIT:

1. 100 % attendance to seminars / practices during the semester.
2. Absences will be tolerated just due to medical reasons - Students must provide

appropriate documentation or medical excuse.

+ Students must be aware that even with justified absences (medical excuse), a minimum of 80% attendance is required to obtain the credit. In case a student will have more than 20 % justified / unjustified absences, he / she will have to repeat the course in the following school year.

3. Fulfilment of given tasks:

+ In case of unjustified absence (per each one), a 1,500-2,000 word seminar paper and a 5-8 minutes power point presentation on the seminar paper topic will be given. If the seminar paper is rejected due to deficiencies and it is not corrected and submitted again, the student will not fulfil with the subject's requirements, and he / she will not get the credit (See Absence and latecomer policy, Academic misconduct, plagiarism detection and unethical issues).

4. Active participation during the seminars / practices / lectures.

*** This subject is part of the Public Health State Examination ***
See VLZP11XX - Public Health State Examination.

ABSENCE AND LATECOMER POLICY:

1. Justified, unjustified absences and late coming to classes:

a-) Justified absences → just due to medical reasons - Student must provide appropriate documentation or medical excuse in original.

b-) Unjustified absences → the student does not present the medical excuse (original) in the following week of the absence.

c-) Late coming to classes → the student arrives after attendance has been taken (3-5 minutes).

2. Measures against absenteeism or late coming to classes:

a-) Every unjustified absence or late coming to classes leads to a 1,500-2,000 word seminar paper plus a 5-8 minutes power point presentation on the same topic (the topics will be assigned in the same week of the absence or late coming).

b-) The seminar paper must be submitted on the subject's vault within the next 7 days of the incident (absence or late coming), in other case it will be rejected → They will not get the credit.

c-) Students will receive an email with the seminar paper instructions, and the word and power point frames.

d) Students take full responsibility for their seminar paper(s) and power point presentation(s). (See Academic misconduct, plagiarism detection and unethical issues).

3. **THERE WILL BE NO EXCEPTIONS.** In the following cases, students will be not get the credit / allowed to take the credit test:

* Not submitting the assigned seminar paper.

- * If the seminar paper is rejected due to deficiencies and is not corrected and submitted again.
- * If despite the fact the seminar paper is accepted but the power point presentation is not shown in class.
- * If the seminar paper is rejected three times.
- * If the seminar paper has plagiarism or any unethical issues.

ACADEMIC MISCONDUCT, PLAGIARISM DETECTION AND UNETHICAL ISSUES:

1. Every seminar paper will be checked / scanned on university and external systems for online plagiarism detection.
2. Cases of suspected plagiarism will be investigated and given to the Disciplinary Committee as a motion to open disciplinary proceedings, according to the Disciplinary Code for Faculty Students.
3. Unethical issues will lead to seminar paper rejection → not getting the credit → repeating the course next school year or expulsion from university.
4. The plagiarism scan system is able to detect cut and paste from other languages with its respective translation into English. Avoid complications. Simply read the source and use your own words and cite (quote) the source of information.
5. Students MUST be aware that before acceptance, all citations are controlled (compared with the original source). It will not be tolerated any attempts to create or manipulate citations (ACADEMIC MISCONDUCT). → Seminar paper rejection → not getting the credit → repeating the course next school year or expulsion from university.

Language of instruction

Czech

Further Comments

[Study Materials](#)

Listed among pre-requisites of other courses

- [VLOZ0642c Public Health II - practice](#)
([VLOZ0241c](#) || [VLOZ0141c](#)) && [VLLM0522c](#) && [VLLM0522p](#) && [VLBC0422p](#) ([Do I meet enrolment requirements?](#))

The course is also listed under the following terms [Spring 2016](#).

VLOZ0241p Public Health I - lecture ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/0/0. 2 credit(s). Type of Completion: k (colloquium).

Teacher(s)

[Mgr. Pavlína Kaňová, Ph.D.](#) (lecturer)

[MUDr. Miroslava Zavřelová](#) (lecturer)

[prof. MUDr. Bc. Zuzana Derflerová Brázdová, DrSc.](#) (seminar tutor)

[Zdeňka Jochová](#) (assistant)

Supervisor

[prof. MUDr. Bc. Zuzana Derflerová Brázdová, DrSc.](#)

[Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [Zdeňka Jochová](#)

Supplier department: [Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Prerequisites

No prerequisites.

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

After successfully completing the course, students will know the basic concepts and methods in the field of Public Health.

Students will be able to explain the benefits of population approach to the study of health and disease, and will be familiarized with the approaches, contents and basic concepts and methods of epidemiology.

Students will be able to search and interpret relevant data and use methods of descriptive and analytic epidemiology to describe and assess population health status.

Learning outcomes

After successfully completing the course, students will know the basic concepts and methods in the field of Public Health.

Students will be able to explain the benefits of population approach to the study of health and disease, and will be familiarized with the approaches, contents and basic concepts and methods of epidemiology.

Students will be able to search and interpret relevant data and use methods of descriptive and analytic epidemiology to describe and assess population health status.

Syllabus

1. Introduction to public health I - orientation, development, contents and methods. Contribution of the population approach to health.
2. Health and population. Healthcare system in the society.
3. Health and its determinants. Social determinants of health.
4. Epidemiology as the basis of health policy.

- 5. International cooperation in preventing the spread of infections, eradication programs.

Literature

required literature

- Holčík J, Žáček A, Koupilová I: Sociální lékařství. 3. nezměněné. vydání. Brno - Česká republika: Masarykova univerzita; 2011. 137 s. ISBN 978-80-8719215-3.

recommended literature

- Bonita R, Beaglehole R, Kjellström: Basic epidemiology. 2nd edition. Geneva - Switzerland: World Health Organization; 2006. 212 pages. ISBN 978-92-4-154707-9.
- WHO: Zdraví 2020. Osnova evropské politiky pro 21. století. Geneva - Switzerland: World Health Organization; 2013. 182 pages. ISBN 978-80-85047-48-6
- Holčík J: Systém péče o zdraví a zdravotní gramotnost: k teoretickým základům cesty ke zdraví. 1. vydání. Brno - Česká republika: Masarykova univerzita; 2011. 293 stran. ISBN 978-80-7-392129-3.
- Gerylovová A, Holčík J: Úvod do základů statistiky: text pro semináře. 1. Vydání. Brno - Česká republika: Masarykova univerzita; 2011. 50 s. ISBN 978-80-2105661-9.
- -

Teaching methods

Lectures.

Reading and studying ALL REQUIRED LITERATURE.

Assessment methods

COLLOQUIUM INFORMATION:

1. To sit for colloquium, it will be required to have obtained the subject's credit - aVLOZ0141c.
2. Each student must register in the Information System (IS) in one of the offered colloquium / examination terms. The colloquium has fixed colloquium / examination terms / dates - (Only during the examination period, except the examination pre-term). No extra-terms will be given.
3. Students registered to a colloquium term will fail the term if:
 - a-) arrive late. No late arrival will be allowed after the start of the colloquium.
 - b-) they are not present and previously did not cancel the term in the stipulated periods (see IS).
4. In case of failure, EACH STUDENT CAN RETAKE THE COLLOQUIUM TWO

MORE TIMES, only in given terms (according to Masaryk University study rules).

5. In case of failure during the third term (second resit), the student must repeat the course in the following school year.

6. All colloquium questions are based on ALL REQUIRED LITERATURE, seminars and lectures.

Colloquium → Written examination → 20 multiple choice question test, with only one correct answer - (to pass the test, it is required a minimum of 14 correct answers / points).

SCORE:

Passed → 14 and more correct answers / points.

Failed → 13,5 or less correct answers / points.

*** This subject is part of the Public Health State Examination ***
See VLZP11XX - Public Health State Examination.

ACADEMIC MISCONDUCT, PLAGIARISM DETECTION AND ETHICAL ISSUES:

1. Any attempts of ACADEMIC MISCONDUCT, such as cheating or assisting someone else to cheat during the colloquium, will result in disciplinary actions, such as:

a-) You will be required to hand over your examination paper and asked to leave the examination room. This means, you failed the examination (examination term), with the respective score F / 4, on your academic records in the information system.

b-) Opening disciplinary proceedings.

c-) Failing the subject / course.

d-) Expulsion from university.

2. During the colloquium, it is forbidden to use items such as:

a-) Smart phones / Tablets.

b-) Laptops.

c-) To wear earphones or headphones (if not medical prescribed).

d-) To talk.

*In such cases, disciplinary actions will be taken (See above numeral 1).

Language of instruction

Czech

Further Comments

[Study Materials](#)

Listed among pre-requisites of other courses

- [VLOZ0642p Public Health II - lecture](#) (VLOZ0241p || [VLOZ0141p](#)) && [VLLM0522c](#) && [VLLM0522p](#) && [VLBC0422p](#) ([Do I meet enrolment requirements?](#))

The course is also listed under the following terms [Spring 2016](#), [Spring 2019](#), [Accreditation autumn](#).

VLOZ0642c Public Health II - practice ✱

Faculty of Medicine

Spring 2018

Extent and Intensity

0/2/0. 1 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Bc. Zuzana Derflerová Brázdová, DrSc.](#) (seminar tutor)
[doc. MUDr. Jindřich Fiala, CSc.](#) (seminar tutor)
[Mgr. Jana Fialová, Ph.D.](#) (seminar tutor)
[Mgr. Martin Forejt, Ph.D.](#) (seminar tutor)
[Mgr. Pavlína Kaňová, Ph.D.](#) (seminar tutor)
[Mgr. Helena Klimusová, Ph.D.](#) (seminar tutor)
[MUDr. Marie Kolářová, CSc.](#) (seminar tutor)
[Mgr. Martin Krobot](#) (seminar tutor)
[doc. Ing. Martin Krsek, CSc., MSc](#) (seminar tutor)
[MVDr. Halina Matějová](#) (seminar tutor)
[Mgr. Aleš Peřina, Ph.D.](#) (seminar tutor)
[MUDr. Bohdana Rezková, Ph.D.](#) (seminar tutor)
[MUDr. Kräuff Rainer Schwanhaeuser Wulff, MBA, Ph.D. et Ph.D., M.A.](#) (seminar tutor)
[Mgr. Robert Vysoký, Ph.D.](#) (seminar tutor)
[MUDr. Miroslava Zavřelová](#) (seminar tutor)
[Zdeňka Jochová](#) (assistant)

Supervisor

[prof. MUDr. Bc. Zuzana Derflerová Brázdová, DrSc.](#)
[Department of Public Health - Theoretical Departments - Faculty of Medicine](#)
 Contact Person: [Mgr. Martin Forejt, Ph.D.](#)
 Supplier department: [Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Prerequisites

([VLOZ0241c Public Health I - practice](#) || [VLOZ0141c Public Health I - practice](#)) && [VLLM0522c Medical Microbiology II-pract.](#) && [VLLM0522p Medical Microbiology II - lect](#) && [VLBC0422p Biochemistry I -lect.](#)

Prerequisites according to the MU study and examination regulations.

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

At the end of course, student will be able to explain the relationship between human and environment, its physical, chemical, biological and psychosocial factors and their interactions. Student will be able to explain the role of adaptation and its active support for the positive development and promotion of both individual and public health;

Student will be able to make deduction about possibilities for preventive provisions in the field of clean and safe environmental, occupational and home surrounding, the quality of air, water, food. Student will be able to understand and explain the different types of prevention, their tasks and aims and methods of realization.

The student will be able to interpret the positive and negative influences of lifestyle factors on human/public health, including the autoaggressive behaviours (nutrition, physical activity, psychical overload and stress, smoking, abuse of alcohol and illegal drugs); Based on acquired knowledge, the student will be able to make deductions about the importance of environment and lifestyle in the health protection and promotion, and about the primary prevention priorities;

Based on acquired knowledge, the student will be able to formulate decisions about concrete preventable possibilities for some more important non-communicable diseases, such as cardiovascular, oncological, metabolically, immune, respiratory.

Learning outcomes

At the end of course, student will be able to explain the relationship between human and environment, its physical, chemical, biological and psychosocial factors and their interactions. Student will be able to explain the role of adaptation and its active support for the positive development and promotion of both individual and public health;

Student will be able to make deduction about possibilities for preventive provisions in the field of clean and safe environmental, occupational and home surrounding, the quality of air, water, food. Student will be able to understand and explain the different types of prevention, their tasks and aims and methods of realization.

The student will be able to interpret the positive and negative influences of lifestyle factors on human/public health, including the autoaggressive behaviours (nutrition, physical activity, psychical overload and stress, smoking, abuse of alcohol and illegal drugs); Based on acquired knowledge, the student will be able to make deductions about the importance of environment and lifestyle in the health protection and promotion, and about the primary prevention priorities;

Based on acquired knowledge, the student will be able to formulate decisions about concrete preventable possibilities for some more important non-communicable diseases, such as cardiovascular, oncological, metabolically, immune, respiratory.

Syllabus

- Nutrition:
- Physical factors of environment: health impacts of short-term and long-term exposure to ionizing and non-ionizing radiation, noise, vibration and particulate matters. Source identification in environment and occupations. Medical sources, different impact on staff and patients. VIII Nutrition: Assessment of Nutritional Consumption. Introduction to the term "Nutritional Consumption" and its explanation. Synonym for the concept of nutritional consumption. A view of the quantitative and qualitative consumption of foods and fluids. Nutrients (Macronutrients, Micronutrients, Seminuents) and fluids taken in the context of nutritional consumption, their need and function in the human body. 3. Distribution of nutritional consumption during the day, intervals between meals. 4. Methods of assessing nutritional consumption. Description of methods for assessing nutritional consumption in groups and individuals. Retrospective and prospective methods. When to use these methods, the positives and negatives of individual methods. Getting to know the types of questionnaires and tools used to assess nutritional consumption. 5. Practical exercise of nutrition history, 24-hour recalculation, WHO score. 6. Summary of knowledge and main principles of nutrition assessment.

Literature

recommended literature

- MÜLLEROVÁ, Dana. *Hygiena, preventivní lékařství a veřejné zdravotnictví*. 1. vydání. Praha: Univerzita Karlova v Praze, nakladatelství Karolinum, 2014. 254 stran. ISBN 9788024625102. [info](#)
- *Wallace/Maxcy-Rosenau-Last public health & preventive medicine*. Edited by Robert B. Wallace - Neal Kohatsu - John M. Last. Fifteenth edition. New York: McGraw Hill Medical, 2008. xxvii, 136. ISBN 9780071441988. [info](#)

Teaching methods

Seminars / practices and class discussion.

Reading and studying ALL REQUIRED LITERATURE.

For those who will have to write research projects and seminar papers during third, fourth and fifth year, it is strongly recommended to enrol the following courses:

VSIL021 - Information literacy - (3 credits) - e-learning.

VSKP041 - A course of working with information sources and tools (4 credits).

Assessment methods

REQUIREMENTS TO OBTAIN THE CREDIT:

1. 100 % attendance to seminars / practices during the semester.
2. It will be required to successfully complete the prerequisite subjects.
3. Absences will be tolerated just due to medical reasons - Students must provide appropriate documentation or medical excuse.
 - + Students must be aware that even with justified absences (medical excuse), a minimum of 80% attendance is required to obtain the credit. In case a student will have more than 20 % justified / unjustified absences, he / she will have to repeat the course in the following school year.
4. Fulfilment of given tasks:
 - + In case of unjustified absence (per each one), a 1,500-2,000 word seminar paper and a 5-8 minutes power point presentation on the seminar paper topic will be given. If the seminar paper is rejected due to deficiencies and it is not corrected and submitted again, the student will not fulfil with the subject's requirements, and he / she will not get the credit (See Absence and latecomer policy, Academic misconduct, plagiarism detection and unethical issues).
5. Active participation during the seminars / practices / lectures.
6. Pass the credit test. Students will be allowed to take the credit test only if they have fulfilled numeral 4 (requirements to obtain the credit).

CREDIT TEST INFORMATION:

1. Get at least 70 % (14 out of 20 questions) in the credit test, which is a requisite to sit for examination.
2. Each student must register in the Information System (IS) in one of the offered credit test terms. The credit test has fixed examination terms / dates - (Only during the examination period, except the examination pre-term). No extra-terms will be given.
3. Students registered to a credit test term will fail the term if:
 - a-) arrive late to the test. No late arrival will be allowed after the start of the credit test.
 - b-) they are not present and previously do not cancel the term in the stipulated periods (see IS).
4. In case of failure, EACH STUDENT CAN RETAKE THE CREDIT TEST TWO MORE TIMES, only in given terms (according to Masaryk University study and examination regulations).
5. In case of failure during the third term (second resit), the student must repeat the

course in the following school year.

6. All credit test questions are based on ALL REQUIRED LITERATURE, seminars and lectures.

The credit test is a written examination → 20 multiple choice question test, with only one correct answer - (to pass the test, it is required a minimum of 14 correct answers / points).

SCORE:

Passed → 14 and more correct answers / points.

Failed → 13,5 or less correct answers / points.

In order to omit / avoid guessing while answering the MCQ test / examination, the following system will be used:

Correct answer = 1 point.

No answer = 0 point.

Wrong answer = -0,5 point.

Test scoring will be according to the next formula:

Final score = Number of correct answers - (Number of wrong answers / two).

For example:

15 correct answers (15 x 1 point = 15 points) - Passed.

5 wrong answers (5 x -0,5 = -2,5 points).

15 - 2,5 = 12,5. The final score of the test will be 12,5 answers / points.

Final result = Failed.

** For that reason, only answer the question when you are sure of the answer.

ABSENCE AND LATECOMER POLICY:

1. Justified, unjustified absences and late coming to classes:

a-) Justified absences → just due to medical reasons - Student must provide appropriate documentation or medical excuse in original.

b-) Unjustified absences → the student does not present the medical excuse (original) in the following week of the absence.

c-) Late coming to classes → the student arrives after attendance has been taken (3-5 minutes).

2. Measures against absenteeism or late coming to classes:

a-) Every unjustified absence or late coming to classes leads to a 1,500-2,000 word seminar paper plus a 5-8 minutes power point presentation on the same topic (the topics will be assigned in the same week of the absence or late coming).

b-) The seminar paper must be submitted on the subject's vault within the next 7 days of the incident (absence or late coming), in other case it will be rejected → They will not get the credit.

c-) Students will receive an email with the seminar paper instructions, and the word and power point frames.

d) Students take full responsibility for their seminar paper(s) and power point presentation(s). (See Academic misconduct, plagiarism detection and unethical issues).

3. **THERE WILL BE NO EXCEPTIONS.** In the following cases, students will be not get the credit / allowed to take the credit test:

- * Not submitting the assigned seminar paper.

- * If the seminar paper is rejected due to deficiencies and is not corrected and submitted again.

- * If despite the fact the seminar paper is accepted but the power point presentation is not shown in class.

- * If the seminar paper is rejected three times.

- * If the seminar paper has plagiarism or any unethical issues.

ACADEMIC MISCONDUCT, PLAGIARISM DETECTION AND UNETHICAL ISSUES:

1. Any attempts of **ACADEMIC MISCONDUCT**, such as cheating or assisting someone else to cheat during the credit test, will result in disciplinary actions, such as:

a-) You will be required to hand over your examination paper and asked to leave the examination room. This means, you failed the examination (examination term), with the respective score F / 4, on your academic records in the information system.

b-) Opening disciplinary proceedings.

c-) Failing the subject / course.

d-) Expulsion from university.

2. During the examination, it is forbidden to:

a-) Use smart phones / Tablets.

b-) Use laptops.

c-) To wear earphones or headphones (if not medical prescribed).

d-) To talk.

*In such cases, disciplinary actions will be taken (See above numeral 1).

3. Every seminar paper will be checked / scanned on university and external systems for online plagiarism detection.

4. Cases of suspected plagiarism will be investigated and given to the Disciplinary

Committee as a motion to open disciplinary proceedings, according to the Disciplinary Code for Faculty Students.

5. Unethical issues will lead to seminar paper rejection → not getting the credit → repeating the course next school year or expulsion from university.

6. The plagiarism scan system is able to detect cut and paste from other languages with its respective translation into English. Avoid complications. Simply read the source and use your own words and cite (quote) the source of information.

7. Students MUST be aware that before acceptance, all citations are controlled (compared with the original source). It will not be tolerated any attempts to create or manipulate citations (ACADEMIC MISCONDUCT). → Seminar paper rejection → not getting the credit → repeating the course next school year or expulsion from university.

Language of instruction

Czech

Further Comments

The course is taught annually.

The course is also listed under the following terms [Accreditation spring](#).

VLOZ0642p Public Health II - lecture ✳

Faculty of Medicine

Spring 2018

Extent and Intensity

0.5/0/0. 2 credit(s). Type of Completion: k (colloquium).

Teacher(s)

[doc. MUDr. Jindřich Fiala, CSc.](#) (lecturer)

[Mgr. Pavlína Kaňová, Ph.D.](#) (lecturer)

[MUDr. Miroslava Zavřelová](#) (lecturer)

[prof. MUDr. Bc. Zuzana Derflerová Brázdová, DrSc.](#) (seminar tutor)

[Zdeňka Jochová](#) (assistant)

Supervisor

[prof. MUDr. Bc. Zuzana Derflerová Brázdová, DrSc.](#)

[Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Supplier department: [Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Prerequisites

([VLOZ0241p Public Health I - lecture](#) || [VLOZ0141p Public Health I - lecture](#)) && [VLLM0522c Medical Microbiology II-pract.](#) && [VLLM0522p Medical Microbiology II - lect](#) && [VLBC0422p Biochemistry I -lect.](#)

Prerequisites according to the MU study and examination regulations.

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim is that the student should be able to explain the relationship between human and environment, its physical, chemical, biological and psychosocial factors and their interactions. Student will be able to explain the role of adaptation and its active support for the positive development and promotion of both individual and public health;

Student will be able to make deduction about possibilities for preventive provisions in the field of clean and safe environmental, occupational and home surrounding, the quality of air, water, food. Student will be able to understand and explain the different types of prevention, their tasks and aims and methods of realization.

The student will be able to interpret the positive and negative influences of lifestyle factors on human/public health, including the autoaggressive behaviours (nutrition, physical activity, psychical overload and stress, smoking, abuse of alcohol and illegal drugs); Based on acquired knowledge, the student will be able to make deductions about the importance of environment and lifestyle in the health protection and promotion, and about the primary prevention priorities;

Based on acquired knowledge, the student will be able to formulate decisions about concrete preventable possibilities for some more important non-communicable diseases, such as cardiovascular, oncological, metabolically, immune, respiratory.

Learning outcomes

At the end of course, student will be able to explain the relationship between human and environment, its physical, chemical, biological and psychosocial factors and their interactions. Student will be able to explain the role of adaptation and its active support for the positive development and promotion of both individual and public health;

Student will be able to make deduction about possibilities for preventive provisions in the field of clean and safe environmental, occupational and home surrounding, the quality of air, water, food. Student will be able to understand and explain the different types of prevention, their tasks and aims and methods of realization.

The student will be able to interpret the positive and negative influences of lifestyle factors on human/public health, including the autoaggressive behaviours (nutrition, physical activity, psychical overload and stress, smoking, abuse of alcohol and illegal drugs); Based on acquired knowledge, the student will be able to make deductions about the importance of environment and lifestyle in the health protection and promotion, and about the primary prevention priorities;

Based on acquired knowledge, the student will be able to formulate decisions about concrete preventable possibilities for some more important non-communicable diseases, such as cardiovascular, oncological, metabolically, immune, respiratory.

Syllabus

- I. Environment in the Czech Republic I 1. Introduction to the problem 2. The issue of nuclear accidents, the impact on our population 3. Brief history of Jaslovskobohňan A1 and her crash 4. Evaluation of Temelin's impact on the health status of the population 5. The issue of overestimating the harmfulness of some impacts on the environment 6. Noise and noise in the environment 7. Examples of environmental microbiology II. Environment in the Czech Republic II: Chemical Factors, Environmental Toxicology 1. Ecotoxicology - an explanation of the term. 2. Familiarizing with basic chemicals that pollute the environment. 3. Natural and anthropogenic sources of pollution. Movement of harmful substances in the environment. 4. Relationship between Organisms and Toxic Substances - Mechanisms of action of substances on environment, biota and human health. 5. Monitoring of substances in the environment - use of instrumental methods of chemical analysis. III. Types of prevention, risk assessment 1. Prevention: definition of the concept, the role of communities in health creation, the role of medical care. Multidisciplinary approach to disease prevention. 2. Types of prevention: primary, secondary, tertiary, quaternary; Framework Health 2020 definition. 3. Health risk: health probability indicator, qualitative and quantitative risk statement. Environmental factors with positive and negative health effects. 4. Health risk assessment as a method of work: hazard identification, stochastic and non-occlusive dose-response, exposure assessment. 5. Man and environment as a dynamic system: causes of inequalities in health, anamnesis of environmental exposure - community life, housing, hobbies and interests, occupation, lifestyle, food and nutrition. Doctor's competence in environmental health. IV. Epidemiological determinants of infectious diseases 1. Physiological colonization of the human body 2. Immunity of immune apparatus, defense 3. Pathogenesis of infectious diseases 4. Etiological structure of infections, epidemiologically relevant characteristics of microorganisms 5. Process of spreading diseases, source of infection, ways of transmission of microorganisms, sensitivity V. Surveillance of infections, pandemic plans 1. Explanation of individual terms 2. Individual immunity, 3. Collective immunity 4. Endemic, epidemic, pandemic spread of infections; examples 5. Pandemic Plans 6. Preparedness of States, Institutions and Individuals to spread infectious widespread infections

Literature

recommended literature

- MÜLLEROVÁ, Dana. *Hygiena, preventivní lékařství a veřejné zdravotnictví*. 1. vydání. Praha: Univerzita Karlova v Praze, nakladatelství Karolinum, 2014. 254 stran. ISBN 9788024625102. [info](#)

- *Wallace/Maxcy-Rosenau-Last public health & preventive medicine*. Edited by Robert B. Wallace - Neal Kohatsu - John M. Last. Fifteenth edition. New York: McGraw Hill Medical, 2008. xxvii, 136. ISBN 9780071441988. [info](#)

Teaching methods

Lectures

Reading and studying ALL REQUIRED LITERATURE.

Assessment methods

REQUIREMENTS TO OBTAIN THE CREDIT:

1. 100 % attendance to seminars / practices during the semester.
2. It will be required to successfully complete the prerequisite subjects.
3. Absences will be tolerated just due to medical reasons - Students must provide appropriate documentation or medical excuse.
 - + Students must be aware that even with justified absences (medical excuse), a minimum of 80% attendance is required to obtain the credit. In case a student will have more than 20 % justified / unjustified absences, he / she will have to repeat the course in the following school year.
4. Fulfilment of given tasks:
 - + In case of unjustified absence (per each one), a 1,500-2,000 word seminar paper and a 5-8 minutes power point presentation on the seminar paper topic will be given. If the seminar paper is rejected due to deficiencies and it is not corrected and submitted again, the student will not fulfil with the subject's requirements, and he / she will not get the credit (See Absence and latecomer policy, Academic misconduct, plagiarism detection and unethical issues).
5. Active participation during the seminars / practices / lectures.
6. Pass the credit test. Students will be allowed to take the credit test only if they have fulfilled numeral 4 (requirements to obtain the credit).

CREDIT TEST INFORMATION:

1. Get at least 70 % (14 out of 20 questions) in the credit test, which is a requisite to sit for examination.
2. Each student must register in the Information System (IS) in one of the offered credit test terms. The credit test has fixed examination terms / dates - (Only during the examination period, except the examination pre-term). No extra-terms will be given.

3. Students registered to a credit test term will fail the term if:
 - a-) arrive late to the test. No late arrival will be allowed after the start of the credit test.
 - b-) they are not present and previously do not cancel the term in the stipulated periods (see IS).
4. In case of failure, EACH STUDENT CAN RETAKE THE CREDIT TEST TWO MORE TIMES, only in given terms (according to Masaryk University study and examination regulations).
5. In case of failure during the third term (second resit), the student must repeat the course in the following school year.
6. All credit test questions are based on ALL REQUIRED LITERATURE, seminars and lectures.

The credit test is a written examination → 20 multiple choice question test, with only one correct answer - (to pass the test, it is required a minimum of 14 correct answers / points).

SCORE:

Passed → 14 and more correct answers / points.

Failed → 13,5 or less correct answers / points.

In order to omit / avoid guessing while answering the MCQ test / examination, the following system will be used:

Correct answer = 1 point.

No answer = 0 point.

Wrong answer = -0,5 point.

Test scoring will be according to the next formula:

Final score = Number of correct answers - (Number of wrong answers / two).

For example:

15 correct answers (15 x 1 point = 15 points) - Passed.

5 wrong answers (5 x -0,5 = -2,5 points).

15 - 2,5 = 12,5. The final score of the test will be 12,5 answers / points.

Final result = Failed.

** For that reason, only answer the question when you are sure of the answer.

ABSENCE AND LATECOMER POLICY:

1. Justified, unjustified absences and late coming to classes:
 - a-) Justified absences → just due to medical reasons - Student must provide appropriate documentation or medical excuse in original.
 - b-) Unjustified absences → the student does not present the medical excuse (original) in the following week of the absence.
 - c-) Late coming to classes → the student arrives after attendance has been taken (3-5 minutes).

2. Measures against absenteeism or late coming to classes:
 - a-) Every unjustified absence or late coming to classes leads to a 1,500-2,000 word seminar paper plus a 5-8 minutes power point presentation on the same topic (the topics will be assigned in the same week of the absence or late coming).
 - b-) The seminar paper must be submitted on the subject's vault within the next 7 days of the incident (absence or late coming), in other case it will be rejected → They will not get the credit.
 - c-) Students will receive an email with the seminar paper instructions, and the word and power point frames.
 - d) Students take full responsibility for their seminar paper(s) and power point presentation(s). (See Academic misconduct, plagiarism detection and unethical issues).

3. **THERE WILL BE NO EXCEPTIONS.** In the following cases, students will be not get the credit / allowed to take the credit test:
 - * Not submitting the assigned seminar paper.
 - * If the seminar paper is rejected due to deficiencies and is not corrected and submitted again.
 - * If despite the fact the seminar paper is accepted but the power point presentation is not shown in class.
 - * If the seminar paper is rejected three times.
 - * If the seminar paper has plagiarism or any unethical issues.

ACADEMIC MISCONDUCT, PLAGIARISM DETECTION AND UNETHICAL ISSUES:

1. Any attempts of **ACADEMIC MISCONDUCT**, such as cheating or assisting someone else to cheat during the credit test, will result in disciplinary actions, such as:
 - a-) You will be required to hand over your examination paper and asked to leave the examination room. This means, you failed the examination (examination term), with the respective score F / 4, on your academic records in the information system.
 - b-) Opening disciplinary proceedings.
 - c-) Failing the subject / course.
 - d-) Expulsion from university.

2. During the examination, it is forbidden to:
 - a-) Use smart phones / Tablets.

- b-) Use laptops.
- c-) To wear earphones or headphones (if not medical prescribed).
- d-) To talk.

*In such cases, disciplinary actions will be taken (See above numeral 1).

3. Every seminar paper will be checked / scanned on university and external systems for online plagiarism detection.
4. Cases of suspected plagiarism will be investigated and given to the Disciplinary Committee as a motion to open disciplinary proceedings, according to the Disciplinary Code for Faculty Students.
5. Unethical issues will lead to seminar paper rejection → not getting the credit → repeating the course next school year or expulsion from university.
6. The plagiarism scan system is able to detect cut and paste from other languages with its respective translation into English. Avoid complications. Simply read the source and use your own words and cite (quote) the source of information.
7. Students MUST be aware that before acceptance, all citations are controlled (compared with the original source). It will not be tolerated any attempts to create or manipulate citations (ACADEMIC MISCONDUCT). → Seminar paper rejection → not getting the credit → repeating the course next school year or expulsion from university.

Language of instruction

Czech

Listed among pre-requisites of other courses

- [VLOZ0943c Ochrana a podpora zdraví III - cvičení](#)
[VLOZ0642p](#) && [VLPF0622p](#) && [VLFA08222p](#) && [VLLP7X1](#) && [VLLE7x1s](#) (Do I meet enrolment requirements?)
- [VLOZ0943p Ochrana a podpora zdraví III - přednáška](#)
[VLOZ0642p](#) && [VLPF0622p](#) && [VLFA08222p](#) && [VLLP7X1](#) && [VLLE7X1s](#) (Do I meet enrolment requirements?)

The course is also listed under the following terms [Accreditation spring](#).

VLOZ0943c Ochrana a podpora zdraví III - cvičení *

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/1/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Bc. Zuzana Derflerová Brázdová, DrSc.](#) (lecturer)

Supervisor

[prof. MUDr. Bc. Zuzana Derflerová Brázdová, DrSc.](#)

[Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Supplier department: [Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Prerequisites (in Czech)

VLOZ0642p && VLPF0622p && VLFA08222p && [VLLP7X1 Medical Psychology](#)
&& [VLE7X1s Medical Ethics 2 - Sem.](#)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Language of instruction

Czech

Further Comments

The course is taught annually.

The course is taught: in blocks.

The course is also listed under the following terms [Accreditation autumn](#).

VLOZ0943p Ochrana a podpora zdraví III - přednáška ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

1.5/0/0. 0 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Bc. Zuzana Derflerová Brázdová, DrSc.](#) (lecturer)

Supervisor

[prof. MUDr. Bc. Zuzana Derflerová Brázdová, DrSc.](#)

[Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Supplier department: [Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Prerequisites (in Czech)

VLOZ0642p && VLPF0622p && VLFA08222p && [VLLP7X1 Medical Psychology](#)
&& [VLE7X1s Medical Ethics 2 - Sem.](#)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Language of instruction

Czech

The course is also listed under the following terms [Accreditation autumn](#).

VLOZ1144p Ochrana a podpora zdraví IV - přednáška ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

1.5/0/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Bc. Zuzana Derflerová Brázdová, DrSc.](#) (lecturer)

Supervisor

[prof. MUDr. Bc. Zuzana Derflerová Brázdová, DrSc.](#)

[Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Supplier department: [Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Prerequisites (in Czech)

VLOZ0934c

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Language of instruction

Czech

Further Comments

The course is taught annually.

The course is taught: in blocks.

The course is also listed under the following terms [Accreditation autumn](#), [Accreditation spring](#).

VLPA0521c Pathology I - practicals ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

3/4/0. 5 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Markéta Hermanová, Ph.D.](#) (lecturer)

[doc. MUDr. Leoš Křen, Ph.D.](#) (lecturer)

[MUDr. Zdeněk Pavlovský](#) (lecturer)

[MUDr. Iva Svobodová](#) (lecturer)

[MUDr. Vít Žampachová](#) (lecturer)

[MUDr. Jitka Hausnerová](#) (lecturer)

[MUDr. Jan Mazanec](#) (lecturer)

[MUDr. Katarína Múčková](#) (lecturer)

[MUDr. Jakub Vlažný](#) (seminar tutor)

[MUDr. Iva Zambo, Ph.D.](#) (lecturer)

[Jarmila Jelínková](#) (assistant)

[Mgr. Iva Holušová](#) (assistant)

[MUDr. Sylva Hotárková](#) (lecturer)

[MUDr. Filip Sokol](#) (lecturer)

[MUDr. Michal Tichý](#) (lecturer)

[MUDr. Lukáš Velecký](#) (lecturer)

[MUDr. Zdeněk Bednařík](#) (seminar tutor)

[MUDr. Lukáš Frola](#) (seminar tutor)

[MUDr. Dominik Gurín](#) (seminar tutor)

[MUDr. Michal Hendrych](#) (seminar tutor)

[MUDr. Miroslava Chovancová](#) (seminar tutor)

[MUDr. Václav Kubeš](#) (seminar tutor)

[MUDr. Ctirad Macháček](#) (seminar tutor)

[MUDr. Šárka Pokorová](#) (seminar tutor)

[Tetiana Shatokhina](#) (seminar tutor)

[MUDr. Tatiana Stupková](#) (seminar tutor)

[MUDr. Eliška Tvrdíková](#) (seminar tutor)

[Miroslava Čápková](#) (assistant)

[Kamila Kožíšková](#) (assistant)

Supervisor

[doc. MUDr. Leoš Křen, Ph.D.](#)

[Department of Pathology - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Contact Person: [prof. MUDr. Markéta Hermanová, Ph.D.](#)

Supplier department: [Department of Pathology - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Timetable of Seminar Groups

VLPA0521c/01: Fri 8:00–11:30 [P01013](#)

VLPA0521c/02: Fri 8:00–11:30 [N01008](#)

VLPA0521c/03: Fri 8:00–11:30 [N01008](#)

VLPA0521c/04: Fri 8:00–11:30 [P01013](#)

VLPA0521c/05: Tue 8:00–11:30 [P01013](#)

VLPA0521c/06: Tue 8:00–11:30 [N01008](#)

VLPA0521c/07: Wed 8:00–11:30 [N01008](#)

VLPA0521c/08: Wed 8:00–11:30 [P01013](#)

VLPA0521c/09: Thu 8:00–11:30 [N01008](#)

VLPA0521c/10: Thu 8:00–11:30 [N01008](#)

VLPA0521c/11: Thu 8:00–11:30 [P01013](#)
VLPA0521c/12: Thu 8:00–11:30 [P01013](#)
VLPA0521c/13: Wed 8:00–11:30 [P01013](#)
VLPA0521c/14: Wed 8:00–11:30 [N01008](#)
VLPA0521c/15: Tue 8:00–11:30 [N01008](#)
VLPA0521c/16: Tue 8:00–11:30 [P01013](#)
VLPA0521c/17: Mon 8:00–11:30 [P01013](#)
VLPA0521c/18: Mon 8:00–11:30 [P01013](#)

Prerequisites (in Czech)

([VLFY0422p Physiology II - lecture](#) || [VSFY0422p Physiology II - lecture](#)) && ([VSBC041p Biochemistry II -1](#) || [VLBC0422p Biochemistry I -lect.](#)) && ([VLAN0222p Anatomy II 1](#) || [VSAN0333p Anatomy III - lec.](#)) && ([VLHE0322p Histology and embryology II -1](#) || [VSHE0322p Histology and embryology II -1](#)) && [VLLM0421c Med.Microbiol.](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

The main stress in the pathology course is given on macroscopic and microscopic correlation of diseases. After finishing the course the student should be able to: understand the basic pathologic processes (regressive changes, inflammation, oncology, immune disorders); understand and be able to apply the basic classification of oncologic processes; understand the basic classification of etiologically defined processes (esp. infectious diseases); learn the most important methods used in diagnostic process and research (tissue processing, special stainings, histochemistry, immunohistochemistry, electron microscopy, molecular pathology); understand various disorders with respect to individual organs and organ systems; get familiar with the process of autopsy (the process of the autopsy and its evaluation); get familiar with laboratory processing of the tissue samples (description, tissue sampling);

Syllabus

- *General Pathology*
- Pathology and its role in medicine.
- Methodology: autopsy, clinico-pathological correlation, surgical pathology (biopsy), ways of tissue examination and fixation
- Cytology.
- The disease, its definition and course. External and internal causes of a disease. Prevention.
- Death (clinical and biological). Signs of death.
- Regressive changes, necrosis (classification, causes). Atrophy: numeric and simple. Dystrophy: metabolic disorders of proteins, glycid, fat, water, minerals and pigments.

- Inflammation: definition, local and general signs, microscopic and macroscopic. Inflammation: classification, nomenclature. Immunity disorders, transplantation pathology.
- Progressive changes. Regeneration, reparation, wound healing. Hypertrophy, hyperplasia, metaplasia, dysplasia. Pseudotumors: cysts, pseudocysts, inflammatory pseudotumor. Disorders of embryonal development.
- Tumors: definition, general properties, etiology, precanceroses. Biology of tumors: benign, malignant and uncertain tumors. Systematic classification of tumors: epithelial, mesenchymal, neuroectodermal and germinal tumors, choriocarcinoma, mesothelioma.
- *Organ pathology*
- Disorders of the heart, circulation of the blood and lymph: Congenital and acquired heart diseases, changes in size and shape of the heart. Pathological contents of the pericardium. Inflammation, ischemic heart disease, myocardial infarction. Circulatory failure. Hypertension. Disorders of arteries and veins: atherosclerosis, aneurysm, inflammation, anemia, polycythemia. Local circulatory disorders: thrombosis, embolism. Bleeding. Lymphadenitis. Tumors.
- Respiratory disorders: Pathology of upper respiratory pathways: rhinitis, laryngitis, bronchitis. Tumors and pseudotumors. Changes in pulmonary ventilation and circulation (venostasis, edema, induration, infarction, embolism). Silicosis and other external pigmentations. Superficial, interstitial and chronic inflammations of the lung. Pulmonary tumors. Pathology of the pleura.
- Disorders of the gastrointestinal tract: Pathology of the oral cavity, pharynx, tonsillae and esophagus. Gastritis, peptic ulcers, gastric tumors. Pathology of the gut: disorders of circulation, inflammation. Appendicitis, malabsorption syndrome. Ileus, herniation. Intestinal tumors. Inflammation of the peritoneum, pathological contents of peritoneal cavity.

Literature

required literature

- POVÝŠIL, Ctibor and Ivo ŠTEINER. *Obecná patologie*. 1. vyd. Praha: Galén, 2011. xiii, 290. ISBN 9788072627738. [info](#)
- POVÝŠIL, Ctibor and Ivo ŠTEINER. *Speciální patologie*. 2. vyd. Praha: Galén, 2007. ISBN 978-80-7262-494-2. [info](#)

recommended literature

- MAČÁK, Jiří, Jana MAČÁKOVÁ and Jana DVOŘÁČKOVÁ. *Patologie*. 2., doplněné vydání. Praha: Grada, 2012. 347 stran. ISBN 9788024735306. [info](#)

not specified

- BUČEK, Jan. *Praktikum z patologie :pítevní cvičení*. 4. přepr. vyd. Brno: Masarykova univerzita, 1993. 88 s. ISBN 80-210-0721-4. [info](#)

- [FEIT, Josef](#), P. MIŘEJOVSKÝ and I. STEINER. *Kontrolní otázky z patologie (Test question in pathology)*. 1. vyd. Praha: Triton, 1998. ISBN 80-85875-89-6. [info](#)

Teaching methods

Pathology course consists of lectures and practical classes. Teaching consists of *theoretical part* (lectures) and *practical part* (laboratory practice). Practical courses consist of *histological practice* (microscopical and macroscopical images of autoptical and bioptical specimens are demonstrated and discussed) and *autoptical practice* (presence and ev. participation in autopsies). *Hypertext teaching materials* for the students are available in our teaching rooms as well in the Internet. These materials contain about 3000 images of various imaging methods (macroscopic, x-ray, CT, MRI images, histological images, partially available as virtual slides, videos). Lectures and practicals are complementary. General information and new updates on classifications as well as images are presented at the lectures. Practical add further information, histopathologically and autoptical experience. Further information is provided in our web-based teaching materials. Various forms of testing is used to give the students proper feedback. Students are supposed to prepare for each practical lesson. The topic for each practical lesson as well as for each lecture is available.

Assessment methods

Lectures: 3 hours/week *Practical classes*: 4 hours/week; microscopic and autoptic lessons. The course of pathology is closed by oral exam. Attendance is compulsory; knowledge of the students is periodically tested during the practical classes. Testing can be either oral or written (multichoice tests, essay). Exam after two semesters of pathology has two parts: practical and theoretical. Practical part of the exam takes the form of a discussion over the microscope or over macroscopical or microscopical images. In theoretical part of the exam the students discuss after short preparation randomly selected topics. The list of these topics is available to the students in advance.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught each semester.

Listed among pre-requisites of other courses

- [VLPA0622c Pathology - practice](#)
[VLPA0521c \(Do I meet enrolment requirements?\)](#)
- [VLPA0622p Pathology II - lecture](#)
[VLPA0521c \(Do I meet enrolment requirements?\)](#)

Teacher's information

<http://www.muni.cz/atlases>

Podrobné informace o průběhu výuky jsou vyvěšeny na vývěškách obou ústavů patologie, na kterých probíhá výuka.

The course is also listed under the following terms [Accreditation autumn](#).

VLPA0521p Pathology I - lecture ✱

Faculty of Medicine

Autumn 2019

Extent and Intensity

3/4/0. 0 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Markéta Hermanová, Ph.D.](#) (lecturer)

[doc. MUDr. Leoš Křen, Ph.D.](#) (lecturer)

[prof. RNDr. Jana Šmardová, CSc.](#) (lecturer)

[MUDr. Vít Žampachová](#) (lecturer)

[MUDr. Iva Svobodová](#) (lecturer)

[Mgr. Iva Holušová](#) (assistant)

[Jarmila Jelínková](#) (assistant)

[MUDr. Pavel Fabian, Ph.D.](#) (lecturer)

[MUDr. Sylva Hotárková](#) (lecturer)

[MUDr. Marta Ježová, Ph.D.](#) (lecturer)

[MUDr. Zdeněk Pavlovský](#) (lecturer)

[MUDr. Filip Sokol](#) (lecturer)

[MUDr. Michal Tichý](#) (lecturer)

[MUDr. Lukáš Velecký](#) (lecturer)

[MUDr. Iva Zambo, Ph.D.](#) (lecturer)

[Miroslava Čápková](#) (assistant)

[Kamila Kožíšková](#) (assistant)

Supervisor

[doc. MUDr. Leoš Křen, Ph.D.](#)

[Department of Pathology - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Contact Person: [prof. MUDr. Markéta Hermanová, Ph.D.](#)

Supplier department: [Department of Pathology - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Timetable

Thu 14:30–17:00 [A22/116 aula](#)

Prerequisites (in Czech)

([VLFY0422p Physiology II - lecture](#) || [VSFY0422p Physiology II - lecture](#)) && (

[VSBC041p Biochemistry II -1](#) || [VLBC0422p Biochemistry I -lect.](#)) && (

[VLAN0222p Anatomy II 1](#) || [VSAN0333p Anatomy III - lec.](#)) && (

[VLHE0322p Histology and embryology II -1](#) || [VSHE0322p Histology and embryology II -1](#)) && [VLLM0421c Med.Microbiol.](#)

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

The main stress in the pathology course is given on macroscopic and microscopic correlation of diseases. After finishing the course the student should be able to: understand the basic pathologic processes (regressive changes, inflammation, oncology, immune disorders); understand and be able to apply the basic classification of oncologic processes; understand the basic classification of etiologically defined processes (esp. infectious diseases); learn the most important methods used in diagnostic process and research (tissue processing, special stainings, histochemistry, immunohistochemistry, electron microscopy, molecular pathology); understand various disorders with respect to individual organs and organ systems; get familiar with the process of autopsy (the process of the autopsy and its evaluation); get familiar with laboratory processing of the tissue samples (description, tissue sampling);

Syllabus

- *General Pathology*
- Pathology and its role in medicine.
- Methodology: autopsy, clinico-pathological correlation, surgical pathology (biopsy), ways of tissue examination and fixation
- Cytology.
- The disease, its definition and course. External and internal causes of a disease. Prevention.
- Death (clinical and biological). Signs of death.
- Regressive changes, necrosis (classification, causes). Atrophy: numeric and simple. Dystrophy: metabolic disorders of proteins, glycid, fat, water, minerals and pigments.
- Inflammation: definition, local and general signs, microscopic and macroscopic. Inflammation: classification, nomenclature. Immunity disorders, transplantation pathology.
- Progressive changes. Regeneration, reparation, wound healing. Hypertrophy, hyperplasia, metaplasia, dysplasia. Pseudotumors: cysts, pseudocysts, inflammatory pseudotumor. Disorders of embryonal development.
- Tumors: definition, general properties, etiology, precanceroses. Biology of tumors: benign, malignant and uncertain tumors. Systematic classification of tumors: epithelial, mesenchymal, neuroectodermal and germinal tumors, choriocarcinoma, mesothelioma.
- *Organ pathology*
- Disorders of the heart, circulation of the blood and lymph: Congenital and acquired heart diseases, changes in size and shape of the heart. Pathological contents of the pericardium. Inflammation, ischemic heart disease, myocardial infarction. Circulatory failure. Hypertension. Disorders of arteries and veins: atherosclerosis, aneurysm, inflammation, anemia, polycytemia. Local circulatory disorders: thrombosis, embolism. Bleeding. Lymphadenitis. Tumors.
- Respiratory disorders: Pathology of upper respiratory pathways: rhinitis, laryngitis, bronchitis. Tumors and pseudotumors. Changes in pulmonary ventilation and circulation (venostasis, edema, induration, infarction, embolism). Silicosis and other external pigmentations. Superficial, interstitial and chronic inflammations of the lung. Pulmonary tumors. Pathology of the pleura.

- Disorders of the gastrointestinal tract: Pathology of the oral cavity, pharynx, tonsillae and esophagus. Gastritis, peptic ulcers, gastric tumors. Pathology of the gut: disorders of circulation, inflammation. Appendicitis, malabsorption syndrome. Ileus, herniation. Intestinal tumors. Inflammation of the peritoneum, pathological contents of peritoneal cavity.

Literature

required literature

- POVÝŠIL, Ctibor and Ivo ŠTEINER. *Obecná patologie*. 1. vyd. Praha: Galén, 2011. xiii, 290. ISBN 9788072627738. [info](#)
- POVÝŠIL, Ctibor and Ivo ŠTEINER. *Speciální patologie*. 2. vyd. Praha: Galén, 2007. ISBN 978-80-7262-494-2. [info](#)

recommended literature

- MAČÁK, Jiří, Jana MAČÁKOVÁ and Jana DVOŘÁČKOVÁ. *Patologie*. 2., doplněné vydání. Praha: Grada, 2012. 347 stran. ISBN 9788024735306. [info](#)

not specified

- BUČEK, Jan. *Praktikum z patologie :pítevní cvičení*. 4. přepr. vyd. Brno: Masarykova univerzita, 1993. 88 s. ISBN 80-210-0721-4. [info](#)
- [FEIT, Josef](#), P. MÍREJOVSKÝ and I. STEINER. *Kontrolní otázky z patologie (Test question in pathology)*. 1. vyd. Praha: Triton, 1998. ISBN 80-85875-89-6. [info](#)

Teaching methods

The course of pathology combines lectures (3 hours/week) and practical classes (4 hours/week, consisting of histological and autoptic lessons). Lectures are common for students of both pathology departments of Faculty of Medicine, Masaryk University, and are proportionally performed by lecturers of these institutions. Topics of the lectures correspond with the recommended literature and the information obtained during the lectures represents an integral part of the recommended study materials/literature and is required at the exam. The schedule of the lectures (including lecturers) is released by each pathology department before the beginning of each semester and students will be informed during the practical classes at the beginning of each term as well. Theoretical basis of each learning unit is presented during the practical classes (in a continuity with lectures) using an audio-visual technique. Histopathological findings of autoptical and bioptical samples are presented using the slides (including virtual/digitized ones). Students are expected to describe histopathological findings in a set of selected lesions. The list of required slides will be published before the beginning of a summer semester. Hypertext teaching materials are also used and are available in lecture rooms of the Department of Pathology (University Hospital Brno) and for all students for the individual work on website (www.muni.cz/atlas). During the winter semester, students will take part in at least 2 commented demonstration autopsies performed by a teacher in a demonstration autopsy room. The student will learn the basis of the autopsy technique and

later during the semester actively participate in an autopsy of all organ systems. The autopsy classes are finished by macroscopic description of all organ systems and summary of autopsy findings. These classes can be replaced by a demonstration of autopsy findings from the database of the particular pathology department and by the excursion to the bioptical laboratories to obtain the information about basic principles of the laboratory work in pathology departments including the techniques of gross sampling.

Assessment methods

The subject is closed by the oral exam. 3 questions from the topics of general pathology, systemic pathology, and oncology are examined. The list of questions will be available on the information system of the university no later than at the beginning of the summer semester and is obligatory for both departments of pathology. The exam is classified in agreement with study and examinations regulations of Faculty of Medicine, Masaryk University. The credit and successful passing through practical exam represent the prerequisites for an oral theoretical exam. The credits are based on the regular participation at practical classes (2 excused absences are accepted), knowledge of autopsy technique and macroscopic description of pathological findings of organs or organ systems during the autopsy. The practical exam includes descriptive evaluation of 2 histopathological slides (real or digitized), basic differential diagnosis of the studied lesion and a theoretical minimum for the topic. Exact histopathological diagnosis is not requested for successful passing through the practical exam. In case of a failure at practical exam, the student is not allowed to take the oral exam and is classified F. Successfully passed practical exam is not repeated in case of a failure at subsequent oral exam.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

Teacher's information

<http://www.muni.cz/atlas>

Podrobné informace o průběhu výuky jsou vyvěšeny na vývěškách obou ústavů patologie, na kterých probíhá výuka.

The course is also listed under the following terms [Accreditation autumn](#).

VLPA0622c Pathology - practice ✳

Faculty of Medicine

Spring 2018

Extent and Intensity

3/4/0. 4 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Markéta Hermanová, Ph.D.](#) (lecturer)

[MUDr. Zdeněk Pavlovský](#) (lecturer)

[MUDr. Vítka Žampachová](#) (lecturer)

[doc. MUDr. Leoš Křen, Ph.D.](#) (lecturer)

[MUDr. Jitka Hausnerová](#) (lecturer)

[MUDr. Katarína Múčková](#) (lecturer)
[MUDr. Václav Kubeš](#) (seminar tutor)
[MUDr. Jan Mazanec](#) (lecturer)
[MUDr. Iva Zambo, Ph.D.](#) (lecturer)
[Jarmila Jelínková](#) (assistant)
[Mgr. Iva Holušová](#) (assistant)
[MUDr. Sylva Hotárková](#) (lecturer)
[MUDr. Iva Svobodová](#) (lecturer)
[MUDr. Michal Hendrych](#) (seminar tutor)
[MUDr. Michal Tichý](#) (lecturer)
[MUDr. Lukáš Velecký](#) (lecturer)
[MUDr. Marta Ježová, Ph.D.](#) (lecturer)
[MUDr. Zdeněk Bednařík](#) (seminar tutor)
[MUDr. Lukáš Frola](#) (seminar tutor)
[MUDr. Dominik Gurín](#) (seminar tutor)
[MUDr. Miroslava Chovancová](#) (seminar tutor)
[MUDr. Ctirad Macháček](#) (seminar tutor)
[MUDr. Šárka Pokorová](#) (seminar tutor)
[Tetiana Shatokhina](#) (seminar tutor)
[MUDr. Filip Sokol](#) (seminar tutor)
[MUDr. Tatiana Stupková](#) (seminar tutor)
[MUDr. Eliška Tvrđíková](#) (seminar tutor)
[MUDr. Jakub Vlažný](#) (seminar tutor)
[Miroslava Čáповá](#) (assistant)
[Kamila Kožíšková](#) (assistant)

Supervisor

[doc. MUDr. Leoš Křen, Ph.D.](#)

[Department of Pathology - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Contact Person: [prof. MUDr. Markéta Hermanová, Ph.D.](#)

Supplier department: [Department of Pathology - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Prerequisites (in Czech)

[VLPA0521c Pathology I - practicals](#)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

The main stress in the pathology course is given on macroscopic and microscopic correlation of diseases. After finishing the course the student should be able to: understand the basic pathologic processes (regressive changes, inflammation, oncology, immune disorders); understand and be able to apply the basic classification of oncologic

processes; understand the basic classification of etiologically defined processes (esp. infectious diseases); learn the most important methods used in diagnostic process and research (tissue processing, special stainings, histochemistry, immunohistochemistry, electron microscopy, molecular pathology); understand various disorders with respect to individual organs and organ systems; get familiar with the process of autopsy (the process of the autopsy and its evaluation); get familiar with laboratory processing of the tissue samples (description, tissue sampling);

Syllabus

- Inflammation of the liver (hepatitis), cirrhosis, tumors. Pathology of the gall bladder and biliary duct (stones, inflammations, tumors). Icterus. Pancreas: pancreatitis, diabetes, tumors.
- Pathology of the urinary system: Kidney stones, inflammation (glomerulonephritis, pyelonephritis), nephrosis. Uremia. Tumors of the kidney, ureter and urinary bladder. Pathology of the male genital system (inflammation, tumors). Pathology of the female genital system (developmental disorders, inflammation, tumors). Pathology of pregnancy. Pathology of the breast.
- Pathology of the central and peripheral nervous system: trauma, bleeding, vascular disorders. Leptomeningitis, hydrocephalus, brain edema. Tumors of the central and peripheral nervous system. Pathology of the eye: trauma, inflammation, tumors.
- Pathology of the endocrine system: thyroid, parathyroid, suprarenal glands, hypophysis, endocrine pancreas.
- Pathology of the skin: inflammation, tumors and pseudotumors.
- Prenatal and neonatal pathology, pathology of child's age.
- Pathology of the bone, striated muscle and soft tissues.

Literature

- POVÝŠIL, Ctibor and Ivo ŠTEINER. *Speciální patologie*. 2. vyd. Praha: Galén, 2007. ISBN 978-80-7262-494-2. [info](#)
- MAČÁK, Jiří. *Obecná patologie*. 1. vyd. Olomouc: Univerzita Palackého v Olomouci, 2002. 189 s. ISBN 8024404362. [info](#)
- [MAČÁK, Jirka](#) and Jana MAČÁKOVÁ. *Patologie (Pathology)*. první. Praha: GRADA, 2004. 347 pp. ISBN 80-247-0785-3. [info](#)
- BUČEK, Jan. *Praktikum z patologie :pítevní cvičení*. 4. přepr. vyd. Brno: Masarykova univerzita, 1993. 88 s. ISBN 80-210-0721-4. [info](#)
- [FEIT, Josef](#), P. MIŘEJOVSKÝ and I. STEINER. *Kontrolní otázky z patologie (Test question in pathology)*. 1. vyd. Praha: Triton, 1998. ISBN 80-85875-89-6. [info](#)

Teaching methods

Pathology course consists of lectures and practical classes. Teaching consists of *theoretical part* (lectures) and *practical part* (laboratory practice). Practical courses consist of *histological practice* (microscopical and macroscopical images of autoptical and bioptical specimens are demonstrated and discussed) and *autoptical practice* (presence and ev. participation in autopsies). *Hypertext teaching materials* for the students are available in our teaching rooms as well in the Internet. These materials contain about

3000 images of various imaging methods (macroscopic, x-ray, CT, MRI images, histological images, partially available as virtual slides, videos). Lectures and practicals are complementary. General information and new updates on classifications as well as images are presented at the lectures. Practical add further information, histopathologically and autoptical experience. Further information is provided in our web-based teaching materials. Various forms of testing is used to give the students proper feedback. Students are supposed to prepare for each practical lesson. The topic for each practical lesson as well as for each lecture is available.

Assessment methods

Lectures: 3 hours/week *Practical classes:* 4 hours/week; microscopic and autoptic lessons. The course of pathology is closed by oral exam. Attendance is compulsory; knowledge of the students is periodically tested during the practical classes. Testing can be either oral or written (multichoice tests, essay). Exam after two semesters of pathology has two parts: practical and theoretical. Practical part of the exam takes the form of a discussion over the microscop or over macroscopical or microscopical images. In theoretical part of the exam the students discuss after short preparation randomly selected topics. The list of these topics is available to the students in advance.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

Teacher's information

<http://www.muni.cz/atlases>

Podrobné informace o průběhu výuky jsou vyvěšeny na vývěškách obou ústavů patologie, na kterých probíhá výuka.

The course is also listed under the following terms [Accreditation spring](#).

VLPA0622p Pathology II - lecture ✳

Faculty of Medicine

Spring 2018

Extent and Intensity

3/4/0. 6 credit(s). Recommended Type of Completion: zk (examination). Alternate Types of Completion: RZk (examination).

Teacher(s)

[prof. MUDr. Markéta Hermanová, Ph.D.](#) (lecturer)

[MUDr. Sylva Hotárková](#) (lecturer)

[MUDr. Marta Ježová, Ph.D.](#) (lecturer)

[doc. MUDr. Leoš Křen, Ph.D.](#) (lecturer)

[MUDr. Filip Sokol](#) (lecturer)

[MUDr. Iva Svobodová](#) (lecturer)

[prof. RNDr. Jana Šmardová, CSc.](#) (lecturer)

[MUDr. Michal Tichý](#) (lecturer)

[MUDr. Lukáš Velecký](#) (lecturer)

[MUDr. Iva Zambo, Ph.D.](#) (lecturer)

[MUDr. Vít Žampachová](#) (lecturer)

[Miroslava Čápková](#) (assistant)

[Mgr. Iva Holušová](#) (assistant)

[Jarmila Jelínková](#) (assistant)

[Kamila Kožíšková](#) (assistant)

Supervisor

[doc. MUDr. Leoš Křen, Ph.D.](#)

[Department of Pathology - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Contact Person: [doc. MUDr. Leoš Křen, Ph.D.](#)

Supplier department: [Department of Pathology - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Prerequisites (in Czech)

[VLPA0521c Pathology I - practicals](#)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

The main stress in the pathology course is given on macroscopic and microscopic correlation of diseases. After finishing the course the student should be able to: understand the basic pathologic processes (regressive changes, inflammation, oncology, immune disorders); understand and be able to apply the basic classification of oncologic processes; understand the basic classification of etiologically defined processes (esp. infectious diseases); learn the most important methods used in diagnostic process and research (tissue processing, special stainings, histochemistry, immunohistochemistry, electron microscopy, molecular pathology); understand various disorders with respect to individual organs and organ systems; get familiar with the process of autopsy (the process of the autopsy and its evaluation); get familiar with laboratory processing of the tissue samples (description, tissue sampling);

Syllabus

- Inflammation of the liver (hepatitis), cirrhosis, tumors. Pathology of the gall bladder and biliary duct (stones, inflammations, tumors). Icterus. Pancreas: pancreatitis, diabetes, tumors.
- Pathology of the urinary system: Kidney stones, inflammation (glomerulonephritis, pyelonephritis), nephrosis. Uremia. Tumors of the kidney, ureter and urinary bladder. Pathology of the male genital system (inflammation, tumors). Pathology of the female genital system (developmental disorders, inflammation, tumors). Pathology of pregnancy. Pathology of the breast.

- Pathology of the central and peripheral nervous system: trauma, bleeding, vascular disorders. Leptomeningitis, hydrocephalus, brain edema. Tumors of the central and peripheral nervous system. Pathology of the eye: trauma, inflammation, tumors.
- Pathology of the endocrine system: thyroid, parathyroid, suprarenal glands, hypophysis, endocrine pancreas.
- Pathology of the skin: inflammation, tumors and pseudotumors.
- Prenatal and neonatal pathology, pathology of child's age.
- Pathology of the bone, striated muscle and soft tissues.

Literature

- POVÝŠIL, Ctibor and Ivo ŠTEINER. *Speciální patologie*. 2. vyd. Praha: Galén, 2007. ISBN 978-80-7262-494-2. [info](#)
- MAČÁK, Jirka and Jana MAČÁKOVÁ. *Patologie (Pathology)*. první. Praha: GRADA, 2004. 347 pp. ISBN 80-247-0785-3. [info](#)
- BUČEK, Jan. *Praktikum z patologie :pítevní cvičení*. 4. přepr. vyd. Brno: Masarykova univerzita, 1993. 88 s. ISBN 80-210-0721-4. [info](#)
- FEIT, Josef, P. MĚŘEJOVSKÝ and I. STEINER. *Kontrolní otázky z patologie (Test question in pathology)*. 1. vyd. Praha: Triton, 1998. ISBN 80-85875-89-6. [info](#)

Teaching methods

Pathology course consists of lectures and practical classes. Teaching consists of *theoretical part* (lectures) and *practical part* (laboratory practice). Practical courses consist of *histological practice* (microscopical and macroscopical images of autoptical and bioptical specimens are demonstrated and discussed) and *autoptical practice* (presence and ev. participation in autopsies). *Hypertext teaching materials* for the students are available in our teaching rooms as well in the Internet. These materials contain about 3000 images of various imaging methods (macroscopic, x-ray, CT, MRI images, histological images, partially available as virtual slides, videos). Lectures and practicals are complementary. General information and new updates on classifications as well as images are presented at the lectures. Practical add further information, histopathologically and autoptical experience. Further information is provided in our web-based teaching materials. Various forms of testing is used to give the students proper feedback. Students are supposed to prepare for each practical lesson. The topic for each practical lesson as well as for each lecture is available.

Assessment methods

Lectures: 3 hours/week *Practical classes*: 4 hours/week; microscopic and autoptic lessons. The course of pathology is closed by oral exam. Attendance is compulsory; knowledge of the students is periodically tested during the practical classes. Testing can be either oral or written (multichoice tests, essay). Exam after two semesters of pathology has two parts: practical and theoretical. Practical part of the exam takes the form of a discussion over the microscope or over macroscopical or microscopical images. In theoretical part of the exam the students discuss after short preparation randomly selected topics. The list of these topics is available to the students in advance.

Language of instruction

Czech

Further comments (probably available only in Czech)

Information on completion of the course: Přihlášení ke zkoušce je podmíněno vykonáním zkoušky z neurověd.

The course is taught each semester.

The course is taught: every week.

Listed among pre-requisites of other courses

- [VLPD7X31p Pediatrics](#)
[VLPF0622p](#) && [VLPA0622p](#) && [VLLP0633c](#) && [VLLM0522p](#) && [VLIM051p](#) (Do I meet enrolment requirements?)
- [VLTL081 Sports Medicine](#)
[VLPF0622p](#) && [VLPA0622p](#) && [VLLP0633c](#) (Do I meet enrolment requirements?)

Teacher's information

<http://www.muni.cz/atlases>

Podrobné informace o průběhu výuky jsou vyvěšeny na vývěškách obou ústavů patologie, na kterých probíhá výuka.

The course is also listed under the following terms [Accreditation spring](#).

VLPD0932c Pediatrics II - practice ✱

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Milan Bajer, Ph.D.](#) (seminar tutor)
[MUDr. Milena Burianová, Ph.D.](#) (seminar tutor)
[prof. MUDr. Zdeněk Doležel, CSc.](#) (seminar tutor)
[MUDr. Lenka Dostalová Kopečná, Ph.D.](#) (seminar tutor)
[MUDr. Petr Jabandžiev, Ph.D.](#) (seminar tutor)
[MUDr. Jan Papež](#) (seminar tutor)
[MUDr. Magdalena Rohanová](#) (seminar tutor)
[MUDr. Jana Šťastná, Ph.D.](#) (seminar tutor)
[Libuše Darmovzalová](#) (assistant)

Supervisor

[MUDr. Petr Jabandžiev, Ph.D.](#)
[Department of Pediatrics - Institutions shared with the Faculty Hospital Brno \(paediatric medicine\) - Faculty of Medicine](#)
Contact Person: [MUDr. Milena Burianová, Ph.D.](#)
Supplier department: [Department of Pediatrics - Institutions shared with the Faculty Hospital Brno \(paediatric medicine\) - Faculty of Medicine](#)

Timetable of Seminar Groups

VLPD0932c/01: Mon 27. 11. to Fri 1. 12. each working day 7:30–12:20 [N03086](#)
VLPD0932c/02: Mon 13. 11. to Fri 17. 11. each working day 7:30–12:20 [N03086](#)
VLPD0932c/03: Mon 30. 10. to Fri 3. 11. each working day 7:30–12:20 [N03086](#)
VLPD0932c/04: Mon 16. 10. to Fri 20. 10. each working day 7:30–12:20 [N03086](#)
VLPD0932c/05: Mon 2. 10. to Fri 6. 10. each working day 7:30–12:20 [N03086](#)
VLPD0932c/06: Mon 15. 1. to Fri 19. 1. each working day 7:30–12:20 [N03086](#)
VLPD0932c/09: Mon 4. 12. to Fri 8. 12. each working day 7:30–12:20 [N03086](#)
VLPD0932c/10: Mon 20. 11. to Fri 24. 11. each working day 7:30–12:20 [N03086](#)
VLPD0932c/11: Mon 6. 11. to Fri 10. 11. each working day 7:30–12:20 [N03086](#)
VLPD0932c/12: Mon 23. 10. to Fri 27. 10. each working day 7:30–12:20 [N03086](#)
VLPD0932c/15: Mon 9. 10. to Fri 13. 10. each working day 7:30–12:20 [N03086](#)
VLPD0932c/16: Mon 25. 9. to Fri 29. 9. each working day 7:30–12:20 [N03086](#)
VLPD0932c/30: Mon 11. 12. to Fri 15. 12. each working day 7:30–12:20 [N03086](#)
VLPD0932c/31: Mon 1. 1. to Fri 5. 1. each working day 7:30–12:20 [N03086](#)
VLPD0932c/32: Mon 8. 1. to Fri 12. 1. each working day 7:30–12:20 [N03086](#)
VLPD0932c/33: Mon 18. 12. to Fri 22. 12. each working day 7:30–12:20 [N03086](#)
VLPD0932c/34: No timetable has been entered into IS.

Prerequisites (in Czech)

[VLFA0722p Pharmacology - L](#) && [VLPD7X31c Pediatrics-practice](#) &&
[VSOT7X1c Otorhinolaryngology - practice](#) && [VLDM7X1c Diagn.imaging - practice](#)
&& [VSIP0622p Introduction to internal II-pr](#) && [VLCP0622p Introduc. to surgery II - lec.](#) && [VLKG7X1c Clinical Genetics - practice](#)
(Do I meet enrolment requirements?)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The goal of practical lessons in pediatry is to acquaint the students with problematics of treatment and prevention nursing in the field. By the end of the course the student will understand the particularities of care of children in illness. The student understands specifics of communication with children. The student acquires and implements theoretical knowledge in taking intensive care of sick children. The student will be acquainted with problems of most frequent diseases in childhood. The student knows standard diagnostic procedures and tests for individual clinical conditions of the child and is able to apply them in practice. The student will know clinical manifestations of urgent conditions in paediatrics. After the participation in the course students will be able to recognize and evaluate the state of the newborn after the delivery and during the transitional period, understand the impact of congenital and inherited diseases on children and their family. The student will acquire basic knowledge of the issue of alimentary disorders. By the end of the course students should be able to perform physical examination.

Learning outcomes

After completing of the course, students will have basic overview of diagnostic, therapeutic and preventive methods of pediatrics - medical history, physical examination, laboratory methods, imaging methods, basic information about patient nutrition and basics of psychological approach to the patient. The student knows the most common childhood illnesses . The student knows standard diagnostic procedures and tests for individual clinical conditions in pediatrics.

Syllabus

- Practical training with tutor. Examination children in age specific categories – newborn, infant, toddlers, preschool, school children and adolescent. Assessment of growth and development. Examination children with typical diseases in childhood.

Literature

recommended literature

- KLIEGMAN, Robert, Bonita F. STANTON, Joseph W. ST GEME III and Nina F. SCHOR. *Nelson textbook of pediatrics. Volume 2*. Edited by Robert Kliegman. 20th edition. Philadelphia: Elsevier, 2016. Ixviii, 17. ISBN 9781455775668. [info](#)
- LEBL, Jan. *Klinická pediatrie*. 1. vyd. Praha: Galén, 2012. xix, 698. ISBN 9788072627721. [info](#)
- [MICHÁLEK, Jaroslav](#), [Lenka DOSTALOVÁ KOPEČNÁ](#) and [Milena BURIANOVÁ](#). *Pediatrická propedeutika (Pediatrics)*. 2008. vyd. Brno: Masarykova univerzita, 2008. 159 pp. ISBN 978-80-210-4695-5. [info](#)
- ŠAŠINKA, Miroslav, Tibor ŠAGÁT and László KOVÁCS. *Pediatrica*. 2., dopl. a aktualiz. vyd. Bratislava: HERBA, 2007. 740 s. ISBN 9788089171491. [info](#)

not specified

- *Praktická pediatrie : obvyklé diagnostické a léčebné postupy na Pediatrické klinice v Motole*. Edited by Jan Lebl - Jan Janda - Petr Pohunek. 1. vyd. Praha: Galén, 2008. 189 s. ISBN 9788072625789. [info](#)
- MUNTAU, Ania Carolina. *Pediatric (Pediatrics)*. 1st. Praha: Grada Publishing a.s., 2009. 608 pp. ISBN 978-80-247-2525-3. [info](#)

Teaching methods

practical training,

Assessment methods

To get the credit, presence in 90% of seminars with active participation in discussions is required

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

Listed among pre-requisites of other courses

- [VLPD1033c Pediatrics III - practice \(VLFA0822p || VLFA0722p\) && VLPD0932c \(Do I meet enrolment requirements?\)](#)

Teacher's information

* Informace o rozdělení studentů do skupin najdete na nástěnce u sekretariátu Pediatrické kliniky, pavilon C, 4. podlaží. Praktická výuka probíhá na odděleních: Pediatrická klinika FN Brno, Černopolní 9, oddělení 46,67,48,69,56. Klinika dětské onkologie, (pavilon G, 2. podlaží). Novorozenecké oddělení Obilní trh, budova A1. 3. podlaží, odd. JIP. Začátek v 8:00 hodin na odděleních kliniky, pozdní příchod nebude akceptován. Nepřítomnost na stážích pro zkoušku z jiného předmětu je nutno nahradit. Účast na stážích 90%, (tj. toleruje se půldenní nepřítomnost). Na novorozeneckém oddělení je začátek v 10:00 hodin, pozdní příchod nebude akceptován. * Semináře zpravidla začínají v 10 hodin: Studovna Pek 1, pavilon G, 3. podlaží, Studovna Pek2, pavilon C, 4. podlaží. * Pomůcky: plášť, přezuvky, fonendoskop (bez pomůcek nelze stáž absolvovat) * Šatny: pavilon A dětské nemocnice (naproti vjízdce, kde jsou k vyzvednutí klíče. Skřínky v šatně je nutno každý den uvolnit. ***** Actual information and schedule could be found on the pinboard next to the headquarters of the Department of Pediatrics, Building C, 4th floor. Practical education is carried out on the wards of Department of Pediatrics, University Hospital Brno, Černopolní 9, at the wards 46, 67, 48, 69 and 56, at the Department of Pediatric Oncology (building G, 2nd floor) and at The Dept. of Neonatology, Obilní Trh 11 (Building A1, 3rd floor, NICU) Practical education starts at 8:00 (10:00 at Dept. of Neonatology), coming late will not be accepted Lectures: Study Room PeK1 (Building G, 3rd floor) Study Room PeK2 (Building C, 4th floor) Tools, necessary to attend Practical education: official university ID card, coat, slippers, stethoscope (without tools can not student attend practical education an internship) Closets: Building A (at the opposite of the gatehouse – where is possible to pick up keys). Lockers must stay free every day. In accordance to The MU Study and Examination Regulations all practical education and lectures are obligatory. Substitution is allowed in the Substitution week at end of semester. To get credit one half of day absence is allowed. Exam or test is NO excuse. To get credit passing of credit test is required.

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#), [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VLPD0932p Pediatrics II - lectures ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

2/0/0. 0 credit(s). Type of Completion: -.

Teacher(s)

[MUDr. Milan Bajer, Ph.D.](#) (lecturer)

[MUDr. Milena Burianová, Ph.D.](#) (lecturer)

[prof. MUDr. Zdeněk Doležel, CSc.](#) (lecturer)
[MUDr. Lenka Dostalová Kopečná, Ph.D.](#) (lecturer)
[prof. MUDr. Hana Hrstková, CSc.](#) (lecturer)
[MUDr. Petr Jabandžiev, Ph.D.](#) (lecturer)
[doc. MUDr. Dagmar Procházková, Ph.D.](#) (lecturer)
[doc. MUDr. Ondřej Rybníček, Ph.D.](#) (lecturer)

Supervisor

[MUDr. Petr Jabandžiev, Ph.D.](#)
[Department of Pediatrics - Institutions shared with the Faculty Hospital Brno \(paediatric medicine\) - Faculty of Medicine](#)
Contact Person: [MUDr. Milena Burianová, Ph.D.](#)
Supplier department: [Department of Pediatrics - Institutions shared with the Faculty Hospital Brno \(paediatric medicine\) - Faculty of Medicine](#)

Timetable

Mon 18. 9. 12:00–14:30 [A11/114](#), Tue 19. 9. 12:00–14:30 [A11/114](#)

- Timetable of Seminar Groups:

VLPD0932p/VLA: Mon 18. 9. 14:40–17:10 [A11/334](#), Wed 20. 9. 14:40–17:10 [A9/324](#)

Prerequisites (in Czech)

([VLFA0822p Pharmacology II - L](#) || [VLFA0722p Pharmacology - L](#)) &&
[VLPD7X31c Pediatrics-practice](#) && [VSOT7X1c Otorhinolaryngology - practice](#) &&
[VLDM7X1c Diagn.imaging - practice](#) && [VSIP0622p Introduction to internal II-pr](#) &&
[VLCF0622p Introduc. to surgery II -lec.](#) && [VLKG7X1c Clinical Genetics - practice](#)
(Do I meet enrolment requirements?)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of lessons is to acquaint students with the issues of therapeutic and preventive care in pediatrics. The student will be acquainted with principal concepts and tasks of paediatrics. The student will be acquainted with prevention, diagnostics and basic therapy of diseases in the childhood. The student knows the system and contents of preventive examinations, vaccination. The student is able to define risk factors endangering healthy development of child and adolescent.

Learning outcomes

Student has knowledge about the origin, course of treatment and prognosis of basic nosological units

Syllabus

- The field of pediatrics, child care management: out-patient, in-patient care of sick children, preventive measures in pediatrics. Age categories, growth and

development during childhood.Social issues in pediatrics.New-born infant,general assessment of the normal new-born, problem with adaptation.Premature infant,sick new-born.Prenatal care,genetic abnormalities,chromosomal aberrations.Nutrition during childhood,feeding of infants - breast feeding, formula feeding.Nutritional disorders.Inborn errors of metabolism.Diseases of GIT,liver, biliary system and pancreas.Diseases of red blood cells,white blood cells.Haemorrhagic diseases. Neoplasms in childhood.

Literature

recommended literature

- KLIEGMAN, Robert, Bonita F. STANTON, Josepf W. ST GEME III and Nina F. SCHOR. *Nelson textbook of pediatrics. Volume 2*. Edited by Robert Kliegman. 20th edition. Philadelphia: Elsevier, 2016. Ixviii, 17. ISBN 9781455775668. [info](#)
- LEBL, Jan. *Klinická pediatrie*. 1. vyd. Praha: Galén, 2012. xix, 698. ISBN 9788072627721. [info](#)
- ŠAŠINKA, Miroslav, Tibor ŠAGÁT and László KOVÁCS. *Pediatrics*. 2., dopl. a aktualiz. vyd. Bratislava: HERBA, 2007. 740 s. ISBN 9788089171491. [info](#)

not specified

- MICHÁLEK, Jaroslav. *Pediatrická propedeutika : vybrané kapitoly*. 1. vyd. Brno: Masarykova univerzita, 2008. 159 s. ISBN 9788021046955. [info](#)
- LEBL, Jan, Kamil PROVAZNÍK and Ludmila HEJCMANOVÁ. *Preklinická pediatrie*. 2., přeprac. vyd. Praha: Galén, 2007. 248 s. ISBN 9788072624386. [info](#)
- NOVÁK, Ivan. *Intenzivní péče v pediatrii*. 1. vyd. Praha: Karolinum, 2008. 579 s. ISBN 9788024614748. [info](#)
- MUNTAU, Ania Carolina. *Pediatrics (Pediatrics)*. 1st. Praha: Grada Publishing a.s., 2009. 608 pp. ISBN 978-80-247-2525-3. [info](#)

Teaching methods

lectures

Assessment methods

credit

Language of instruction

Czech

Further Comments

The course is taught annually.

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#), [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VLDP1033c Pediatrics III - practice ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2/0. 1 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Milan Bajer, Ph.D.](#) (seminar tutor)

[MUDr. Milena Burianová, Ph.D.](#) (seminar tutor)

[prof. MUDr. Zdeněk Doležel, CSc.](#) (seminar tutor)

[MUDr. Lenka Dostalová Kopečná, Ph.D.](#) (seminar tutor)

[MUDr. Petr Jabandžiev, Ph.D.](#) (seminar tutor)

[MUDr. Jan Papež](#) (seminar tutor)

[MUDr. Jana Šťastná, Ph.D.](#) (seminar tutor)

[Libuše Darmovzalová](#) (assistant)

Supervisor

[MUDr. Petr Jabandžiev, Ph.D.](#)

[Department of Pediatrics - Institutions shared with the Faculty Hospital Brno \(paediatric medicine\) - Faculty of Medicine](#)

Contact Person: [MUDr. Milena Burianová, Ph.D.](#)

Supplier department: [Department of Pediatrics - Institutions shared with the Faculty Hospital Brno \(paediatric medicine\) - Faculty of Medicine](#)

Timetable of Seminar Groups

VLPD1033c/34: No timetable has been entered into IS.

Prerequisites (in Czech)

([VLFA0822p Pharmacology II - L](#) || [VLFA0722p Pharmacology - L](#)) &&

[VLPD0932c Pediatrics II - practice](#)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The goal of practical lessons is to acquaint the students with problematics of treatment and prevention nursing in the field. By the end of the course the student will understand the particularities of care of children in illness. The student understands specifics of communication with children. The student acquires and implements theoretical knowledge in taking intensive care of sick children. The student will be acquainted with problems of most frequent diseases in childhood. The student knows standard diagnostic procedures and tests for individual clinical conditions of the child and is able to apply them in practice. The student will know clinical manifestations of urgent conditions in paediatrics. After the participation in the course students will be able to recognize and evaluate the state of the newborn after the delivery and during the transitional period, understand of the impact of congenital and inherited diseases on children and their family. The student will acquire basic knowledge of the issue of alimentary disorders. By the end of the course

student should be able to perform physical examination. In the end of course student should be able to set diagnosis and to treat different pediatric conditions

Learning outcomes

Students will be able to perform a qualified and independent examination of a child or an adolescent and to assess his or her development in all aspects, to recognize pathological symptoms in physical examination, to indicate laboratory and other complementary exams and to interpret their results. They will understand general principles as well as specifics of paediatric pharmacotherapy, rehabilitation care and psychological support.

Syllabus

- Practical training with tutor. Self examination of children in typical age categories. The basic differential diagnosis. Typical examination methods in pulmonology, gastroenterology, hematology, oncology, endocrinology and inherited diseases. Basic therapy in childhood.

Literature

recommended literature

- KLIEGMAN, Robert, Bonita F. STANTON, Joseph W. ST GEME III and Nina F. SCHOR. *Nelson textbook of pediatrics. Volume 2*. Edited by Robert Kliegman. 20th edition. Philadelphia: Elsevier, 2016. Ixviii, 17. ISBN 9781455775668. [info](#)
- LEBL, Jan, Kamil PROVAZNÍK and Ludmila HEJCMANOVÁ. *Preklinická pediatrie*. 2., přeprac. vyd. Praha: Galén, 2007. 248 s. ISBN 9788072624386. [info](#)

not specified

- NEVORAL, Jiří. *Praktická pediatrická gastroenterologie, hepatologie a výživa*. První vydání. Praha: Mladá fronta, 2013. 677 stran. ISBN 9788020428639. [info](#)
- LEBL, Jan. *Klinická pediatrie*. 1. vyd. Praha: Galén, 2012. xix, 698. ISBN 9788072627721. [info](#)
- MICHÁLEK, Jaroslav. *Pediatrická propedeutika : vybrané kapitoly*. 1. vyd. Brno: Masarykova univerzita, 2008. 159 s. ISBN 9788021046955. [info](#)
- CHALOUPECKÝ, Václav. *Dětská kardiologie*. 1. vyd. Praha: Galén, 2007. 444 s. ISBN 8072624067. [info](#)
- JANDA, Jan. *Dětská nefrologie*. 1. vyd. Praha: Galén, 2006. 261 s. ISBN 8072623788. [info](#)

Teaching methods

Practical training with tutor

Assessment methods

Credit, attendance at practical training 90 %

Language of instruction

English

Further comments (probably available only in Czech)

The course is taught each semester.

Listed among pre-requisites of other courses

- **[VLCH11XX Surgery - State Exam](#)**
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#)
&& [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) &&
[VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) ||
[VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) &&
[VLS7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) &&
[VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLP1022c](#) &&
VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#),
[VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#),
[VLR041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) &&
([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment
requirements?)
- **[VLPD11XX Paediatrics - State Exam](#)**
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#)
&& [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) &&
[VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) ||
[VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) &&
[VLS7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) &&
[VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLP1022c](#) &&
VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#),
[VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#),
[VLR041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) &&
([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment
requirements?)
- **[VLP11XX Obstetric and Gynaecology - State Exam](#)**
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#)
&& [VSDV9X22p](#) && [VLAM9X1p](#) && [VLVL9X66c](#) && ([VLVL9X65c](#) ||
[VLVL7X65c](#)) && [VLPD1033c](#) && [VLIN9X22](#) && [VLS7X1p](#) && [VSEI7X1](#)
&& [VL0L7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#)
&& [VSLE7X1p](#) && [VLP1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#),
[VSAT081](#), [VSNO071](#), [VLKA091](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#),
[VLPM071](#), [VLEP041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSDL071](#),
[VLR041](#), [VLIA081](#), [VLKM081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VSAJ0222](#) ||
[VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- **[VLVL11XX Internal Medicine - State Exam](#)**
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#)
&& [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) &&
[VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) ||
[VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) &&
[VLS7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) &&
[VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLP1022c](#) &&
VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#),
[VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#),
[VLR041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) &&
([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment
requirements?)

- [VLZP11XX Public Health - State Exam](#)
[\(VLFA0822p || VLFA0722p\)](#) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#)
&& [VSDV9X22p](#) && [VLAM9X1p](#) && [\(VLVL7X61c || VLVL9X61c\)](#) &&
[VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && [\(VLVL9X65c ||](#)
[VLVL7X65c\)](#) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) &&
[VLS7X1p](#) && [VSEI7X1](#) && [VLOL7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) &&
[VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && [VYCET\(3,](#)
[VLPS07X || VLPS071, VSAT081, VLKA091, VSNO071, VSPM071, VLKB091,](#)
[VLKF091, BMBS051, VLPM071, VLEP041, VLIA081, VLKM081, VLRL041,](#)
[VLTLO81, VSDL071, VSAL081, VSFP071\)](#) && [VLCH9X33c](#) && [\(VLAJ0222 ||](#)
[VSAJ0222 || VSNJ0222\)](#) && [VSSP03X](#) (Do I meet enrolment requirements?)

Teacher's information

Praktická výuka probíhá na odděleních: - Pediatrická klinika FN Brno, Černopolní 9, oddělení 46,67,48,69,56. Klinika dětské onkologie, (pavilon G, 2.podlaží. Začátek v 8:00 hodin zpravidla na odděleních kliniky, pozdní příchod nebude akceptován. - Novorozenecké oddělení Obilní trh, budova A1. 3.podlaží, odd JIP. Na novorozeneckém oddělení je začátek v 10:00 hodin, pozdní příchod nebude akceptován. * Nepřítomnost na stážích pro zkoušku z jiného předmětu je nutno nahradit (v náhradním týdnu na konci semestru). Účast na stážích 90%,(tj. toleruje se půldenní nepřítomnost).* Semináře zpravidla od 10 hodin: Studovna Pek1, pavilon G, 3.podlaží, Studovna Pek2, pavilon C, 4. podlaží. * Pomůcky: plášť, přezuvky, fonendoskop (bez pomůcek nelze stáž absolvovat) * Šatny: pavilon A dětské nemocnice (naproti vratek, kde jsou k vyzvednutí klíče. Skřínky v šatně je nutno každý den uvolnit. * Další informace na nástěnce u sekretariátu Pediatrické kliniky, pavilon C, 4.podlaží . Practical education is carried out on the wards of Department of Pediatrics, University Hospital Brno, Černopolní 9, at the wards 46, 67, 48, 69 and 56, at the Department of Pediatric Oncology (building G, 2nd floor) and at The Dept.of Neonatology, Obilní Trh 11 (Building A1, 3rd floor, NICU) Practical education starts at 8:00 (10:00 at Dept. of Neonatology), coming late will not be accepted Lectures: Study Room PeK1 (Building G, 3rd floor) Study Room PeK2 (Building C, 4th floor) Tools, necessary to attend Practical education: official university ID card, coat, slippers, stethoscope (without tools can not student attend practical education an internship) Closets: Building A (at the opposite of the gatehouse – where is possible to pick up keys). Lockers must stay free every day. Actual information and schedule could be found on the pinboard next to the headquarters of the Departement of Pediatrics, Building C, 4th floor In accordance to The MU Study and Examination Regulations all practical education and lectures are obligatory. Substitution is allowed in the Substitution week at end of semester. To get credit one half of day absence is allowed. Exam or test is NO excuse. ****It is the duty of every student at 7.50h to find out the allocation of students into groups and particular wards. Schedule of wards and lectures, including the allocation of students into groups is posted on the pinboard in front of the secretary of Department of Pediatrics (Building C 4th floor). Students are not allowed to change specified group. Student who will come more than 15 minutes later is not allowed to participate in lesson.

The course is also listed under the following terms [Spring 2000](#), [Spring 2001](#), [Spring 2002](#), [Spring 2003](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#), [Spring 2019](#), [Spring 2018](#), [Accreditation spring](#).

VLPD11Xpp Pediatrics - Pre-graduation Practice ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/0/0. 7 credit(s) (plus extra credits for completion). Type of Completion: z (credit).

Teacher(s)

[MUDr. Milena Burianová, Ph.D.](#) (lecturer)

[prof. MUDr. Zdeněk Doležel, CSc.](#) (lecturer)

[MUDr. Milan Bajer, Ph.D.](#) (seminar tutor)

[MUDr. Lenka Dostalová Kopečná, Ph.D.](#) (seminar tutor)

[MUDr. Petr Jabandžiev, Ph.D.](#) (seminar tutor)

[doc. MUDr. Dagmar Procházková, Ph.D.](#) (seminar tutor)

[MUDr. Magdalena Rohanová](#) (seminar tutor)

[doc. MUDr. Ondřej Rybníček, Ph.D.](#) (seminar tutor)

[MUDr. Jana Šťastná, Ph.D.](#) (seminar tutor)

[Libuše Darmovzalová](#) (assistant)

Supervisor

[prof. MUDr. Zdeněk Doležel, CSc.](#)

[Department of Pediatrics - Institutions shared with the Faculty Hospital Brno \(paediatric medicine\) - Faculty of Medicine](#)

Contact Person: [MUDr. Milena Burianová, Ph.D.](#)

Supplier department: [Institutions shared with the Faculty Hospital Brno \(paediatric medicine\) - Faculty of Medicine](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The goal of the practical lessons in paediatrics is to acquaint students with different areas of treatment and preventive nursing in paediatrics. Student shall acquire and implement theoretical knowledge in taking intensive care of sick children. Student shall summarise her/his knowledge in diagnostics, therapy and prevention of paediatric diseases in different age periods, according to particular physiological systems. By the end of the course students should be able to perform physical examination of the patient. They should be able to assess physical findings and distinguish them from pathological ones. Students shall know standard diagnostic procedures and tests for individual clinical conditions of the child and shall be able to apply them in practice. Students shall also be able to indicate and substantiate basic laboratory and examination methods for specific disease groups. Students will learn about work organization in different departments.

Students will gain practical experience how to work with medical records and other relevant documentation. In the end of the course students shall be able to set up the diagnosis and to treat different paediatric diseases and conditions Syllabus: • Individual practical training. • Examination of sick children. • Examination of new-born children, infants, toddlers, pre and school children as well as adolescents. • Special laboratory and diagnostic methods in different types/groups of illness in childhood. • Differential diagnosis, including pharmacotherapy in paediatrics.

Learning outcomes

Students will be able to perform a qualified and independent examination of a child or an adolescent and to assess his or her development in all aspects, to recognize pathological symptoms in physical examination, to indicate laboratory and other complementary exams and to interpret their results. They will understand general principles as well as specifics of paediatric pharmacotherapy, rehabilitation care and psychological support,

Syllabus

- Individual practical training over tutor supervisor. Examination of sick children. Examination newborn children, infants, toddlers, pre and school children and adolescents. Special methods in all illness in childhood. Differential diagnosis, speciality in pharmacotherapy in pediatrics.

Literature

- LEBL, Jan, Kamil PROVAZNÍK and Ludmila HEJCMANOVÁ. *Preklinická pediatrie*. 2., přeprac. vyd. Praha: Galén, 2007. 248 s. ISBN 9788072624386. [info](#)
- LEBL, Jan. *Klinická pediatrie*. 1. vyd. Praha: Galén, 2012. xix, 698. ISBN 9788072627721. [info](#)
- HRODEK, Otto and Jan VAVŘINEC. *Pediatrie*. 1. vyd. Praha: Galén, 2002. xxxii, 767. ISBN 8072621785. [info](#)
- ŠAŠINKA, Miroslav and Tibor ŠAGÁT. *Pediatrics*. 1. vyd. Košice: SATUS, 1998. 620 s. ISBN 8096796305. [info](#)
- MICHÁLEK, Jaroslav. *Pediatrická propedeutika : vybrané kapitoly*. 1. vyd. Brno: Masarykova univerzita, 2008. 159 s. ISBN 9788021046955. [info](#)
- NOVÁK, Ivan. *Intenzivní péče v pediatrii*. 1. vyd. Praha: Karolinum, 2008. 579 s. ISBN 9788024614748. [info](#)
- *Praktická pediatrie : obvyklé diagnostické a léčebné postupy na Pediatrické klinice v Motole*. Edited by Jan Lebl - Jan Janda - Petr Pohunek. 1. vyd. Praha: Galén, 2008. 189 s. ISBN 9788072625789. [info](#)
- KOPEČNÁ, Lenka and Milena BURIANOVÁ. *Pediatrie - kontrolní otázky (Pediatrics - questions)*. 1. vyd. Brno: LF MU, 2000. 55 pp. ISBN 80-210-2432-1. [info](#)
- *Nelson textbook of pediatrics : text with continually update online references*. Edited by Robert Kliegman. 18th ed. Philadelphia: Saunders, 2007. lii, 3147. ISBN 9781416040040. [info](#)
- CHALOUPECKÝ, Václav. *Dětská kardiologie*. 1. vyd. Praha: Galén, 2007. 444 s. ISBN 8072624067. [info](#)

- MUNTAU, Ania Carolina. *Pediatric (Pediatrics)*. 1st. Praha: Grada Publishing a.s., 2009. 608 pp. ISBN 978-80-247-2525-3. [info](#)

Teaching methods

Individual study in department under the teacher supervision. /history,examination of the patient on admission to hospital/. Daily ward round.

Assessment methods

To get the credit, presence in 90% of seminars with active participation in discussions is required. Case report - Written and oral presentation of case report

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: in blocks.

Information on the extent and intensity of the course: 2 týdny.

Teacher's information

*Informace a rozpis studentů do skupin na nástěnce u sekretariátu Pediatrické kliniky,pavilon B, 4. patro. První den praxe organizační schůzka v 7.45 hod Pavilon G, 3. patro studovna Pek 1. * Praktická výuka probíhá týden na odděleních Pediatrické kliniky FN Brno,Černopolní 9, týden v ambulancích nemocnice, z toho jeden den na lékařské službě první pomoci (nutná vizitka studenta) * Pomůcky: plášť, přezuvky, fonendoskop (bez pomůcek nelze stáž absolvovat) * Nepřítomnost pro zkoušku z jiného předmětu je nutno nahradit. * Šatny: pavilon A (naproti vřátnice, kde jsou k vyzvednutí klíče. Skřínky v šatně je nutno každý den uvolnit. * Další informace a rozpis studentů do skupin na nástěnce u sekretariátu Pediatrické kliniky, pavilon C, 4.podlaží***** Actual information and schedule could be found on the pinboard next to the headquarters of the Departement of Pediatrics, Building C, 4th floor Training is carried out for one week on the wards of Department of Pediatrics, University Hospital Brno, Černopolní 9, at the wards 46, 67, 48, 69 and 56, for one week at the outpatient part of hospital, one day of „outpatient week“ can be during afternoon or evening in time of Medical first aid service. Training starts at 8:00, coming late will not be accepted. Tools, necessary to attend training: official university ID card, coat, slippers, stethoscope (without tools can not student attend practical education an internship) Closets: Building A (at the opposite of the gatehouse – where is possible to pick up keys). Lockers must stay free every day. In accordance to The MU Study and Examination Regulations all practical education and lectures are obligatory. To get credit one day absence is allowed. Exam or test is NO excuse. To get credit writting of case report of selected patient is required.

The course is also listed under the following terms [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/0/0. 0 credit(s) (plus extra credits for completion). Type of Completion: SRZK (closing examination).

Teacher(s)

[MUDr. Milan Bajer, Ph.D.](#) (lecturer)
[MUDr. Jan Blatný, Ph.D.](#) (lecturer)
[MUDr. Milena Burianová, Ph.D.](#) (lecturer)
[prof. MUDr. Zdeněk Doležel, CSc.](#) (lecturer)
[MUDr. Petr Dominik](#) (lecturer)
[MUDr. Lenka Dostalová Kopečná, Ph.D.](#) (lecturer)
[MUDr. Karel Goldemund, CSc.](#) (lecturer)
Doc MUDr Michal Hladík, PhD (lecturer)
[prof. MUDr. Hana Hrstková, CSc.](#) (lecturer)
[doc. MUDr. Lenka Krbková, CSc.](#) (lecturer)
[doc. MUDr. Lubomír Kukla, CSc.](#) (lecturer)
[MUDr. Dana Novotná, Ph.D.](#) (lecturer)
[doc. MUDr. Dagmar Procházková, Ph.D.](#) (lecturer)
[doc. MUDr. Ondřej Rybníček, Ph.D.](#) (lecturer)
[prof. MUDr. Jaroslav Štěrba, Ph.D.](#) (lecturer)
[doc. MUDr. Petr Štourač, Ph.D.](#) (lecturer)
[Libuše Darmovzalová](#) (assistant)

Supervisor

[prof. MUDr. Zdeněk Doležel, CSc.](#)
[First Department Pediatric Internal Medicine - Institutions shared with the Faculty Hospital Brno \(paediatric medicine\) - Faculty of Medicine](#)
Contact Person: [Libuše Darmovzalová](#)
Supplier department: [First Department Pediatric Internal Medicine - Institutions shared with the Faculty Hospital Brno \(paediatric medicine\) - Faculty of Medicine](#)

Prerequisites (in Czech)

([VLFA0822p Pharmacology II - L](#) || [VLFA0722p Pharmacology - L](#)) &&
[VLNE9X1p Neurology - lecture](#) && [VLPY9X1p Psychiatry - lect.](#) &&
[VLVZ9X1c Health Care and Policy](#) && [VSDV9X22p Dermatovenerology II-I](#) &&
[VLAM9X1p Intensive care med. - lect.](#) && ([VLVL7X61c Internal medicine part 1](#) ||
[VLVL9X61c Internal medicine part 1](#)) && [VLVL9X62c Internal medicine part 2](#) &&
[VLVL9X63c Internal medicine part 3](#) && [VLVL9X64c Internal medicine part 4](#) && ([VLVL9X65c Internal medicine part 5](#) || [VLVL7X65c Internal medicine part 5](#)) &&
[VLVL9X66c Internal medicine part 6](#) && [VLDP1033c Pediatrics III-practice](#) &&
[VLIN9X22 Infectious diseases II](#) && [VLSD7X1p Forensic med.-lectures](#) &&
[VSEI7X1 EPI](#) && [VLLO7X1 Ophthalmology - lec.](#) &&
[VSOT7X1p Otorhinolaryngology-lect.](#) && [VSLP7X1 Medical Psychology](#) &&
[VLPL9X1 Prevent. Med.](#) && [VLON091 Clinical oncology](#) &&
[VLST7X1p stomatology -I](#) && [VSLE7X1p Medical Ethics 2 - lecture](#) &&
[VLPG1022c Gynecol. and obst. II- pract.](#) && VYCET (3 , [VLPS07X Posudkové lékařství](#) || [VLPS071 Medical Assessment Service](#) , [VSAT081 Fundament.of AntimicrobTherap](#) , [VLKA091 Clinical anatomy](#) , [VSNO071 Ophthalmology news](#) ,

[VSPM071 Palliative Medicine](#) , [VLKB091 Clinical Biochemistry](#) , [VLKF091 Clinical Pharmacology](#) , [BMBS051 Biostatistics - basic course](#) , [VLPM071 Legal Aspects in Medicine](#) , [VLEP041 The Economics of Health Care](#) , [VLIA081 Clin.immunol. alergol.](#) , [VLKM081 Commun.in medicine](#) , [VLRL041 Medicinal plants](#) , [VLTL081 Sports Medicine](#) , [VSDL071 Diagnostics and management in orthopaedic surgery](#) , [VSAL081 Anaesth. and Tr. of Pain I](#) , [VSFP071 Neonatal Physiology and Pathol](#)) && [VLCH9X33c Surgery III - practicals](#) && ([VLAJ0222 English 1 II -p](#) || [VSAJ0222 English 1 II -p](#) || [VSNJ0222 German 1 II -p](#)) && [VSSP03X Individual project](#)

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of state examination is to confirm basic knowledge in epidemiology, pathogenesis, diagnosis, treatment and prevention of the most common pediatric diseases.

Learning outcomes

Student knows standard diagnostic procedures and tests for individual clinical conditions of the child and is able to apply in practice. At the end of the course, students should be able to diagnose and treat various pediatric conditions

Syllabus

- During the 2-week practice, students work independently from departments and outpatients. Seminars are part of the course. After completing the internship, the practice is completed by state rigorous examination.

Literature

- LEBL, Jan, Kamil PROVAZNÍK and Ludmila HEJCMANOVÁ. *Preklinická pediatrie*. 2., přeprac. vyd. Praha: Galén, 2007. 248 s. ISBN 9788072624386. [info](#)
- LEBL, Jan. *Klinická pediatrie*. 1. vyd. Praha: Galén, 2012. xix, 698. ISBN 9788072627721. [info](#)
- HRODEK, Otto and Jan VAVŘINEC. *Pediatrie*. 1. vyd. Praha: Galén, 2002. xxxii, 767. ISBN 8072621785. [info](#)
- MICHÁLEK, Jaroslav. *Pediatrická propedeutika : vybrané kapitoly*. 1. vyd. Brno: Masarykova univerzita, 2008. 159 s. ISBN 9788021046955. [info](#)
- ŠAŠINKA, Miroslav and Tibor ŠAGÁT. *Pediatrica*. 1. vyd. Košice: SATUS, 1998. 620 s. ISBN 8096796305. [info](#)
- CHALOUPECKÝ, Václav. *Dětská kardiologie*. 1. vyd. Praha: Galén, 2007. 444 s. ISBN 8072624067. [info](#)

- *Nelson textbook of pediatrics : text with continually update online references.* Edited by Robert Kliegman. 18th ed. Philadelphia: Saunders, 2007. lii, 3147. ISBN 9781416040040. [info](#)

Teaching methods

preparing for state examination

Assessment methods

State Exam of pediatrics has practical and theoretical part. Practical part – case report.

Theoretical part consists of 3 questions.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course can also be completed outside the examination period.

The course is taught annually.

Teacher's information

Doporučená literatura 1. . Lebl J, Provazník K, Hejčmanová L a kol.: Preklinická pediatrie. Galén 2007. 2. Lebl J, Janda J, Pohunek P, Starý J a kol.: Klinická pediatrie. Galén 2012. Rozsah textu obou učebnic je zcela odpovídající pro znalosti požadované u SZZ z pediatrie. Přitom první učebnice uvádí především vývojové aspekty dětského věku a zásady preventivních opatření, logicky na tuto učebnici pak navazuje text učebnice druhé, která uvádí podrobný přehled patologie jednotlivých tělních systémů u dětí. ----- Pro studium lze s určitým omezením využít také dvou níže uvedených titulů, jejichž textový rozsah je však omezený a mnohá problematika je uvedena pouze ve strukturované podobě: 1. Kovács L a kol.: *Pediatric Physical Examination: An Illustrated Handbook*, 2nd edition; Elsevier 2. Karen Marcadante et al.: *Nelson Essentials of Pediatrics*, 6th edition; SAUNDERS 3. G. Clayden, T. Lissauer: *Illustrated Textbook of Paediatrics*, 4th edition; Elsevier 4. William W. Hay Jr et al.: *Current Diagnosis and Treatment Pediatrics*, 23rd edition; LANGE Textbook No 1 is the most practical, up-to-date, well referenced guide to the diagnosis and treatment of the medical problems of children – from birth to adolescence. Other textbooks are classic textbooks for students and for pediatric residencies. These textbooks provide comprehensive, yet concise and accessible guidance on normal childhood growth and development, as well as the diagnosis, management, and prevention of common pediatric diseases and disorders.

The course is also listed under the following terms [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

VLPD7X31c Pediatrics-practice ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Milan Bajer, Ph.D.](#) (seminar tutor)
[MUDr. Milena Burianová, Ph.D.](#) (seminar tutor)
[MUDr. Veronika Fiamoli, Ph.D.](#) (seminar tutor)
[MUDr. Petr Jabandžiev, Ph.D.](#) (seminar tutor)
[MUDr. Jan Papež](#) (seminar tutor)
[MUDr. Magdalena Rohanová](#) (seminar tutor)
[MUDr. Jana Šťastná, Ph.D.](#) (seminar tutor)
[Libuše Darmovzalová](#) (assistant)

Supervisor

[MUDr. Petr Jabandžiev, Ph.D.](#)
[Department of Pediatrics - Institutions shared with the Faculty Hospital Brno \(paediatric medicine\) - Faculty of Medicine](#)
Contact Person: [MUDr. Milena Burianová, Ph.D.](#)
Supplier department: [Department of Pediatrics - Institutions shared with the Faculty Hospital Brno \(paediatric medicine\) - Faculty of Medicine](#)

Timetable of Seminar Groups

VLPD7X31c/01: Mon 20. 11. to Fri 24. 11. each working day 7:30–12:20 [N03086](#)
VLPD7X31c/02: Mon 6. 11. to Fri 10. 11. each working day 7:30–12:20 [N03086](#)
VLPD7X31c/04: Mon 9. 10. to Fri 13. 10. each working day 7:30–12:20 [N03086](#)
VLPD7X31c/05: Mon 25. 9. to Fri 29. 9. each working day 7:30–12:20 [N03086](#)
VLPD7X31c/06: Mon 8. 1. to Fri 12. 1. each working day 7:30–12:20 [N03086](#)
VLPD7X31c/07: Mon 18. 12. to Fri 22. 12. each working day 7:30–12:20 [N03086](#)
VLPD7X31c/08: Mon 4. 12. to Fri 8. 12. each working day 7:30–12:20 [N03086](#)
VLPD7X31c/34: No timetable has been entered into IS.

Prerequisites (in Czech)

[VSPF0622p Pathophysiol. II - lect.](#) && [VSPA0622p Pathology II - lecture](#) &&
[VLCP0622c Introduc. to surgery II -pr.](#) && [VSIP0622c Introduction to internal II-pr](#) &&
[VLLM0522p Medical Microbiology II - lect](#) && [VLIM051p Immunology - lecture](#)
(Do I meet enrolment requirements?)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the practical exercises is to acquaint students with the issues of therapeutic and preventive care in pediatrics. By the end of the course the student will understand the particularities of care of children in illness. The student understands specifics of communication with children. By the end of the course student should be able to take anamnestic data from parents, to perform physical examination /sight, palpation, auscultation,percussion/, to propose scheme of baby formula. By the end of the course

student should be able to describe normal growth and development during infancy, childhood and adolescence.

Learning outcomes

After completing of the practicals the student will be able to take medical history from parents, to perform a general objective physical examination of patients, to propose infant nutrition. The student knows laboratory and diagnostic tests in individual diseases. The student understands specifics of communication with children.

Syllabus

- Growth and development during childhood. Clinical examination of children. Basic examination of infants. Psychomotoric development during infancy. Examination of new-born, resuscitation of new-born. Examination of the respiratory tract, GIT, urinary tract. Nutrition in childhood. Breast feeding, formula feeding.

Literature

recommended literature

- MICHÁLEK, Jaroslav. *Pediatrická propedeutika : vybrané kapitoly*. 1. vyd. Brno: Masarykova univerzita, 2008. 159 s. ISBN 9788021046955. [info](#)
- *Preklinická pediatrie*. Edited by Jan Lebl - Kamil Provazník - Ludmila Hejzmanová. 1. vyd. Praha: Galén, 2003. xiv, 248. ISBN 8072622072. [info](#)
- LEBL, Jan. *Klinická pediatrie*. 1. vyd. Praha: Galén, 2012. xix, 698. ISBN 9788072627721. [info](#)

not specified

- MUNTAU, Ania Carolina. *Pediatric (Pediatrics)*. 1st. Praha: Grada Publishing a.s., 2009. 608 pp. ISBN 978-80-247-2525-3. [info](#)

Teaching methods

practical training, seminar

Assessment methods

90% attendance at practical training. A short presentation/Power point/ on a given topic. Credit.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught each semester.

Listed among pre-requisites of other courses

- [VLDO091 Clinical Training in Paediatric Oncology](#)
[VLPD7X31c](#) && [VLFA0722p](#) (Do I meet enrolment requirements?)
- [VLPD0932c Pediatrics II - practice](#)
[VLFA0722p](#) && [VLPD7X31c](#) && [VSOT7X1c](#) && [VLDM7X1c](#) && [VSIP0622p](#)
&& [VLCF0622p](#) && [VLKG7X1c](#) (Do I meet enrolment requirements?)

- [VLPD0932p Pediatrics II - lectures](#) ([VLFA0822p](#) || [VLFA0722p](#)) && [VLPD7X31c](#) && [VSOT7X1c](#) && [VLDM7X1c](#) && [VSIP0622p](#) && [VLCP0622p](#) && [VLKG7X1c](#) (Do I meet enrolment requirements?)
- [VSFP091 Physiology and pathology of newborn](#) [VLPD7X31c](#) (Do I meet enrolment requirements?)

Teacher's information

Rozdělení studentů do skupin najdete na nástěnce u sekretariátu Pediatrické kliniky, Pavilon C, 4. podlaží * Praktická výuka probíhá na odděleních Pediatrické kliniky FN Brno, Černopolní 9, Semináře od 8 hodin : Studovna Pek1, pavilon G, 3.podlaží, nebo Studovna Pek2, pavilon C, 4. podlaží. Na odděleních 46,67,48,69,56. začátek v 10:00 hodin, pozdní příchod nebude akceptován * * Pomůcky: plášť, přezuvky, fonendoskop (bez pomůcek nelze stáž absolvovat) * Nepřítomnost na stážích pro zkoušku z jiného předmětu je nutno nahradit * Šatny: pavilon A (naproti vřátnice, kde jsou k vyzvednutí klíče. Skřínky v šatně je nutno každý den uvolnit. * Další informace na nástěnce u sekretariátu Pediatrické kliniky, pavilon C, 4.podlaží***** Practical education is carried out on the wards of Department of Pediatrics, University Hospital Brno, Černopolní 9, at the wards 46, 67, 48, 69 and 56. Practical education starts at 8:00, coming late will not be accepted Lectures: Study Room PeK1 (Building G, 3rd floor) Study Room PeK2 (Building C, 4th floor) Tools, necessary to attend Practical education: official university ID card, coat, slippers, stethoscope (without tools can not student attend practical education an internship) Closets: Building A (at the opposite of the gatehouse – where is possible to pick up keys). Lockers must stay free every day. Actual information and schedule could be found on the pinboard next to the headquarters of the Departement of Pediatrics, Building C, 4th floor In accordance to The MU Study and Examination Regulations all practical education and lectures are obligatory. Substitution is allowed in the Substitution week at end of semester. To get credit one half of day absence is allowed. Exam or test is NO excuse. To get credit passing of credit test is required. ***** It is the duty of every student at 7.50h to find out the allocation of students into groups and particular wards. Schedule of wards and lectures, including the allocation of students into groups is posted on the pinboard in front of the secretary of Department of Pediatrics (Building C 4th floor). Students are not allowed to change specified group. Student who will come more than 15 minutes later is not allowed to participate in lesson.

The course is also listed under the following terms [Autumn 1999](#), [Spring 2000](#), [Autumn 2000](#), [Spring 2001](#), [Autumn 2001](#), [Spring 2002](#), [Autumn 2002](#), [Spring 2003](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

VLPD7X31p Pediatrics ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

1/0/0. 0 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Milan Bajer, Ph.D.](#) (seminar tutor)
[MUDr. Milena Burianová, Ph.D.](#) (seminar tutor)
[MUDr. Lenka Dostalová Kopečná, Ph.D.](#) (seminar tutor)
[MUDr. Veronika Fiamoli, Ph.D.](#) (seminar tutor)
[MUDr. Petr Jabandžiev, Ph.D.](#) (seminar tutor)
[MUDr. Jan Papež](#) (seminar tutor)
[MUDr. Magdalena Rohanová](#) (seminar tutor)
[MUDr. Jana Šťastná, Ph.D.](#) (seminar tutor)
[Libuše Darmovzalová](#) (assistant)

Supervisor

[MUDr. Petr Jabandžiev, Ph.D.](#)
[Department of Pediatrics - Institutions shared with the Faculty Hospital Brno \(paediatric medicine\) - Faculty of Medicine](#)
Contact Person: [MUDr. Milena Burianová, Ph.D.](#)
Supplier department: [Department of Pediatrics - Institutions shared with the Faculty Hospital Brno \(paediatric medicine\) - Faculty of Medicine](#)

Prerequisites (in Czech)

VLPF0622p && VLPA0622p && VLLP0633c && [VLLM0522p Medical Microbiology II - lect](#) && [VLIM051p Immunology - lecture](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The student will be acquainted with principal concepts and tasks of paediatrics.

Learning outcomes

The student will be acquainted with principal concepts and tasks of paediatrics.

Syllabus

- History of pediatrics. Child care management:out-patient,in-patient care of sick children.Social issues in pediatrics. Growth and development. Pediatric nutrition. Neonatology. Metabolic disorders.Prenatal care,genetic abnormalities.

Literature

recommended literature

- LEBL, Jan, Jan JANDA, Petr POHUNEK and Jan STARÝ. *Klinická pediatrie*. Druhé vydání. Praha: Karolinum, 2014. xix, 698. ISBN 9788024626970. [info](#)
- LEBL, Jan, Kamil PROVAZNÍK and Ludmila HEJCMANOVÁ. *Preklinická pediatrie*. 2., přeprac. vyd. Praha: Galén, 2007. 248 s. ISBN 9788072624386. [info](#)

not specified

- ŠAŠINKA, Miroslav, Tibor ŠAGÁT and László KOVÁCS. *Pediatrics*. 2., dopl. a aktualiz. vyd. Bratislava: HERBA, 2007. S: 18. ISBN 9788089171491. [info](#)

Teaching methods

lectures

Assessment methods

credit

Language of instruction

Czech

Further Comments

The course is taught each semester.

The course is taught: in blocks.

The course is also listed under the following terms [Accreditation autumn](#), [Accreditation spring](#).

VLPF0521c Pathological physiology I - practice ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/3/0. 4 credit(s). Type of Completion: z (credit).

Teacher(s)

[doc. MUDr. Julie Bienertová Vašků, Ph.D.](#) (seminar tutor)

[MUDr. Kamil Ďuriš, Ph.D.](#) (seminar tutor)

[MUDr. Michal Jurajda, Ph.D.](#) (seminar tutor)

[prof. MUDr. Kateřina Kaňková, Ph.D.](#) (seminar tutor)

[Mgr. Andrea Knight, Ph.D.](#) (seminar tutor)

[MUDr. Jan Máchal, Ph.D.](#) (seminar tutor)

[RNDr. Michal Masařík, Ph.D.](#) (seminar tutor)

[Mgr. Lukáš Pácal, Ph.D.](#) (seminar tutor)

[doc. RNDr. Monika Pávková Goldbergová, Ph.D.](#) (seminar tutor)

[Dipl. Ing. Martin Piskáček, Dr. rer. nat.](#) (seminar tutor)

[prof. MUDr. Anna Vašků, CSc.](#) (seminar tutor)

[MUDr. Jaromír Gumulec, Ph.D.](#) (assistant)

[Věra Ježková](#) (assistant)

Supervisor

[prof. MUDr. Anna Vašků, CSc.](#)

[Department of Pathological Physiology - Theoretical Departments - Faculty of Medicine](#)

Supplier department: [Department of Pathological Physiology - Theoretical Departments - Faculty of Medicine](#)

Timetable of Seminar Groups

VLPF0521c/01: Thu 10:30–13:00 [A18/106](#), *L. Pácal*
VLPF0521c/02: Thu 10:30–13:00 [A18/106](#), *L. Pácal*
VLPF0521c/03: Mon 7:30–10:00 [A18/106](#), *M. Jurajda*
VLPF0521c/04: Mon 7:30–10:00 [A18/106](#), *M. Jurajda*
VLPF0521c/05: Fri 7:30–10:00 [A18/106](#), *J. Gumulec*
VLPF0521c/06: Fri 7:30–10:00 [A18/106](#), *J. Gumulec*
VLPF0521c/07: Fri 10:20–12:50 [A18/106](#), *M. Masařík*
VLPF0521c/08: Fri 10:20–12:50 [A18/106](#), *M. Masařík*
VLPF0521c/09: Tue 7:30–10:00 [A18/106](#), *J. Máchal*
VLPF0521c/10: Tue 7:30–10:00 [A18/106](#), *J. Máchal*
VLPF0521c/11: Tue 10:20–12:50 [A18/106](#), *J. Máchal*
VLPF0521c/12: Tue 10:20–12:50 [A18/106](#), *J. Máchal*
VLPF0521c/13: Thu 7:30–10:00 [A18/106](#), *M. Pávková Goldbergová*
VLPF0521c/14: Thu 7:30–10:00 [A18/106](#), *M. Pávková Goldbergová*
VLPF0521c/15: Wed 10:20–12:50 [A18/106](#), *K. Ďuriš*
VLPF0521c/16: Wed 10:20–12:50 [A18/106](#), *K. Ďuriš*
VLPF0521c/17: Wed 7:30–10:00 [A18/106](#), *K. Ďuriš*
VLPF0521c/18: Wed 7:30–10:00 [A18/106](#), *K. Ďuriš*

Prerequisites

([VLFY0422p Physiology II - lecture](#) || [VSFY0422p Physiology II - lecture](#)) && ([VSBC041p Biochemistry II -1](#) || [VLBC0422p Biochemistry I -lect.](#)) && ([VLAN0222p Anatomy II 1](#) || [VSAN0333p Anatomy III - lec.](#)) && ([VLHE0322p Histology and embryology II -1](#) || [VSHE0322p Histology and embryology II -1](#)) && [VLLM0421c Med.Microbiol.](#)

Physiology, biochemistry

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

The student will be trained for assuming these knowledge and skills:

Principles and ethics of experimental use of laboratory animals, basic surgical skills, general principles of work with lab. animals - explorative laparotomy

Pathophysiology of blood and bone marrow disorders, haematological findings in selected blood disorders

Statistical analysis of experiments (introduction)

Exp. induced acute radiation syndrome in lab. animal – haematological consequences

Essential hypertension, resting and ambulatory blood pressure (and heart rate)

measurements, postural changes, effect of isometric and aerobic exercise

Pathophysiology of ventilation disorders and pulmonary gas exchange – spirometry and

hyperoxic test

Secondary hypertension, exp. induced renal ischemia – quantification of renal renin expression

Conductive disorders, demonstration of selected types of arrhythmias

ECG monitoring of exp. induced arrhythmias in lab. animal

Exp. induced acute renal insufficiency in lab. animal – measurement of GFR based on kinetics of renal inulin excretion

Exp. induced renal failure - peritoneal dialysis in lab. animal

Learning outcomes (in Czech)

Student aplikuje základní znalosti biostatistiky k vysvětlení konstrukce referenčních intervalů;

Student popíše vliv ionizujícího záření na organismus na úrovni molekulární, buněčné, tkáňové a systémové;

Student zdůvodní časovou dynamiku změn krevního obrazu při akutní nemoci z ozáření;

Student rozlišuje mezi deterministickými a stochastickými účinky ionizujícího záření a jejich praktickými implikacemi;

Student vysvětlí princip ultrazvukového a dopplerometrického vyšetření cév, základní patologie periferních cév (insuficience venózních chlopní, ischemie, zkraty, steal syndromy);

Student interpretuje kontinuální záznam EKG u pokusného zvířete při jednotlivých patologických stavech, popíše nálezy na záznamu EKG. Rozezná základní typy arytmii na EKG;

Student rozlišuje mezi EKG záznamy nejčastějších arytmii ;

Student vysvětlí stanovení glomerulární filtrační rychlosti v závislosti na křivce koncentrace inulinu během vylučování ledvinami, diskutuje využití clearance dalších látek (kreatinin, PAH);

Student demonstruje vznik renovaskulární hypertenze v průběhu modifikovaného Goldblattova pokusu, rozdíl mezi stenózou renální tepny unilaterální a bilaterální (resp. solitární ledviny), úlohu RAAS a expanze objemu, hypertrofie srdeční stěny v důsledku hypertenze;

Syllabus

- 1. Introduction, health & safety in the lab, principles and ethics of experimental use of laboratory animals, basic surgical skills, general principles of work with lab. animals & explorative laparotomy 2. Statistical analysis of experiments (introduction) 3. Principles of ECG analysis, demonstration of selected pathological ECG patterns 4. Conductive disorders (seminar), ECG monitoring of exp. induced arrhythmias in lab. animal 5. Principles and demonstration of peripheral blood flow examination using ultrasonography 6. Cell cycle, oncogenes and suppressor genes, cancer development. (seminar) [ing. Martin Piskáček, PhD., Mgr. Sabina Ševčíková, PhD.] 7. Exp. induced acute radiation syndrome in lab. animal – haematological consequences 8. Secondary hypertension (seminar), exp. induced renal ischemia (part 1) 9. Pathophysiology of ventilation disorders and pulmonary gas exchange – spirometry. 10. Essential hypertension (seminar), resting and ambulatory blood pressure (and heart rate) measurements, postural changes, effect of isometric and aerobic exercise 11. Exp. induced renal ischemia – detection of renal renin expression (part 2) 12. Exp. induced acute renal

insufficiency in lab. animal – measurement of GFR based on kinetics of renal inulin excretion
13. Exp. induced renal failure - peritoneal dialysis in lab. animal
14. Acidbase balance (seminar), tests, credits
Teachers: Mon – As. MUDr. Michal Jurajda PhD.

- Tue – doc. RNDr. Monika Goldbergová-Pávková, PhD.; As. MUDr. Kamil Ďuriš, PhD.
- Wed – As. MUDr. Jaromír Gumulec, PhD., as. RNDr. Michal Masařík, PhD.
- Thu – As. MUDr. Michal Jurajda PhD.; As. MUDr. Jan Máchal, PhD.

Literature

- [KAŇKOVÁ, Kateřina](#), [Julie BIENERTO VÁ VAŠKŮ](#), [Lydie IZAKOVIČOVÁ HOLLÁ](#), [Michal JURA JDA](#), [Michal MASAŘÍK](#), [Lukáš PÁCAL](#) and [Anna VAŠKŮ](#). *Pathophysiology practicals for General Medicine and Dental Medicine courses*. 1. vyd. Brno: Masarykova univerzita, 2008. 46 pp. Portal of MU's Faculty of Medicine [online]. ISSN 1801-6103. [URL info](#)
- [BIENERTO VÁ VAŠKŮ, Julie](#), [Dana BUČKOVÁ](#), [Lydie IZAKOVIČOVÁ HOLLÁ](#), [Michal JURA JDA](#), [Kateřina KAŇKOVÁ](#), [Šárka KUČTÍČKOVÁ](#), [Lukáš PÁCAL](#), [Anna VAŠKŮ](#) and [Vladimír ZNOJIL](#). *Praktikum z patologické fyziologie. Elportál*, Brno: Masarykova univerzita, 2007. ISSN 1802-128X. [URL info](#)
- [VAŠKŮ, Anna a kol.](#) *Praktikum z patologické fyziologie*. 1. vyd. Brno: Masarykova univerzita, 2000. 59 pp. ISBN 80-210-2318-X. [info](#)

Teaching methods

practical exercises in labs, discussion to the given topics, video with comments

Assessment methods

Practicals are compulsory. The only permitted reason for not attending is a student's sick leave. Student can - with tutor's approval - substitute the particular practical in a given week with another group in case he/she has a justifiable reason for it. Student's participation in the practicals throughout the term is certified by a credit. Students can be given written tests or individual home work by tutor's throughout the term. Students have to be wearing lab coats during the practicals.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

General note: Studenti opakující 3. ročník nemusejí znovu absolvovat praktika, budou jim uznány zápočty, ke zkoušce mohou přijít v nejbližším zkuškovém období.

Listed among pre-requisites of other courses

- [VLPF0622c Pathological Physiology II - practical training](#)
[VLPF0521c \(Do I meet enrolment requirements?\)](#)
- [VLPF0622p Pathological Physiology II - lectures](#)
[VLPF0521c \(Do I meet enrolment requirements?\)](#)

The course is also listed under the following terms [Accreditation autumn](#).

VLPF0521p Pathological Physiology I - lecture ✱

Faculty of Medicine

Autumn 2019

Extent and Intensity

2/0/0. 0 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Anna Vašků, CSc.](#) (lecturer)

[doc. MUDr. Julie Bienertová Vašků, Ph.D.](#) (lecturer)

[prof. MUDr. Kateřina Kaňková, Ph.D.](#) (lecturer)

[doc. RNDr. Monika Pávková Goldbergová, Ph.D.](#) (lecturer)

[Věra Ježková](#) (assistant)

Supervisor

[prof. MUDr. Anna Vašků, CSc.](#)

[Department of Pathological Physiology - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [prof. MUDr. Anna Vašků, CSc.](#)

Supplier department: [Department of Pathological Physiology - Theoretical Departments - Faculty of Medicine](#)

Timetable

Wed 13:30–15:10 [A22/116 aula](#)

Prerequisites (in Czech)

([VLFY0422p Physiology II - lecture](#) || [VSFY0422p Physiology II - lecture](#)) && (

[VSBC041p Biochemistry II -I](#) || [VLBC0422p Biochemistry I -lect.](#)) && (

[VLAN0222p Anatomy II I](#) || [VSAN0333p Anatomy III - lec.](#)) && (

[VLHE0322p Histology and embryology II -I](#) || [VSHE0322p Histology and embryology II -I](#)) && [VLLM0421c Med.Microbiol.](#)

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the subject is to teach students to be able to answer a sufficient number of pathophysiologically asked questions "why".

Learning outcomes

Are taken from OPTIMED and expressed in questions to exam. General pathophysiology

Student characterizes state of healthy and disease

Student calls main sources of interindividual variability

Student discusses influences which determined population frequencies of alleles

Student distinguishes mutation types according to the mechanism

Student describes base principles of methods detecting human genome and its variability

Student summarises base types of DNA repair
Student describes base characteristics of monogenic diseases
Student discusses base principles and indications of gene therapy
Student knows an importance of the term of pharmacogenetics
Student demonstrates understanding of an influence of external factors on disease development
Student characterizes base features of complex diseases
Student summarises importance of epigenetics
Student describes pathophysiology of stress reaction
Student defines homeostasis term
Student is able to describe base principles of multicellular organism functioning
Student identifies disorder of growth and development from ontogenetic point of view
Student describes results of hypoxia including HIF 1 program
Student explains a difference between local and systemic inflammation
Student explains pathogenesis of oedema
Student discusses etiopathogenesis of the most important ion homeostasis disturbances
Student distinguishes base acid base balance disturbances and possibilities of their compensation
Student applies knowledge of volume and tonicity regulation
Student discusses a role of platelets and physiological endothelium during antiaggregation state and understands base principles of antiaggregation therapy
Student knows principles and performance of base coagulation tests
Student explains wound healing process with examples of pathological healing
Student knows pathophysiology of urgent states in oncology diseases
Student explains an importance of micronutrients abnormalities
Student knows results of abnormal vitamin levels
Student explains mechanism of genomic and non- genomic effects of soluble in lipids vitamins
Student discusses pathophysiology of protein metabolism
Student understands the base principles of regulation of glucose
Student interprets knowledge of immune recognition of own and foreign structure on examples of specifically organ and systemic disorders
Student interprets immunological knowledge of hypersensitive mechanisms in pathophysiology of atopic and allergic changes
Student describes onset, signs and results of heart and vessels remodelling
Student applies chronobiology knowledge for explication of different pathophysiological changes

Syllabus

- Pathophysiology: an integrating medical speciality. Aetiology and pathogenesis of diseases. Ethics of experiments in medicine.
- Atherosclerosis. Remodelling of blood vessels. Diseases of peripheral blood vessels.
- Pressure and volume overload of heart. Systolic and diastolic heart dysfunction. Heart remodelling. Heart failure.
- Metabolism of myocardium, ischemic heart disease, myocardium infarction.
- Pathophysiology of liver disorders.

- Pathophysiology of gas exchange and ventilation control in the lungs.
- Lung diseases.
- Inflammation. Acute phase reaction. Systemic reaction of organism on damage. Regeneration and reparation. Wound healing. Pathophysiology of blood clotting.
- Acid base balance disorders.
- Pathophysiological aspects of renal functions. Kidney diseases. Acute and chronic renal failure.
- Pathophysiology of water and electrolytes. Tonicity and volume disturbances.
- Bone and muscles disorders.

Literature

required literature

- NEČAS, Emanuel a spol. *Obecná patologická fyziologie*. 1. vyd. Praha: Karolinum, 2000. 377 pp. ISBN 80-246-0051-X. [info](#)
- NEČAS, Emanuel. *Patologická fyziologie orgánových systémů*. 1. vyd. Praha: Karolinum, 2003. 379 s. ISBN 9788024606750. [info](#)
- NEČAS, Emanuel. *Patologická fyziologie orgánových systémů*. 1. vyd. Praha: Karolinum, 2003. s. 381-760. ISBN 9788024606743. [info](#)
- Ivan Damjanov: Pathophysiology, ISBN 13: 978-1-4160-0229-1, Saunders Elsevier, 2009.

recommended literature

- PÁVKOVÁ GOLDBERGOVÁ, Monika. *Patofyziologie v obrazech*. Vydání první. Brno: Masarykova univerzita-Lékařská fakulta, 2016. 186 stran. ISBN 9788021083233. [info](#)

Teaching methods

lecture

Assessment methods

The attendance of lectures and only one absence on practicals per semester are necessary for successful accomplishment of the subject. Continuous control of knowledge in practicals is fully in powers of teachers (assays, tests...). Elaborated proceedings of practicals will be put to teachers for credit.

Language of instruction

Czech

Further Comments

[Study Materials](#)

The course is taught annually.

Teacher's information

<http://www.med.muni.cz/patfyz>

The course is also listed under the following terms [Accreditation autumn](#).

VLPF0622c Pathological Physiology II - practical training ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

0/3/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Vendula Bartáková, Ph.D.](#) (seminar tutor)
[doc. MUDr. Julie Bienertová Vašků, Ph.D.](#) (seminar tutor)
[MUDr. Kamil Ďuriš, Ph.D.](#) (seminar tutor)
[MUDr. Jaromír Gumulec, Ph.D.](#) (seminar tutor)
[MUDr. Michal Jurajda, Ph.D.](#) (seminar tutor)
[Mgr. Andrea Knight, Ph.D.](#) (seminar tutor)
[MUDr. Jan Máchal, Ph.D.](#) (seminar tutor)
[RNDr. Michal Masařík, Ph.D.](#) (seminar tutor)
[Mgr. Lukáš Pácal, Ph.D.](#) (seminar tutor)
[doc. RNDr. Monika Pávková Goldbergová, Ph.D.](#) (seminar tutor)
[doc. RNDr. Sabina Ševčíková, Ph.D.](#) (seminar tutor)
[prof. MUDr. Anna Vašků, CSc.](#) (seminar tutor)
[Věra Ježková](#) (assistant)

Supervisor

[prof. MUDr. Anna Vašků, CSc.](#)
[Department of Pathological Physiology - Theoretical Departments - Faculty of Medicine](#)
Contact Person: [prof. MUDr. Anna Vašků, CSc.](#)
Supplier department: [Department of Pathological Physiology - Theoretical Departments - Faculty of Medicine](#)

Prerequisites

[VLPF0521c Pathol. physiology I - pract.](#)
Physiology, biochemistry
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

The objective of the practical exercises and seminars from pathological physiology is to provide students basic idea about pathological states and experimental work. Students will also acquire practical skills necessary for their subsequent(future) study and work.

Learning outcomes

Student will explain the pharmacological options affecting the secretion of gastric juice in the context of experimentally induced gastric ulcer in experimental animal model (inhibition of proton pump, H2 receptor blockade);
Student will explain the pharmacological options affecting the secretion of gastric juice in the context of experimentally induced gastric ulcer in experimental animal model (inhibition of proton pump, H2 receptor blockade);
Student demonstrates the principle of load test (oGTT) in an animal model of

experimentally induced diabetes (alloxan);

Student shall identify clinically relevant parameters describe nutritional status (calorimetry, BMI, WHR index, the weight, the skin-fold thickness, bioimpedance, DEXA) ;

Student demonstrates the examination of the quality of the skin barrier, through the examination of resistance and conductivity of the skin or a chemical (Burckhardt's) examination with regard to the composition of the skin barrier;

Student demonstrates onset of obstruction icterus induced by ligation of ductus choledochus. He understands etiopathogenesis of other types of icterus (hemolytic, hepatic) and diagnostics of them using heme metabolites in urine, blood and stool using mitochondrial/cytoplasmic membranes liver enzymes;

Student describes etiopathogenesis of venous thrombosis using data from experimental animal model;

Student will explain the importance and principles of DNA diagnostics to detect I/D polymorphism using PCR methodology ACE

Syllabus

- 1 Exp. induced peptic ulcer in lab. animal, image analysis. Obstructive jaundice preparation 2 Exp. induced jaundice in lab. animal 3 Pathophysiology of GIT (tutorial) 4 Statistical evaluation of experiments (advanced methods), practical analysis of exp. data (using stat. software) 5 Neuropathophysiology (tutorial) 6 Exp. induced vein thrombosis in lab. animal 7 Overview of molecular biology exp. methods used in pathophysiology (tutorial & demonstration of selected lab. methods) 8 Genetic susceptibility to disease – monogenic vs. complex diseases (tutorial) 9 Haematology, blood transfusion (tutorial) 10 Anaphylactic reaction, pathophysiology of circulatory shock (tutorial) 11 Skin barrier disorders (measurement of skin conductivity) 12 Pathophysiology of cancer disease, system effect of cancer growth (tutorial) Exp. induced diabetes mellitus preparation 13 Exp. induced diabetes mellitus – diagnosis by glucose tolerance test 14 Food intake disorders (tutorial) – practical demonstration of nutritional state, credits

Literature

required literature

- [KAŇKOVÁ, Kateřina, Julie BIENERTOVÁ VAŠKŮ, Lydie IZAKOVIČOVÁ HOLLÁ, Michal JURAJDA, Michal MASARÍK, Lukáš PÁCAL and Anna VAŠKŮ](#). *Pathophysiology practicals for General Medicine and Dental Medicine courses*. 1. vyd. Brno: Masarykova univerzita, 2008. 46 pp. Portal of MU's Faculty of Medicine [online]. ISSN 1801-6103. [URL info](#)

recommended literature

- [BIENERTOVÁ VAŠKŮ, Julie, Dana BUČKOVÁ, Lydie IZAKOVIČOVÁ HOLLÁ, Michal JURAJDA, Kateřina KAŇKOVÁ, Šárka KUČTÍČKOVÁ, Lukáš PÁCAL, Anna VAŠKŮ and Vladimír ZNOJIL](#). *Praktikum z patologické fyziologie. Elportál*, Brno: Masarykova univerzita, 2007. ISSN 1802-128X. [URL info](#)

Teaching methods

practical exercise in lab, seminars

Assessment methods

P> Practicals are compulsory (the only permitted reason for not attending is a student's sick leave). Students can be given written tests or individual home work by tutor's throughout the term. Student's participation in the practicals throughout the term is certified by a credit given upon the following conditions: (i) complete attendance, (ii) complete protocols from the exp. practicals, (iii) individual criteria announced by the principal tutor.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

Teacher's information

<http://www.med.muni.cz/patfyz/patfyzc.html>

Je bezpodmínečně nutné nosit v~průběhu praktické výuky laboratorní plášť a dbát na zásady bezpečnosti práce. Student může ve zdůvodněných případech nahradit výuku v~daném týdnu v~jiným pravidelným termínu, ale pouze po předchozí domluvě s~vyučujícím.

Students have to be wearing lab coats during the practicals and follow the safety rules when working experimentally. Student can - with tutor's approval - substitute the particular practical in a given week with another group in case he/she has a justifiable reason for it.

The course is also listed under the following terms [Accreditation spring](#).

VLPF0622p Pathological Physiology II - lectures ✳

Faculty of Medicine

Spring 2018

Extent and Intensity

2/0/0. 5 credit(s). Type of Completion: zk (examination).

Teacher(s)

[prof. MUDr. Anna Vašků, CSc.](#) (lecturer)

[prof. MUDr. Kateřina Kaňková, Ph.D.](#) (lecturer)

[doc. MUDr. Julie Bienertová Vašků, Ph.D.](#) (lecturer)

[doc. RNDr. Monika Pávková Goldbergová, Ph.D.](#) (lecturer)

[Věra Ježková](#) (assistant)

Supervisor

[prof. MUDr. Anna Vašků, CSc.](#)

[Department of Pathological Physiology - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [prof. MUDr. Anna Vašků, CSc.](#)

Supplier department: [Department of Pathological Physiology - Theoretical Departments - Faculty of Medicine](#)

Prerequisites (in Czech)

[VLPF0521c Pathol. physiology I - pract.](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the subject is to train general medicine students in dynamic thinking about etiology and pathogenesis of diseases focused on special pathophysiology as well as molecular pathophysiology themes:

Pathophysiology of cardiovascular system.

Pathophysiology of digestive system, nutrition deficits.

Pathophysiology of endocrine system, metabolic diseases.

Pathophysiology of hemopoietic system, neoplasias.

Rheumatic diseases. Immunologically conditioned diseases.

Pathophysiology of respiratory tract.

Pathophysiology of kidneys, disturbances in metabolism of water and ions.

Pathophysiology of nervous system.

Pathophysiology of muscles and sensory organs.

Learning outcomes

Student discusses the etiopathogenesis of atherosclerosis at the molecular, cellular and tissue level

Student will describe the etiopathogenesis of systolic and diastolic dysfunction of myocardium and pressure and volume overload of the heart

Student distinguishes between the causes of arrhythmias

Student categorizes the clinical forms of ischemic heart disease and clinically important consequences of heart failure syndrome

Student will explain the general and special pathophysiology of shock conditions and basic types of shock

Student will sum up the most common causes of disorders of the respiratory apparatus

Student characterizes the pathophysiology of chronic bronchitis and pulmonary emphysema

Student will sum up the pathogenesis of respiratory insufficiency

Student controls the issue of regulation of renal perfusion

Student can explain the issue glomerulopathy

Student categorizes causes of acute and chronic renal failure

Student will explain the difference between acute and chronic effects of hormones

Student categorizes acute and chronic renal failure

Student will explain the difference between acute and chronic effects of hormones

Student discusses the pathophysiology of clinically significant endocrine disruption of the function

Student will describe the pathophysiology of clinically significant gastrointestinal disorders, from a clinical point of view
Student will describe the anemic syndrome including the effects of anemic hypoxia
Student discusses different classification of anemias
Student discusses the pathophysiological aspects of transfusion of blood and blood derivatives,
Student will describe the main categories of diseases of white blood cells
Student distinguishes principled differences between physiological and pathological blood clotting
Student discusses the most important hypocoagulation and hypercoagulation disorders
Student will sum up the etiopathogenesis of common diseases of the joints,
Student demonstrates a knowledge of the etiopathogenesis of diseases of the muscle and neuromuscular plate
Student rattles off examples of failures of a sensory sensation
Student demonstrates examples of common neurodegenerative diseases of CNS
Student discusses the pathophysiology of epilepsy,
Student will use knowledge of the composition of cerebrospinal fluid
Student argues the importance of stability of intracranial pressure and its components for the creation of intracranial hypertension
Student will sum up the function of autonomous (vegetative) system
Student will sum up the function of movement system and consequences of its failure
Student describes the systems important for the existence of consciousness and waking

Syllabus

- DNA diagnostics in complex diseases. Pharmacogenetics and gene therapy
- General pathophysiology of endocrine system
- Special pathophysiology of endocrine system
- Pathophysiology of fetoplacental unit
- Pathophysiology of food intake disorders
- Pathophysiology of gastrointestinal disorders
- Pathophysiology of bones and muscles
- Pathophysiology of chosen allergic and autoimmune disorders
- Pathophysiology of hematopoiesis and blood clotting
- Pathophysiological aspects of protein metabolism
- Pathophysiological aspects of lipid metabolism
- Pathophysiological aspects of sugars metabolism
- Pathophysiology of motoric system
- Neurodegenerative disorders
- Pathophysiology of urgent events in oncology diseases

Literature

required literature

- [NEČAS, Emanuel](#) and A KOLEKTIV. *Obecná patologická fyziologie*. 1. vyd. Praha: Karolinum, 2000. 377 pp. [info](#)
- NEČAS, Emanuel. *Patologická fyziologie orgánových systémů*. 1. vyd. Praha: Karolinum, 2003. s. 381-760. ISBN 9788024606743. [info](#)

- DAMJANOV, Ivan. *Pathophysiology*. Illustrated by Matt Chansky. 1st ed. Philadelphia: Saunders/Elsevier, 2009. vii, 464. ISBN 9781416002291. [info](#)

Teaching methods

lecture

Assessment methods

Oral exam. The final exam is oral; student will answer 4 questions selected by lot from general, special pathophysiology, practicals and lectures. Individual evaluation from practicals (described by assistant) is taken into account.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught each semester.

The course is taught: every week.

Listed among pre-requisites of other courses

- [VLOZ0943c](#) Ochrana a podpora zdraví III - cvičení
[VLOZ0642p](#) && [VLPF0622p](#) && [VLFA08222p](#) && [VLLP7X1](#) && [VLLE7x1s](#) (Do I meet enrolment requirements?)
- [VLOZ0943p](#) Ochrana a podpora zdraví III - přednáška
[VLOZ0642p](#) && [VLPF0622p](#) && [VLFA08222p](#) && [VLLP7X1](#) && [VLLE7X1s](#) (Do I meet enrolment requirements?)
- [VLPD7X31p](#) Pediatrics
[VLPF0622p](#) && [VLPA0622p](#) && [VLLP0633c](#) && [VLLM0522p](#) && [VLIM051p](#) (Do I meet enrolment requirements?)
- [VLPM081](#) Palliative Medicine
souhlas && [VLPF0622p](#) (Do I meet enrolment requirements?)
- [VLTl081](#) Sports Medicine
[VLPF0622p](#) && [VLPA0622p](#) && [VLLP0633c](#) (Do I meet enrolment requirements?)
- [VSPM081](#) Palliative Medicine
souhlas && [VLPF0622p](#) (Do I meet enrolment requirements?)

Teacher's information

Přednášky se konají v aule UKB (A22)vždy ve středu 13:30-15:00. Lectures are given at the Aula A22, UCB, A18 on Tuesdays, 16:15-17:50.

The course is also listed under the following terms [Accreditation spring](#).

VLPG0921c Gynecology and obstetrics - practicals ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Pavel Ventruba, DrSc., MBA](#) (seminar tutor)

[doc. MUDr. Igor Crha, CSc.](#) (seminar tutor)

[MUDr. Michal Felsing](#) (seminar tutor)

[MUDr. Romana Gerychová](#) (seminar tutor)

[MUDr. Lukáš Hruban, Ph.D.](#) (seminar tutor)

[doc. MUDr. Robert Hudeček, Ph.D.](#) (seminar tutor)

[prof. MUDr. Martin Huser, Ph.D.](#) (seminar tutor)

[MUDr. Petr Janků, Ph.D.](#) (seminar tutor)

[MUDr. Luboš Minář, Ph.D.](#) (seminar tutor)

[doc. MUDr. Michal Pohanka, Ph.D.](#) (seminar tutor)

[MUDr. Ingrid Rejdová](#) (seminar tutor)

[prof. MUDr. Aleš Roztočil, CSc.](#) (seminar tutor)

[MUDr. Vít Weinberger, Ph.D.](#) (seminar tutor)

[doc. RNDr. Jana Žáková, Ph.D.](#) (seminar tutor)

[Ing. Kateřina Kaderková, MBA](#) (assistant)

[Zdeňka Kroupová](#) (assistant)

[Ing. Josef Stodůlka](#) (assistant)

Supervisor

[prof. MUDr. Martin Huser, Ph.D.](#)

[Department of Gynecology and Obstetrics - Institutions shared with the Faculty Hospital Brno - Institutions of Reproductive Medicine - Faculty of Medicine](#)

Contact Person: [Zdeňka Kroupová](#)

Supplier department: [Department of Gynecology and Obstetrics - Institutions shared with the Faculty Hospital Brno - Institutions of Reproductive Medicine - Faculty of Medicine](#)

Timetable of Seminar Groups

VLPG0921c/01: Mon 13. 11. to Fri 17. 11. each working day 7:30–12:20 [N03031](#)

VLPG0921c/02: Mon 30. 10. to Fri 3. 11. each working day 7:30–12:20 [N03031](#)

VLPG0921c/03: Mon 16. 10. to Fri 20. 10. each working day 7:30–12:20 [N03031](#)

VLPG0921c/04: Mon 2. 10. to Fri 6. 10. each working day 7:30–12:20 [N03031](#)

VLPG0921c/05: Mon 15. 1. to Fri 19. 1. each working day 7:30–12:20 [N03031](#)

VLPG0921c/06: Mon 1. 1. to Fri 5. 1. each working day 7:30–12:20 [N03031](#)

VLPG0921c/09: Mon 9. 10. to Fri 13. 10. each working day 7:30–12:20 [N03031](#), Mon 16. 10. to Fri 20. 10. each working day 7:30–12:20 [N03520](#)

VLPG0921c/10: Mon 25. 9. to Fri 29. 9. each working day 7:30–12:20 [N03031](#), Mon 2. 10. to Fri 6. 10. each working day 7:30–12:20 [N03520](#)

VLPG0921c/11: Mon 8. 1. to Fri 12. 1. each working day 7:30–12:20 [N03031](#), Mon 15. 1. to Fri 19. 1. each working day 7:30–12:20 [N03520](#)

VLPG0921c/12: Mon 18. 12. to Fri 22. 12. each working day 7:30–12:20 [N03031](#), Mon 1. 1. to Fri 5. 1. each working day 7:30–12:20 [N03520](#)

VLPG0921c/15: Mon 4. 12. to Fri 8. 12. each working day 7:30–12:20 [N03031](#), Mon 11. 12. to Fri 15. 12. each working day 7:30–12:20 [N03520](#)

VLPG0921c/16: Mon 20. 11. to Fri 24. 11. each working day 7:30–12:20 [N03031](#), Mon 27. 11. to Fri 1. 12. each working day 7:30–12:20 [N03520](#)

VLPG0921c/30: Mon 4. 12. to Fri 8. 12. each working day 7:30–12:20 [N03520](#)

VLPG0921c/31: Mon 11. 12. to Fri 15. 12. each working day 7:30–12:20 [N03031](#)

VLPG0921c/32: Mon 6. 11. to Fri 10. 11. each working day 7:30–12:20 [N03031](#), Mon 13. 11. to Fri 17. 11. each working day 7:30–12:20 [N03520](#)

VLPG0921c/33: Mon 23. 10. to Fri 27. 10. each working day 7:30–12:20 [N03031](#), Mon 30. 10. to Fri 3. 11. each working day 7:30–12:20 [N03520](#)

VLPG0921c/34: Mon 20. 11. to Fri 24. 11. each working day 7:30–12:20 [N03520](#), Mon 27. 11. to Fri 1. 12. each working day 7:30–12:20 [N03031](#)

Prerequisites

([VLFA0822p Pharmacology II - L](#) || [VLFA0722p Pharmacology - L](#)) &&
[VLCH0832c Surgery II - practicals](#) && [VLDM7X1c Diagn.imaging - practice](#) &&
[VSIP0622p Introduction to internal II-pr](#) && [VLCP0622p Introduc. to surgery II -lec.](#)
Successfully passed subjects - pharmacology, surgery, diagnostic imaging, clinical introduction

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the subject Gynecology and obstetrics is to acquire the necessary and complex theoretical knowledge and practical skills in the field of prevention, diagnosis and treatment of diseases of female reproductive system. The content of the course provides students with an understanding, sufficient theoretical knowledge and basic practical skills in epidemiology, pathogenesis, diagnosis, therapy and prevention of the most important pathological conditions in gynecology and obstetrics. The course gives to its graduate's sufficient overview in reproductive health issues, family planning, diagnosis and treatment of infertility and maternal care during pregnancy. The content of the course is determined by the syllabus and is clearly and specifically defined before the course begins and includes the theoretical and practical segment. Theoretical preparation includes lectures, thematic seminars, practical lessons and self-study. The learning outcomes of the graduate of the subject include, in particular, sufficient medical knowledge to supervise the pregnancy and delivery and to resolve most common gynecological diseases. Upon graduation, the student gets enough practical and theoretical information needed for medical decision making and can practice basic examination and treatment procedures in the field of gynecology and obstetrics. Students will also get a basic clinical view of gynecology and obstetrics. Student demonstrates their practical skills and performance using the "Procedure List" form (so-called logbook).

Learning outcomes

After completing the subject Gynecology and obstetrics, the student will be able to:

- Theoretically and practically perform gynecological and obstetrical examinations
- Know all common diagnostic and therapeutic procedures in the field
- Provide sufficient medical knowledge to monitor pregnancy and childbirth
- Will be sufficiently educated in symptoms, diagnosis and treatment of gynecological diseases
- Get enough practical and theoretical information about basic clinical decision making in the field

Syllabus

- Obstetrics Diagnosis of pregnancy Human pelvis, delivery ways, pelvic measurements Examination of a pregnant woman - external and internal obstetric examination Prenatal care Mechanism of human birth – cephalic presentation Abnormal presentation of the fetus - causes, diagnosis, birth mechanisms Breech presentation Multiple pregnancy and delivery of twins Hypertension in pregnancy - preeclampsia, eclampsia Trophoblastic diseases Fetal growth disorders - intrauterine growth retardation Premature birth - causes, clinical management Ectopic pregnancy - causes, symptoms, diagnosis, treatment Placenta preavia and placental abruption Diseases of puerperium, puerperal sepsis Periparturine bleeding and its treatment Prenatal diagnostics Ultrasound in obstetrics Gynecology Gynecological examination Laparoscopy in gynecology - indication, execution Hysteroscopy - Indication and execution Menstrual cycle disorders - classification, diagnosis, dysfunctional uterine bleeding Gynecological inflammation - etiology, pathophysiology Endometritis, myometritis, perimetritis Pelvic inflammatory disease and pelveoperitonitis Sexually transmitted diseases Endometriosis genital and extragenital Sterility, infertility - causes, meaning, treatment Contraception Benign and malignant neoplasms of gynecological organs Pre-canceroses of gynecological organs Diagnosis and treatment in oncogynecology Breast cancer, pre-cancerosis of the breast Benign breast disease Urinary incontinence in women Chronic pelvic pain Assisted reproduction

Literature

recommended literature

- ROZTOČIL, Aleš. *Moderní gynekologie*. 1. vydání. Praha: Grada Publishing, 2011. xviii, 508. ISBN 9788024728322. [info](#)
- ROZTOČIL, Aleš. *Moderní porodnictví*. 1. vyd. Praha: Grada, 2008. 405 s. ISBN 9788024719412. [info](#)
- *Dewhurst's textbook of obstetrics & gynaecology*. Edited by D. Keith Edmonds. Eighth edition. Chichester, West Sussex: Wiley-Blackwell, 2012. xv, 852. ISBN 9780470654576. [info](#)
- HÁJEK, Zdeněk, Evžen ČECH and Karel MARŠÁL. *Porodnictví*. 3., zcela přepracované a d. Praha: Grada, 2014. 538 stran. ISBN 9788024745299. [info](#)
- 1. Procházka M., Pilka R. a kol. *Porodnictví pro studenty všeobecného lékařství a porodní asistence*. Olomouc: AED - Olomouc s.r.o., 2016, 243 s., ISBN 978-80-906280-0-7

Teaching methods

Teaching takes place in three weekly blocks. Each block consists of five working days and includes teaching in inpatient and outpatient units within the Departments of Gynecology and Obstetrics. The courses lasts daily from 7 am to 1 pm and includes a propedeutical part and practical part each day, using patients medical reports. Every teaching day ends up with the clinical seminar led by the teacher and dedicated to one important topic within the field. Important parts of teaching methods are also practical demonstration of selected diagnostic and therapeutic techniques directly with patients or using simulators and daily presentation of clinical cases or up-to-date medical issues ended up with clinical discussion between the students and the teacher. The important part

of the teaching process is to participate on at least one afternoon or weekend practice. The main purpose of such a practice is to increase the level of practical training, to allow students to experience the on-call clinical routine, to make a better overview of the daily work of a young doctor in specialty training and last but not least to reduce the number of students in the study groups during the weekday morning classes. Afternoon lessons begin at 1 pm (right after the clinical seminar, which is common for both morning and afternoon classes) and lasts until 4 pm. The weekend practical classes are scheduled from 8 am to 11 am and always begin at the departments delivery rooms. The sign-up for afternoon and weekend practical lessons is necessary to do in advance using the is.muni.cz electronic system, maximum 4 students are allowed per each block.

Assessment methods

• Continuous discussions during internship, student presentations during seminars • Recording from practice - logbook • Interview (Colloquium) • Practical exam (demonstration of skills) • Continuous test-paper form • Final exam - combined form
Daily evaluation – to receive the daily credit it is necessary to prove sufficient theoretical knowledge and practical demonstration of selected diagnostic and therapeutic procedures listed in the “Procedure list” (so-called logbook), which each student receives at the beginning of the course
Final evaluation - presentation of a given clinical problem or selected diagnostic-therapeutic method with the participation of a teacher (maximum of 10 minutes per student). In particular, the teacher assesses the professional medical level of the topic, quality and form of the presentation and the student's speech competences. This evaluation can be replaced by the elaboration and presentation of a selected scientific clinical topic (original scientific work, review article or meta-analysis, case report).

Language of instruction

Czech

Further comments (probably available only in Czech)

Study Materials

The course is taught annually.

Listed among pre-requisites of other courses

- [VLPG1022c Gynecology and Obstetrics II - practice](#)
[VLPG0921c \(Do I meet enrolment requirements?\)](#)
- [VLPG1022p Gynecology and Obstetrics II - lecture](#)
[VLPG0921c \(Do I meet enrolment requirements?\)](#)

Teacher's information

<http://portal.med.muni.cz/disciplina-17-porodnictvi-a-gynekologie>, www.fnbrno.cz/gpk,
www.ivfbrno.cz

Organizační pokyny Zahájení výuky v pondělí v 8:00 v posluchárně Porodnice/Bohunice. Studenti zapsaní na odpolední praxi v pondělí přijdou až na seminář a pokračují odpolední praxí. Na rozdělení do 5 skupin, které se provádí v pondělí ráno, se mohou domluvit s kolegy předem. Je nezbytné bílé lékařské oblečení – košile, kalhoty, případně plášť, přezůvky, zámek na šatní skříň, zřetelné označení studenta jmenovkou, učební texty (viz. doporučená literatura v is.muni.cz)!!! Ukončení výuky a závěrečné hodnocení probíhá vždy pátek 12:00 – 13:00. Pro udělení zápočtu je nutné splnit náplň stáží, splnit odpolední praxi a uspět v zápočtovém testu – správně odpovědět více než 50 % otázek.

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#), [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VLPG0921p Gynecology and obstetrics I - lecture ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

2/0/0. 0 credit(s). Type of Completion: -.

Teacher(s)

[prof. MUDr. Pavel Ventruba, DrSc., MBA](#) (lecturer)

[doc. MUDr. Igor Crha, CSc.](#) (lecturer)

[doc. MUDr. Vít Unzeitig, CSc.](#) (lecturer)

[doc. MUDr. Michal Pohanka, Ph.D.](#) (lecturer)

[MUDr. Atanas-Ivan Belkov](#) (lecturer)

[MUDr. Michal Felsingr](#) (lecturer)

[MUDr. Romana Gerychová](#) (lecturer)

[prof. MUDr. Martin Huser, Ph.D.](#) (lecturer)

[MUDr. Petr Janků, Ph.D.](#) (lecturer)

[MUDr. Luboš Minář, Ph.D.](#) (lecturer)

[MUDr. Vít Weinberger, Ph.D.](#) (lecturer)

[doc. RNDr. Jana Žáková, Ph.D.](#) (lecturer)

[Ing. Josef Stodůlka](#) (assistant)

Supervisor

[prof. MUDr. Martin Huser, Ph.D.](#)

[Department of Gynecology and Obstetrics - Institutions shared with the Faculty Hospital Brno - Institutions of Reproductive Medicine - Faculty of Medicine](#)

Contact Person: [Zdeňka Kroupová](#)

Supplier department: [Department of Gynecology and Obstetrics - Institutions shared with the Faculty Hospital Brno - Institutions of Reproductive Medicine - Faculty of Medicine](#)

Timetable

Mon 18. 9. 7:30–9:35 [A11/114](#), Tue 19. 9. 7:30–9:35 [A11/114](#), Wed 20. 9. 7:30–9:35 [A11/114](#), Thu 21. 9. 7:30–9:35 [A11/114](#), Fri 22. 9. 7:30–9:35 [A11/334](#)

- Timetable of Seminar Groups:

VLPG0921p/VLA: Mon 18. 9. 9:45–11:50 [A11/334](#), Tue 19. 9. 9:45–11:50 [A9/324](#), Wed 20. 9. 9:45–11:50 [A9/324](#), Thu 21. 9. 9:45–11:50 [A11/234](#), Fri 22. 9. 9:45–11:50 [A11/234](#)

Prerequisites

([VLFA0822p Pharmacology II - L](#) || [VLFA0722p Pharmacology - L](#)) &&
[VLCH0832c Surgery II - practicals](#) && [VLDM7X1c Diagn.imaging - practice](#) &&
[VSIP0622p Introduction to internal II-pr](#) && [VLCPO622p Introduc. to surgery II -lec.](#)

Successfully passed subjects - pharmacology, surgery, diagnostic imaging, clinical introduction

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the subject Gynecology and obstetrics is to acquire the necessary and complex theoretical knowledge and practical skills in the field of prevention, diagnosis and treatment of diseases of female reproductive system. The content of the course provides students with an understanding, sufficient theoretical knowledge and basic practical skills in epidemiology, pathogenesis, diagnosis, therapy and prevention of the most important pathological conditions in gynecology and obstetrics. The course gives to its graduate's sufficient overview in reproductive health issues, family planning, diagnosis and treatment of infertility and maternal care during pregnancy. The content of the course is determined by the syllabus and is clearly and specifically defined before the course begins and includes the theoretical and practical segment. Theoretical preparation includes lectures, thematic seminars, practical lessons and self-study. The learning outcomes of the graduate of the subject include, in particular, sufficient medical knowledge to supervise the pregnancy and delivery and to resolve most common gynecological diseases. Upon graduation, the student gets enough practical and theoretical information needed for medical decision making and can practice basic examination and treatment procedures in the field of gynecology and obstetrics. Students will also get a basic clinical view of gynecology and obstetrics. Student demonstrates their practical skills and performance using the "Procedure List" form (so-called logbook).

Learning outcomes

After completing the subject Gynecology and obstetrics, the student will be able to:

- Theoretically and practically perform gynecological and obstetrical examinations
- Know all common diagnostic and therapeutic procedures in the field
- Provide sufficient medical knowledge to monitor pregnancy and childbirth
- Will be sufficiently educated in symptoms, diagnosis and treatment of gynecological diseases
- Get enough practical and theoretical information about basic clinical decision making in the field

Syllabus

- Obstetrics
Diagnosis of pregnancy
Human pelvis, delivery ways, pelvic measurements
Examination of a pregnant woman - external and internal obstetric examination
Prenatal care
Mechanism of human birth – cephalic presentation
Abnormal presentation of the fetus - causes, diagnosis, birth mechanisms
Breech presentation
Multiple pregnancy and delivery of twins
Hypertension in pregnancy - preeclampsia, eclampsia
Trophoblastic diseases
Fetal growth disorders - intrauterine growth retardation
Premature birth - causes, clinical management
Ectopic pregnancy - causes, symptoms, diagnosis, treatment
Placenta previa and

placental abruption Diseases of puerperium, puerperal sepsis Periparturine uterine bleeding and its treatment Prenatal diagnostics Ultrasound in obstetrics Gynecology Gynecological examination Laparoscopy in gynecology - indication, execution Hysteroscopy - Indication and execution Menstrual cycle disorders - classification, diagnosis, dysfunctional uterine bleeding Gynecological inflammation - etiology, pathophysiology Endometritis, myometritis, perimetritis Pelvic inflammatory disease and pelveoperitonitis Sexually transmitted diseases Endometriosis genital and extragenital Sterility, infertility - causes, meaning, treatment Contraception Benign and malignant neoplasms of gynecological organs Pre-canceroses of gynecological organs Diagnosis and treatment in oncogynecology Breast cancer, pre-cancerosis of the breast Benign breast disease Urinary incontinence in women Chronic pelvic pain Assisted reproduction

Literature

recommended literature

- HÁJEK, Zdeněk, Evžen ČECH and Karel MARŠÁL. *Porodnictví*. 3., zcela přepracované a d. Praha: Grada, 2014. 538 stran. ISBN 9788024745299. [info](#)
- ROB, Lukáš, Alois MARTAN and Karel CITTERBART. *Gynekologie*. 2., dopl. a přeprac. vyd. Praha: Galén, 2008. xxiv, 319. ISBN 9788072625017. [info](#)
- *Dewhurst's textbook of obstetrics & gynaecology*. Edited by D. Keith Edmonds. Eighth edition. Chichester, West Sussex: Wiley-Blackwell, 2012. xv, 852. ISBN 9780470654576. [info](#)
- OATS, Jeremy and Suzanne ABRAHAM. *Llewellyn-Jones fundamentals of obstetrics and gynaecology*. 8th ed. Edinburgh: Mosby, 2005. x, 365. ISBN 0723433291. [info](#)

not specified

- ČECH, Evžen, Zdeněk HÁJEK, Karel MARŠÁL and Bedřich SRP. *Porodnictví*. 2., přepracované a doplně. Praha: Grada, 2007. 544 s. ISBN 9788024713038. [info](#)

Teaching methods

Teaching takes place in three weekly blocks. Each block consists of five working days and includes teaching in inpatient and outpatient units within the Departments of Gynecology and Obstetrics. The courses last daily from 7 am to 1 pm and include a propedeutical part and practical part each day, using patients' medical reports. Every teaching day ends up with the clinical seminar led by the teacher and dedicated to one important topic within the field. Important parts of teaching methods are also practical demonstration of selected diagnostic and therapeutic techniques directly with patients or using simulators and daily presentation of clinical cases or up-to-date medical issues ended up with clinical discussion between the students and the teacher. The important part of the teaching process is to participate on at least one afternoon or weekend practice. The main purpose of such a practice is to increase the level of practical training, to allow students to experience the on-call clinical routine, to make a better overview of the daily work of a young doctor in specialty training and last but not least to reduce the number of students in the study groups during the weekday morning classes. Afternoon

lessons begin at 1 pm (right after the clinical seminar, which is common for both morning and afternoon classes) and lasts until 4 pm. The weekend practical classes are scheduled from 8 am to 11 am and always begin at the departments delivery rooms. The sign-up for afternoon and weekend practical lessons is necessary to do in advance using the is.muni.cz electronic system, maximum 4 students are allowed per each block.

Assessment methods

• Continuous discussions during internship, student presentations during seminars • Recording from practice - logbook • Interview (Colloquium) • Practical exam (demonstration of skills) • Continuous test-paper form • Final exam - combined form
Daily evaluation – to receive the daily credit it is necessary to prove sufficient theoretical knowledge and practical demonstration of selected diagnostic and therapeutic procedures listed in the “Procedure list” (so-called logbook), which each student receives at the beginning of the course
Final evaluation - presentation of a given clinical problem or selected diagnostic-therapeutic method with the participation of a teacher (maximum of 10 minutes per student). In particular, the teacher assesses the professional medical level of the topic, quality and form of the presentation and the student's speech competences. This evaluation can be replaced by the elaboration and presentation of a selected scientific clinical topic (original scientific work, review article or meta-analysis, case report).

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

Teacher's information

<http://portal.med.muni.cz/disciplina-17-porodnictvi-a-gynekologie>, www.fnbrno.cz/gpk, www.ivfbrno.cz

Organizační pokyny Zahájení výuky v pondělí v 8:00 v posluchárně Porodnice/Bohunice. Studenti zapsaní na odpolední praxi v pondělí přijdou až na seminář a pokračují odpolední praxí. Na rozdělení do 5 skupin, které se provádí v pondělí ráno, se mohou domluvit s kolegy předem. Je nezbytné bílé lékařské oblečení – košile, kalhoty, případně plášť, přezůvky, zámek na šatní skříň, zřetelné označení studenta jmenovkou, učební texty (viz. doporučená literatura v is.muni.cz)!!! Ukončení výuky a závěrečné hodnocení probíhá vždy pátek 12:00 – 13:00. Pro udělení zápočtu je nutné splnit náplň stáží, splnit odpolední praxi a uspět v zápočtovém testu – správně odpovědět více než 50 % otázek.

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#), [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

V LPG1022c Gynecology and Obstetrics II - practice ✳

Faculty of Medicine

Spring 2018

Extent and Intensity

0/4/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Pavel Ventruba, DrSc., MBA](#) (lecturer)
[doc. MUDr. Igor Crha, CSc.](#) (lecturer)
[doc. MUDr. Vít Unzeitig, CSc.](#) (lecturer)
[MUDr. Petr Janků, Ph.D.](#) (seminar tutor)
[MUDr. Lukáš Hruban, Ph.D.](#) (seminar tutor)
[MUDr. Michal Felsing](#) (seminar tutor)
[MUDr. Romana Gerychová](#) (seminar tutor)
[MUDr. Zuzana Hodická, Ph.D.](#) (seminar tutor)
[doc. MUDr. Robert Hudeček, Ph.D.](#) (seminar tutor)
[prof. MUDr. Martin Huser, Ph.D.](#) (seminar tutor)
[MUDr. Luboš Minář, Ph.D.](#) (seminar tutor)
[doc. MUDr. Michal Pohanka, Ph.D.](#) (seminar tutor)
[MUDr. Ingrid Rejdová](#) (seminar tutor)
[prof. MUDr. Aleš Roztočil, CSc.](#) (seminar tutor)
[MUDr. Vít Weinberger, Ph.D.](#) (seminar tutor)
[doc. RNDr. Jana Žáková, Ph.D.](#) (seminar tutor)
[Ing. Kateřina Kaderková, MBA](#) (assistant)
[Zdeňka Kroupová](#) (assistant)

Supervisor

[prof. MUDr. Martin Huser, Ph.D.](#)
[Department of Gynecology and Obstetrics - Institutions shared with the Faculty Hospital Brno - Institutions of Reproductive Medicine - Faculty of Medicine](#)
Contact Person: [Zdeňka Kroupová](#)
Supplier department: [Department of Gynecology and Obstetrics - Institutions shared with the Faculty Hospital Brno - Institutions of Reproductive Medicine - Faculty of Medicine](#)

Prerequisites

[VLPG0921c Gynecol. and obst. - practical](#)
Successfully passed subjects - pharmacology, surgery, diagnostic imaging, clinical introduction
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the subject Gynecology and obstetrics is to acquire the necessary and complex theoretical knowledge and practical skills in the field of prevention, diagnosis and treatment of diseases of female reproductive system. The content of the course provides students with an understanding, sufficient theoretical knowledge and basic practical skills in epidemiology, pathogenesis, diagnosis, therapy and prevention of the most important pathological conditions in gynecology and obstetrics. The course gives to its graduate's sufficient overview in reproductive health issues, family planning, diagnosis and treatment of infertility and maternal care during pregnancy. The content of the course is

determined by the syllabus and is clearly and specifically defined before the course begins and includes the theoretical and practical segment. Theoretical preparation includes lectures, thematic seminars, practical lessons and self-study. The learning outcomes of the graduate of the subject include, in particular, sufficient medical knowledge to supervise the pregnancy and delivery and to resolve most common gynecological diseases. Upon graduation, the student gets enough practical and theoretical information needed for medical decision making and can practice basic examination and treatment procedures in the field of gynecology and obstetrics. Students will also get a basic clinical view of gynecology and obstetrics. Student demonstrates their practical skills and performance using the "Procedure List" form (so-called logbook).

Learning outcomes

After completing the subject Gynecology and obstetrics, the student will be able to:

- Theoretically and practically perform gynecological and obstetrical examinations
- Know all common diagnostic and therapeutic procedures in the field
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- Get enough practical and theoretical information about basic clinical decision making in the field

Syllabus

- Obstetrics Diagnosis of pregnancy Human pelvis, delivery ways, pelvic measurements Examination of a pregnant woman - external and internal obstetric examination Prenatal care Mechanism of human birth – cephalic presentation Abnormal presentation of the fetus - causes, diagnosis, birth mechanisms Breech presentation Multiple pregnancy and delivery of twins Hypertension in pregnancy - preeclampsia, eclampsia Trophoblastic diseases Fetal growth disorders - intrauterine growth retardation Premature birth - causes, clinical management Ectopic pregnancy - causes, symptoms, diagnosis, treatment Placenta previa and placental abruption Diseases of puerperium, puerperal sepsis Periparturine uterine bleeding and its treatment Prenatal diagnostics Ultrasound in obstetrics Gynecology Gynecological examination Laparoscopy in gynecology - indication, execution Hysteroscopy - Indication and execution Menstrual cycle disorders - classification, diagnosis, dysfunctional uterine bleeding Gynecological inflammation - etiology, pathophysiology Endometritis, myometritis, perimetritis Pelvic inflammatory disease and pelveoperitonitis Sexually transmitted diseases Endometriosis genital and extragenital Sterility, infertility - causes, meaning, treatment Contraception Benign and malignant neoplasms of gynecological organs Pre-canceroses of gynecological organs Diagnosis and treatment in oncogynecology Breast cancer, pre-cancerosis of the breast Benign breast disease Urinary incontinence in women Chronic pelvic pain Assisted reproduction

Literature

recommended literature

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- HÁJEK, Zdeněk, Evžen ČECH and Karel MARŠÁL. *Porodnictví*. 3., zcela přepracované a d. Praha: Grada, 2014. 538 stran. ISBN 9788024745299. [info](#)

- *Dewhurst's textbook of obstetrics & gynaecology*. Edited by D. Keith Edmonds. Eighth edition. Chichester, West Sussex: Wiley-Blackwell, 2012. xv, 852. ISBN 9780470654576. [info](#)

Teaching methods

Teaching takes place in three weekly blocks. Each block consists of five working days and includes teaching in inpatient and outpatient units within the Departments of Gynecology and Obstetrics. The courses lasts daily from 7 am to 1 pm and includes a propedeutical part and practical part each day, using patients medical reports. Every teaching day ends up with the clinical seminar led by the teacher and dedicated to one important topic within the field. Important parts of teaching methods are also practical demonstration of selected diagnostic and therapeutic techniques directly with patients or using simulators and daily presentation of clinical cases or up-to-date medical issues ended up with clinical discussion between the students and the teacher. The important part of the teaching process is to participate on at least one afternoon or weekend practice. The main purpose of such a practice is to increase the level of practical training, to allow students to experience the on-call clinical routine, to make a better on overview of the daily work of a young doctor in specialty training and last but not least to reduce the number of students in the study groups during the weekday morning classes. Afternoon lessons begin at 1 pm (right after the clinical seminar, which is common for both morning and afternoon classes) and lasts until 4 pm. The weekend practical classes are scheduled from 8 am to 11 am and always begin at the departments delivery rooms. The sign-up for afternoon and weekend practical lessons is necessary to do in advance using the is.muni.cz electronic system, maximum 4 students are allowed per each block.

Assessment methods

- Continuous discussions during internship, student presentations during seminars
- Recording from practice - logbook
- Interview (Colloquium)
- Practical exam (demonstration of skills)
- Continuous test-paper form
- Final exam - combined form

Daily evaluation – to receive the daily credit it is necessary to prove sufficient theoretical knowledge and practical demonstration of selected diagnostic and therapeutic procedures listed in the “Procedure list” (so-called logbook), which each student receives at the beginning of the course

Final evaluation - presentation of a given clinical problem or selected diagnostic-therapeutic method with the participation of a teacher (maximum of 10 minutes per student). In particular, the teacher assesses the professional medical level of the topic, quality and form of the presentation and the student's speech competences. This evaluation can be replaced by the elaboration and presentation of a selected scientific clinical topic (original scientific work, review article or meta-analysis, case report).

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught each semester.

The course is taught: in blocks.

Listed among pre-requisites of other courses

- [VLCH11XX Surgery - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#)
&& [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) &&

[VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

- **[VLPD11XX Paediatrics - State Exam](#)**

([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

- **[VLPG11XX Obstetric and Gynaecology - State Exam](#)**

([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && [VLVL9X66c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VSNO071](#), [VLKA091](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSDL071](#), [VLRL041](#), [VLIA081](#), [VLKM081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

- **[VLVL11XX Internal Medicine - State Exam](#)**

([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

- **[VLZP11XX Public Health - State Exam](#)**

([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) ||

[VLVL7X65c](#) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

Teacher's information

<http://portal.med.muni.cz/disciplina-17-porodnictvi-a-gynekologie>, www.fnbrno.cz/gpk, www.ivfbrno.cz

Organizační pokyny Zahájení výuky v pondělí v 8:00 v posluchárně Porodnice/Bohunice. Studenti zapsaní na odpolední praxi v pondělí přijdou až na seminář a pokračují odpolední praxí. Na rozdělení do 5 skupin, které se provádí v pondělí ráno, se mohou domluvit s kolegy předem. Je nezbytné bílé lékařské oblečení – košile, kalhoty, případně plášť, přezůvky, zámek na šatní skříň, zřetelné označení studenta jmenovkou, učební texty (viz. doporučená literatura v is.muni.cz)!!! Ukončení výuky a závěrečné hodnocení probíhá vždy pátek 12:00 – 13:00. Pro udělení zápočtu je nutné splnit náplň stáží, splnit odpolední praxi a uspět v zápočtovém testu – správně odpovědět více než 50 % otázek.

The course is also listed under the following terms [Spring 2000](#), [Spring 2001](#), [Spring 2002](#), [Spring 2003](#), [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VLPG1022p Gynecology and Obstetrics II - lecture ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

0/1/0. 0 credit(s). Type of Completion: -.

Teacher(s)

[prof. MUDr. Pavel Ventruba, DrSc., MBA](#) (lecturer)

[doc. MUDr. Igor Crha, CSc.](#) (lecturer)

[doc. MUDr. Vít Unzeitig, CSc.](#) (lecturer)

[MUDr. Atanas-Ivan Belkov](#) (lecturer)

[MUDr. Michal Felsing](#) (lecturer)

[MUDr. Romana Gerychová](#) (lecturer)

[MUDr. Lukáš Hruban, Ph.D.](#) (lecturer)

[doc. MUDr. Robert Hudeček, Ph.D.](#) (lecturer)

[prof. MUDr. Martin Huser, Ph.D.](#) (lecturer)

[MUDr. Petr Janků, Ph.D.](#) (lecturer)

[doc. MUDr. Michal Pohanka, Ph.D.](#) (lecturer)

[prof. MUDr. Aleš Roztočil, CSc.](#) (lecturer)

[MUDr. Vít Weinberger, Ph.D.](#) (lecturer)

[doc. RNDr. Jana Žáková, Ph.D.](#) (lecturer)

Supervisor

[prof. MUDr. Martin Huser, Ph.D.](#)

[Department of Gynecology and Obstetrics - Institutions shared with the Faculty Hospital Brno - Institutions of Reproductive Medicine - Faculty of Medicine](#)

Contact Person: [Zdeňka Kroupová](#)

Supplier department: [Department of Gynecology and Obstetrics - Institutions shared with the Faculty Hospital Brno - Institutions of Reproductive Medicine - Faculty of Medicine](#)

Prerequisites

[VLPG0921c Gynecol. and obst. - practical](#)

Successfully passed subjects - pharmacology, surgery, diagnostic imaging, clinical introduction

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the subject Gynecology and obstetrics is to acquire the necessary and complex theoretical knowledge and practical skills in the field of prevention, diagnosis and treatment of diseases of female reproductive system. The content of the course provides students with an understanding, sufficient theoretical knowledge and basic practical skills in epidemiology, pathogenesis, diagnosis, therapy and prevention of the most important pathological conditions in gynecology and obstetrics. The course gives to its graduate's sufficient overview in reproductive health issues, family planning, diagnosis and treatment of infertility and maternal care during pregnancy. The content of the course is determined by the syllabus and is clearly and specifically defined before the course begins and includes the theoretical and practical segment. Theoretical preparation includes lectures, thematic seminars, practical lessons and self-study. The learning outcomes of the graduate of the subject include, in particular, sufficient medical knowledge to supervise the pregnancy and delivery and to resolve most common gynecological diseases. Upon graduation, the student gets enough practical and theoretical information needed for medical decision making and can practice basic examination and treatment procedures in the field of gynecology and obstetrics. Students will also get a basic clinical view of gynecology and obstetrics. Student demonstrates their practical skills and performance using the "Procedure List" form (so-called logbook).

Learning outcomes

After completing the subject Gynecology and obstetrics, the student will be able to:

- Theoretically and practically perform gynecological and obstetrical examinations
- Know all common diagnostic and therapeutic procedures in the field
- Provide sufficient medical knowledge to monitor pregnancy and childbirth
- Will be sufficiently educated in symptoms, diagnosis and treatment of gynecological diseases
- Get enough practical and theoretical information about basic clinical decision making in the field

Syllabus

- Obstetrics Diagnosis of pregnancy Human pelvis, delivery ways, pelvic measurements Examination of a pregnant woman - external and internal obstetric examination Prenatal care Mechanism of human birth – cephalic presentation Abnormal presentation of the fetus - causes, diagnosis, birth mechanisms Breech presentation Multiple pregnancy and delivery of twins Hypertension in pregnancy - preeclampsia, eclampsia Trophoblastic diseases Fetal growth disorders - intrauterine growth retardation Premature birth - causes, clinical management Ectopic pregnancy - causes, symptoms, diagnosis, treatment Placenta previa and placental abruption Diseases of puerperium, puerperal sepsis Periparturine bleeding and its treatment Prenatal diagnostics Ultrasound in obstetrics Gynecology Gynecological examination Laparoscopy in gynecology - indication, execution Hysteroscopy - Indication and execution Menstrual cycle disorders - classification, diagnosis, dysfunctional uterine bleeding Gynecological inflammation - etiology, pathophysiology Endometritis, myometritis, perimetritis Pelvic inflammatory disease and pelveoperitonitis Sexually transmitted diseases Endometriosis genital and extragenital Sterility, infertility - causes, meaning, treatment Contraception Benign and malignant neoplasms of gynecological organs Pre-canceroses of gynecological organs Diagnosis and treatment in oncogynecology Breast cancer, pre-cancerosis of the breast Benign breast disease Urinary incontinence in women Chronic pelvic pain Assisted reproduction

Literature

recommended literature

- HÁJEK, Zdeněk, Evžen ČECH and Karel MARŠÁL. *Porodnictví*. 3., zcela přepracované a d. Praha: Grada, 2014. 538 stran. ISBN 9788024745299. [info](#)
- *Dewhurst's textbook of obstetrics & gynaecology*. Edited by D. Keith Edmonds. Eighth edition. Chichester, West Sussex: Wiley-Blackwell, 2012. xv, 852. ISBN 9780470654576. [info](#)
- ROZTOČIL, Aleš. *Moderní gynekologie*. 1. vydání. Praha: Grada Publishing, 2011. xviii, 508. ISBN 9788024728322. [info](#)

Teaching methods

Teaching takes place in three weekly blocks. Each block consists of five working days and includes teaching in inpatient and outpatient units within the Departments of Gynecology and Obstetrics. The courses last daily from 7 am to 1 pm and include a propedeutical part and practical part each day, using patients' medical reports. Every teaching day ends up with the clinical seminar led by the teacher and dedicated to one important topic within the field. Important parts of teaching methods are also practical demonstration of selected diagnostic and therapeutic techniques directly with patients or using simulators and daily presentation of clinical cases or up-to-date medical issues ended up with clinical discussion between the students and the teacher. The important part of the teaching process is to participate on at least one afternoon or weekend practice. The main purpose of such a practice is to increase the level of practical training, to allow students to experience the on-call clinical routine, to make a better overview of the daily work of a young doctor in specialty training and last but not least to reduce the number of students in the study groups during the weekday morning classes. Afternoon

lessons begin at 1 pm (right after the clinical seminar, which is common for both morning and afternoon classes) and lasts until 4 pm. The weekend practical classes are scheduled from 8 am to 11 am and always begin at the departments delivery rooms. The sign-up for afternoon and weekend practical lessons is necessary to do in advance using the is.muni.cz electronic system, maximum 4 students are allowed per each block.

Assessment methods

• Continuous discussions during internship, student presentations during seminars • Recording from practice - logbook • Interview (Colloquium) • Practical exam (demonstration of skills) • Continuous test-paper form • Final exam - combined form
Daily evaluation – to receive the daily credit it is necessary to prove sufficient theoretical knowledge and practical demonstration of selected diagnostic and therapeutic procedures listed in the “Procedure list” (so-called logbook), which each student receives at the beginning of the course
Final evaluation - presentation of a given clinical problem or selected diagnostic-therapeutic method with the participation of a teacher (maximum of 10 minutes per student). In particular, the teacher assesses the professional medical level of the topic, quality and form of the presentation and the student's speech competences. This evaluation can be replaced by the elaboration and presentation of a selected scientific clinical topic (original scientific work, review article or meta-analysis, case report).

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

Teacher's information

<http://portal.med.muni.cz/disciplina-17-porodnictvi-a-gynekologie>, www.fnbrno.cz/gpk, www.ivfbrno.cz

Organizační pokyny Zahájení výuky v pondělí v 8:00 v posluchárně Porodnice/Bohunice. Studenti zapsaní na odpolední praxi v pondělí přijdou až na seminář a pokračují odpolední praxí. Na rozdělení do 5 skupin, které se provádí v pondělí ráno, se mohou domluvit s kolegy předem. Je nezbytné bílé lékařské oblečení – košile, kalhoty, případně plášť, přezůvky, zámek na šatní skříň, zřetelné označení studenta jménovkou, učební texty (viz. doporučená literatura v is.muni.cz)!!! Ukončení výuky a závěrečné hodnocení probíhá vždy pátek 12:00 – 13:00. Pro udělení zápočtu je nutné splnit náplň stáží, splnit odpolední praxi a uspět v zápočtovém testu – správně odpovědět více než 50 % otázek.

The course is also listed under the following terms [Spring 2000](#), [Spring 2001](#), [Spring 2002](#), [Spring 2003](#), [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VLPG11XX Obstetrics and Gynaecology - State Exam ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/0/0. 0 credit(s). Type of Completion: SRZK (closing examination).

Teacher(s)

[prof. MUDr. Pavel Ventruba, DrSc., MBA](#) (lecturer)
[doc. MUDr. Igor Crha, CSc.](#) (lecturer)
[doc. MUDr. Vít Unzeitig, CSc.](#) (lecturer)
[doc. MUDr. Michal Pohanka, Ph.D.](#) (lecturer)
[MUDr. Atanas-Ivan Belkov](#) (lecturer)
[doc. MUDr. Robert Hudeček, Ph.D.](#) (lecturer)
[doc. RNDr. Jana Žáková, Ph.D.](#) (lecturer)
[MUDr. Luboš Minář, Ph.D.](#) (lecturer)
[MUDr. Vít Weinberger, Ph.D.](#) (lecturer)
[MUDr. Zuzana Hodická, Ph.D.](#) (lecturer)
[Zdeňka Kroupová](#) (assistant)
[Ing. Josef Stodůlka](#) (assistant)

Supervisor

[prof. MUDr. Pavel Ventruba, DrSc., MBA](#)
[Department of Gynecology and Obstetrics - Institutions shared with the Faculty Hospital Brno - Institutions of Reproductive Medicine - Faculty of Medicine](#)
Contact Person: [Zdeňka Kroupová](#)
Supplier department: [Department of Gynecology and Obstetrics - Institutions shared with the Faculty Hospital Brno - Institutions of Reproductive Medicine - Faculty of Medicine](#)

Prerequisites (in Czech)

([VLFA0822p Pharmacology II - L](#) || [VLFA0722p Pharmacology - L](#)) &&
[VLNE9X1p Neurology - lecture](#) && [VLPY9X1p Psychiatry - lect.](#) &&
[VLVZ9X1c Health Care and Policy](#) && [VSDV9X22p Dermatovenereology II-I](#) &&
[VLAM9X1p Intensive care med. - lect.](#) && ([VLVL7X61c Internal medicine part 1](#) ||
[VLVL9X61c Internal medicine part 1](#)) && [VLVL9X62c Internal medicine part 2](#) &&
[VLVL9X63c Internal medicine part 3](#) && [VLVL9X64c Internal medicine part 4](#) && ([VLVL9X65c Internal medicine part 5](#) || [VLVL7X65c Internal medicine part 5](#)) &&
[VLVL9X66c Internal medicine part 6](#) && [VLPD1033c Pediatrics III-practice](#) &&
[VLIN9X22 Infectious diseases II](#) && [VLSD7X1p Forensic med.-lectures](#) &&
[VSEI7X1 EPI](#) && [VLLO7X1 Ophthalmology - lec.](#) &&
[VSOT7X1p Otorhinolaryngology-lect.](#) && [VSLP7X1 Medical Psychology](#) &&
[VLPL9X1 Prevent. Med.](#) && [VLON091 Clinical oncology](#) &&
[VLST7X1p stomatology -I](#) && [VSLE7X1p Medical Ethics 2 - lecture](#) &&
[VLPG1022c Gynecol. and obst. II- pract.](#) && VYCET (3 , [VLPS07X Posudkové lékařství](#) || [VLPS071 Medical Assessment Service](#) , [VSAT081 Fundament.of AntimicrobTherap](#) , [VSNO071 Ophthalmology news](#) , [VLKA091 Clinical anatomy](#) , [VSPM071 Palliative Medicine](#) , [VLKB091 Clinical Biochemistry](#) , [VLKF091 Clinical Pharmacology](#) , [BMBS051 Biostatistics - basic course](#) , [VLPM071 Legal Aspects in Medicine](#) , [VLEP041 The Economics of Health Care](#) , [VLTL081 Sports Medicine](#) , [VSDL071 Diagnostics and management in orthopaedic surgery](#) , [VSAL081 Anaesth. and Tr. of Pain I](#) , [VSAL082 Anaesth.and Treatm.of PainII](#) , [VSDL071 Diagnostics and management in orthopaedic surgery](#) , [VRL041 Medicinal plants](#) , [VLIA081 Clin.immunol. alergol.](#) , [VLKM081 Commun.in medicine](#) , [VSFP071 Neonatal Physiology and Pathol](#)) && [VLCH9X33c Surgery III - practicals](#) && ([VSAJ0222 English 1 II -p](#) || [VSNJ0222 German 1 II -p](#)) && [VSSP03X Individual project](#)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The Obstetrics and Gynecology course involves the supervision and appropriate intervention during, normal and complicated pregnancy and delivery, as well as the recognition, prevention, management and surveillance of diseases affecting reproductive health in women. The course gives students understanding, basic knowledge and skills in epidemiology, pathogenesis, diagnosis, treatment and prevention of common problems in obstetrics and gynecology; reproductive health matters, including family planning, infertility and maternal care, emphasizing wellness and prevention in addition to treatment of disease. The aim of the course is to attain standards of knowledge and practical skills adequate to start postgraduate training in medicine and reach level of competence defined in the Log Book. The course graduates should be able to keep with international standards of patient care by reaching high level of clinical skills, bedside care skills, surgical skills, in addition to updated medical knowledge. The students learning outcomes and competences mainly cover medical knowledge and skills to evaluate the data about the follow-up of pregnancy and birth, and the management of the gynecological diseases, to get the new information and to make decisions for similar situations, to perform the gynecological procedures. The students will achieve the appropriate attitude.

Syllabus

- The practice should help reaching high level of clinical skills, bedside care skills, surgical skills in diagnostics and treatment of pathologies:
- OBSTETRICS Physiological changes during pregnancy Antenatal care Drugs use during pregnancy and lactation Abortion Ectopic pregnancy Gestational Trophoblastic Disease Hypertension in pregnancy Preeclampsia Diabetes in pregnancy Bleeding disorders with pregnancy Multiple pregnancy Analgesia & anaesthesia in labour Breech presentation Uterine action in pregnancy (normal and abnormal) Perineal vaginal & cervical injuries Rupture uterus Antepartum hemorrhage (Placenta previa) Antepartum hemorrhage (Abruptio placentae) Shock in obstetrics Normal puerperium Venous thrombosis in obstetrics Caesaria Section Induction of abortion & labour Dysmaturity and Prematurity Perinatal asphyxia Ultrasound in obstetrics Prenatal diagnosis of congenital anomalies
- GYNAECOLOGY Functional uterine bleeding Amenorrhoea Amenorrhoea Climacteric and HRT Dysmenorrhoea, Premenstrual syndroma Infertility Assisted reproductive techniques ART Vaginitis and vulvitis Salpingitis Cervicitis Sexually Transmitted diseases AIDS Tumours & masses of vulva & vagina Cancer cervix Malignant diseases of body of uterus – carcinoma Fibromyomata treatment and modern trends Endometriosis Ovarian tumors Endoscopy Vaginal smear and

colposcopy Urinary incontinence Contraception (pills) Contraception (I.U.D)
Contraception (other methods)

Literature

recommended literature

- ROZTOČIL, Aleš. *Moderní gynekologie*. 1. vydání. Praha: Grada Publishing, 2011. xviii, 508. ISBN 9788024728322. [info](#)
- ROZTOČIL, Aleš. *Moderní porodnictví*. 1. vyd. Praha: Grada, 2008. 405 s. ISBN 9788024719412. [info](#)

not specified

- *Essential obstetrics and gynaecology*. Edited by Ian M. Symonds - Sabaratnam Arulkumaran - E. M. Symonds. 5th edition. Edinburgh: Churchill Livingstone, 2013. x, 437. ISBN 9780702030680. [info](#)
- ROB, Lukáš, Alois MARTAN and Karel CITTERBART. *Gynekologie*. 2., dopl. a přeprac. vyd. Praha: Galén, 2008. xxiv, 319. ISBN 9788072625017. [info](#)

Teaching methods

Teaching and learning is scheduled into three blocks. Each block is planned for 5 working days in the inpatients and outpatients facilities of the Ob/Gyn department. The teaching process starts from 07h00 and lasts to 13h00. Teaching schedule includes theoretical session, teaching and learning with simulators and patients and students formative assessment of clinical case.

Assessment methods

Theoretical Assessment

Continuous - Ten true/false and/or short-answer questions, on the day after each daily theoretical session, to be answered in 15 minutes.

Final - Twenty multiple choice and/or matching questions, to be answered in 20 minutes, on the last day of each block.

Practical Assessment

Continuous - Completion of a log-book, including the elaboration and discussion of a clinical history.

Final - Resolution of one clinical problem with simulators, instruments and equipment, in the presence of the teachers, with a maximal duration of 10 minutes. Special oral theoretical assessment to improve the classification, performed whenever possible by the discipline coordinator or another teacher. It may be substituted by a written elaboration or presentation of a paper (letter to the Editor, case report, review or original research).

Language of instruction

Czech

Further Comments

Study Materials

The course can also be completed outside the examination period.

The course is also listed under the following terms [Autumn 2003](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

VLPL9X1 Preventive Medicine ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/5/0. 3 credit(s). Type of Completion: k (colloquium).

Teacher(s)

[prof. MUDr. Bc. Zuzana Derflerová Brázdová, DrSc.](#) (lecturer)

[doc. MUDr. Jindřich Fiala, CSc.](#) (lecturer)

[prof. MUDr. Drahoslava Hrubá, CSc.](#) (lecturer)

[prof. MUDr. Jaroslav Kotulán, CSc.](#) (lecturer), [prof. MUDr. Bc. Zuzana Derflerová Brázdová, DrSc.](#) (deputy)

[Mgr. Aleš Peřina, Ph.D.](#) (lecturer)

[doc. MUDr. Jan Šimůnek, CSc.](#) (lecturer)

[Mgr. Bc. Michal Koščík, Ph.D.](#) (seminar tutor)

[MUDr. Kräuff Rainer Schwanhaeuser Wulff, MBA, Ph.D. et Ph.D., M.A.](#) (seminar tutor)

[Zdeňka Jočová](#) (assistant)

Supervisor

[prof. MUDr. Drahoslava Hrubá, CSc.](#)

[Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Supplier department: [Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Timetable

Mon 25. 9. to Fri 29. 9. each working day 13:20–15:50 [A11/114](#)

Prerequisites

[VSIP0622c Introduction to internal II-pr](#) && [VLCP0622c Introduc. to surgery II -pr.](#) &&

[VLLM0522p Medical Microbiology II - lect](#) && [VLIM051p Immunology - lecture](#) &&

[VSEI7X1 EPI](#) && [VLDM7X1c Diagn.imaging - practice](#)

Prerequisites according to the MU study and examination regulations.

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

At the end of course, student will be able to explain the relationship between human and environment, its physical, chemical, biological and psychosocial factors and their interactions. Student will be able to explain the role of adaptation and its active support for the positive development and promotion of both individual and public health;

Student will be able to make deduction about possibilities for preventive provisions in the field of clean and safe environmental, occupational and home surrounding, the quality of air, water, food. Student will be able to understand and explain the different types of prevention, their tasks and aims and methods of realization.

The student will be able to interpret the positive and negative influences of lifestyle factors on human/public health, including the autoaggressive behaviours (nutrition, physical activity, psychical overload and stress, smoking, abuse of alcohol and illegal drugs); Based on acquired knowledge, the student will be able to make deductions about the importance of environment and lifestyle in the health protection and promotion, and about the primary prevention priorities;

Based on acquired knowledge, the student will be able to formulate decisions about concrete preventable possibilities for some more important non-communicable diseases, such as cardiovascular, oncological, metabolically, immune, respiratory.

Syllabus

- 1. MAN AND ENVIRONMENT: Physical, biological, chemical and social factors in macro- and microenvironment. Their interactions. Ways of adaptation and compensation for keeping the homeostasis. "health" and "disease", their determinants.
 - 2. PREVENTION: primary and secondary prevention, tasks and aims. The most important world and Czech primary prevention programmes.
 - 3. NOISE: sources, impact on health, possibilities for control.
 - 4. LIGHT AND ILLUMINATION: physiology of seeing, optimal working conditions. The physiologic sense of colours.
 - 5. RADIATION: different types, their sources and impact on human health. Possibilities of control.
 - 6. COMPLEX OF MICROCLIMATE: external and internal conditions. Ways of thermoregulation. Work places with extreme microclimate, rules for drinking schedule. Long-term and short-term thermal load.
 - 7. BIOLOGICAL RHYTMS: circadian and other types, their influence on the performances. Shift work as a risk for health. Active and passive rest. Hygiene of sleeping.

- 8. AIR AND HEALTH: the most common contaminants of ambient air, their sources and human exposure. Smog. Health consequences of the exposure to polluted air.
- 9. BASIC TOXICOLOGY: ways of exposure, intake, uptake; metabolism of xenobiotics, genetic polymorphism in the microsomal enzymes; excretion. Health insure caused by chemical exposure, carcinogenesis. Similarities and differences between children and adults in toxicology.
- 10. HOUSING AND HEALTH: the most common risk factors at homes, health consequences of exposure (housing-related diseases, sick building syndrome, multiple chemical sensitivity). Ventilation, types and sense.
- 11. WATER AND HEALTH: the hygienic limits for drinking water, indicators of sewage contaminants. Trace elements in drinking water. Diseases related to water pollution. The principles for safety source of water.
- 12. NUTRITION AND HEALTH: diseases related to malnutrition and food contaminants. The role of nutrition in health promotion. Dietary guidelines. The ways for measurement of nutritional habits.
- 13. WASTE AND HEALTH: the types of waste products, their sources. Hygienic rules for safe destruction of waste products.
- 14. NATURAL AND MAN-MADE CHEMICALS IN ENVIRONMENT: their types, point and areal sources. Environment in the Czech Republic. Principles of the monitoring of environmental pollutants. "Natural pesticides".
- 15. SMOKING AND HEALTH: Smoking as the most important single preventable risk factor of premature morbidity and mortality. Dependence on smoking as a psychiatric disease. Involuntary smoking and health consequences of exposure.
- 16. WORKING AND HEALTH: risk occupational factors and related diseases. The rules for safety of occupational environment and health protection of workers.
- 17. STRESS AND HEALTH: physiologic response on stress situations. Stress-related diseases. Rules for the prevention of stress.
- 18. NON-COMMUNICABLE DISEASES: epidemiology, aetiology, prevention; Cardiovascular diseases, Cancer, Respiratory diseases, Allergy, Diabetes mellitus, Osteoporosis.

Literature

required literature

- Interaktivní osnova / Interactive syllabi
- TUČEK, Milan. Hygiena a epidemiologie. 1. vyd. Praha: Karolinum, 2012. 358 s. ISBN 9788024620251.
- Provozník K. aj.: Manuál prevence v lékařské praxi. 3. LF UK Praha, SZÚ Praha, 2003, 2004
- Manuál prevence v lékařské praxi :souborné vydání. Edited by Kamil Provozník. 1. vyd. Praha: Státní zdravotní ústav, 1998. 622 s. ISBN 80-7071-080-2

recommended literature

- Manuál prevence v lékařské praxi 7 :doporučené preventivní postupy v primární péči. Edited by Kamil Provazník - Lumír Komárek. 1. vyd. Praha: Státní zdravotní ústav, 1999. 55 s. ISBN 80-7071-135-3.
- Manuál prevence v lékařské praxi 8 :základy hodnocení zdravotních rizik. Edited by Kamil Provazník. 1. vyd. Praha: Státní zdravotní ústav, 2000. 158 s. ISBN 80-7071-161-2
- Manuál prevence v lékařské praxi 9 :hodnocení zdravotního stavu, přístupy klinické epidemiologie. Edited by Kamil Provazník - Lumír Komárek. 1. vyd. Praha: Státní zdravotní ústav, 2001. 63 s. ISBN 80-7071-194-9.
- Pracovní lékařství pro praxi :příručka s doporučenými standardy. Edited by Milan Tuček - Miroslav Cikrt - Daniela Pelclová. 1. vyd. Praha: Grada Publishing, 2005. 327 s. ISBN 80-247.
- Referenční hodnoty pro příjem živin. V ČR 1. vyd. Praha: Společnost pro výživu, 2011. 192 s. ; ISBN 9788025469873.
- KOTULÁN, Jaroslav. Zdravotní nauky pro pedagogy. 3. vyd. Brno: Masarykova univerzita, 2012. 258 s. ISBN 978-80-210-5763-0.
- Kotulán aj: Preventivní lékařství I, II. Lékařská fakulta MU, 1991, 1992

not specified

- .
- .
- **REQUIRED LITERATURE FOR PREVENTIVE MEDICINE AND HYGIENE**
- 1. Lener J et al: Medical hygiene. Prague - Czech Republic: Vydavatesltví Karolinum; 1997. pp 1-128.
- 2. Bártová J, Havránek J, Hrnčíř E, Lener J, Petrová K: General and environmental hygiene. Edited by J. Bártová. Prague - Czech Republic: 3rd Medical Faculty Charles University Prague; 1994. pp 5-87.
- 3. Varkey P: Mayo clinic preventive medicine and public health board review. Edited by Prathibha Varkey. New York - United States: Mayo Clinic Scientific Press - Oxford University Press; 2010. pp 111-232.
- 4. Brázdová Z, Fiala J: Dietary guidelines in the Czech Republic. Brno: Acta Facultatis Medicae Universitas Masarykianae; 1998.
- 4. Krause's food & nutrition therapy. Edited by L. Kathleen Mahan - Sylvia Escott-Stump. 12th ed. St. Louis, Mo.: Saunders/Elsevier, 2008. ISBN 9781416034018. pp 2-144, 200-206, 224-228, 249-254, 269-283, 299-300.
- 5. Bonita R, Beaglehole R, Kjellström: Basic epidemiology. 2nd edition. Geneva - Switzerland: World Health Organization; 2006. pp 99-177.
- 6. Farmer R, Lawrenson R, Miller D: Epidemiology and public health medicine. 5th edition. Oxford - U.K.: Blackwell Publishing; 2004. pp 96-102, 127-139.
- 7. Stone DB, Armstrong WR, Macrina DM, Pankau JW: Introduction to epidemiology. Dubuque, IA - USA: Brown & Benchmark Publishers; 1996. pp 49-63, 163-190.
- 8. All study materials provided in the IS subject's vault
- 9. www.who.int (information not found in the books).
- .
- .

- RECOMMENDED LITERATURE FOR PREVENTIVE MEDICINE AND HYGIENE
- .
- 1. Wallace/Maxcy-Rosenau-Last: Public health & preventive medicine. 15th edition. Edited by Robert B Wallace. United States: The McGraw-Hill Companies; 2008.
- 2. Jekel J, Katz D, Elmore J, Wild DMG: Epidemiology, biostatistics and preventive medicine. 3rd edition. United States: Saunders Elsevier; 2007.
- 3. Hrubá D: Occupational Medicine Practice. Basic Toxicology. (Fundamental abstracts from textbooks. LF MU: 1997.
- 4. Lu FC: Basic Toxicology. Taylor, Francis, Washington, DC, 1996.

Teaching methods

Lectures.

Reading and studying ALL REQUIRED LITERATURE.

For those who will have to write research projects and seminar papers during third, fourth and fifth year, it is strongly recommended to enrol the following courses:

VSIL021 - Information literacy - (3 credits) - e-learning.

VSKP041 - A course of working with information sources and tools (4 credits).

Assessment methods

COLLOQUIUM INFORMATION:

1. To sit for colloquium, it will be required to successfully complete the prerequisite subjects and to have obtained the subject's credit - VLPL9X1a.
2. Each student must register in the Information System (IS) in one of the offered colloquium / examination terms. The colloquium has fixed colloquium / examination terms / dates - (Only during the examination period, except the examination pre-term). No extra-terms will be given.
3. Students registered to a colloquium term will fail the term if:
 - a-) arrive late the colloquium day.
 - b-) they are not present and previously did not cancel the term in the stipulated periods (see IS).
4. In case of failure, EACH STUDENT CAN RETAKE THE COLLOQUIUM TWO MORE TIMES, only in given terms (according to Masaryk University study rules).
5. In case of failure during the third term (second resit), the student must repeat the course in the following school year.
6. All colloquium questions are based on ALL REQUIRED LITERATURE, seminars

and lectures.

Colloquium → Written examination → 20 multiple choice question test, with only one correct answer - (to pass the test, it is required a minimum of 14 correct answers / points).

SCORE:

Passed → 14 and more correct answers / points.

Failed → 13,5 or less correct answers / points.

In order to omit / avoid guessing while answering the MCQ test / examination, the following system will be used:

Correct answer = 1 point.

No answer = 0 point.

Wrong answer = -0,5 point.

Test scoring will be according to the next formula:

Final score = Number of correct answers - (Number of wrong answers / two).

For example:

15 correct answers (15 x 1 point = 15 points) - Passed.

5 wrong answers (5 x -0,5 = -2,5 points).

15 - 2,5 = 12,5. The final score of the test will be 12,5 answers / points.

Final result = Failed.

** For that reason, only answer the question when you are sure of the answer.

*** This subject is part of the Public Health State Examination ***

See VLZP11XX - Public Health State Examination.

ACADEMIC MISCONDUCT, PLAGIARISM DETECTION AND ETHICAL ISSUES:

1. Any attempts of ACADEMIC MISCONDUCT, such as cheating or assisting someone else to cheat during the colloquium, will result in disciplinary actions, such as:

a-) You will be required to hand over your examination paper and asked to leave the examination room. This means, you failed the examination (examination term), with the respective score F / 4, on your academic records in the information system.

b-) Opening disciplinary proceedings.

c-) Failing the subject / course.

d-) Expulsion from university.

2. During the colloquium, it is forbidden to use items such as:
 - a-) Smart phones / Tablets.
 - b-) Laptops.
 - c-) To wear earphones or headphones (if not medical prescribed).
 - d-) To talk.

*In such cases, disciplinary actions will be taken (See above numeral 1).

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

Information on completion of the course: kolokvium je nutna prerekvizita k SRZk pro studenty LF, pro ostatni studenty MU nikoliv

The course can also be completed outside the examination period.

The course is taught each semester.

General note: pro studenty MU mimo LF nutny souhlas garanta.

Information on the extent and intensity of the course: 30 hodin celkem.

Listed among pre-requisites of other courses

- [VLCH11XX Surgery - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLS7X1p](#) && [VSEI7X1](#) && [VL7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLP1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLR041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [VLPD11XX Paediatrics - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLS7X1p](#) && [VSEI7X1](#) && [VL7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLP1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLR041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [VLP11XX Obstetric and Gynaecology - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && [VLVL9X66c](#) && ([VLVL9X65c](#) ||

[VLVL7X65c](#)) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VSNO071](#), [VLKA091](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSDL071](#), [VRL041](#), [VLIA081](#), [VLKM081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

- **[VLRL11XX](#) Family Medicine and Geriatrics**
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLIN9X22](#) && [VLPL9X1](#) && [VLON091](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) (Do I meet enrolment requirements?)
- **[VLVL11XX](#) Internal Medicine - State Exam**
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- **[VLZP11XX](#) Public Health - State Exam**
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

Teacher's information

Společné semináře jsou pokládány za prerekvizitu pro povolení účasti studentů na praktikách a praxi oboru Preventivní lékařství téhož semestru. Na závěr každého semináře bude předložen studentům krátký test.

The course is also listed under the following terms [Autumn 1999](#), [Spring 2000](#), [Autumn 2000](#), [Spring 2001](#), [Autumn 2001](#), [Spring 2002](#), [Autumn 2002](#), [Spring 2003](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#),

[Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

VLPL9X1a Preventive Medicine ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

15/60/0. 2 credit(s). Recommended Type of Completion: z (credit). Alternate Types of Completion: k (colloquium).

Teacher(s)

[prof. MUDr. Bc. Zuzana Derflerová Brázdová, DrSc.](#) (seminar tutor)

[doc. MUDr. Jindřich Fiala, CSc.](#) (seminar tutor)

[Mgr. Jana Fialová, Ph.D.](#) (seminar tutor)

[Mgr. Martin Forejt, Ph.D.](#) (seminar tutor)

[RNDr. Jan Hollan, Ph.D.](#) (seminar tutor)

[prof. MUDr. Drahoslava Hrubá, CSc.](#) (seminar tutor)

[MUDr. Miluše Jurášková](#) (seminar tutor)

[MUDr. Anna Klimová](#) (seminar tutor)

[RNDr. Danuše Lefnerová, Ph.D.](#) (seminar tutor)

[MVDr. Halina Matějová](#) (seminar tutor)

[MUDr. Veronika Mičulková](#) (seminar tutor)

[Mgr. Aleš Peřina, Ph.D.](#) (seminar tutor)

[MUDr. Kräuff Rainer Schwanhaeuser Wulff, MBA, Ph.D. et Ph.D., M.A.](#) (seminar tutor)

[doc. MUDr. Jan Šimůnek, CSc.](#) (seminar tutor)

[Mgr. Robert Vysoký, Ph.D.](#) (seminar tutor)

[MUDr. Miroslava Zavřelová](#) (seminar tutor)

[RNDr. Ondřej Zvěřina, Ph.D.](#) (seminar tutor)

[Jana Chaloupková](#) (assistant)

[Zdeňka Jochová](#) (assistant)

Supervisor

[doc. MUDr. Jindřich Fiala, CSc.](#)

[Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [Mgr. Aleš Peřina, Ph.D.](#)

Supplier department: [Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Timetable of Seminar Groups

VLPL9X1a/01: Mon 23. 10. to Fri 27. 10. each working day 7:30–12:20 [A21/107](#), Mon

11. 12. to Fri 15. 12. each working day 7:30–12:20 [A21/107](#), pouze pro studenty
pediatrického směru

VLPL9X1a/02: Mon 9. 10. to Fri 13. 10. each working day 7:30–12:20 [A21/107](#), Mon 27.

11. to Fri 1. 12. each working day 7:30–12:20 [A21/107](#)

VLPL9X1a/03: Mon 25. 9. to Fri 29. 9. each working day 7:30–12:20 [A21/107](#), Mon 13.

11. to Fri 17. 11. each working day 7:30–12:20 [A21/107](#)
VLPL9X1a/04: Mon 30. 10. to Fri 3. 11. each working day 7:30–12:20 [A21/107](#), Mon 8.
1. to Fri 12. 1. each working day 7:30–12:20 [A21/107](#)
VLPL9X1a/05: Mon 16. 10. to Fri 20. 10. each working day 7:30–12:20 [A21/107](#), Mon
18. 12. to Fri 22. 12. each working day 7:30–12:20 [A21/107](#)
VLPL9X1a/06: Mon 2. 10. to Fri 6. 10. each working day 7:30–12:20 [A21/107](#), Mon 4.
12. to Fri 8. 12. each working day 7:30–12:20 [A21/107](#)
VLPL9X1a/30: Mon 6. 11. to Fri 10. 11. each working day 7:30–12:20 [A21/107](#), Mon 18.
12. to Fri 5. 1. each working day 7:30–12:30 [A21/107](#)
VLPL9X1a/31: Mon 20. 11. to Fri 24. 11. each working day 7:30–10:00 [A21/112](#), Mon 8.
1. to Fri 19. 1. each working day 7:30–12:20 [A21/107](#)
VLPL9X1a/34: No timetable has been entered into IS.

Prerequisites

[VSIP0622c Introduction to internal II-pr](#) && [VLCP0622c Introduc. to surgery II -pr.](#) &&
[VLLM0522p Medical Microbiology II - lect](#) && [VLIM051p Immunology - lecture](#) &&
[VSEI7X1 EPI](#) && [VLDM7X1c Diagn.imaging - practice](#)

Prerequisites according to the MU study and examination regulations.

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

At the end of course, student will be able to explain the relationship between human and environment, its physical, chemical, biological and psychosocial factors and their interactions. Student will be able to explain the role of adaptation and its active support for the positive development and promotion of both individual and public health;

Student will be able to make deduction about possibilities for preventive provisions in the field of clean and safe environmental, occupational and home surrounding, the quality of air, water, food. Student will be able to understand and explain the different types of prevention, their tasks and aims and methods of realization.

The student will be able to interpret the positive and negative influences of lifestyle factors on human/public health, including the autoaggressive behaviours (nutrition, physical activity, psychical overload and stress, smoking, abuse of alcohol and illegal drugs); Based on acquired knowledge, the student will be able to make deductions about the importance of environment and lifestyle in the health protection and promotion, and about the primary prevention priorities;

Based on acquired knowledge, the student will be able to formulate decisions about concrete preventable possibilities for some more important non-communicable diseases, such as cardiovascular, oncological, metabolically, immune, respiratory.

Syllabus

-
- PRACTICES:
 - 1. General information about the course Preventive medicine.
 -
 - 2. BASIC PRINCIPLES OF NON-INFECTIOUS EPIDEMIOLOGY AND PREVENTIVE MEDICINE.
 - 3. PREVENTION OF CARDIOVASCULAR DISEASES.
 - 4. PREVENTION OF CANCER.
 - 5. METHODS OF MEASUREMENT OF NUTRITIONAL INTAKE: Questionnaire and laboratory methods - presentation. Self-evaluation of short-term recalls and long-term nutritional habits. .
 - 6. PREVENTION OF THE MUSCULOSKELETICAL DISTURBANCES: ergonomic approaches to the optimization of working conditions. Risk of the sedentary position. Exercises lowering the static load. .
 - 7. PREVENTION OF THE STRESS: Tests for self-availability to be stressed by the obvious load. Techniques for relaxation.
 - 8. TREATMENT OF TOBACCO ADDICTION.
 - 9. PROGRAMMES OF DRUGS ABUSE PRIMARY PREVENTION.
 - 10. NUTRITION AND FOOD: food labelling, nutritional and health recommendations, nutritional safety .
 - 11. ENVIRONMENT AND HEALTH: noise, light, radiation, living, water.
 - 12. TOXICOLOGY IN PREVENTION.
 - 13. WORK AND HEALTH.
-
- PRAXIS:
 - 1. EPIDEMIOLOGIC STUDY ABOUT THE NUTRITION OF TARGET POPULATIONS: proposals for the development of questionnaires, selection of a population sample, use of standardised questionnaires, digitalized information and data, evaluation of obtained results at individual and group basis.
 - 2. SPECIAL TOXIKOLOGY: power point presentations on chosen chemical xenobiotics (Pb, Hg, Cr, Cd, toluene, benzene, trichlorethylene): their sources in the environment and working exposure, way of exposures, effects on humans. Clinical manifestations of poisoning, therapy. Primary and secondary prevention.
 - 3. KOMPLEX PREVENTION OF CARDIOVASCULAR DISEASES: anamnesis, clinical and biochemical measurements of the main risk factors (smoking, nutrition, physical activity, blood lipids, anthropometry); evaluation of the results, preventive proposals.
 - 4. SMOKING CESSATION AMONG THE HOSPITALIZED PATIENTS: Practical application of the 4A programme used for smoking cessation at some clinics.

- 5. BREAST-FEEDING PROMOTION: Practical application of the knowledge about the postnatal care for newborns with the concern on the breast-feeding promotion.
- 6. EPIDEMIOLOGIC STUDIES WITH DIFFERENT AIMS: Preference of the different foods among children. The frequencies of the fast food consumption among children. Approaches of different target population groups to the non-smoking activities. Frequency of the fruit and vegetables consumption, dairy products among children.
- 7. CONSEQUENCES OF PRENATAL EXPOSURE TO SMOKING, during childhood and adulthood. Review of scientific literature.
- 8. BASIC OF RISK ASSESMENT, MANAGEMENT AND COMMUNICATION: examples of case-studies.

Literature

required literature

- Interaktivní osnova / Interactive syllabi
- MÜLLEROVÁ, Dana. *Hygiena, preventivní lékařství a veřejné zdravotnictví*. 1. vydání. Praha: Univerzita Karlova v Praze, nakladatelství Karolinum, 2014. 254 stran. ISBN 9788024625102. [info](#)
- TUČEK, Milan. *Hygiena a epidemiologie*. 1. vyd. Praha: Karolinum, 2012. 358 s. ISBN 9788024620251. [info](#)

recommended literature

- *Manuál prevence v lékařské praxi*. Edited by Kamil Provazník - Lumír Komárek. 1. vyd. Praha: Státní zdravotní ústav, 1999. 55 s. ISBN 8070711353. [info](#)
- *Manuál prevence v lékařské praxi*. Edited by Kamil Provazník. 1. vyd. Praha: Státní zdravotní ústav, 2000. 158 s. ISBN 8070711612. [info](#)
- *Manuál prevence v lékařské praxi*. Edited by Kamil Provazník - Lumír Komárek. 1. vyd. Praha: Státní zdravotní ústav, 2001. 63 s. ISBN 8070711949. [info](#)
- TUČEK, Milan, Miroslav CIKRT and Daniela PELCLOVÁ. *Pracovní lékařství pro praxi : příručka s doporučenými standardy*. Vyd. 1. Praha: Grada, 2005. 327 s. ISBN 8024709279. [info](#)
- *Referenční hodnoty pro příjem živin*. V ČR 1. vyd. Praha: Společnost pro výživu, 2011. 192 s. ISBN 9788025469873. [info](#)
- KOTULÁN, Jaroslav. *Zdravotní nauky pro pedagogy*. 3. vydání. Brno: Masarykova univerzita, 2012. 258 stran. ISBN 9788021057630. [info](#)
- J.Kotulán: Primární prevence I, II. Lékařská fakulta MU, Brno, 1991,1992
- *Manuál prevence v lékařské praxi : souborné vydání*. Edited by Kamil Provazník. 1. vyd. Praha: Státní zdravotní ústav, 1998. 622 s. ISBN 8070710802. [info](#)

not specified

- .
- REQUIRED LITERATURE FOR PREVENTIVE MEDICINE AND HYGIENE
- .

- 1. Lener J et al: Medical hygiene. Prague - Czech Republic: Vydavatelství Karolinum; 1997. pp 1-128.
- 2. Bártová J, Havránek J, Hrnčíř E, Lener J, Petrová K: General and environmental hygiene. Edited by J. Bártová. Prague - Czech Republic: 3rd Medical Faculty Charles University Prague; 1994. pp 5-87.
- 3. Varkey P: Mayo clinic preventive medicine and public health board review. Edited by Prathibha Varkey. New York - United States: Mayo Clinic Scientific Press - Oxford University Press; 2010. pp 111-232.
- 4. Brázdová Z, Fiala J: Dietary guidelines in the Czech Republic. Brno: Acta Facultatis Medicae Universitatis Masarykianae; 1998.
- 4. Krause's food & nutrition therapy. Edited by L. Kathleen Mahan - Sylvia Escott-Stump. 12th ed. St. Louis, Mo.: Saunders/Elsevier, 2008. ISBN 9781416034018. pp 2-144, 200-206, 224-228, 249-254, 269-283, 299-300.
- 5. Bonita R, Beaglehole R, Kjellström: Basic epidemiology. 2nd edition. Geneva - Switzerland: World Health Organization; 2006. pp 99-177.
- 6. Farmer R, Lawrenson R, Miller D: Epidemiology and public health medicine. 5th edition. Oxford - U.K.: Blackwell Publishing; 2004. pp 96-102, 127-139.
- 7. Stone DB, Armstrong WR, Macrina DM, Pankau JW: Introduction to epidemiology. Dubuque, IA - USA: Brown & Benchmark Publishers; 1996. pp 49-63, 163-190.
- 8. All study materials provided in the IS subject's vault
- 9. www.who.int (information not found in the books).
- .
- .
- .
- RECOMMENDED LITERATURE FOR PREVENTIVE MEDICINE AND HYGIENE
- .
- 1. Wallace/Maxcy-Rosenau-Last: Public health & preventive medicine. 15th edition. Edited by Robert B Wallace. United States: The McGraw-Hill Companies; 2008.
- 2. Jekel J, Katz D, Elmore J, Wild DMG: Epidemiology, biostatistics and preventive medicine. 3rd edition. United States: Saunders Elsevier; 2007.
- 3. Hrubá D: Occupational Medicine Practice. Basic Toxicology. (Fundamental abstracts from textbooks. LF MU: 1997.
- 4. Lu FC: Basic Toxicology. Taylor, Francis, Washington, DC, 1996

Teaching methods

Seminář / cvičení, skupinové projekty a diskuze.

Nastudování VEŠKERÉ POVINNÉ LITERATURY.

Studentům, kteří budou vypracovávat výzkumné projekty či psát seminární práce během třetího, čtvrtého či pátého roku studia, je velmi doporučeno zapsat si následující předměty:

VSIL021 - Information literacy - (3 kredity) - e-learning.

VSKP041 - Kurz práce s informačními zdroji a nástroji (4 kredity).

Assessment methods

REQUIREMENTS TO OBTAIN THE CREDIT:

1. 100 % attendance to seminars / practices during the semester.
2. It will be required to successfully complete the prerequisite subjects.
3. Absences will be tolerated just due to medical reasons - Students must provide appropriate documentation or medical excuse.
 - + Students must be aware that even with justified absences (medical excuse), a minimum of 80% attendance is required to obtain the credit. In case a student will have more than 20 % justified / unjustified absences, he / she will have to repeat the course in the following school year.
4. Fulfilment of given tasks:
 - + In case of unjustified absence (per each one), a 1,500-2,000 word seminar paper and a 5-8 minutes power point presentation on the seminar paper topic will be given. If the seminar paper is rejected due to deficiencies and it is not corrected and submitted again, the student will not fulfil with the subject's requirements, and he / she will not get the credit (See Absence and latecomer policy, Academic misconduct, plagiarism detection and unethical issues).
5. Active participation during the seminars / practices / lectures.
6. Pass the credit test. Students will be allowed to take the credit test only if they have fulfilled numeral 4 (requirements to obtain the credit).

CREDIT TEST INFORMATION:

1. Get at least 70 % (14 out of 20 questions) in the credit test, which is a requisite to sit for examination.
2. Each student must register in the Information System (IS) in one of the offered credit test terms. The credit test has fixed examination terms / dates - (Only during the examination period, except the examination pre-term). No extra-terms will be given.
3. Students registered to a credit test term will fail the term if:
 - a-) arrive late to the test. No late arrival will be allowed after the start of the credit test.
 - b-) they are not present and previously do not cancel the term in the stipulated periods (see IS).
4. In case of failure, EACH STUDENT CAN RETAKE THE CREDIT TEST TWO MORE TIMES, only in given terms (according to Masaryk University study and examination regulations).

5. In case of failure during the third term (second resit), the student must repeat the course in the following school year.
6. All credit test questions are based on ALL REQUIRED LITERATURE, seminars and lectures.

The credit test is a written examination → 20 multiple choice question test, with only one correct answer - (to pass the test, it is required a minimum of 14 correct answers / points).

SCORE:

Passed → 14 and more correct answers / points.

Failed → 13,5 or less correct answers / points.

In order to omit / avoid guessing while answering the MCQ test / examination, the following system will be used:

Correct answer = 1 point.

No answer = 0 point.

Wrong answer = -0,5 point.

Test scoring will be according to the next formula:

Final score = Number of correct answers - (Number of wrong answers / two).

For example:

15 correct answers (15 x 1 point = 15 points) - Passed.

5 wrong answers (5 x -0,5 = -2,5 points).

15 - 2,5 = 12,5. The final score of the test will be 12,5 answers / points.

Final result = Failed.

** For that reason, only answer the question when you are sure of the answer.

ABSENCE AND LATECOMER POLICY:

1. Justified, unjustified absences and late coming to classes:

a-) Justified absences → just due to medical reasons - Student must provide appropriate documentation or medical excuse in original.

b-) Unjustified absences → the student does not present the medical excuse (original) in the following week of the absence.

c-) Late coming to classes → the student arrives after attendance has been taken (3 minutes).

2. Measures against absenteeism or late coming to classes:

a-) Every unjustified absence or late coming to classes leads to a 1,500-2,000 word seminar paper plus a 5-8 minutes power point presentation on the same topic (the topics will be assigned in the same week of the absence or late coming).

b-) The seminar paper must be submitted on the subject's vault within the next 6 days of the incident (absence or late coming), in other case it will be rejected → They will not get the credit.

c-) Students will receive an email with the seminar paper instructions, and the word and power point frames.

d) Students take full responsibility for their seminar paper(s) and power point presentation(s). (See Academic misconduct, plagiarism detection and unethical issues).

3. THERE WILL BE NO EXCEPTIONS. In the following cases, students will be not get the credit / allowed to take the credit test:

* Not submitting the assigned seminar paper.

* If the seminar paper is rejected due to deficiencies and is not corrected and submitted again.

* If despite the fact the seminar paper is accepted but the power point presentation is not shown in class.

* If the seminar paper is rejected three times.

* If the seminar paper has plagiarism or any unethical issues.

ACADEMIC MISCONDUCT, PLAGIARISM DETECTION AND UNETHICAL ISSUES:

1. Any attempts of ACADEMIC MISCONDUCT, such as cheating or assisting someone else to cheat during the credit test, will result in disciplinary actions, such as:

a-) You will be required to hand over your examination paper and asked to leave the examination room. This means, you failed the examination (examination term), with the respective score F / 4, on your academic records in the information system.

b-) Opening disciplinary proceedings.

c-) Failing the subject / course.

d-) Expulsion from university.

2. During the examination, it is forbidden to:

a-) Use smart phones / Tablets.

b-) Use laptops.

c-) To wear earphones or headphones (if not medical prescribed).

d-) To talk.

*In such cases, disciplinary actions will be taken (See above numeral 1).

3. Every seminar paper will be checked / scanned on university and external systems for online plagiarism detection.

4. Cases of suspected plagiarism will be investigated and given to the Disciplinary Committee as a motion to open disciplinary proceedings, according to the Disciplinary Code for Faculty Students.
5. Unethical issues will lead to seminar paper rejection → not getting the credit → repeating the course next school year or expulsion from university.
6. The plagiarism scan system is able to detect cut and paste from other languages with its respective translation into English. Avoid complications. Simply read the source and use your own words and the cite (quote) the source of information.
7. Students MUST be aware that before acceptance, all citations are controlled (compared with the original source). It will not be tolerated any attempts to create or manipulate citations (ACADEMIC MISCONDUCT). → Seminar paper rejection → not getting the credit → repeating the course next school year or expulsion from university.

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

Information on completion of the course: kolokvium je nutna prerekvizita k SRZk pro studenty LF, pro ostatni studenty MU nikoliv

The course can also be completed outside the examination period.

The course is taught each semester.

General note: pro studenty MU mimo LF nutny souhlas garanta.

Information on the extent and intensity of the course: 75 hodin celkem.

Information on course enrolment limitations: mimo studenty LF max. 16 studentu

Teacher's information

DŮLEŽITÉ UPOZORNĚNÍ:

- skupina pediatrického směru je vyhrazena POUZE příslušným studentům.
- Stážování s různými skupinami se povoluje jen výjimečně ze závažných důvodů.

The course is also listed under the following terms [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

VLPM071 Legal Aspects in Medicine ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

2/0. 3 credit(s). Type of Completion: k (colloquium).

Teacher(s)

[doc. JUDr. Filip Křepelka, Ph.D.](#) (lecturer)

[Mgr. Bc. Michal Koščík, Ph.D.](#) (lecturer)

Supervisor

[Mgr. Bc. Michal Koščík, Ph.D.](#)

[Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [Mgr. Bc. Michal Koščík, Ph.D.](#)

Supplier department: [Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Timetable

Mon 2. 10. to Fri 20. 10. Wed 15:30–17:10 [N01902](#), Mon 23. 10. to Fri 22. 12. Wed 16:10–17:50 [A11/234](#)

Prerequisites (in Czech)

[VSSL051p Social Medicine - lecture](#)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

The capacity limit for the course is 193 student(s).

Current registration and enrolment status: enrolled: **121**/193, only registered: **0**/193

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

At the end of the course, students should be able to understand basics of single legal branches related to health law. Legal problems in health care are discussed in-depth.

Syllabus

- 1. Basic legal terms, legal branches, sources of law
- 2. Health law – sources, public health insurance, subjects of public health insurance and their duties, health insurance funds, patients rights, medical liability, confidentiality, protection of privacy, detention, health care professions, health care administration, self-government in health care, medical liability, transplantation, autopsy, assisted reproduction, genetics
- 3. Basics of penal and trespass law – sources, principles of penal law and penal proceeding, sanctions, selected crimes, trespasses – basic information

Literature

- ŽDÁREK, Roman, Jolana TĚŠINOVÁ, Marta ŠKÁROVÁ, Robert WALTR and František PÚRY. *Metodika odškodňování imateriálních újem na zdraví*. Vydání první. xiv, 164. ISBN 9788074002809. [info](#)
- ŠUSTEK, Petr and Tomáš HOLČAPEK. *Zdravotnické právo*. Vydání první. Praha: Wolters Kluwer, 2016. 850 stran. ISBN 9788075523211. [info](#)
- PRUDIL, Lukáš. *Právo pro zdravotnické pracovníky*. Praha: Linde, 2014. 178 s. ISBN 9788072019298. [info](#)

- TĚŠINOVÁ, Jolana, Roman ŽĎÁREK and Radek POLICAR. *Medicínské právo*. Vyd. 1. V Praze: C.H.Beck, 2011. xxxiii, 41. ISBN 9788074000508. [info](#)

Teaching methods

lectures

Assessment methods

colloquium

Language of instruction

Czech

Further Comments

[Study Materials](#)

The course is taught annually.

Listed among pre-requisites of other courses

- [VLCH11XX Surgery - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VRL041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [VLPD11XX Paediatrics - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VRL041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [VLPG11XX Obstetric and Gynaecology - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && [VLVL9X66c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VSNO071](#), [VLKA091](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSDL071](#),

[VLRL041](#), [VLIA081](#), [VLKM081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

- **[VLRL11XX](#) Family Medicine and Geriatrics**
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLIN9X22](#) && [VLPL9X1](#) && [VLON091](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) (Do I meet enrolment requirements?)
- **[VLVL11XX](#) Internal Medicine - State Exam**
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- **[VLZP11XX](#) Public Health - State Exam**
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

The course is also listed under the following terms [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#), [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VLPM081 Palliative Medicine ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

2/0/0. 3 credit(s). Type of Completion: k (colloquium).

Teacher(s)

19989 Ladislav Kabelka, MUDr., Ph.D. (lecturer)

[MUDr. Ondřej Sláma, Ph.D.](#) (lecturer)

Supervisor

[MUDr. Ondřej Sláma, Ph.D.](#)

[Comprehensive Cancer Care Department - Institutions shared with the Masaryk Memorial Cancer Institute - Faculty of Medicine](#)

Supplier department: [Comprehensive Cancer Care Department - Institutions shared with the Masaryk Memorial Cancer Institute - Faculty of Medicine](#)

Prerequisites (in Czech)

SOUHLAS && [VLPP0622p Pathophysiol. II - lect.](#)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

The capacity limit for the course is 50 student(s).

Current registration and enrolment status: enrolled: **0**/50, only registered: **0**/50

Fields of study the course is directly associated with

- [Stomatology](#) (programme LF, M-ST)
- [General Medicine](#) (programme LF, M-VL)

Course objectives (in Czech)

Předmět Paliativní medicína nabízí možnost získat základní znalosti a dovednosti v péči o pokročile nevléčitelně nemocné pacienty (onkologické i neonkologické). Obsahem přednášek a seminářů bude léčba nejčastějších symptomů, pravidla podpůrné komunikace a psychosociální aspekty péče. Účastníci se seznámí s etickým a právním rámcem poskytování paliativní péče. Součástí výuky budou 2 exkurze do hospiců v brněnském regionu. Předmět je zakončen kolokviem.

Learning outcomes (in Czech)

Student bude po absolvování předmětu schopen: náležitě zhodnotit a paliativně řešit nejčastější tělesné a psychické symptomy pokročilých stádií nevléčitelných onemocnění; podpůrně komunikovat s pacienty a jejich rodinami o závažné diagnóze, prognóze a plánu paliativní péče; bude znát etické a právní souvislosti lékařského rozhodování u pacientů v závěru života; bude znát organizaci paliativní péče v ČR

Literature

recommended literature

- SLÁMA, Ondřej, Ladislav KABELKA and Jiří VORLÍČEK. *Paliativní medicína pro praxi*. 2., nezměn. vyd. Praha: Galén, 2011. 363 s. ISBN 9788072628490. [info](#)

Teaching methods (in Czech)

Přednášky;workshopy; exkurze v hospicových zařízeních

Assessment methods (in Czech)

Podmínky k udělení zápočtu za předmět Paliativní medicína Účast na přednáškách 80%
Písemně zpracovaná: Kazuistika nevléčitelně nemocného pacienta a rozvaha

o možnostech paliativní péče (na základě osobní zkušenosti nebo klinické zkušenosti ze stáží) NEBO Esej na jedno z následujících témat 1. Co znamená „kvalita života“ v situaci pokročilého nevyлéčitelného onemocnění 2. Lze pacienty otevřeně a pravdivě informovat o nepříznivé prognóze a přitom jim „nebrat naději“? 3. Je otázce péče o pacienty v závěru života věnována během studia na LF MU dostatečná pozornost? Rozsah eseje: 1-2 stránky A4

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

Information on course enrolment limitations: Předmět je určen pouze pro studenty 5. a 6. ročníku

The course is also listed under the following terms [Accreditation spring](#).

VLPO011c First Aid - practice ❄

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/1/0. 1 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Lukáš Dadák, Ph.D.](#) (seminar tutor)
[MUDr. Jan Maláska, Ph.D.](#) (lecturer)
[doc. MUDr. Petr Štourač, Ph.D.](#) (seminar tutor)
[MUDr. Roman Štoudek](#) (seminar tutor)
[MUDr. Ivan Čundrle, Ph.D.](#) (seminar tutor)
[MUDr. Martina Drahošová](#) (seminar tutor)
[prof. MUDr. Roman Gál, Ph.D.](#) (seminar tutor)
[MUDr. Martin Helán, Ph.D.](#) (seminar tutor)
[MUDr. Ondřej Hrdý](#) (seminar tutor)
[MUDr. Jan Hruđa, Ph.D.](#) (seminar tutor)
[MUDr. Kamil Hudáček](#) (seminar tutor)
[MUDr. Jan Hudec](#) (seminar tutor)
[MUDr. Miloš Chobola](#) (seminar tutor)
[MUDr. Zdeněk Chvátal](#) (seminar tutor)
[MUDr. Kateřina Jedličková](#) (seminar tutor)
[MUDr. Milan Jelínek](#) (seminar tutor)
[MUDr. Mgr. Miroslav Jíra, Ph.D.](#) (seminar tutor)
[MUDr. Tomáš Korbička](#) (seminar tutor)
[MUDr. Martina Kosinová](#) (seminar tutor)
[MUDr. Lukáš Růžek](#) (seminar tutor)
[MUDr. Olga Smékalová](#) (seminar tutor)
[MUDr. Pavel Suk, Ph.D.](#) (seminar tutor)
[MUDr. Petr Suk](#) (seminar tutor)

[prof. MUDr. Vladimír Šrámek, Ph.D.](#) (seminar tutor)

[MUDr. Robert Vach](#) (seminar tutor)

[MUDr. Michal Zimmer](#) (seminar tutor)

[MUDr. Václav Zvoníček, Ph.D.](#) (seminar tutor)

[Lenka Dobrovolná](#) (assistant)

[Martina Matoušková](#) (assistant)

[Eva Podborská](#) (assistant)

Supervisor

[MUDr. Lukáš Dadák, Ph.D.](#)

[Department of Anesthesiology and Intensive Care - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Contact Person: [MUDr. Lukáš Dadák, Ph.D.](#)

Supplier department: [Department of Anesthesiology and Intensive Care - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Timetable of Seminar Groups

VLPO011c/01: each even Monday 13:30–15:10 [063](#), *L. Dadák*

VLPO011c/02: each even Monday 13:00–14:40 [N02214](#), *J. Maláska*

VLPO011c/03: each odd Tuesday 13:00–14:40 [063](#), *L. Dadák*

VLPO011c/04: each even Tuesday 15:00–16:40 [N02214](#), *J. Maláska*

VLPO011c/05: each odd Wednesday 13:00–14:40 [N02214](#), *J. Maláska*

VLPO011c/06: each even Wednesday 13:00–14:40 [N02214](#), *J. Maláska*

VLPO011c/07: each odd Monday 13:30–15:10 [063](#), *L. Dadák*

VLPO011c/08: each odd Monday 13:00–14:40 [N02214](#), *J. Maláska*

VLPO011c/09: each odd Thursday 14:30–16:10 [063](#), *L. Dadák*

VLPO011c/10: each even Thursday 14:30–16:10 [063](#), *L. Dadák*

VLPO011c/11: each odd Wednesday 14:50–16:30 [N02214](#), *J. Maláska*

VLPO011c/12: each even Wednesday 14:50–16:30 [N02214](#), *J. Maláska*

VLPO011c/13: each even Tuesday 13:10–14:50 [063](#), *L. Dadák*

VLPO011c/14: each even Thursday 8:00–9:40 [N02214](#), *J. Maláska*

VLPO011c/15: each odd Wednesday 13:00–14:40 [063](#), *L. Dadák*

VLPO011c/16: each even Wednesday 13:00–14:40 [063](#), *L. Dadák*

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

At the end of this course, students should be able to:

understand basic vital signs;

provide Basic Cardiac Life Support according to ERC guidelines 2015;

provide first aid including wound dressing, transport and vital signs monitoring.

Learning outcomes

Student will be able to:

- carry out primary and secondary survey of the patient;

- show 1 minute of basic life support on the model of adult;

- show 1 minute of basic life support on the model of child;
- to provide first aid to the unconscious and conscious victim.
- communicate with the conscious patient.

Syllabus

- Cardiopulmonary resuscitation; Examination of the casualty. Basic vital functions. Breathing disorders, apnea, airway obstruction. Airway management, artificial ventilation. Cardiac arrest, circulation failure. Chest compressions, precordial thrust, cardiopulmonary resuscitation.
- CPR in children.
- Bleeding external, internal. Wounds. Bleeding management. Shock, treatment. Fainting, fatigue.
- Burns.
- Bandages.
- Fractures, injuries of joints and muscles - Treatment, immobilisation skills, splints, positioning.

Literature

required literature

- AUSTIN, Margaret, Rudy CRAWFORD and Vivien J. ARMSTRONG. *První pomoc : autorizovaná příručka organizací St John Ambulance, St Andrew's First Aid a British Red Cross*. Translated by Petr Stříbrný. V Praze: Slovart, 2015. 288 stran. ISBN 9788073913861. [info](#)

recommended literature

- AUSTIN, Margaret, Rudy CRAWFORD and Barry KLAASSEN. *First aid manual : the Authorised Manual of St John Ambulance, St Andrew's First Aid and the British Red Cross*. Revised 10th edition. London: DK, 2016. 288 stran. ISBN 9780241241233. [info](#)

Bookmarks

<https://is.muni.cz/auth/ln/tag/LF:VLPO011c!>

Teaching methods

Class exercises.

Assessment methods

Class exercises are obliged. MCQ test - student must pass well at least 75% of questions.

Language of instruction

Czech

Further Comments

[Study Materials](#)

The course is taught annually.

The course is also listed under the following terms [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VLPO011p First Aid - lecture ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

1/0/0. 2 credit(s). Type of Completion: k (colloquium).

Teacher(s)

[MUDr. Lukáš Dadák, Ph.D.](#) (lecturer)
[MUDr. Jan Maláska, Ph.D.](#) (lecturer)
[doc. MUDr. Petr Štourač, Ph.D.](#) (lecturer)
[MUDr. Roman Štoudek](#) (lecturer)
[MUDr. Ivan Čundrle, Ph.D.](#) (lecturer)
[prof. MUDr. Roman Gál, Ph.D.](#) (lecturer)
[MUDr. Ondřej Hrdý](#) (lecturer)
[MUDr. Jan Hruza, Ph.D.](#) (lecturer)
[MUDr. Kamil Hudáček](#) (lecturer)
[MUDr. Jan Hudec](#) (lecturer)
[MUDr. Zdeněk Chvátal](#) (lecturer)
[MUDr. Milan Jelínek](#) (lecturer)
[MUDr. Mgr. Miroslav Jíra, Ph.D.](#) (lecturer)
[MUDr. Jozef Klučka](#) (lecturer)
[MUDr. Tomáš Korbička](#) (lecturer)
[MUDr. Ivo Křikava, Ph.D.](#) (lecturer)
[MUDr. Lukáš Růžek](#) (lecturer)
[MUDr. Olga Smékalová](#) (lecturer)
[MUDr. Jan Stašek](#) (lecturer)
[MUDr. Pavel Suk, Ph.D.](#) (lecturer)
[MUDr. Petr Suk](#) (lecturer)
[prof. MUDr. Vladimír Šrámek, Ph.D.](#) (lecturer)
[MUDr. Robert Vach](#) (lecturer)
[MUDr. Václav Zvoníček, Ph.D.](#) (lecturer)
[Lenka Dobrovolná](#) (assistant)
[Martina Matoušková](#) (assistant)
[Eva Podborská](#) (assistant)

Supervisor

[MUDr. Lukáš Dadák, Ph.D.](#)
[Department of Anesthesiology and Intensive Care - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)
Contact Person: [MUDr. Lukáš Dadák, Ph.D.](#)
Supplier department: [Department of Anesthesiology and Intensive Care - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Timetable

Tue 18:00–18:50 [A22/116 aula](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

At the end of this course, students should be able to: understand basic vital signs; provide Basic Cardiac Life Support according to ERC guidelines; provide first aid including wound dressing, vital signs monitoring and transport.

Learning outcomes

Student will be able to:

- carry out primary and secondary survey of the patient;
- show 1 minute of basic life support on the model of adult;
- show 1 minute of basic life support on the model of child;
- to provide first aid to the unconscious and conscious victim.
- communicate with the conscious patient.

Syllabus

- **Cardiopulmonary resuscitation** Examination of the casualty. Basic vital functions. Breathing disorders, apnea, airway obstruction. Airway management, artificial ventilation. Cardiac arrest, circulation failure. Chest compressions, precordial thrust, cardiopulmonary resuscitation. BLS guidelines 2015.
- **CPR in children.**
- **Bleeding external, internal.** Wounds. Bleeding management. Shock, treatment. Fainting, fatigue.
- **Disorders of consciousness, coma. Seizures, cramps.**
- **Head injuries, face injuries, skull fractures, brain concussion, intracranial bleeding. Backbone injuries, contusions, fractures, spinal injuries. Treatment, fixation, transport.**
- **Chest injuries, rib fractures, pneumothorax. Abdominal injuries, injuries to the pelvis, lower extremities, polytrauma. Fixation, immobilisation skills, splints.**
- **Road accidents, multiple casualties situations.** Survey, assesment, evaluation of the casualties, first aid organisation. Emergency situations in diabetic patients.
- **Heat, cold injuries, electrical injuries.** Burns, scalds, heat stroke, heat exhaustion. Hypotermia, frostbites. Chemical burns.
- **Drawning. Chest pain evaluation, treatment.**
- **Animal, snake, insect bites . Infection, rabies, allergic reactions.**
- **Poisoning alcohol, drugs, CO, food. Injuries to the eye.**
- **Emergency situations in gynaecology and obstetrics.**

Literature

required literature

- AUSTIN, Margaret, Rudy CRAWFORD and Barry KLAASSEN. *First aid manual : the Authorised Manual of St John Ambulance, St Andrew's First Aid and the British Red Cross*. Revised 10th edition. London: DK, 2016. 288 stran. ISBN 9780241241233. [info](#)

not specified

- AUSTIN, Margaret, Rudy CRAWFORD and Vivien J. ARMSTRONG. *První pomoc : autorizovaná příručka organizací St John Ambulance, St Andrew's First Aid a British Red Cross*. Translated by Petr Stříbrný. V Praze: Slovart, 2015. 288 stran. ISBN 9788073913861. [info](#)
- *First aid : manual*. 10th ed. London: Dorling Kindersley, 2014. 288 s. ISBN 9781409342007. [info](#)

Bookmarks

<https://is.muni.cz/auth/ln/tag/LF:VLPO011p!>

Teaching methods

Lectures are theoretical. Presentations of lectures are with a support of PPT and video.

Assessment methods

oral exam Attending of lectures is obliged. Oral exam is connected with a practical presentation of cardiopulmonary resuscitation on model.

Language of instruction

Czech

Further Comments

[Study Materials](#)

The course can also be completed outside the examination period.

The course is taught annually.

Listed among pre-requisites of other courses

- [VLPP3X1 Nursing](#) ([VLPO011p](#) || [VSPO011p](#)) ([Do I meet enrolment requirements?](#))
- [VLPX042t Vacation Training in Nursing](#) ([VLBF011p](#) && [VLPO011p](#) && [VLLT0222s](#)) ([Do I meet enrolment requirements?](#))

The course is also listed under the following terms [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VLPP11Xpp Paliativní péče - předpromoční paxe ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/1.2/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Ondřej Sláma, Ph.D.](#) (lecturer)

Supervisor

[MUDr. Ondřej Sláma, Ph.D.](#)

[Comprehensive Cancer Care Department - Institutions shared with the Masaryk Memorial Cancer Institute - Faculty of Medicine](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught each semester.

The course is taught: in blocks.

Information on the extent and intensity of the course: 3 dny.

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

VLPP3X1 Nursing ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

3/12/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[Mgr. Hana Pinkavová](#) (lecturer)

[doc. PhDr. Andrea Pokorná, Ph.D.](#) (lecturer)

Supervisor

[doc. PhDr. Andrea Pokorná, Ph.D.](#)

[Department of Nursing - Departments of Non-medical Branches - Faculty of Medicine](#)

Contact Person: [doc. PhDr. Andrea Pokorná, Ph.D.](#)

Supplier department: [Department of Nursing - Departments of Non-medical Branches - Faculty of Medicine](#)

Timetable of Seminar Groups

VLPP3X1/05: Mon 6:00–10:00 [N03017](#)

VLPP3X1/06: Mon 6:00–10:00 [N03017](#)

VLPP3X1/07: Mon 6:00–10:00 [N03017](#)

VLPP3X1/08: Wed 6:00–10:00 [N03017](#)

VLPP3X1/09: Mon 6:00–10:00 [N03017](#)

VLPP3X1/10: Wed 6:00–10:00 [N03017](#)

VLPP3X1/11: Wed 6:00–10:00 [N03017](#)

VLPP3X1/12: Wed 6:00–10:00 [N03017](#)

VLPP3X1/13: Wed 6:00–10:00 [N03017](#)

Prerequisites

([VLPO011p First Aid - lecture](#) || [VSP0011p First Aid - lecture](#))

Students must have basic knowledge of anatomy and first aid. They should be able to

react under the guidance of a teacher on sudden changes in the patient's health status within their competencies according to the valid legislation.

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

This subject is an introduction in Nursing science for medical students. Tuition is focused on the basic information how to take care of the patient (mobile - independent, immobile - dependent) in all age and period of life. Special attention will be paid on obtaining knowledge and skills in basic nursing interventions in clinical practice and to fulfill basic patient's needs in relation to the Maslow's hierarchy and pyramid.

Learning outcomes

Students will be able after the completion of the course to render care in basic patient's needs: - in the area of cognitive goals they will be able to define nursing, holism and nursing care to define patient's needs and nursing process as a way for fulfillment - in the area of psychomotor goals they will be able: to render care and satisfy basic patient's needs in hygiene, feeding, excretion, breathing. - in the area of affective goals they will be able: to understand and accept the role of general nurse in multidisciplinary team

Syllabus

- The subject Basic nursing skills is theoreticaly and practicaly orientated subject. The main goal of the subject is to familiarise medical students with nursing sciences and possible collaboration among general nurses and physicians (team working in nursing). Students obtaine knowledge and basic skills for deliverring basic nursing skills/interventions and diagnostic procedures which are provided by general nurses or in which general nurse assists to physicians. First part - theory - 3 hours.
- nursing - characteristics, goals, features
- nursing process and nursing documentation
- communication - verbal, nonverbal
- nursing unit
- patient rights
- patients bed - positioning of the patients, making beds, immobilisation syndrome - prevention
- help with hygienic care
- help with feeding and eating
- help with excretion
- The tuition is organised in special skills labo, students are trained in basic nursing skills in the environment simulated clinical practice.
- Second part- 12 hours (8 hours for english speaking students)

- Demonstration and exercise of basic nursing skills in clinical environment under the supervision of nursing teacher (content of the tuition depends on type of unit, actual status of the patients and available prescribed interventions).

Literature

required literature

- VYTEJČKOVÁ, Renata, Petra SEDLÁŘOVÁ, Vlasta WIRTHOVÁ, Iva OTRADOVCOVÁ and Lucie KUBÁTOVÁ. *Ošetřovatelské postupy v péči o nemocné III : speciální část*. 1. vydání. Praha: Grada Publishing, 2015. 303 stran. ISBN 9788024734217. [info](#)
- [POKORNÁ, Andrea](#), [Alena KOMÍNKOVÁ](#) and [Nikola SIKOROVÁ](#). *Ošetřovatelské postupy založené na důkazech (Nursing skills - based on evidence)*. první. Brno: Masarykova univerzita, 2014. 171 pp. ISBN 978-80-210-7415-6. [info](#)
- [POKORNÁ, Andrea](#) and [Alena KOMÍNKOVÁ](#). *Ošetřovatelské postupy založené na důkazech (Nursing intervention - evidence based)*. 1. vyd. Brno: Masarykova univerzita, 2013. ISBN 978-80-210-6331-0. [info](#)

recommended literature

- POTTER, Patricia Ann, Anne Griffin PERRY, Patricia A. STOCKERT and Amy HALL. *Essentials for nursing practice*. 8th edition. xxii, 1225. ISBN 9780323112024. [info](#)
- DEBNATH, Rita. PROFESSIONAL SKILLS IN NURSING. 1st. ed. 218 pp. isbn 978-1-84787-396-5
- NANDA International, Inc. *nursing diagnoses : definitions & classification 2015-2019*. Edited by T. Heather Herdman - Shigemi Kamitsuru. Tenth edition. Chichester: Wiley Blackwell, 2014. xxviii, 48. ISBN 9781118914939. [info](#)
- *Nursing Interventions Classification (NIC)*. Edited by Gloria M. Bulechek. 6th ed. St. Louis: Elsevier, 2013. xxviii, 60. ISBN 9780323100113. [info](#)
- *Nursing Outcomes Classification (NOC) : measurement of health outcomes*. Edited by Sue Moorhead. 5th ed. St. Louis: Elsevier, 2013. xix, 751. ISBN 9780323100106. [info](#)
- *Nursing older adults*. Edited by Jan Reed - Charlotte L. Clarke - Ann Macfarlane. New York: Open University Press/McGraw-Hill, 2012. xvii, 297. ISBN 0335240844. [info](#)
- MCEWEN, Melanie and Evelyn M. WILLS. *Theoretical basis for nursing*. 3rd ed. Philadelphia: Wolters Kluwer/Lippincott Williams & Wilkins, 2011. xix, 508. ISBN 1605473235. [info](#)
- SCHUMACHER, Lori and Cynthia C. CHERNECKY. *Saunders nursing survival guide : critical care & emergency nursing*. 2nd ed. St. Louis, Mo.: Elsevier Saunders, 2010. xviii, 377. ISBN 141606169X. [info](#)
- *Ošetřovatelské postupy v péči o kriticky nemocné děti*. Edited by Jiřina Tučková. 1. vyd. Brno: IVPZ, 1997. 100 s. ISBN 8070132531. [info](#)

not specified

- VYTEJČKOVÁ, Renata. *Ošetrovatelské postupy v péči o nemocné I : obecná část*. 1. vyd. Praha: Grada, 2011. 228 s. ISBN 9788024734194. [info](#)

Teaching methods

lecture, practical laboratory training in skills laboratory and clinical placement - obligatory

Assessment methods

Credits (attendance of theoretical lessons, practical training).

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

Teacher's information

Zápočet je udělen pouze v případě, že student absolvoval všechny části výuky (jednou tříhodinový seminář a následně třikrát klinickou praxi vždy po čtyřech hodinách výuky). Teoretický seminář je přípravou na klinickou výuku, která následuje. Záznam o praxi předá lektor z klinické praxe vyučující teoretické části výuky. Úprava studenta k výuce: - pro teoretickou část výuky musí mít studenti přezůvky či návleky (výuka probíhá v prostorách simulujících klinické pracoviště) - pro výuku na klinických pracovištích je nezbytné, aby studenti měli ochranný pracovní oděv (bílé tričko, bílé lékařské kalhoty, obuv vhodnou do klinického nemocničního prostředí, jmenovku /obdrží na studijním oddělení/ a malý zápisník). Podrobnější informace k rozpisu stáží a úpravě na klinickou praxi studenti obdrží v teoretické výuce.

The course is also listed under the following terms [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

VLPS071 Medical Assessment Service in the Czech Republic



Faculty of Medicine

Autumn 2019

Extent and Intensity

8/4/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Petr Brhel, CSc.](#) (lecturer)
 doc. MUDr. Libuše Čeledová, PhD. (lecturer)
 MUDr. Rostislav Čevela, PhD (lecturer)
 MUDr. Hana Trnkócy (seminar tutor)
 MUDr. Andrea Suchomelová (seminar tutor)
 MUDr. Ivana Bogrová, PhD (seminar tutor)
[MUDr. Petr Malenka, Ph.D.](#) (seminar tutor)
[Bohdana Furiková](#) (assistant)

Supervisor

[prof. MUDr. Petr Brhel, CSc.](#)
[Department of Occupational Medicine - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Contact Person: [prof. MUDr. Petr Brhel, CSc.](#)

Supplier department: [Department of Occupational Medicine - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Prerequisites

[VSPF0622p Pathophysiol. II - lect.](#) && [VSPA0622p Pathology II - lecture](#) && [VSIP0622c Introduction to internal II-pr](#) && [VLCP0622c Introd. to surgery II -pr.](#)

VSPF0622p && VSPA0622p && VSIP0622c && VLCP0622c

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

The capacity limit for the course is 25 student(s).

Current registration and enrolment status: enrolled: 9/25, only registered: 0/25, only registered with preference (fields directly associated with the programme): 0/25

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

in czech only

Syllabus

- in czech only

Literature

recommended literature

- ČELEDVÁ, Libuše a Rostislav ČEVELA. Posudkové lékařství pro studenty lékařských fakult. Edited by Petr Brhel. 1. vyd. Brno: Masarykova univerzita, 2012. 80 s. ISBN 978-80-210-5950-4.
- ZVONÍKOVÁ, Alena, Libuše ČELEDVÁ and Rostislav ČEVELA. *Základy posuzování invalidity*. 1. vyd. Praha: Grada, 2010. 357 s. ISBN 9788024735351. [info](#)
- ČEVELA, Rostislav, Libuše ČELEDVÁ and Alena ZVONÍKOVÁ. *Posudkové lékařství : vybrané kapitoly*. 1. vyd. Praha: Grada, 2010. 143 s. ISBN 9788024732855. [info](#)

Teaching methods

in czech only

Assessment methods

in czech only

Language of instruction

Czech

Further comments (probably available only in Czech)

Study Materials

The course is taught annually.

Note related to how often the course is taught: 4x3 hodiny za semestr.

General note: Praktická výuka probíhá na PK MPSV a MěSSZ v Brně.

Information on the extent and intensity of the course: termíny upřesníme do dohody.

Information on course enrolment limitations: Minimum přihlášených - 5 studentů

Listed among pre-requisites of other courses

- **VLCH11XX Surgery - State Exam**
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- **VLPD11XX Paediatrics - State Exam**
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- **VLPG11XX Obstetric and Gynaecology - State Exam**
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && [VLVL9X66c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VSNO071](#), [VLKA091](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSDL071](#), [VLRL041](#), [VLIA081](#), [VLKM081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- **VLRL11XX Family Medicine and Geriatrics**
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLIN9X22](#) && [VLPL9X1](#) && [VLON091](#) && VYCET(3,

[VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) (Do I meet enrolment requirements?)

- **[VLVL11XX](#) Internal Medicine - State Exam**
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- **[VLZP11XX](#) Public Health - State Exam**
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

Teacher's information

Výuka bude probíhat ve 4 termínech v úterý v odpoledních hodinách v úterý od 14:00 h ve výukové místnosti Kliniky pracovního lékařství FN u sv. Anny v Brně na detašovaném pracovišti na Výstavní 17 (u Mendlova nám.). První výukový den 10.10. 2019. Program výuky v akad.škol.roce 2019/2018: 1. Posuzování zdravotního stavu pro účely nemocenského pojištění, tj. vše kolem dočasné pracovní neschopnosti. 2. Posuzování zdravotního stavu pro účely důchodového pojištění, tj. vše kolem invalidity. 3. Posuzování zdravotního stavu pro účely sociálních služeb, posuzování zdravotního stavu pro účely dávek osobám se zdravotním postižením. 4. Praktika na LPS Městské správy sociálního zabezpečení Brno + posuzování zdrav. stavu pro účely zaměstnanosti, status osoby zdravotně znevýhodněné. Před zahájením výuky v zimním semestru v týdnu od 18.9. do 22.9. 2019 obdrží zapsaní studenti e-mailem informační dopis. Zápočet se uděluje za účast ve výuce.

The course is also listed under the following terms [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#), [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VLPX042t **Vacational Training in Nursing** ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

0/0/0. 1 credit(s). Type of Completion: z (credit).

Supervisor

[Mgr. Hana Pinkavová](#)

[Department of Nursing - Departments of Non-medical Branches - Faculty of Medicine](#)

Contact Person: [Bc. Tereza Polzer, DiS.](#)

Supplier department: [Department of Nursing - Departments of Non-medical Branches - Faculty of Medicine](#)

Prerequisites (in Czech)

[VLBF011p Biophysics-lect.](#) && [VLPO011p First Aid - lecture](#) && [VLLT0222s Bas. Med. Terminol. II -s](#)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

This subject allows students the first contact with primary care on the ground of their new knowledge of theoretical and preclinical subjects and to obtain the overview of the performance of primary care.

Literature

- SEIFERT, Bohumil. *Primární péče. Praktické lékařství : výukový text pro studenty magisterského studia lékařství*. 1. vyd. Praha: Karolinum, 2004. 156 s. ISBN 8024608839. [info](#)

Assessment methods

stage, credit

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: in blocks.

Note related to how often the course is taught: 2 týdny během letních prázdnin.

Information on the extent and intensity of the course: 2 týdny.

Listed among pre-requisites of other courses

- [VLPX061t Vacation Training in Primary Care](#)
([VSPX042t](#) || [VLPX042t](#)) ([Do I meet enrolment requirements?](#))

The course is also listed under the following terms [Spring 2019](#), [Accreditation spring](#).

VLPX061t Vacation Training in Primary Care *

Faculty of Medicine

Spring 2018

Extent and Intensity

0/0. 1 credit(s). Type of Completion: z (credit).

Supervisor

[prof. MUDr. Hana Matějovská Kubešová, CSc.](#)

[Department of Internal Medicine, Geriatrics and Practical Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Supplier department: [Department of Internal Medicine, Geriatrics and Practical Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Prerequisites (in Czech)

([VSPX042t Vacation Training 2y](#) || [VLPX042t Vacation Training 2y](#))
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

This subject allows students the first contact with primary care on the ground of their new knowledge of theoretical and preclinical subjects and to obtain the overview of the performance of primary care.

Syllabus

- GP office, performance of primary care
- First contact with the patient at GP office
- Home visit of the patient
- Education of the patient in primary care
- Contact with relatives of the patient
- Emergencies at GP office

Literature

- SEIFERT, Bohumil. *Primární péče. Praktické lékařství : výukový text pro studenty magisterského studia lékařství*. 1. vyd. Praha: Karolinum, 2004. 156 s. ISBN 8024608839. [info](#)

Teaching methods

practical training at clinics

Assessment methods

one week stay, credit

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: in blocks.

Note related to how often the course is taught: v průběhu prázdnin.

Information on the extent and intensity of the course: 1 týden.

Listed among pre-requisites of other courses

- [VLPX084t](#) [Vacational Training in Surgery and Internal Medicine](#) [VSPF0622p](#) && [VSPA0622p](#) && [VSIP0622c](#) && [VLCP0622c](#) && [VLPX061t](#) && [VLFA0621c](#) (Do I meet enrolment requirements?)

The course is also listed under the following terms [Spring 2002](#), [Spring 2003](#), [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VLPX084t Vacational Training in Surgery and Internal Medicine ✳

Faculty of Medicine

Spring 2018

Extent and Intensity

0/0. 1 credit(s). Type of Completion: z (credit).

Supervisor

[prof. MUDr. Hana Matějovská Kubešová, CSc.](#)

[Department of Internal Medicine, Geriatrics and Practical Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Supplier department: [Department of Internal Medicine, Geriatrics and Practical Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Prerequisites (in Czech)

[VSPF0622p](#) [Pathophysiol. II - lect.](#) && [VSPA0622p](#) [Pathology II - lecture](#) && [VSIP0622c](#) [Introduction to internal II-pr](#) && [VLCP0622c](#) [Introduc. to surgery II -pr.](#) && [VLPX061t](#) [Vacational Training](#) && [VLFA0621c](#) [Pharmacology I - p](#) (Do I meet enrolment requirements?)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

This subject is arranged in cooperation with district hospitals and offers students the opportunity to be more familiar with routine performance of internal and surgical department and out-patient clinics.

Syllabus

- 1st week - department of medicine, diagnostic examination, diagnostic and treatment procedures, patient education, dimission
- 2nd week - internal out-patient clinic, rules of the care on out-patient basis, cooperation with home care agencies, emergency dept.
- 3rd week - surgical department, diagnostic procedures, bedside surgical procedures, operation theatre
- 4th week - surgical out patient clinic, small injuries, acute abdomen, emergencies at surgical out-patient clinic

Literature

- KLENER, Pavel. *Vnitřní lékařství*. 3., přepr. a dopl. vyd. Praha: Karolinum, 2006. 1158 s. ISBN 8024612526. [info](#)

Teaching methods

practical training at hospital during holidays

Assessment methods

Certificate of the district hospital, credit

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

Information on the extent and intensity of the course: 4 týdny.

Listed among pre-requisites of other courses

- [aVLAP111 Practical skills in acute patient VLPX084t](#) && [VLAM9X1c \(Do I meet enrolment requirements?\)](#)
- [VLPX102t Vacationl training Gynecology and Obstetrics VLPX084t \(Do I meet enrolment requirements?\)](#)

The course is also listed under the following terms [Spring 2000](#), [Spring 2001](#), [Spring 2002](#), [Spring 2003](#), [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VLPX102t Vacationl training Gynecology and Obstetrics ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

0/0. 1 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Pavel Ventruba, DrSc., MBA](#) (seminar tutor)

[doc. MUDr. Igor Crha, CSc.](#) (seminar tutor)

[doc. MUDr. Robert Hudeček, Ph.D.](#) (seminar tutor)

[MUDr. Petr Janků, Ph.D.](#) (seminar tutor)

[doc. RNDr. Jana Žáková, Ph.D.](#) (seminar tutor)

[prof. MUDr. Martin Huser, Ph.D.](#) (seminar tutor)

[MUDr. Luboš Minář, Ph.D.](#) (seminar tutor)

Supervisor

[prof. MUDr. Pavel Ventruba, DrSc., MBA](#)

[Department of Gynecology and Obstetrics - Institutions shared with the Faculty Hospital Brno - Institutions of Reproductive Medicine - Faculty of Medicine](#)

Contact Person: [Zdeňka Kroupová](#)

Supplier department: [Department of Gynecology and Obstetrics - Institutions shared with the Faculty Hospital Brno - Institutions of Reproductive Medicine - Faculty of Medicine](#)

Prerequisites (in Czech)

[VLPX084t](#) [Vacational training](#)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

This subject is arranged in cooperation with district hospitals and allows students to participate at the routine performance of gynaecology-obstetric department.

Syllabus

- 1st week - gynaecological department, diagnostic procedures, preoperative preparation, postoperative care, postoperative complications
- 2nd week - labour ward, care for mother and child, delivery complications, extramural delivery, pregnancy pathologies

Literature

recommended literature

- HÁJEK, Zdeněk, Evžen ČECH and Karel MARŠÁL. *Porodnictví*. 3., zcela přepracované a d. Praha: Grada, 2014. 538 stran. ISBN 9788024745299. [info](#)
- 1. Procházka M., Pilka R. a kol. *Porodnictví pro studenty všeobecného lékařství a porodní asistence*. Olomouc : AED - Olomouc s.r.o., 2016, 243 s., ISBN 978-80-906280-0-7

not specified

- ROZTOČIL, Aleš. *Moderní gynekologie*. 1. vydání. Praha: Grada Publishing, 2011. xviii, 508. ISBN 9788024728322. [info](#)

Teaching methods

practical training at hospital during holidays

Assessment methods

2-weeks stage certificate, credit

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

Note related to how often the course is taught: 2 týdny během prázdnin.

The course is also listed under the following terms [Spring 2000](#), [Spring 2001](#), [Spring 2002](#), [Spring 2003](#), [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VLPY9X1c Psychiatry - practice ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/4/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Tomáš Kašpárek, Ph.D.](#) (seminar tutor)

[MUDr. Richard Barteček, Ph.D.](#) (seminar tutor)

[MUDr. Bc. Libor Ustohal, Ph.D.](#) (seminar tutor)

[MUDr. Pavel Theiner, Ph.D.](#) (seminar tutor)

[MUDr. Jana Hořínková, Ph.D.](#) (seminar tutor)

[MUDr. Václav Krmíček](#) (seminar tutor)

[prof. MUDr. Eva Češková, CSc.](#) (seminar tutor)

[doc. MUDr. Radek Ryšánek, CSc.](#) (seminar tutor)

[prof. MUDr. Ivana Drtílková, CSc.](#) (seminar tutor)

[MUDr. Jitka Hüttlová, Ph.D.](#) (seminar tutor)

[MUDr. Michaela Mayerová](#) (seminar tutor)

Supervisor

[prof. MUDr. Tomáš Kašpárek, Ph.D.](#)

[Department of Psychiatry - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Contact Person: [Jana Pazderová](#)

Supplier department: [Department of Psychiatry - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Timetable of Seminar Groups

VLPY9X1c/09: Mon 20. 11. to Fri 1. 12. each working day 7:30–12:20 [N02230](#)
VLPY9X1c/10: Mon 6. 11. to Fri 17. 11. each working day 7:30–12:20 [N02230](#)
VLPY9X1c/11: Mon 23. 10. to Fri 3. 11. each working day 7:30–12:20 [N02230](#)
VLPY9X1c/12: Mon 9. 10. to Fri 20. 10. each working day 7:30–12:20 [N02230](#)
VLPY9X1c/15: Mon 25. 9. to Fri 6. 10. each working day 7:30–12:20 [N02230](#)
VLPY9X1c/16: Mon 8. 1. to Fri 19. 1. each working day 7:30–12:20 [N02230](#)
VLPY9X1c/32: No timetable has been entered into IS.
VLPY9X1c/33: No timetable has been entered into IS.

Prerequisites

[VLFA0722p Pharmacology - L](#) && [VLNP081c Introduction to Neurology -pr](#)
VLFA0722p - Farmakology II lecture
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

GENERAL PSYCHIATRY: content included propedeutic and symptomatology practical training in seminar rooms and patients exploration patients history, basic examination, a methodological approach in psychiatry psychopathology of each psychic function. Special Psychiatry: content included main psychiatric disorders, diagnostic and therapeutic procedures. Opening theoretical seminar (60 min.) practical application in patients. Presentation of patients chart, psychiatric diagnosis Classified credit, examination after practical education. Teachers information are available on the noticeboard next to Secretariat of Dept. of Psychiatry.

Syllabus

- EDUCATIONAL SEMINARS Psychiatric assessment Treatment in Psychiatry Psychopathology Affective disorders Schizophrenia Personality disorders + psychotherapy Neurotic disorders Eating disorders Child psychiatry Substance use disorders

Literature

required literature

- RABOCH, Jiří and Pavel PAVLOVSKÝ. *Psychiatrie, 1. vydání*. 1. vyd. Praha: Karolinum, 2012. 466 pp. ISBN 978-80-246-1985-9. [info](#)
- HÖSCHL, Cyril, Jan LIBIGER and Jaromír ŠVESTKA. *Psychiatrie. 2.*, doplněné a opravené vyd. Praha: Tigris, 2004. 883 pp. ISBN 80-900130-7-4. [info](#)
- [KAŠPÁREK, Tomáš](#). Psychiatrická propedeutika. Multimediální podpora výuky klinických a zdravotnických oborů. In *Portál LF MU (on-line)*. 2011. [URL info](#)

- [ŽOURKOVÁ, Alexandra](#), [Eva ČEŠKOVÁ](#) and [Ivana DRTÍLKOVÁ](#). *General and specialized psychiatry. Multimediální podpora výuky klinických a zdravotnických oborů (General and specialized psychiatry)*. 2011. [URL info](#)
- COWEN, Philip, Paul HARRISON a Tom BURNS. *Shorter Oxford textbook of psychiatry*, sixth edition, 818 stran. ISBN 978-80-1996-0561-3

recommended literature

- DUŠEK, Karel and Alena VEČEŘOVÁ-PROCHÁZKOVÁ. *Diagnostika a terapie duševních poruch*. 2., přepracované vydání. 646 stran. ISBN 9788024748269. [info](#)
- [ŽOURKOVÁ, Alexandra](#). *Klinická sexuologie (Clinical sexology)*. 1. vyd. Brno, Česká republika: Masarykova Univerzita, 2002. 34 pp. Učební skripta. ISBN 80-210-2795-9. [info](#)
- [KRATOCHVÍL, Stanislav](#). *Základy psychoterapie*. Praha, 2006. 283 pp. Portál. ISBN 80-7367-122-0. [info](#)
- [ŽOURKOVÁ, Alexandra](#). *Sexualita u nemocných s psychickými poruchami*. Multimediální podpora výuky klinických a zdravotnických oborů. In *Portál LF MU (on-line)*. 2011. [URL info](#)
- STAHL, Stephen. *Stahl's essential psychopharmacology: neuroscientific basis and practical application*. 4. vyd. New York: Cambridge University Press, 2013, 608 s. ISBN 978-1-107-68646-5

Teaching methods

The course psychiatry practice takes the form of theoretical training through internships in departments and in the form of seminars.

Assessment methods

LESSON COMPLETION - CREDIT To complete the subject, a student has to attend the lessons, only one full day of excused absence is allowed. In case of more absences, substitution is required. Substitution is usually in the form of the written essay on a selected topic or short stay at one of the wards of Department of Psychiatry. The means of substitution can be arranged with Dr Barteček, deputy for education. The final evaluation is in the form of written test. The test is multiple-choice answer test with only one correct answer. To succeed in the test at least 8 out of 13 questions have to be answered correctly.

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

Information on completion of the course: K udělení zápočtu je třeba vypracovat písemné psychiatrické vyšetření pacienta

The course can also be completed outside the examination period.

The course is taught each semester.

General note: Další informace na: <http://psychiatrie.med.muni.cz>.

Teacher's information

<http://psychiatrie.med.muni.cz>

Výuka předmětu Psychiatrie - cvičení probíhá ve dvoutýdenních blocích podle studijních skupin. Maximální počet studentů na výuku předmětu Psychiatrie - cvičení je 26 studentů na každý blok. Prosíme o dodržování tohoto max. počtu studentů při přihlašování do

jednotlivých studijních skupin. Výuka začíná každý den v 8.00 hod (v pátek v 7.30 hod.) v posluchárně Psychiatrické kliniky FN Brno, budova G, 1. patro. První den stáží (další dny taktéž) se studenti se shromáždí ve vestibulu před posluchárnou PK, budova G, zadní trakt v prvním patře a vyčkají na sekretářku, která jim posluchárnu odemkne. Studenti si na výuku přinesou přezůvky, pláště, psací potřeby, papír na záznamy, popř. fonendoskop. Tyto věci si mohou po celou dobu výuky nechávat v zadních prostorách posluchárny. Ve dnech, kdy mají studenti předmět „Klinické dovednosti“ (8.00 – 9.00 hod.) na odděleních PK, se nejdříve převléknou v posluchárně do pláštěů, přezují se a všechny věci si mohou v posluchárně nechat (na odd. budou potřebovat jen tužku a papír). Medici musí před odchodem na oddělení posluchárnu UZAMKNOUT a klíč odevzdají na sekretariát přednosta p. Pazderové (v případě její nepřítomnosti p. Douškové). Po návratu z oddělení si klíč od posluchárny opět na sekretariátě vyzvednou. Povinnou součástí výuky je účast studentů na odborných seminářích, které se konají pravidelně v pátek od 10.00 do 12.20 hod v posluchárně PK. Program odborných seminářů je vyvěšen na dveřích posluchárny, na nástěnce vedle sekretariátu Psychiatrické kliniky a na webu <http://psychiatrie.med.muni.cz/> - odkaz: Aktuality. Očekává se, že studenti budou na výuku přicházet připraveni. To znamená, že budou disponovat alespoň základními informacemi, které budou daný den probírány v rámci výukového semináře respektive v rámci kazuistik a demonstrací. Vodítkem pro rozsah znalostí, které by měl student pojmout před zahájením výuky budiž elektronická učebnice „Psychiatrická propedeutika“ dostupná na Portálu LF MU (<http://portal.med.muni.cz/clanek-509-psychiatricka-propedeutika.html>) a krátké prezentace dostupné na is.muni.cz/el/1411/podzim2015/VLPY9X1c/um/58932521/. Pokud se student na výuku dostaví nepřipraven, nemusí mu být dovolena účast na daném dni výuky – což se rovná absenci se všemi důsledky z toho vyplývajícími (viz výše). Za dny Státního svátku není náhrada výuky. Studenti si nastudují formou samostudia zkrácené formy prezentace seminářů a základní pojmy k dané výukové jednotce. Najdete je na odkaze: is.muni.cz/el/1411/podzim2015/VLPY9X1c/um/58932521/ Rozpis stáží dle jednotlivých studijních skupin najdete na <http://psychiatrie.med.muni.cz/>, odkaz výuka. Rozpis je také vyvěšen na nástěnce vedle sekretariátu přednosta Psychiatrické kliniky v Brně-Bohunicích. Psychiatry practice: <http://psychiatrie.med.muni.cz/>, link teaching. Is Taking Place to Time-table.

The course is also listed under the following terms [Autumn 1999](#), [Spring 2000](#), [Autumn 2000](#), [Spring 2001](#), [Autumn 2001](#), [Spring 2002](#), [Autumn 2002](#), [Spring 2003](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

VLPY9X1p Psychiatry -lecture ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

6/0/0. 4 credit(s). Recommended Type of Completion: zk (examination). Alternate Types of Completion: RZk (examination).

Teacher(s)

[prof. MUDr. Tomáš Kašpárek, Ph.D.](#) (lecturer)
[MUDr. Richard Barteček, Ph.D.](#) (lecturer)
[MUDr. Pavel Theiner, Ph.D.](#) (lecturer)
[MUDr. Bc. Libor Ustohal, Ph.D.](#) (lecturer)
[prof. MUDr. Ivana Drtílková, CSc.](#) (alternate examiner)
[prof. MUDr. Alexandra Žourková, CSc.](#) (alternate examiner)

Supervisor

[prof. MUDr. Tomáš Kašpárek, Ph.D.](#)
[Department of Psychiatry - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)
Contact Person: [Jana Pazderová](#)
Supplier department: [Department of Psychiatry - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Timetable

Thu 21. 9. 14:30–17:00 [A11/114](#), Fri 22. 9. 12:00–14:30 [A11/114](#)

- Timetable of Seminar Groups:

VLPY9X1p/VLA: Thu 21. 9. 12:00–14:30 [A11/234](#), Fri 22. 9. 7:30–9:35 [A11/234](#)

Prerequisites

([VLFA0822p Pharmacology II - L](#) || [VLFA0722p Pharmacology - L](#)) &&
[VLNP081c Introduction to Neurology -pr](#)
VLFA0722p Farmakology II - lecture
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

In the sphere of psychiatry the students are getting acquainted with history and organization of psychiatry. General psychiatry is focused on clinical manifestation and treatment of the most important psychiatric disorders (affective disorders, schizophrenia, dementia, personality disorders neurotic and stress-related disorders) and issues of child psychiatry and old age psychiatry. The next education proceeds in obligatory seminars involving eating disorders, psychotherapeutic techniques (art therapy, relaxation techniques etc.)and psychiatric sexology.

Syllabus

- The first lecture: Introduction to Psychiatry Second lecture: Sexology

Literature

required literature

- RABOCH, Jiří and Pavel PAVLOVSKÝ. *Psychiatrie, 1. vydání*. 1. vyd. Praha: Karolinum, 2012. 466 pp. ISBN 978-80-246-1985-9. [info](#)
- COWEN, Philip, Paul HARRISON a Tom BURNS. *Shorter Oxford textbook of psychiatry*, sixth edition, 818 stran. ISBN 978-80-1996-0561-3

recommended literature

- HOSCHL, Cyril and Jan LIBIGER. *Psychiatrie, 2. dopl. a opr. vyd.* 2. vyd. Praha: TIGIS, 2004. 883 pp. ISBN 80-900130-7-4. [info](#)
- [KAŠPÁREK, Tomáš](#). Psychiatrická propedeutika. Multimediální podpora výuky klinických a zdravotnických oborů. In *Portál LF MU (on-line)*. 2011. [URL](#) [info](#)
- STAHL, Stephen. *Stahl's essential psychopharmacology: neuroscientific basis and practical application*. 4. vyd. New York: Cambridge University Press, 2013, 608 s. ISBN 978-1-107-68646-5

Teaching methods

Lectures in the first week of the fall semester - theoretical training

Assessment methods

Examination in Psychiatry for VLA is oral and has 3 questions: - General Psychiatry, B - Special psychiatry, C - Clinical management of mental disorders. The list of questions for the exam in psychiatry can be found at: <http://psychiatrie.med.muni.cz>

Language of instruction

Czech

Follow-Up Courses

- [VLAM9X1p Intensive care medicine - lectures](#)
- [VLNE9X1p Neurology - lecture](#)
- [VLVL11XX Internal Medicine - State Exam](#)

Further comments (probably available only in Czech)

Study Materials

Information on completion of the course: Ustní zkouška se skládá ze 2 otázek. Otázky jsou k dispozici na <http://psychiatrie.med.muni.cz>, odkaz výuka a také na Spolku mediků. The course can also be completed outside the examination period.

The course is taught annually.

General note: Další informace najdete na: <http://psychiatrie.med.muni.cz>.

Listed among pre-requisites of other courses

- [VLCH11XX Surgery - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#)
&& [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) &&
[VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) ||
[VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) &&
[VLSD7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) &&

[VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

- **[VLPD11XX](#) Paediatrics - State Exam**

([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

- **[VLPG11XX](#) Obstetric and Gynaecology - State Exam**

([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && [VLVL9X66c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VSNO071](#), [VLKA091](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLTL081](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSDL071](#), [VLRL041](#), [VLIA081](#), [VLKM081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

- **[VLRL11XX](#) Family Medicine and Geriatrics**

([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLIN9X22](#) && [VLPL9X1](#) && [VLON091](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTL081](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) (Do I meet enrolment requirements?)

- **[VLVL11XX](#) Internal Medicine - State Exam**

([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) &&

[\(VLAJ0222 || VSAJ0222 || VSNJ0222\)](#) && [VSSP03X](#) (Do I meet enrolment requirements?)

- [VLZP11XX Public Health - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#)
&& [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) &&
[VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) ||
[VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) &&
[VLSD7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) &&
[VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3,
[VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#),
[VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#),
[VTLT081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) ||
[VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

Teacher's information

<http://psychiatrie.med.muni.cz>

Otázky ke zkoušce z psychiatrie a další výukové materiály, speciálně FAQ k otázkám typu C najdete na webu <http://psychiatrie.med.muni.cz>, odkaz výuka. Odpovědi na často kladené otázky k některým zkušebním okruhům je možno nalézt na stránce <http://psychiatrie.med.muni.cz> (odkazy: Výuka - Pregraduální vzdělávání - rozvrhy, studijní literatura, FAQ).

The course is also listed under the following terms [Autumn 1999](#), [Spring 2000](#), [Autumn 2000](#), [Spring 2001](#), [Autumn 2001](#), [Spring 2002](#), [Autumn 2002](#), [Spring 2003](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

VLRL041 Medicinal plants ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

2/0. 3 credit(s). Type of Completion: k (colloquium).

Teacher(s)

[doc. PharmDr. Jan Juřica, Ph.D.](#) (lecturer)

[PharmDr. Jana Rudá, Ph.D.](#) (lecturer)

[Renata Blábllová](#) (assistant)

[Mgr. Jana Merhautová, Ph.D.](#) (alternate examiner)

[Mgr. Kristýna Nosková](#) (alternate examiner)

[MUDr. Jana Pistovčáková, Ph.D.](#) (alternate examiner)

Supervisor

[doc. MUDr. Regina Demlová, Ph.D.](#)

[Department of Pharmacology - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [doc. MUDr. Regina Demlová, Ph.D.](#)

Supplier department: [Department of Pharmacology - Theoretical Departments - Faculty of Medicine](#)

Prerequisites (in Czech)

[VLFA07212c Pharmacology I](#)

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)
- [Dentistry](#) (programme LF, M-ZL)

Course objectives

The course on Medicinal Plants will provide students with the state-of-the-art pharmacodynamic parameters and therapeutic potential of herbal medications grouping them by their specific actions and discussing interactions with conventional medicine.

Syllabus

- Medicinal Plants course
-
- 1. MEDICINAL PLANTS - Terminology and classification of natural medicines. Plants according to their use. Adverse effects of medicinal plants. Safety of the use of preparations of plant medicines.
-
- 2. MEDICINAL PLANTS - Pharmacognosy. The active constituents of drug plants. Plant medicines, registration on the market.
-
- 3. MEDICINAL PLANTS and the central and peripheral nervous system, analgesics.
-
- 4. MEDICINAL PLANTS and the respiratory tract, drug-phytochemicals interactions.
-
- 5. MEDICINAL PLANTS and the cardiovascular system.
-
- 6. State Holiday
-
- 7. MEDICINAL PLANTS and urogenital tract.
-
- 8. MEDICINAL PLANTS and the gastrointestinal tract
-
- 9. MEDICINAL PLANTS in dermatology and cosmetics.
-
- 10. MEDICINAL PLANTS in oncology and immunology, drug interactions.
-

- 11. Systemic enzymotherapy, anti-inflammatory and antioxidant agents.
-
- 12. MEDICINAL PLANTS- antidiabetics, hypolipidemics, virostatics, antihelminthics, insecticides.
-
- 13. Colloquium

Literature

required literature

- Učební texty dostupné přímo v IS MU ve studijních materiálech předmětu VLRL041 - Léčivé rostliny

recommended literature

- Farmakognózia - Tomko Jozef a kolektiv, Osveta, Martin, 1999, ISBN 80-8063-014-3
- Přírodní toxiny a jedy - Hrdina Vratislav. a kolektiv, Galén, Praha, 2004, ISBN 80-7262-256-0
- Trease and Evans' Pharmacognosy, 16th Edition - Elsevier,2009 ISBN 9780702029349

not specified

- Český lékopis 2009, Grada Publishing, Praha 2009, vybrané kapitoly a články.

Teaching methods

During the studying the students can acquire the knowledge of the therapeutical use of medicinal plants at the lectures with the possibility to discuss the particular topics with the pharmacology teacher.

Assessment methods

The students have to prove the active knowledge of pharmacology of medicinal plants. They have to pass the final multiple-choice test to get the credit. They are asked to answer to multiple-choice questions (1 or more correct answers are possible to each question). The test contains 25 questions. One point is granted for each correctly answered question. No point will be deducted for an incorrect answer to the multiple-choice question. The summary of the score obtained is evaluated. A criterion for receiving the credit is the summary score higher or equal to the 50% points of the maximum score obtained, i.e. a minimum of 13 completely correctly answered questions required.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

Information on course enrolment limitations: Předmět si mohou zapsat pouze studenti LF v 8.-12.semestru studia.

Listed among pre-requisites of other courses

- **[VLCH11XX Surgery - State Exam](#)**
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#)
&& [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) &&
[VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) ||
[VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) &&
[VLS7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) &&
[VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) &&
VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#),
[VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#),
[VLR041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) &&
([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment
requirements?)
- **[VLPD11XX Paediatrics - State Exam](#)**
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#)
&& [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) &&
[VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) ||
[VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) &&
[VLS7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) &&
[VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) &&
VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#),
[VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#),
[VLR041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) &&
([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment
requirements?)
- **[VLPG11XX Obstetric and Gynaecology - State Exam](#)**
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#)
&& [VSDV9X22p](#) && [VLAM9X1p](#) && [VLVL9X66c](#) && ([VLVL9X65c](#) ||
[VLVL7X65c](#)) && [VLPD1033c](#) && [VLIN9X22](#) && [VLS7X1p](#) && [VSEI7X1](#)
&& [VL0L7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#)
&& [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#),
[VSAT081](#), [VSNO071](#), [VLKA091](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#),
[VLPM071](#), [VLEP041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSDL071](#),
[VLR041](#), [VLIA081](#), [VLKM081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VSAJ0222](#) ||
[VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- **[VLR11XX Family Medicine and Geriatrics](#)**
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VSDV9X22p](#)
&& [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) &&
[VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) &&
[VLVL9X66c](#) && [VLIN9X22](#) && [VLPL9X1](#) && [VLON091](#) && VYCET(3,
[VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#),
[VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLR041](#),
[VTL081](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSFP071](#)) && [VLCH9X33c](#) &&
([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) (Do I meet enrolment requirements?)
- **[VLVL11XX Internal Medicine - State Exam](#)**
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#)
&& [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) &&
[VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) ||

[VLVL7X65c](#) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

- [VLZP11XX Public Health - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

Teacher's information

Výuka probíhá od 3. do 15. týdne semestru v pavilonu A19, místnosti 326. Úřední hodiny sekretariátu Farmakologického ústavu, UKB, Kamenice 5, denně - 13.00-14.00hod, tel.: 54949 3070. Education is organized from 3.rd till 15th week of semester in building A19, room 326. Office hours of secretary at Dept. of Pharmacology: daily: 13.00-14.00hod, tel.: +420 54949 3070.

The course is also listed under the following terms [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VLRL081 Medicinal plants ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

2/0. 3 credit(s). Type of Completion: k (colloquium).

Teacher(s)

[doc. PharmDr. Jan Juřica, Ph.D.](#) (lecturer)

[PharmDr. Jana Rudá, Ph.D.](#) (lecturer)

[Renata Blábllová](#) (assistant)

[Mgr. Jana Merhautová, Ph.D.](#) (alternate examiner)

[Mgr. Kristýna Nosková](#) (alternate examiner)

[MUDr. Jana Pistovčáková, Ph.D.](#) (alternate examiner)

Supervisor

[doc. MUDr. Regina Demlová, Ph.D.](#)

[Department of Pharmacology - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [doc. MUDr. Regina Demlová, Ph.D.](#)

Supplier department: [Department of Pharmacology - Theoretical Departments - Faculty of Medicine](#)

Prerequisites (in Czech)

[VLFA07212c Pharmacology I](#)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)
- [Dentistry](#) (programme LF, M-ZL)

Course objectives

The course on Medicinal Plants will provide students with the state-of-the-art pharmacodynamic parameters and therapeutic potential of herbal medications grouping them by their specific actions and discussing interactions with conventional medicine.

Syllabus

- Medicinal Plants course
-
- 1. MEDICINAL PLANTS - Terminology and classification of natural medicines. Plants according to their use. Adverse effects of medicinal plants. Safety of the use of preparations of plant medicines.
-
- 2. MEDICINAL PLANTS - Pharmacognosy. The active constituents of drug plants. Plant medicines, registration on the market.
-
- 3. MEDICINAL PLANTS and the central and peripheral nervous system, analgesics.
-
- 4. MEDICINAL PLANTS and the respiratory tract, drug-phytochemicals interactions.
-
- 5. MEDICINAL PLANTS and the cardiovascular system.
-
- 6. State Holiday
-
- 7. MEDICINAL PLANTS and urogenital tract.
-
- 8. MEDICINAL PLANTS and the gastrointestinal tract
-
- 9. MEDICINAL PLANTS in dermatology and cosmetics.
-

- 10. MEDICINAL PLANTS in oncology and immunology, drug interactions.
-
- 11. Systemic enzymotherapy, anti-inflammatory and antioxidant agents.
-
- 12. MEDICINAL PLANTS- antidiabetics, hypolipidemics, virostatics, antihelmintics, insecticides.
-
- 13. Colloquium

Literature

required literature

- Učební texty dostupné přímo v IS MU ve studijních materiálech předmětu VLRL041 - Léčivé rostliny

recommended literature

- Farmakognózia - Tomko Jozef a kolektiv, Osveta, Martin, 1999, ISBN 80-8063-014-3
- Přírodní toxiny a jedy - Hrdina Vratislav. a kolektiv, Galén, Praha, 2004, ISBN 80-7262-256-0
- Trease and Evans' Pharmacognosy, 16th Edition - Elsevier, 2009 ISBN 9780702029349

not specified

- Český lékopis 2009, Grada Publishing, Praha 2009, vybrané kapitoly a články.

Teaching methods

During the studying the students can acquire the knowledge of the therapeutical use of medicinal plants at the lectures with the possibility to discuss the particular topics with the pharmacology teacher.

Assessment methods

The students have to prove the active knowledge of pharmacology of medicinal plants. They have to pass the final multiple-choice test to get the credit. They are asked to answer to multiple-choice questions (1 or more correct answers are possible to each question). The test contains 25 questions. One point is granted for each correctly answered question. No point will be deducted for an incorrect answer to the multiple-choice question. The summary of the score obtained is evaluated. A criterion for receiving the credit is the summary score higher or equal to the 50% points of the maximum score obtained, i.e. a minimum of 13 completely correctly answered questions required.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

Information on course enrolment limitations: Předmět si mohou zapsat pouze studenti LF v 8.-12.semestru studia.

Teacher's information

Výuka probíhá od 3. do 15. týdne semestru v pavilonu A19, místnosti 326. Úřední hodiny sekretariátu Farmakologického ústavu, UKB, Kamenice 5, denně - 13.00-14.00hod, tel.: 54949 3070. Education is organized from 3.rd till 15th week of semester in building A19, room 326. Office hours of secretary at Dept. of Pharmacology: daily: 13.00-14.00hod, tel.: +420 54949 3070.

The course is also listed under the following terms [Accreditation spring](#).

VLRL11Xpp Family Medicine and Geriatrics ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/0/0. 12 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Emmanuela Fernandová](#) (lecturer)

[MUDr. Josef Laub](#) (lecturer)

[MUDr. Vladimír Marek](#) (lecturer)

[MUDr. Lucie Rausová](#) (lecturer)

[MUDr. Lenka Dvořáková](#) (seminar tutor)

[prof. MUDr. Hana Matějovská Kubešová, CSc.](#) (seminar tutor)

[MUDr. Vlasta Polcarová](#) (seminar tutor)

[prof. MUDr. Pavel Weber, CSc.](#) (seminar tutor)

[Jitka Skládaná](#) (assistant)

Supervisor

[prof. MUDr. Hana Matějovská Kubešová, CSc.](#)

[Department of Internal Medicine, Geriatrics and Practical Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Supplier department: [Department of Internal Medicine, Geriatrics and Practical Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Timetable

Mon 2. 10. 8:00–12:00 [A11/114](#), Mon 9. 10. 12:00–16:00 [N01008](#), Mon 16. 10. 12:00–16:00 [N01008](#), Fri 27. 10. 8:00–12:00 [A11/334](#), Mon 13. 11. 8:00–12:00 [A11/114](#), Mon 20. 11. 12:00–16:00 [N01008](#), Mon 27. 11. 12:00–16:00 [N01008](#), Fri 8. 12. 8:00–12:00 [A11/334](#), Mon 29. 1. 8:00–12:00 [A11/114](#), Mon 5. 2. 12:00–16:00 [A11/334](#), Mon 12. 2. 12:00–16:00 [A11/334](#), Fri 23. 2. 8:00–12:00 [A11/334](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)

- [General Medicine](#) (programme LF, M-VL)

Course objectives

Students will have the overview of basic aspects of general practice, main difference between general practice and other specialities of medicine. The practical part of this subject runs in general practitioners offices - teachers of Medical Faculty of Masaryk University, students obtain the picture of GP office performance.

Syllabus

- Family medicine and general practice. Development, content of the subject, methods of work.
- 2. Family in the past and today. The family environment influence on health and disease. Dynamice of the family.
- 3. Competences of general practitioner in diagnostics and therapy.
- 4. Interdisciplinary cooperation in health service, cooperation between family medicine/general practice and other medical specialities. How to achieve the compliance.
- 5. Aspects of the care for seriously ill patients at home. Specificities of the care for patients with cardiovascular, oncological and locomotion diseases.
- 6. Specificities of the diseases in elderly. Pharmacological and non pharmacological methods in elderly.
- 7. Psychiatric patient in the family and at non-psychiatric hospital.
- 8. First aid at home and at work place. The equipment for first aid at the non-urgent healthcare service.
- 9. Communication with patients. Empathy and burn-out syndrome prevention.
- 10. Communication with handicapped, especially with visual and hearing disturbances.
- 11. Cross influence of health and social situation. Complex home care as a support of out-patient basis care.
- 12. Different types of social facilities. Nutritional problems, physiotherapy and care for blind patients in social facilities.
- 13. Education to health life style.
- 14. Ethic aspects of primary care.

Literature

- SEIFERT, Bohumil, Václav BENEŠ and Svatopluk BÝMA. *Všeobecné praktické lékařství. 2., dopl. a přeprac. vyd.* Praha: Galén, 2013. xi, 673. ISBN 9788072629343. [info](#)
- GESENHUES, Stefan and Rainer ZIESCHÉ. *Vademecum lékaře : všeobecné praktické lékařství. 1. vyd.* Praha: Galén, 2006. xxiii, 976. ISBN 807262444X. [info](#)
- SEIFERT, Bohumil and Václav BENEŠ. *Všeobecné praktické lékařství. 1. vyd.* Praha: Galén, 2005. 292 s. ISBN 8072623699. [info](#)
- SEIFERT, Bohumil. *Primární péče. Praktické lékařství : výukový text pro studenty magisterského studia lékařství. 1. vyd.* Praha: Karolinum, 2004. 156 s. ISBN 8024608839. [info](#)

Teaching methods

lectures, class exercises, workshops, stage at GP office, at paediatric office, at geriatric department

Assessment methods

credit

Language of instruction

Czech

Further comments (probably available only in Czech)

The course can also be completed outside the examination period.

The course is taught each semester.

General note: výuka včetně kolokvia musí být absolvována před poslední SRZ.

Information on the extent and intensity of the course: stáž 4 týdny.

The course is also listed under the following terms [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#).

VLRL11XX Family Medicine and Geriatrics ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/0/0. 3 credit(s). Type of Completion: k (colloquium).

Teacher(s)

[MUDr. Lenka Dvořáková](#) (lecturer)

[MUDr. Emmanuela Fernandová](#) (lecturer)

[MUDr. Josef Holík](#) (lecturer)

[MUDr. Josef Laub](#) (lecturer)

[MUDr. Vladimír Marek](#) (lecturer)

[MUDr. Lucie Rausová](#) (lecturer)

[prof. MUDr. Hana Matějovská Kubešová, CSc.](#) (seminar tutor)

[Jitka Skládaná](#) (assistant)

Supervisor

[prof. MUDr. Hana Matějovská Kubešová, CSc.](#)

[Department of Internal Medicine, Geriatrics and Practical Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Supplier department: [Department of Internal Medicine, Geriatrics and Practical Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Prerequisites (in Czech)

([VLFA0822p Pharmacology II - L](#) || [VLFA0722p Pharmacology - L](#)) &&

[VLNE9X1p Neurology - lecture](#) && [VLPY9X1p Psychiatry - lect.](#) &&

[VSDV9X22p Dermatovenerology II-I](#) && [VLAM9X1p Intensive care med. - lect.](#) && (

[VLVL7X61c Internal medicine part 1](#) || [VLVL9X61c Internal medicine part 1](#)) &&

[VLVL9X62c Internal medicine part 2](#) && [VLVL9X63c Internal medicine part 3](#) && [VLVL9X64c Internal medicine part 4](#) && ([VLVL9X65c Internal medicine part 5](#) || [VLVL7X65c Internal medicine part 5](#)) && [VLVL9X66c Internal medicine part 6](#) && [VLIN9X22 Infectious diseases II](#) && [VLPL9X1 Prevent. Med.](#) && [VLON091 Clinical oncology](#) && VYCET (3 , [VLPS07X Posudkové lékařství](#) || [VLPS071 Medical Assessment Service](#) , [VSAT081 Fundament.of AntimicrobTherap](#) , [VLKA091 Clinical anatomy](#) , [VSNO071 Ophthalmology news](#) , [VSPM071 Palliative Medicine](#) , [VLKB091 Clinical Biochemistry](#) , [VLKF091 Clinical Pharmacology](#) , [BMBS051 Biostatistics - basic course](#) , [VLPM071 Legal Aspects in Medicine](#) , [VLEP041 The Economics of Health Care](#) , [VLIA081 Clin.immunol. alergol.](#) , [VLKM081 Commun.in medicine](#) , [VLRL041 Medicinal plants](#) , [VLTL081 Sports Medicine](#) , [VSDL071 Diagnostics and management in orthopaedic surgery](#) , [VSAL081 Anaesth. and Tr. of Pain I](#) , [VSAL082 Anaesthes.and Treatm.of PainII](#) , [VSFP071 Neonatal Physiology and Pathol](#)) && [VLCH9X33c Surgery III - practicals](#) && ([VLAJ0222 English 1 II -p](#) || [VSAJ0222 English 1 II -p](#) || [VSNJ0222 German 1 II -p](#))

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Students will have the basic overview containing basic aspects of general practice, main difference between general practice and other specialities of medicine. The practical part of this subject runs in general practitioners offices, so student will know the performance of GPs offices of teachers of Medical Faculty of Masaryk University

Syllabus

- Family medicine and general practice. Development, content of the subject, methods of work.
- 2. Family in the past and today. The family environment influence on health and disease. Dynamic of the family.
- 3. Competences of general practitioner in diagnostics and therapy.
- 4. Interdisciplinary cooperation in health service, cooperation between family medicine/general practice and other medical specialities. How to achieve the compliance.
- 5. Aspects of the care for seriously ill patients at home. Specificities of the care for patients with cardiovascular, oncological and locomotion diseases.
- 6. Specificities of the diseases in elderly. Pharmacological and non pharmacological methods in elderly.
- 7. Psychiatric patient in the family and at non-psychiatric hospital.
- 8. First aid at home and at work place. The equipment for first aid at the non-urgent healthcare service.

- 9. Communication with patients. Empathy and burn-out syndrom prevention.
- 10. Communication with handicapped, especially with visual and hearing disturbances.
- 11. Cross influence of health and social situation. Complex home care as a support of out-patient basis care.
- 12. Different types of social facilities. Nutritional probléme, physiotherapy and care for blind patiens in social facilities.
- 13. Education to health life style.
- 14. Ethic aspects of primary care.

Literature

recommended literature

- <http://www.woncaeurope.org/content/world-book-family-medicine-european-edition-2015-table-content>
- SEIFERT, Bohumil, Václav BENEŠ and Svatopluk BÝMA. *Všeobecné praktické lékařství*. 2., dopl. a přeprac. vyd. Praha: Galén, 2013. xi, 673. ISBN 9788072629343. [info](#)
- *Textbook of family medicine*. Edited by Ian R. McWhinney - Thomas Freeman. 3rd ed. New York: Oxford University Press, 2009. xii, 460 p. ISBN 0195369858. [info](#)
- SEIFERT, Bohumil and Václav BENEŠ. *Všeobecné praktické lékařství*. 1. vyd. Praha: Galén, 2005. 292 s. ISBN 8072623699. [info](#)

Teaching methods

4 seminars, 1 workshop -case reports, active preparation and presentation of report

Assessment methods

koloqium, case description

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught each semester.

The course is taught: in blocks.

General note: výuka včetně kolokvia musí být absolvována před poslední SRZ.

Information on the extent and intensity of the course: stáž 4 týdny.

The course is also listed under the following terms [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#).

VLSB051 Self-experience and self –development group ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[Mgr. Terézia Knejzlíková](#) (lecturer)

[Mgr. Lucie Strachotová](#) (lecturer)

[PhDr. Miroslav Světlák, Ph.D.](#) (lecturer)

[Vlasta Břicháčková](#) (assistant)

Supervisor

[PhDr. Miroslav Světlák, Ph.D.](#)

[Department of Psychology and Psychosomatics - Theoretical Departments - Faculty of Medicine](#)

Supplier department: [Department of Psychology and Psychosomatics - Theoretical Departments - Faculty of Medicine](#)

Prerequisites

The course is designed for all students of the medical faculty of all specialties.

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)
- [Dentistry](#) (programme LF, M-ZL)

Course objectives

Main objectives of the course: The student will be a participant in group psychotherapy, where under the guidance of experienced psychotherapists he / she will experience what is usually experienced by patients in similar groups. On the way to their own experience, they will familiarize themselves with the basic psychotherapeutic approaches and techniques that are commonly used in group and individual psychotherapy in healthcare facilities. New experiences in this field will be grounded theoretically in the context of individual personal self-realization of students, but also in the field of medical practice. The aim is to develop and support students with the help of psychotherapeutic techniques and skills that are a prerequisite not only for maintaining mental health but also the basis for good medical practice as a future health care professional.

Learning outcomes

Students will become familiar through their own experience with the basic psychotherapeutic approaches and techniques that are commonly used in group and individual psychotherapy in healthcare facilities.

Syllabus

- Functions and objectives of individual and group psychotherapy in the health context. Psychotherapeutic directions and their integration. Definition of psychotherapy. The principles of human behavior and experience change. Psychotherapeutic contract, boundary of relationship, responsibility. Duration of short-term and long-term psychotherapy. Principle of attendance. Phenomenological method. Dialogue. Field Theory. Paradoxical intentions.

Processes of change and phase of change. Application of psychotherapy in various health contexts and in various difficulties.

Literature

recommended literature

- [VYBÍRAL, Zbyněk](#) and [Jan ROUBAL](#). *Současná psychoterapie (Current Psychotherapy)*. 1. vyd. Praha: Portál, 2010. 744 pp. 615.8 – Psychoterapie. ISBN 978-80-7367-682-7. [info](#)
- PROCHASKA, James O. and John C. NORCROSS. *Psychoterapeutické systémy : průřez teoriemi*. Praha: Grada, 1999. 479 s. ISBN 8071697664. [info](#)

Teaching methods

Workshop.

Assessment methods

Requirements for completion of the course - 100% active participation in workshops.

Form of the exam - the exam is completed by credit.

Language of instruction

Czech

Further Comments

[Study Materials](#)

The course is taught each semester.

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#).

VLSD7X1c Forensic Medicine - practice *

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2/0. 1 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Miroslav Hirt, CSc.](#) (lecturer)

[MUDr. Mgr. Bc. Tomáš Vojtíšek, Ph.D.](#) (lecturer)

[MUDr. Michal Zelený, Ph.D.](#) (lecturer)

[MUDr. Jan Krajsa, Ph.D.](#) (lecturer)

[Mgr. Andrea Brzobohatá, Ph.D.](#) (lecturer)

[Mgr. Tomáš Pexa](#) (lecturer)

[MUDr. Miroslav Ďatko, Ph.D.](#) (lecturer)

[MUDr. Martin Zeman](#) (lecturer)

[MUDr. Kateřina Stoklásková](#) (lecturer)

[Mgr. Jan Pivnička](#) (lecturer)

[Květa Blatná](#) (assistant)

Supervisor

[MUDr. Mgr. Bc. Tomáš Vojtíšek, Ph.D.](#)

[Department of Forensic Medicine - Institutions shared with St. Anne's Faculty Hospital -](#)

Faculty of Medicine

Contact Person: [Květa Blatná](#)

Supplier department: [Department of Forensic Medicine - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Timetable of Seminar Groups

VLSD7X1c/01: Mon 27. 11. to Fri 1. 12. each working day 7:30–12:20 [N03088](#)

VLSD7X1c/02: Mon 13. 11. to Fri 17. 11. each working day 7:30–12:20 [N03088](#)

VLSD7X1c/04: Mon 23. 10. to Fri 27. 10. each working day 7:30–12:20 [N03088](#)

VLSD7X1c/05: Mon 30. 10. to Fri 3. 11. each working day 7:30–12:20 [N03088](#)

VLSD7X1c/06: Mon 25. 9. to Fri 29. 9. each working day 7:30–12:20 [N03088](#)

VLSD7X1c/07: Mon 2. 10. to Fri 6. 10. each working day 7:30–12:20 [N03088](#)

VLSD7X1c/08: Mon 11. 12. to Fri 15. 12. each working day 7:30–12:20 [N03088](#)

VLSD7X1c/31: Mon 4. 12. to Fri 8. 12. each working day 7:30–12:30 [N03088](#)

VLSD7X1c/32: Mon 20. 11. to Fri 24. 11. each working day 7:30–12:30 [N03088](#)

VLSD7X1c/35: Mon 6. 11. to Fri 10. 11. each working day 7:30–12:30 [N03088](#)

Prerequisites (in Czech)

[VSPF0622p Pathophysiol. II - lect.](#) && [VSPA0622p Pathology II - lecture](#) &&

[VLCP0622c Introduc. to surgery II -pr.](#) && [VSIP0622c Introduction to internal II-pr](#) &&

[VLFA0621c Pharmacology I - p](#)

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

At the end of this course, students: have basic skills in thanatology, should be oriented in the problems of the origin of a lot of kinds of injuries and sudden death, have basic skills in forensic toxicology, genetics and serology including their using in practice, should be oriented in medical and criminal law in medicine, should be able to examine dead person

Syllabus

- During lessons there will be presented: the theoretical basis of forensic thanatology including changes after death
- Sudden and unexpected death
- Blunt injuries including problems of traffic accidents
- Knife wounds
- Firearms injuries
- Forensic toxicology, genetics and serology
- Injury due to heat, cold and electricity
- Suffocation
- During the lectures there will be presented up-to-date informations in forensic medicine

Literature

required literature

- ADÁMEK, Tomáš, Michal BERAN, Igor DVOŘÁČEK, Miroslav DVOŘÁK, Jiří FIALKA, Petr HEJNA, [Miroslav HIRT](#), Jiří HLADÍK, Martin JANÍK, Přemysl KLÍR, Jozef KRAJČOVIČ, [Jan KRAJSA](#), Pavel KUBIŠTA, Rudolf MACHÁČEK, Ivan MAZURA, František NOVOMESKÝ, Peter ONDRA, Alexander PILIN, Hynek ŘEHULKA, Miloš SOKOL, Lubomír STRAKA, Přemysl STREJC, [Markéta ŠAŇKOVÁ](#), Petr TOMÁŠEK, Pavel TOUPALÍK, František TOUŠEK, [Tomáš VOJTÍŠEK](#) and František VOREL. *Soudní lékařství : I. díl (Forensic Medicine : I)*. 1. vydání. Praha: Grada Publishing, 2015. 240 pp. ISBN 978-80-247-5680-6. [info](#)
- [HIRT, Miroslav](#), [František VOREL](#), [Vladimír ANTONÍN](#), Michal BERAN, Ivan BOUŠKA, [Andrea BRZOBOHATÁ](#), Ivana ČERNÁ, [Miroslav ĎATKO](#), Martin DOBIÁŠ, Silvia FARKAŠOVÁ IANNACCONE, Iva GROSSOVÁ, Petr HEJNA, [Václav HORÁK](#), Kateřina HRUBÁ, Lucie HRUŠKOVÁ, Martin JANÍK, [Miroslav KITKA](#), Ivana KOMÁREKOVÁ, [Jan KRAJSA](#), [Ivan MAZURA](#), Peter ONDRA, Alexander PILIN, Pavel REJTAR, [Luděk RYBA](#), [Miloš SOKOL](#), Marie STAŇKOVÁ, Lubomír STRAKA, Miroslav ŠAFR, Jozef ŠIDLO, [Naděžda ŠPATENKOVÁ](#), Petr TOMÁŠEK, Jana TOMKOVÁ, [Aleš VÉMOLA](#), [Tomáš VOJTÍŠEK](#), [Milan VOTAVA](#), David VRÁNA, Lenka ZÁTOPKOVÁ and [Michal ZELENÝ](#). *Soudní lékařství II.díl (Forensic Medicine)*. 1.vydání. Praha: Grada Publishing.a.s., 2016. 232 pp. ISBN 978-80-271-0268-6. [info](#)
- [HIRT, Miroslav](#), [Tomáš VOJTÍŠEK](#), [Lukáš PRUDIL](#), [Roman HEINZ](#), [František VOREL](#), Miroslav DVOŘÁK, Petr HEJNA and Michal BERAN. *Medicína a trestní právo*. 1. vyd. Brno: Masarykova univerzita, 2011. 87 pp. ISBN 978-80-210-5508-7. [info](#)
- HIRT, Miroslav, [Dalibor STRATIL](#), Tomáš PEXA and M. PEŠTÁLOVÁ. *Forensic Medicine*. Brno: Masarykova univerzita Brno, 1999. 76 pp. ISBN 80-210-2094-6. [info](#)

recommended literature

- [HIRT, Miroslav](#), [Michal BERAN](#), [Miroslav ĎATKO](#), Petr HEJNA, [Jan CHRASTINA](#), Martin JANÍK, Ivana KOMÁREKOVÁ, [Jan KRAJSA](#), [Zdeněk NOVÁK](#), [Ivo ŘÍHA](#), Lubomír STRAKA, Miroslav ŠAFR, Pavel TOUPALÍK, Andrea VLČKOVÁ, [Tomáš VOJTÍŠEK](#), [Milan VOTAVA](#) and [Michal ZELENÝ](#). *Tupá poranění v soudním lékařství (Blunt injury in forensic medicine)*. 1.vyd. Praha: Grada Publishing, 2011. 192 pp. ISBN 978-80-247-4194-9. [info](#)
- [HIRT, Miroslav](#), [Andrea BRZOBOHATÁ](#), [Miroslav ĎATKO](#), [Jan KRAJSA](#), [Tomáš VOJTÍŠEK](#), [Michal ZELENÝ](#), [Miloš SOKOL](#), [Kateřina HIRTOVÁ](#) and [Aleš VÉMOLA](#). *Dopravní nehody v soudním lékařství a soudním inženýrství (Traffic accidents in forensic medicine and forensic engineering)*. 1. vyd. Praha: Grada, 2012. 151 pp. ISBN 978-80-247-4308-0. [info](#)
- *Soudní lékařství*. Edited by František Vorel. Vyd. 1. Praha: Grada, 1999. 600 s. ISBN 8071697281. [info](#)

- STRAKA, Lubomír, [Miroslav HIRT](#), [František NOVOMESKÝ](#), [Michal ZELENÝ](#), Jozef KRAJČOVIČ, [Tomáš VOJTÍŠEK](#), František ŠTULLER, [Jan KRAJSA](#), Martin JANÍK, [Andrea BRZOBOHATÁ](#), Ivana KOMÁREKOVÁ, [Vladimír ANTONÍN](#), Janka BUCHANCOVÁ and Oto OSINA. *Kompendium súdnolekárskej toxikológie*. Martin SR, 2012. 179 pp. ISBN 978-80-8063-378-3. [info](#)
- [HIRT, Miroslav](#), Lubomír STRAKA, [Michal ZELENÝ](#), Jozef KRAJČOVIČ, [Tomáš VOJTÍŠEK](#), František ŠTULLER, [Jan KRAJSA](#), [Andrea BRZOBOHATÁ](#) and [Vladimír ANTONÍN](#). *Toxikologie a jiné laboratorní metody ve forenzní praxi*. 1. vyd. Brno: Masarykova univerzita, 2011. 51 pp. ISBN 978-80-210-5477-6. [info](#)
- [HIRT, Miroslav](#) and [František NOVOMESKÝ](#). *Alkohologie v soudním lékařství*. Martin SR, 2011. ISBN 978-80-8063-367-7. [info](#)
- JASON, Payne-James, W.Byard ROGER, S Corey TRACEY and Henderson CAROL. *Encyclopedia of Forensic and Legal Medicine*. 2005. ISBN 0-12-547970-0. [info](#)
- PAYNE-JAMES, Jason. *Simpson's forensic medicine*. 13th ed. London: Hodder Arnold, 2011. x, 253. ISBN 9780340986035. [info](#)

not specified

- [HIRT, Miroslav](#), [Michal ZELENÝ](#), [Tomáš VOJTÍŠEK](#), [Jan KRAJSA](#), [Andrea BRZOBOHATÁ](#) and [Eva MATĚJŮ](#). *Soudní lékařství*. Brno: Masarykova Univerzita Právnická fakulta, 2008. 82 pp. Edice učebnic PrF MU č. 413. ISBN 978-80-210-4583-5. [info](#)
- [HIRT, Miroslav](#), Michal BERAN, Miroslav DVOŘÁK, [Aleš VÉMOLA](#), [Tomáš VOJTÍŠEK](#), František VOREL and [Michal ZELENÝ](#). *Soudní znaleství v oboru zdravotnictví*. 1. vydání. Praha: Grada publishing, 2014. 48 pp. ISBN 978-80-247-3890-1. [info](#)

Teaching methods

The seminars contains the discussion to various topics and demonstration of practical cases. Lectures are involved in new information in the forensic discipline.

Assessment methods

The final examination consists of written test.

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

The course can also be completed outside the examination period.

The course is taught each semester.

Information on course enrolment limitations: 15 - 25 studentů na jeden kurz

Teacher's information

Informace k výuce předmětu jsou obsaženy v interaktivní osnově v IS MUNI. Veškerý přístup do e-learningu provádějte z předmětu Soudní lékařství - přednáška!

The course is also listed under the following terms [Autumn 1999](#), [Spring 2000](#), [Autumn 2000](#), [Spring 2001](#), [Autumn 2001](#), [Spring 2002](#), [Autumn 2002](#), [Spring 2003](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#),

[Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

VLSD7X1p Forensic medicine - lectures ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0.7/3/0. 3 credit(s). Type of Completion: zk (examination).

Teacher(s)

[prof. MUDr. Miroslav Hirt, CSc.](#) (lecturer)

[MUDr. Mgr. Bc. Tomáš Vojtíšek, Ph.D.](#) (lecturer)

[MUDr. Jan Krajsa, Ph.D.](#) (lecturer)

[MUDr. Michal Zelený, Ph.D.](#) (lecturer)

[Mgr. Andrea Brzobohatá, Ph.D.](#) (seminar tutor)

[Mgr. Tomáš Pexa](#) (seminar tutor)

[MUDr. Miroslav Ďatko, Ph.D.](#) (seminar tutor)

[Mgr. Jan Pivnička](#) (seminar tutor)

[MUDr. Kateřina Stoklásková](#) (seminar tutor)

[MUDr. Martin Zeman](#) (seminar tutor)

[Květa Blatná](#) (assistant)

[Taťána Řezáčová](#) (assistant)

Supervisor

[MUDr. Mgr. Bc. Tomáš Vojtíšek, Ph.D.](#)

[Department of Forensic Medicine - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Contact Person: [Květa Blatná](#)

Supplier department: [Department of Forensic Medicine - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Timetable

Mon 18. 9. to Fri 20. 10. Wed 13:20–15:00 [N01902](#)

- Timetable of Seminar Groups:

VLSD7X1p/VLA: Mon 13. 11. to Fri 15. 12. Fri 13:30–15:10 [N03088](#)

Prerequisites (in Czech)

[VSPF0622p Pathophysiol. II - lect.](#) && [VSPA0622p Pathology II - lecture](#) &&

[VLCP0622c Introduc. to surgery II -pr.](#) && [VSIP0622c Introduction to internal II-pr](#) &&

[VLFA0621c Pharmacology I - p](#)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

At the end of this course, students: have basic skills in thanatology, should be oriented in the problems of the origin of a lot of kinds of injuries and sudden death, have basic skills in forensic toxicology, genetics and serology including their using in practice, should be oriented in medical and criminal law in medicine, should be able to examine dead person

Syllabus

- During lessons there will be presented: the theoretical basis of forensic thanatology including changes after death
- Sudden and unexpected death
- Blunt injuries including problems of traffic accidents
- Knife wounds
- Firearms injuries
- Forensic toxicology, genetics and serology
- Injury due to heat, cold and electricity
- Suffocation
- During the lectures there will be presented up-to-date informations in forensic medicine

Literature

required literature

- ADÁMEK, Tomáš, Michal BERAN, Igor DVOŘÁČEK, Miroslav DVOŘÁK, Jiří FIALKA, Petr HEJNA, [Miroslav HIRT](#), Jiří HLADÍK, Martin JANÍK, Přemysl KLÍR, Jozef KRAJČOVIČ, [Jan KRAJSA](#), Pavel KUBIŠTA, Rudolf MACHÁČEK, Ivan MAZURA, František NOVOMESKÝ, Peter ONDRA, Alexander PILIN, Hynek ŘEHULKA, Miloš SOKOL, Lubomír STRAKA, Přemysl STREJC, [Markéta ŠAŇKOVÁ](#), Petr TOMÁŠEK, Pavel TOUPALÍK, František TOUŠEK, [Tomáš VOJTÍŠEK](#) and František VOREL. *Soudní lékařství : I. díl (Forensic Medicine : I)*. 1. vydání. Praha: Grada Publishing, 2015. 240 pp. ISBN 978-80-247-5680-6. [info](#)
- [HIRT, Miroslav](#), [František VOREL](#), [Vladimír ANTONÍN](#), Michal BERAN, Ivan BOUŠKA, [Andrea BRZOBOHATÁ](#), Ivana ČERNÁ, [Miroslav DATKO](#), Martin DOBIÁŠ, Silvia FARKAŠOVÁ IANNACCONE, Iva GROSSOVÁ, Petr HEJNA, [Václav HORÁK](#), Kateřina HRUBÁ, Lucie HRUŠKOVÁ, Martin JANÍK, [Miroslav KITKA](#), Ivana KOMÁREKOVÁ, [Jan KRAJSA](#), [Ivan MAZURA](#), Peter ONDRA, Alexander PILIN, Pavel REJTAR, [Luděk RYBA](#), [Miloš SOKOL](#), Marie STAŇKOVÁ, Lubomír STRAKA, Miroslav ŠAFR, Jozef ŠIDLO, [Naděžda ŠPATENKOVÁ](#), Petr TOMÁŠEK, Jana TOMKOVÁ, [Aleš VÉMOLA](#), [Tomáš VOJTÍŠEK](#), [Milan VOTAVA](#), David VRÁNA, Lenka ZÁTOPKOVÁ and [Michal](#)

[ZELENÝ](#). *Soudní lékařství II.díl (Forensic Medicine)*. 1.vydání. Praha: Grada Publishing.a.s., 2016. 232 pp. ISBN 978-80-271-0268-6. [info](#)

- [HIRT, Miroslav](#), [Tomáš VOJTÍŠEK](#), [Lukáš PRUDIL](#), [Roman HEINZ](#), [František VOREL](#), Miroslav DVOŘÁK, Petr HEJNA and Michal BERAN. *Medicína a trestní právo*. 1. vyd. Brno: Masarykova univerzita, 2011. 87 pp. ISBN 978-80-210-5508-7. [info](#)
- HIRT, Miroslav, [Dalibor STRATIL](#), Tomáš PEXA and M. PEŠTÁLOVÁ. *Forensic Medicine*. Brno: Masarykova univerzita Brno, 1999. 76 pp. ISBN 80-210-2094-6. [info](#)

recommended literature

- [HIRT, Miroslav](#), [Michal BERAN](#), [Miroslav ĎATKO](#), Petr HEJNA, [Jan CHRASTINA](#), Martin JANÍK, Ivana KOMÁREKOVÁ, [Jan KRAJSA](#), [Zdeněk NOVÁK](#), [Ivo ŘÍHA](#), Lubomír STRAKA, Miroslav ŠAFR, Pavel TOUPALÍK, Andrea VLČKOVÁ, [Tomáš VOJTÍŠEK](#), [Milan VOTAVA](#) and [Michal ZELENÝ](#). *Tupá poranění v soudním lékařství (Blunt injury in forensic medicine)*. 1.vyd. Praha: Grada Publishing, 2011. 192 pp. ISBN 978-80-247-4194-9. [info](#)
- [HIRT, Miroslav](#), [Andrea BRZOBOHATÁ](#), [Miroslav ĎATKO](#), [Jan KRAJSA](#), [Tomáš VOJTÍŠEK](#), [Michal ZELENÝ](#), [Miloš SOKOL](#), [Kateřina HIRTOVÁ](#) and [Aleš VÉMOLA](#). *Dopravní nehody v soudním lékařství a soudním inženýrství (Traffic accidents in forensic medicine and forensic engineering)*. 1. vyd. Praha: Grada, 2012. 151 pp. ISBN 978-80-247-4308-0. [info](#)
- *Soudní lékařství*. Edited by František Vorel. Vyd. 1. Praha: Grada, 1999. 600 s. ISBN 8071697281. [info](#)
- [HIRT, Miroslav](#), Lubomír STRAKA, [Michal ZELENÝ](#), Jozef KRAJČOVIČ, [Tomáš VOJTÍŠEK](#), František ŠTULLER, [Jan KRAJSA](#), [Andrea BRZOBOHATÁ](#) and [Vladimír ANTONÍN](#). *Toxikologie a jiné laboratorní metody ve forenzní praxi*. 1. vyd. Brno: Masarykova univerzita, 2011. 51 pp. ISBN 978-80-210-5477-6. [info](#)
- STRAKA, Lubomír, [Miroslav HIRT](#), [František NOVOMESKÝ](#), [Michal ZELENÝ](#), Jozef KRAJČOVIČ, [Tomáš VOJTÍŠEK](#), František ŠTULLER, [Jan KRAJSA](#), Martin JANÍK, [Andrea BRZOBOHATÁ](#), Ivana KOMÁREKOVÁ, [Vladimír ANTONÍN](#), Janka BUCHANCOVÁ and Oto OSINA. *Kompendium súdnolekárskej toxikológie*. Martin SR, 2012. 179 pp. ISBN 978-80-8063-378-3. [info](#)
- STRAKA, Lubomír. *Alkoholologie v soudním lékařství*. Martin: Vydavateľstvo Osveta, 2011. 182 s. ISBN 9788080633677. [info](#)
- JASON, Payne-James, W.Byard ROGER, S Corey TRACEY and Henderson CAROL. *Encyclopedia of Forensic and Legal Medicine*. 2005. ISBN 0-12-547970-0. [info](#)
- PAYNE-JAMES, Jason. *Simpson's forensic medicine*. 13th ed. London: Hodder Arnold, 2011. x, 253. ISBN 9780340986035. [info](#)

not specified

- [HIRT, Miroslav](#), [Michal ZELENÝ](#), [Tomáš VOJTÍŠEK](#), [Jan KRAJSA](#), [Andrea BRZOBOHATÁ](#) and [Eva MATĚJŮ](#). *Soudní lékařství*. Brno: Masarykova

Univerzita Právnická fakulta, 2008. 82 pp. Edice učebnic PrF MU č. 413.
ISBN 978-80-210-4583-5. [info](#)

- HIRT, Miroslav. *Soudní znaleství v oboru zdravotnictví*. 1. vyd. Praha: Grada, 2014. 47 s. ISBN 9788024738901. [info](#)

Teaching methods

The seminars contains the discussion to various topics and demonstration of practical cases. Lectures are involved in new information in the forensic discipline.

Assessment methods

The final examination consists of written test.

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

The course can also be completed outside the examination period.

The course is taught annually.

Listed among pre-requisites of other courses

- [VLCH11XX Surgery - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLT081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [VLPD11XX Paediatrics - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLT081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [VLPG11XX Obstetric and Gynaecology - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && [VLVL9X66c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#)

&& [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VSNO071](#), [VLKA091](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSDL071](#), [VRL041](#), [VLIA081](#), [VLKM081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

- [VLVL11XX](#) Internal Medicine - State Exam
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [VLZP11XX](#) Public Health - State Exam
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

Teacher's information

Podrobné informace k výuce předmětu jsou obsaženy v interaktivní osnově v IS MUNI.

Information about the course are available in the Interactive syllabus in the IS MU.

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

VLSM001 Summer School Abroad ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/0. 2 credit(s). Type of Completion: z (credit).

Supervisor

[prof. RNDr. Eva Táborská, CSc.](#)

[Faculty of Medicine](#)

Contact Person: [prof. RNDr. Eva Táborská, CSc.](#)

Supplier department: [Faculty of Medicine](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)
- [Dentistry \(eng.\)](#) (programme LF, M-ZL)
- [Dentistry](#) (programme LF, M-ZL)

Language of instruction

English

The course is also listed under the following terms [Spring 2014](#), [Autumn 2014](#), [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VLSP03X Individual project ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/0/0. 5 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Jiří Litzman, CSc.](#) (lecturer)

[prof. MUDr. Miroslav Penka, CSc.](#) (lecturer)

[MUDr. Tomáš Andrašina, Ph.D.](#) (seminar tutor)

[prof. MUDr. Martin Bareš, Ph.D.](#) (seminar tutor)

[prof. MUDr. Josef Bednařík, CSc.](#) (seminar tutor)

[MUDr. Atanas-Ivan Belkov](#) (seminar tutor)

[doc. MUDr. Eva Brichtová, Ph.D.](#) (seminar tutor)

[prof. MUDr. Petr Dobšák, CSc.](#) (seminar tutor)

[prof. RNDr. Petr Dubový, CSc.](#) (seminar tutor)

[doc. MUDr. Josef Feit, CSc.](#) (seminar tutor)

[MUDr. Ivo Hanke, Ph.D.](#) (seminar tutor)

[MUDr. Markéta Hanslianová](#) (seminar tutor)

[MUDr. Lukáš Homola, Ph.D.](#) (seminar tutor)

[MUDr. Ivana Hradilová Svíženská, CSc.](#) (seminar tutor)

[prof. MUDr. Petr Husa, CSc.](#) (seminar tutor)

[MUDr. Zita Chovancová, Ph.D.](#) (seminar tutor)

[doc. MUDr. Jan Chrastina, Ph.D.](#) (seminar tutor)

[prof. MUDr. Zdeněk Kala, CSc.](#) (seminar tutor)
[MUDr. Michala Karkanová, Ph.D.](#) (seminar tutor)
[MUDr. Marie Kolářová, CSc.](#) (seminar tutor)
[Mgr. Zuzana Koledová, Ph.D.](#) (seminar tutor)
[prof. MUDr. Marta Krejčí, Ph.D.](#) (seminar tutor)
[MUDr. Břetislav Lipový, Ph.D.](#) (seminar tutor)
[prof. MUDr. Jiří Litzman, CSc.](#) (seminar tutor)
[prof. MUDr. Jindřich Lokaj, CSc.](#) (seminar tutor)
[MUDr. Jan Maláska, Ph.D.](#) (seminar tutor)
[MUDr. Veronika Matušková, Ph.D., FEBO](#) (seminar tutor)
[MUDr. Ladislav Mitáš, Ph.D.](#) (seminar tutor)
[MUDr. Miroslav Nečas, Ph.D.](#) (seminar tutor)
[PhDr. Hana Neudertová, Ph.D.](#) (seminar tutor)
[MUDr. Marcela Nováková](#) (seminar tutor)
[doc. MUDr. Mgr. Jiří Pařenica, Ph.D.](#) (seminar tutor)
[MUDr. Klára Perceová, Ph.D.](#) (seminar tutor)
[MUDr. Markéta Petrovová, Ph.D.](#) (seminar tutor)
[Dipl. Ing. Martin Piskáček, Dr. rer. nat.](#) (seminar tutor)
[JUDr. Radek Policar](#) (seminar tutor)
[doc. MUDr. Zbyněk Rozkydal, Ph.D.](#) (seminar tutor)
[PharmDr. Jana Rudá, Ph.D.](#) (seminar tutor)
[doc. MUDr. Jarmila Rulcová, CSc.](#) (seminar tutor)
[MUDr. Kräuff Rainer Schwanhaeuser Wulff, MBA, Ph.D. et Ph.D., M.A.](#) (seminar tutor)
[doc. MUDr. Šárka Skorkovská, CSc.](#) (seminar tutor)
[doc. MUDr. Jarmila Skotáková, CSc.](#) (seminar tutor)
[prof. MUDr. Jana Skřičková, CSc.](#) (seminar tutor)
[MUDr. Libor Streit, Ph.D.](#) (seminar tutor)
[MUDr. Hana Svačinová, Ph.D.](#) (seminar tutor)
[doc. RNDr. Sabina Ševčíková, Ph.D.](#) (seminar tutor)
[MUDr. Martina Šišáková, Ph.D.](#) (seminar tutor)
[MUDr. Mgr. Karel Šlais, Ph.D.](#) (seminar tutor)
[MUDr. Taťána Šrámková, Ph.D.](#) (seminar tutor)
[prof. MUDr. Vojtěch Thon, Ph.D.](#) (seminar tutor)
[MUDr. Karel Urbášek](#) (seminar tutor)
[MUDr. Jitka Vokurková, Ph.D.](#) (seminar tutor)
[Mgr. Robert Vysoký, Ph.D.](#) (seminar tutor)
[MUDr. Miroslava Zavřelová](#) (seminar tutor)
[Jana Aberlová](#) (assistant)
[Renata Bláblová](#) (assistant)
[Vlasta Břicháčková](#) (assistant)
[Miroslava Bučková](#) (assistant)
[Libuše Darmovzalová](#) (assistant)
[prof. MUDr. Bc. Zuzana Derflerová Brázdová, DrSc.](#) (assistant)
[Lenka Chrástová](#) (assistant)
[MUDr. Tomáš Křivka](#) (assistant)
[Lucie Kučerová](#) (assistant)

[Lea Müllerová](#) (assistant)
[Dana Procházková](#) (assistant)

Supervisor

[Faculty of Medicine](#)

Supplier department: [Faculty of Medicine](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

Student should become acquainted with methods of research work. In the end of the project he should be able to use specialized literature and databases to know principles of scientific report or overview preparation to evaluate experimental data using statistical methods or to plan experiments to formulate conclusions from the result be able to prepare presentation of results

Syllabus

- Individual project includes a) Summarization of literature data to the given topic and elaboration of written overview
- or b) project based on evaluation of clinical results by statistical methods, formulation of conclusions and presentation in form of a scientific paper or ppt presentation
- or c) own experimental research work to the given topic. The work includes evaluation of experiments, formulation of conclusions and presentation in form of a scientific paper or ppt presentation

Literature

- <https://is.muni.cz/auth/elearning/warp.pl?furl=%2Fauth%2F1431%2Fjaro2009%2FXK010%2Findex.qwarp;qurl=%2F1431%2Fjaro2009%2FXK010%2Findex.qwarp>

Assessment methods

Individual project is compulsory component of General medicine study plan. Individual project is completed by submitting results of the project in written form and presentation of results on the workshop of the given department where the results were obtained or on the Students scientific conference. The course unit credit is given after it.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught each semester.

General note: Studenti se přihlašují k tématům ze stránky IS MU Osobní administrativa --

> Student-->Rozpisy témat-->Samostatné práce VL.

Information on the extent and intensity of the course: dle zadání.

The course is also listed under the following terms [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

VLST7X1c Stomatology - practice ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/1/0. 1 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Lydie Izakovičová Hollá, Ph.D.](#) (lecturer)

[MUDr. Sonia Bartáková, Ph.D.](#) (seminar tutor)

[MUDr. Alena Bryšová, Ph.D.](#) (seminar tutor)

[doc. MUDr. Pavlína Černochová, Ph.D.](#) (seminar tutor)

[prof. MUDr. Antonín Fassmann, CSc.](#) (seminar tutor)

[MUDr. Lubomír Freyburg, CSc.](#) (seminar tutor)

[MUDr. Karin Klimo Kaňovská](#) (seminar tutor)

MUDr Tomáš Křiva (seminar tutor)

[prof. MUDr. Martina Kukletová, CSc.](#) (seminar tutor)

[doc. MUDr. Milan Machálka, CSc.](#) (seminar tutor)

[MUDr. Eva Petrová](#) (seminar tutor)

[MUDr. Hana Poskerová, Ph.D.](#) (seminar tutor)

[MUDr. Ludmila Procházková, CSc.](#) (seminar tutor)

[MUDr. Jan Vokurka](#) (seminar tutor)

[Milena Prudíková](#) (assistant)

Supervisor

[MUDr. Sonia Bartáková, Ph.D.](#)

[Department of Stomatology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Supplier department: [Department of Stomatology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Timetable of Seminar Groups

VLST7X1c/09: Mon 18. 12. 7:30–12:20 [N03901](#), Tue 19. 12. 7:30–12:20 [N17190](#), Wed 20. 12. 7:30–9:45 [N03901](#)

VLST7X1c/10: Mon 4. 12. 7:30–12:20 [N03901](#), Tue 5. 12. 7:30–12:20 [N17190](#), Wed 6. 12. 7:30–9:45 [N03901](#)

VLST7X1c/11: Mon 20. 11. 7:30–12:20 [N03901](#), Tue 21. 11. 7:30–12:20 [N17190](#), Wed 22. 11. 7:30–9:45 [N03901](#)

VLST7X1c/12: Mon 6. 11. 7:30–12:20 [N03901](#), Tue 7. 11. 7:30–12:20 [N17190](#), Wed 8. 11. 7:30–9:45 [N03901](#)

VLST7X1c/15: Mon 23. 10. 7:30–12:20 [N03901](#), Tue 24. 10. 7:30–12:20 [N17190](#), Wed 25. 10. 7:30–9:45 [N03901](#)

VLST7X1c/16: Mon 8. 1. 7:30–12:20 [N03901](#), Tue 9. 1. 7:30–12:20 [N17190](#), Wed 10. 1.

7:30–9:45 [N03901](#)

VLST7X1c/30: Mon 30. 10. to Fri 3. 11. each working day 7:30–12:20 [N05502](#)

VLST7X1c/33: Mon 27. 11. to Fri 1. 12. each working day 7:30–12:20 [N05502](#)

VLST7X1c/35: Tue 2. 1. to Thu 4. 1. each working day 7:30–12:30 [N05502](#)

Prerequisites (in Czech)

[VSPF0622p Pathophysiol. II - lect.](#) && [VSPA0622p Pathology II - lecture](#) &&

[VLCP0622c Introduc. to surgery II -pr.](#) && [VSIP0622c Introduction to internal II-pr](#) &&

[VLLM0522p Medical Microbiology II - lect](#) && [VLIM051p Immunology - lecture](#) &&

[VLFA0621c Pharmacology I - p](#)

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Characterization of the field "Stomatology". Division of the field into dentoalveolar and maxillofacial surgery. Classification of parodontopathies. Etiology of the dental caries. Differences between primary and permanent dentition. Prosthetic treatment of defects of the dentition. Characterization of orthodontics.

Syllabus

- 1. Characterization of the field " Stomatology". Division of the field into dentoalveolar and maxillofacial surgery. Specifics of the post-graduate education. The in-patient department. Anesthesia in dentistry. Characterization of some interventions: tooth extraction, incision, resection, apicoectomy, transplantation, implantation. Tumours of the orofacial region. Inflammatory diseases in the dentoalveolar region, dentitis difficilis, periosteal inflammations, inflammations of the lymph nodes, inflammations affecting the jawbones. Cysts of the jaws. Fractures in the orofacial region. Lymphadenitis, salivary glands diseases, jaw anomalies, temporomandibular joint disorders, hemorrhagic diseases. 2. Classification of parodontopathies. Diagnosis and therapy with a view to needs of the dental practitioner. Oral mucous membrane diseases associated with systemic diseases. 3. Etiology of the dental caries. Prevention of the dental caries. Clinical symptoms, localization and classification of the caries. Caries treatment, filling materials. Pulpitis, periodontitis, focal infection. Treatment of the patient at risk, geriatric dentistry. Differences between primary and permanent dentition. Differences in treatment of teeth with incompletely formed apices. Development of dentition, teeth eruption. Injuries of teeth and their consequences. Guidelines in treatment of children. Significance of healthy dentition for health of the child. 4. Prosthetic treatment of defects of the dentition and its significance for the health and social being of the individual. Characterization of orthodontics. Etiology of orthodontic anomalies. Prevention and prophylaxis in orthodontics. Classification of orthodontic anomalies, principles of treatment in orthodontics. Cleft defects.

Literature

- BILDER, Josef. *Stomatologie :pro studující všeobecného lékařství*. 1. vyd. Brno: Masarykova univerzita, 1996. 99 s. ISBN 80-210-1469-5. [info](#)
- KOŠUT, Vladimír. *Stomatologie pro studující všeobecného lékařství*. 1. vyd. Brno: Masarykova univerzita-Lékařská fakulta, 1991. 78 s. ISBN 80-210-0227-1. [info](#)
- VELGOS, Štefan, Jaroslav KOMÍNEK and František URBAN. *Stomatológia*. 1. vyd. Martin: Osveta, 1982. 171 pp. [info](#)
- URBAN, František. *Stomatologie*. 2. přeprac. a dopl. vyd. Praha: Avicenum, 1976. 357 s., vy. [info](#)

Teaching methods

Presentations by professionals from all departments of Stomatological Clinic nad Department of Maxillofacial surgery.

Assessment methods

Full attendance in the course is the condition for giving credit.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught each semester.

Teacher's information

Informace o výuce jsou na nástěnce Stomatologické kliniky a Kliniky ústní, čelistní a obličejové chirurgie.

The course is also listed under the following terms [Autumn 1999](#), [Spring 2000](#), [Autumn 2000](#), [Spring 2001](#), [Autumn 2001](#), [Spring 2002](#), [Autumn 2002](#), [Spring 2003](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

VLST7X1p Stomatology - lecture ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

1/0/0. 3 credit(s). Type of Completion: zk (examination).

Teacher(s)

[MUDr. Sonia Bartáková, Ph.D.](#) (lecturer)

[MUDr. Alena Bryšová, Ph.D.](#) (lecturer)

MUDr Oliver Bulík (lecturer)

[doc. MUDr. Pavlína Černochová, Ph.D.](#) (lecturer)

[prof. MUDr. Antonín Fassmann, CSc.](#) (lecturer)

[MUDr. Lubomír Freyburg, CSc.](#) (lecturer)

[doc. MUDr. Zdenka Halačková, CSc.](#) (lecturer)
[prof. MUDr. Lydie Izakovičová Hollá, Ph.D.](#) (lecturer)
[prof. MUDr. Martina Kukletová, CSc.](#) (lecturer)
[MUDr. Jarmila Kuklová](#) (lecturer)
[doc. MUDr. Milan Machálka, CSc.](#) (lecturer)
[MUDr. Hana Poskerová, Ph.D.](#) (lecturer)
[MUDr. Patrik Prachár, Ph.D.](#) (lecturer)
[MUDr. Hana Střeščíková, CSc.](#) (lecturer)
[prof. MUDr. Jiří Vaněk, CSc.](#) (lecturer)
[MUDr. Jan Vokurka](#) (lecturer)
[Bc. Jaroslava Páleníková](#) (assistant)
[Milena Prudíková](#) (assistant)
[Blanka Suchá](#) (assistant)

Supervisor

[MUDr. Sonia Bartáková, Ph.D.](#)
[Department of Stomatology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)
Supplier department: [Department of Stomatology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Timetable

Mon 25. 9. to Fri 20. 10. Mon 13:30–17:00 [A11/234](#)

Prerequisites (in Czech)

[VSPF0622p Pathophysiol. II - lect.](#) && [VSPA0622p Pathology II - lecture](#) &&
[VLCP0622c Introduc. to surgery II -pr.](#) && [VSIP0622c Introduction to internal II-pr](#) &&
[VLLM0522p Medical Microbiology II - lect](#) && [VLIM051p Immunology - lecture](#) &&
[VLFA0621c Pharmacology I - p](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Characterization of the field "Stomatology". Division of the field into dentoalveolar and maxillofacial surgery. Classification of parodontopathies. Etiology of the dental caries. Differences between primary and permanent dentition. Prosthetic treatment of defects of the dentition. Characterization of orthodontics.

Syllabus

- 1. Characterization of the field " Stomatology". Division of the field into dentoalveolar and maxillofacial surgery. Specifics of the post-graduate education. The in-patient department. Anesthesia in dentistry. Characterization of some interventions: tooth extraction, incision, resection, apicoectomy, transplantation, implantation. Tumours of the orofacial region. Inflammatory diseases in the

dentoalveolar region, dentitio difficilis, periosteal inflammations, inflammations of the lymph nodes, inflammations affecting the jawbones. Cysts of the jaws. Fractures in the orofacial region. Lymphadenitis, salivary glands diseases, jaw anomalies, temporomandibular joint disorders, hemorrhagic diseases. 2. Classification of parodontopathies. Diagnosis and therapy with a view to needs of the dental practitioner. Oral mucous membrane diseases associated with systemic diseases. 3. Etiology of the dental caries. Prevention of the dental caries. Clinical symptoms, localization and classification of the caries. Caries treatment, filling materials. Pulpitis, periodontitis, focal infection. Treatment of the patient at risk, geriatric dentistry. Differences between primary and permanent dentition. Differences in treatment of teeth with incompletely formed apices. Development of dentition, teeth eruption. Injuries of teeth and their consequences. Guidelines in treatment of children. Significance of healthy dentition for health of the child. 4. Prosthetic treatment of defects of the dentition and its significance for the health and social being of the individual. Characterization of orthodontics. Etiology of orthodontic anomalies. Prevention and prophylaxis in orthodontics. Classification of orthodontic anomalies, principles of treatment in orthodontics. Cleft defects.

Literature

- BILDER, Josef. *Stomatologie :pro studující všeobecného lékařství*. 1. vyd. Brno: Masarykova univerzita, 1996. 99 s. ISBN 80-210-1469-5. [info](#)
- KOŠUT, Vladimír. *Stomatologie pro studující všeobecného lékařství*. 1. vyd. Brno: Masarykova univerzita-Lékařská fakulta, 1991. 78 s. ISBN 80-210-0227-1. [info](#)
- VELGOS, Štefan, Jaroslav KOMÍNEK and František URBAN. *Stomatológia*. 1. vyd. Martin: Osveta, 1982. 171 pp. [info](#)
- URBAN, František. *Stomatologie*. 2. přeprac. a dopl. vyd. Praha: Avicenum, 1976. 357 s., vy. [info](#)

Teaching methods

Lectures of Restorative Dentistry, Prosthetic Dentistry, Oral surgery, Maxillofacial surgery, Orthodontics, Pediatric Dentistry

Assessment methods

Course is finished by oral examination.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course can also be completed outside the examination period.

The course is taught annually.

Listed among pre-requisites of other courses

- [VLCH11XX Surgery - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#)
&& [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) &&
[VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) ||
[VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) &&

[VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

- **[VLPD11XX Paediatrics - State Exam](#)**

([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

- **[VLPG11XX Obstetric and Gynaecology - State Exam](#)**

([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && [VLVL9X66c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VSNO071](#), [VLKA091](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSDL071](#), [VLRL041](#), [VLIA081](#), [VLKM081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

- **[VLVL11XX Internal Medicine - State Exam](#)**

([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

- **[VLZP11XX Public Health - State Exam](#)**

([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) &&

[VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && [VYCET\(3, VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

Teacher's information

Informace o výuce jsou na nástěnce Stomatologické kliniky a Kliniky ústní, čelistní a obličejové chirurgie.

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

VLTL081 Sports Medicine ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

2/0/0. 3 credit(s). Type of Completion: k (colloquium).

Teacher(s)

[prof. MUDr. Petr Dobšák, CSc.](#) (lecturer)

[prof. MUDr. Lubomír Elbl, CSc.](#) (lecturer)

[doc. MUDr. Luboš Hrazdira, CSc.](#) (lecturer)

[MUDr. Jana Martinková](#) (lecturer)

[prof. MUDr. Jan Novotný, CSc.](#) (lecturer)

[MUDr. Ladislav Svoboda, Ph.D.](#) (lecturer)

[MUDr. Iva Tomášková, Ph.D.](#) (lecturer)

[MUDr. Pavel Homolka, Ph.D.](#) (seminar tutor)

[Ing. Soňa Pavlová](#) (assistant)

Supervisor

[prof. MUDr. Petr Dobšák, CSc.](#)

[Department of Physiotherapy and Rehabilitation - Departments of Non-medical Branches - Faculty of Medicine](#)

Contact Person: [prof. MUDr. Petr Dobšák, CSc.](#)

Supplier department: [Department of Physiotherapy and Rehabilitation - Departments of Non-medical Branches - Faculty of Medicine](#)

Prerequisites

[VLPF0622p Pathophysiol. II - lect.](#) && [VLPA0622p Pathology II - lecture](#) &&

[VLLP0633c Clinical Introduction III - practice](#)

Studenti 4.-5. ročníku

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the course “Sports medicine” is to acquire basic theoretical knowledge in the field of physiology and pathophysiology of physical load, including reaction and adaptation to different types of physical load in healthy and ill subjects. The course also includes the importance of movement and physical fitness in primary and secondary prevention and therapy of various disorders and diseases.

Syllabus

- 1. The importance of physical education, the health care of sporting events, the complex approach of physical education physicians to the examination of the locomotive apparatus, the assessment of the ability of TV and sports (L. Hrazdira MD, CSc., J. Novotný, CSc.)
- 2. Methodology of stress investigation in sports medicine (cardiorespiratory and metabolic diagnostics in laboratory and field, effectiveness assessment and management control, F.Jedlička, P. Homolka, PhD.)
- 3. Proper management of endurance and strength training in healthy populations, terrain and fitness facilities (J. Martinková, MD)
- 4. Sports anthropology, sport activity in relation to various age and sex (body dimensions, composition, somatotype, biological age, height prediction, J. Novotný, MD, Iva Tomášková, MD)
- 5. Cardiological Issues of the Athletic Population (Risk of Sudden Death in Athletes Prof. L. Elbl MD, MD, Iva Tomaskova, MD)
- 6. Significance of physical activity for human health (physiopathology of body load, eg congestion, remodeling by I. Tomášková MD, F. Jedlička, MD)
- 7. Sports orthopedics and traumatology I (first R.Moster MD, CSc., MD L. Hrazdira MD, CSc.)
- 8. Sport orthopedics and traumatology II, taping, orthoses (doc. MUDr.L.Hrazdira, CSc., Prim.MUDr.R.Moster, CSc.)
- 9. Health Issues of Selected Sports (J.Novotný, MD, PhD., MUDr.P.Homolka, MD)
- 10. Nutrition, nutritional supplements and drinking regime in sport (Iva Tomášková MD, Prof. L. Elbl MD, CSc.)
- 11. Anti-Doping and Pharmacological Problems in Sport (P.Homolka, PhD., F.Jedlička, MD)
- 12. Medical rehabilitation in sport medicine II (MD Martinková, MD, MD, Dr. Hrazdira, CSc)
- 13. Medical rehabilitation in sports medicine I (J. Martinková MD, MD, L. Hrazdira MD, CSc.)
- 14. Conclusion - tests and granting of credits (Tomášková, MD, L. Hrazdir, MD)

Literature

- Meško a kol. Tělovýchovnělékařské vademekum. SSTL, Bratislava 2005
- Vilikus Z. a kol. Tělovýchovné lékařství. Universita Karlova, Praha 2004
- Cinglová L. Vybrané kapitoly z tělovýchovného lékařství. Karolinum, Praha 2002
- Novotný J. a kol. Kapitoly sportovní medicíny. Paido, Brno 2003
- Kučera M. a kol. Sportovní medicína. Grada, Praha 1999
- Placheta Z. a spol. Zátěžová funkční diagnostika v ambulanci a klinické praxi. Grada, Praha 1999
- Časopis: Medicina Sportiva Bohemica et Slovaca
- Studijní materiály na internetu: www/fsps.muni.cz/~novotny
- Harries M. et al. ABC of Sports Medicine. BMJ Books, London 2000
- Kjaer M. et al. Textbook of Sports Medicine. Blackwell Publishing, Malden 2003
- Peterson L et al. Sports Injuries. Martin Dunitz Ltd, London 2001

Teaching methods

lectures

Assessment methods

test, colloquium

Language of instruction

Czech

Further Comments

The course is taught annually.

Listed among pre-requisites of other courses

- [VLCH11XX Surgery - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [VLPD11XX Paediatrics - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) &&

[\(VLAJ0222 || VSAJ0222 || VSNJ0222\)](#) && [VSSP03X](#) (Do I meet enrolment requirements?)

- **[VLPG11XX](#)** Obstetric and Gynaecology - State Exam
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && [VLVL9X66c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VSNO071](#), [VLKA091](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSDL071](#), [VRL041](#), [VLIA081](#), [VLKM081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- **[VLR11XX](#)** Family Medicine and Geriatrics
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLIN9X22](#) && [VLPL9X1](#) && [VLON091](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) (Do I meet enrolment requirements?)
- **[VLVL11XX](#)** Internal Medicine - State Exam
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- **[VLZP11XX](#)** Public Health - State Exam
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

The course is also listed under the following terms [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VLTP05X Preclinical practice *

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/0. 5 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Zuzana Nováková, Ph.D.](#) (seminar tutor)

Supervisor

[prof. RNDr. Eva Táborská, CSc.](#)

[Faculty of Medicine](#)

Supplier department: [Faculty of Medicine](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim is to obtain practical skills and experience with work in preclinical laboratories (biochemistry, physics, biology, physiology, pathophysiology)

Learning outcomes

The student will get acquainted with the equipment of the laboratory and basic laboratory processes. -learns how to handle simpler devices, understand the principle of their function. - understands the importance of methods, can evaluate and interpret the results.

Syllabus

- According to the type of the lab.

Literature

- Dle typu laboratoře

Teaching methods

internship in the lab under the assistance of experienced laboratory staff.

Assessment methods

credit based on individual evaluation of participation and activity.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course can also be completed outside the examination period.

The course is taught each semester.

Note related to how often the course is taught: Student absolvuje 75 hod v provozu laboratoře teoretického pracoviště.

General note: Zápočet z předmětu zadá referentka studijního oddělení na základě potvrzení přednosta ústavu.

Information on the extent and intensity of the course: Student absolvuje 75 hod v provozu laboratoře teoretického pracoviště.

Information on course enrolment limitations: Student může předmět zapsat pouze po předchozí domluvě na příslušném ústavu, na základě souhlasu přednosta ústavu

The course is also listed under the following terms [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

VLTZ0451 Theoretical Bases of Clinical Medicine I - seminar ❁

Faculty of Medicine

Spring 2018

Extent and Intensity

0/1.5/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. PharmDr. Petr Babula, Ph.D.](#) (seminar tutor)

[doc. MUDr. Markéta Běbarová, Ph.D.](#) (seminar tutor)

[prof. Ing. Petr Dvořák, CSc.](#) (seminar tutor)

[doc. MUDr. Aleš Hampl, CSc.](#) (seminar tutor)

[MUDr. Michal Jurajda, Ph.D.](#) (seminar tutor)

[prof. MUDr. Kateřina Kaňková, Ph.D.](#) (seminar tutor)

[prof. MUDr. Marta Krejčí, Ph.D.](#) (seminar tutor)

[MUDr. Milan Krtička, Ph.D.](#) (seminar tutor)

[MUDr. Petr Lokaj, Ph.D.](#) (seminar tutor)

[doc. MUDr. Robert Mikulík, Ph.D.](#) (seminar tutor)

[MUDr. Martin Pešl, Ph.D.](#) (seminar tutor)

[Mgr. Vladimír Rotrekl, Ph.D.](#) (seminar tutor)

[MUDr. Veronika Slonková, Ph.D.](#) (seminar tutor)

[prof. MUDr. Anna Vašků, CSc.](#) (seminar tutor)

[doc. MUDr. Lenka Veverková, Ph.D.](#) (seminar tutor)

[Věra Ježková](#) (assistant)

Supervisor

[MUDr. Michal Jurajda, Ph.D.](#)

[Department of Pathological Physiology - Theoretical Departments - Faculty of Medicine](#)

Supplier department: [Department of Pathological Physiology - Theoretical Departments - Faculty of Medicine](#)

Prerequisites (in Czech)

[VLFY0321c Physiology I - practice](#) && [VLFY0321s Physiology I - seminar](#) &&
[VLBC0321s Biochemistry I sem](#) && [VLBC0321c Biochemistry I](#) &&
[VLBI0222p Biology II-lect.](#) && [VLAN0222c Anatomy II p](#) &&
[VLAN0222s Anatomy II s](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

This newly introduced subject focuses on overview exercising of substantial problems from the point of view of anatomist, embryologist, physiologist, pathological physiologist, pathologist, microbiologist, immunologist and finally, corresponding clinician. Using this approach we will conceptually approach closer to strategy of USMLE, Step 1.

Syllabus

- 1/4 Stem cells, wound healing, regeneration in medicine
-
- Guarantor of topic: doc. MVDr. Aleš Hampl, CSc.
- A11/334 Campus 11:00-12:40
- Importance and perspectives of stem cells application in medicine I (2 hrs, prof. Dvořák)
- A11/334 Campus 11:00-12:40
- Autologous and allogenic hematopoietic stem cells transplantation: introduction, contemporary indications and trends (2 hrs, prof. M. Krejčí)
- A11/334 Campus 11:00-12:40
- Possibilities of using of cardiomyocytes produced by induced pluripotent stem cells of individual patient in medicine (1 hr, doc. Bébarová)
- Wound healing in surgery (1 hr, doc. Veverková)
- A11/334 Campus 11:00-12:40
- Importance and perspectives of stem cells application in medicine II (2 hrs, doc. Hampl)
- A11/334 Campus 11:00-12:40
- Wound healing in dermatology (2 hrs, dr. Slonková)
-
- 2/4 Metabolic bone diseases
-
- Guarantor of topic: prof. MUDr. Anna Vašků, CSc.
- A11/334 Campus 11:00-12:40
- Metabolism of calcium and phosphates (1 hr, doc. Babula)

- Laboratory diagnostics (Ca, phosphates, PTH, PTHrP, vitamin D, paraproteins) – 1 hr, doc. Babula)
- A11/334 Campus 11:00-12:40
- Osteoporosis, osteodystrophy, and osteomalacia: Bone state in patients with chronic renal failure: pathophysiological point of view (2 hrs, prof. A. Vašků)
- A11/334 Campus 11:00-12:40
- Clinical example (woman aged 85, living alone with pathophysiological fracture history)- (1 hr, prof. A. Vašků)

Literature

recommended literature

- SILBERNAGL, Stefan and Florian LANG. *Color atlas of pathophysiology / Stefan Silbernagl, Florian Lang*. 3rd edition. Stuttgart: Thieme, 2016. x, 438. ISBN 9783131165534. [info](#)
- PORTH, Carol. *Essentials of pathophysiology : concepts of altered health states*. Edited by Kathryn J. Gaspard - Kim A. Noble. 3rd ed. Philadelphia: Lippincott Williams & Wilkins, 2010. xxiv, 1256. ISBN 9781451103182. [info](#)
- DAMJANOV, Ivan. *Pathophysiology*. Illustrated by Matt Chansky. 1st ed. Philadelphia: Saunders/Elsevier, 2009. vii, 464. ISBN 9781416002291. [info](#)

Teaching methods

Education will be realised by interactive seminars, practicals and lectures.

Assessment methods

When the semester is finished, colloquium will be organized by a guarantor of the theme. In the 7th semester, a committee of examiners (teachers of the subjects) will examine learning outputs of all topics.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught: every week.

Listed among pre-requisites of other courses

- [VLTZ0552 Theoretical Bases of Clinical Medicine II](#) [VLTZ0451](#) && ([VLAN0222p](#) || [VSAN0333p](#)) ([Do I meet enrolment requirements?](#))

Teacher's information

Literatura: garanti témat budou ve spolupráci s přednášejícími vytvářet e-learningový materiál po každém semestru, případně doplňovat o další aktuální literární zdroje.

The course is also listed under the following terms [Accreditation spring](#).

VLTZ0451c Theoretical Bases of Clinical Medicine I - practice ✨

Faculty of Medicine

Spring 2019

Extent and Intensity

0/1.5/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. PharmDr. Petr Babula, Ph.D.](#) (seminar tutor)
[doc. MUDr. Markéta Bébarová, Ph.D.](#) (seminar tutor)
[prof. Ing. Petr Dvořák, CSc.](#) (seminar tutor)
[doc. MVDr. Aleš Hampl, CSc.](#) (seminar tutor)
[prof. MUDr. Marta Krejčí, Ph.D.](#) (seminar tutor)
[MUDr. Martin Pešl, Ph.D.](#) (seminar tutor)
[Mgr. Vladimír Rotrekl, Ph.D.](#) (seminar tutor)
[MUDr. Veronika Slonková, Ph.D.](#) (seminar tutor)
[prof. MUDr. Anna Vašků, CSc.](#) (seminar tutor)
[doc. MUDr. Lenka Veverková, Ph.D.](#) (seminar tutor)
[Věra Ježková](#) (assistant)

Supervisor

[prof. MUDr. Anna Vašků, CSc.](#)
[Department of Pathological Physiology - Theoretical Departments - Faculty of Medicine](#)
Supplier department: [Department of Pathological Physiology - Theoretical Departments - Faculty of Medicine](#)

Timetable of Seminar Groups

VLTZ0451c/01: Mon 20. 2. to Fri 21. 4. Fri 8:30–10:10 [A22/116 aula](#)
VLTZ0451c/02: Mon 20. 2. to Fri 21. 4. Fri 8:30–10:10 [A22/116 aula](#)
VLTZ0451c/03: Mon 20. 2. to Fri 21. 4. Fri 8:30–10:10 [A22/116 aula](#)
VLTZ0451c/04: Mon 20. 2. to Fri 21. 4. Fri 8:30–10:10 [A22/116 aula](#)
VLTZ0451c/05: Mon 20. 2. to Fri 21. 4. Fri 8:30–10:10 [A22/116 aula](#)
VLTZ0451c/06: Mon 20. 2. to Fri 21. 4. Fri 8:30–10:10 [A22/116 aula](#)
VLTZ0451c/07: Mon 20. 2. to Fri 21. 4. Fri 8:30–10:10 [A22/116 aula](#)
VLTZ0451c/08: Mon 20. 2. to Fri 21. 4. Fri 8:30–10:10 [A22/116 aula](#)
VLTZ0451c/09: Mon 20. 2. to Fri 21. 4. Fri 8:30–10:10 [A22/116 aula](#)
VLTZ0451c/10: Mon 20. 2. to Fri 21. 4. Fri 8:30–10:10 [A22/116 aula](#)
VLTZ0451c/11: Mon 20. 2. to Fri 21. 4. Fri 8:30–10:10 [A22/116 aula](#)
VLTZ0451c/12: Mon 20. 2. to Fri 21. 4. Fri 8:30–10:10 [A22/116 aula](#)
VLTZ0451c/13: Mon 20. 2. to Fri 21. 4. Fri 8:30–10:10 [A22/116 aula](#)
VLTZ0451c/14: Mon 20. 2. to Fri 21. 4. Fri 8:30–10:10 [A22/116 aula](#)
VLTZ0451c/15: Mon 20. 2. to Fri 21. 4. Fri 8:30–10:10 [A22/116 aula](#)
VLTZ0451c/16: Mon 20. 2. to Fri 21. 4. Fri 8:30–10:10 [A22/116 aula](#)
VLTZ0451c/17: Mon 20. 2. to Fri 21. 4. Fri 8:30–10:10 [A22/116 aula](#)
VLTZ0451c/18: Mon 20. 2. to Fri 21. 4. Fri 8:30–10:10 [A22/116 aula](#)

Prerequisites (in Czech)

[VLFY0321c Physiology I - practice](#) && [VLFY0321s Physiology I - seminar](#) &&
[VLBC0321s Biochemistry I sem](#) && [VLBC0321c Biochemistry I](#) &&
[VLBI0222p Biology II-lect.](#) && [VLAN0222c Anatomy II p](#) &&
[VLAN0222s Anatomy II s](#)
(Do I meet enrolment requirements?)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

This newly introduced subject focuses on overview exercising of substantial problems from the point of view of anatomist, embryologist, physiologist, pathological physiologist, pathologist, microbiologist, immunologist and finally, corresponding clinician. Using this approach we will conceptually approach closer to strategy of USMLE, Step 1.

Syllabus

- 1/4 Stem cells, wound healing, regeneration in medicine
-
- Guarantor of topic: doc. MVDr. Aleš Hampl, CSc.
- 24. 2. 2019 A11/334 Campus 11:00-12:40
- Importance and perspectives of stem cells application in medicine I (2 hrs, prof. Dvořák)
- 3. 3. 2019 A11/334 Campus 11:00-12:40
- Autologous and allogenic hematopoietic stem cells transplantation: introduction, contemporary indications and trends (2 hrs, prof. M. Krejčí)
- 10.3. 2019 A11/334 Campus 11:00-12:40
- Possibilities of using of cardiomyocytes produced by induced pluripotent stem cells of individual patient in medicine (1 hr, doc. Bébarová)
- Wound healing in surgery (1 hr, doc. Veverková)
- 17. 3. 2019 A11/334 Campus 11:00-12:40
- Importance and perspectives of stem cells application in medicine II (2 hrs, doc. Hampl)
- 24. 3. 2019 A11/334 Campus 11:00-12:40
- Wound healing in dermatology (2 hrs, dr. Slonková)
-
- 2/4 Metabolic bone diseases
-
- Guarantor of topic: prof. MUDr. Anna Vašků, CSc.
- 31. 3. 2019 A11/334 Campus 11:00-12:40
- Metabolism of calcium and phosphates (1 hr, doc. Babula)
- Laboratory diagnostics (Ca, phosphates, PTH, PTHrP, vitamin D, paraproteins) – 1 hr, doc. Babula)
- 7. 4. 2019 A11/334 Campus 11:00-12:40
- Osteoporosis, osteodystrophy, and osteomalacia: Bone state in patients with chronic renal failure: pathophysiological point of view (2 hrs, prof. A. Vašků)
- 14. 4. 2019 A11/334 Campus 11:00-12:40
- Easter
- 21. 4. 2019 A11/334 Campus 11:00-12:40

- Clinical example (woman aged 85, living alone with pathophysiological fracture history)- (1 hr, prof. A. Vašků)

Literature

recommended literature

- SILBERNAGL, Stefan and Florian LANG. *Color atlas of pathophysiology / Stefan Silbernagl, Florian Lang*. 3rd edition. Stuttgart: Thieme, 2016. x, 438. ISBN 9783131165534. [info](#)
- PORTH, Carol. *Essentials of pathophysiology : concepts of altered health states*. Edited by Kathryn J. Gaspard - Kim A. Noble. 3rd ed. Philadelphia: Lippincott Williams & Wilkins, 2010. xxiv, 1256. ISBN 9781451103182. [info](#)
- DAMJANOV, Ivan. *Pathophysiology*. Illustrated by Matt Chansky. 1st ed. Philadelphia: Saunders/Elsevier, 2009. vii, 464. ISBN 9781416002291. [info](#)

Teaching methods

Education will be realised by interactive seminars, practicals and lectures.

Assessment methods

When the semester is finished, colloquium will be organized by a guarantor of the theme. In the 7th semester, a committee of examiners (teachers of the subjects) will examine learning outputs of all topics.

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

Teacher's information

Literatura: garanti témat budou ve spolupráci s přednášejícími vytvářet e-learningový materiál po každém semestru, případně doplňovat o další aktuální literární zdroje.

VLTZ0552 Theoretical Bases of Clinical Medicine II ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/1.5/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[doc. MUDr. Robert Mikulík, Ph.D.](#) (seminar tutor)

[prof. MUDr. Anna Vašků, CSc.](#) (seminar tutor)

Supervisor

[doc. MUDr. Robert Mikulík, Ph.D.](#)

[First Department of Neurology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Supplier department: [First Department of Neurology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Timetable

Wed 15:20–17:10 [A22/116 aula](#)

- Timetable of Seminar Groups:

VLTZ0552/01: No timetable has been entered into IS.
VLTZ0552/02: No timetable has been entered into IS.
VLTZ0552/03: No timetable has been entered into IS.
VLTZ0552/04: No timetable has been entered into IS.
VLTZ0552/05: No timetable has been entered into IS.
VLTZ0552/06: No timetable has been entered into IS.
VLTZ0552/07: No timetable has been entered into IS.
VLTZ0552/08: No timetable has been entered into IS.
VLTZ0552/09: No timetable has been entered into IS.
VLTZ0552/10: No timetable has been entered into IS.
VLTZ0552/11: No timetable has been entered into IS.
VLTZ0552/12: No timetable has been entered into IS.
VLTZ0552/13: No timetable has been entered into IS.
VLTZ0552/14: No timetable has been entered into IS.
VLTZ0552/15: No timetable has been entered into IS.
VLTZ0552/16: No timetable has been entered into IS.
VLTZ0552/17: No timetable has been entered into IS.
VLTZ0552/18: No timetable has been entered into IS.

Prerequisites (in Czech)

VLTZ0451 && ([VLAN0222p Anatomy II I](#) || [VSAN0333p Anatomy III - lec.](#))
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of this newly introduced subject is to exercise choosen substantial problems of clinical medicine from the point of view of anatomy, embryology, physiology, pathophysiology, pathology, mikrobiology, imunology and finally clinics. Thus, we will our concept of education to strategy of USMLE, Step 1.

Learning outcomes

Student bude po absolvování předmětu schopen:

- interpretovat základní onkologické pojmy
- vysvětlit nejnovější koncepce kancerogeneze (R and W genom)
- interpretovat principy nejnovějších metodologií molekulární biologie, aplikovatelné v onkologii
- vysvětlit principy epigenetiky a aplikovat je na poli kancerogeneze
- umět měřit krevní tlak
- aplikovat správné posouzení klinické významnosti naměřených hodnot krevních tlaku

u dospělých pacientů i u dětí
-posoudit možnosti léčby vysokého krevního tlaku u konkrétního pacienta

Syllabus

- Cancerogenesis
-
- Concept of „Read and Write“ genome and consequences of its application in oncology (2 hrs)
- „Next generation sequencing“ in oncology (1.5 hrs)
- Importance of cytogenetics in hematological malignancies (1.5 hrs)
- Importance of epigenetics in oncology (1.5 hr)
- Pathogenesis of leukemia´s (0.5 hod)
- Pathogenesis of multiple myeloma (1.5 hr)
- Pathogenesis of solid tumors (1 hr, přednáška)
-
- Hypertension
-
- Dysregulation of blood pressure in hypertension, hypertension in childhood, methodology of blood pressure measurement –misinterpretation of values (3 hrs)
- Clinical and pharmacological aspects of hypertension (4 hrs)
- Strokes (3 hrs)

Literature

required literature

- *USMLE step 1 Qbook*. Seventh edition. New York: Kaplan Publishing, 2015. vii, 446. ISBN 9781625232632. [info](#)

recommended literature

- LAZO, John S., Bruce R. PITT and Joseph C. GLORIOSO. *Review for USMLE : United States medical licensing examination*. 7th ed. Philadelphia: Lippincott Williams & Wilkins, 2006. xi, 418. ISBN 9780781779210. [info](#)

Language of instruction

Czech

Further Comments

[Study Materials](#)

Listed among pre-requisites of other courses

- [VLTZ0653 Theoretical Bases of Clinical Medicine III](#)
[VLTZ0552 \(Do I meet enrolment requirements?\)](#)

The course is also listed under the following terms [Accreditation autumn](#).

VLTZ0653 Theoretical Bases of Clinical Medicine III ✱

Faculty of Medicine

Spring 2018

Extent and Intensity

0/2.5/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Michal Jurajda, Ph.D.](#) (seminar tutor)

[MUDr. Milan Krtička, Ph.D.](#) (seminar tutor)

[MUDr. Petr Lokaj, Ph.D.](#) (seminar tutor)

[doc. MUDr. Robert Mikulík, Ph.D.](#) (seminar tutor)

[prof. MUDr. Anna Vašků, CSc.](#) (seminar tutor)

Supervisor

[MUDr. Milan Krtička, Ph.D.](#)

[Department of Traumatic Surgery - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Supplier department: [Department of Traumatic Surgery - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Prerequisites

[VLTZ0552 Theor.Bases of Clinical Med II](#)

Knowledge of anatomy, histology, physiology, biochemistry and basic knowledge of pathophysiology, imagine methods and pharmacotherapy.

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

This newly introduced subject focuses on overview exercising of substantial problems from the point of view of anatomist, embryologist, physiologist, pathological physiologist, pathologist, microbiologist, immunologist and finally, corresponding clinician. Using this approach we will conceptually approach closer to strategy of USMLE, Step 1.

Learning outcomes

Understanding of diseases substances on the basis of information interconnections acquired from study of anatomy, histology, biochemistry, pathophysiology and pharmacotherapy in respect to diagnostic and therapeutic opportunities.

Syllabus

- 5/6 Diabetes mellitus
- 6/6 Aterosklerosis
- 7/6 Autoimmune diseases and hypersensitivity in clinical medicine
- 8/6 Microbial microflora interaction microorganism x macroorganism

Literature

recommended literature

- SILBERNAGL, Stefan and Florian LANG. *Color atlas of pathophysiology / Stefan Silbernagl, Florian Lang*. 3rd edition. Stuttgart: Thieme, 2016. x, 438. ISBN 9783131165534. [info](#)
- PORTH, Carol. *Essentials of pathophysiology : concepts of altered health states*. Edited by Kathryn J. Gaspard - Kim A. Noble. 3rd ed. Philadelphia: Lippincott Williams & Wilkins, 2010. xxiv, 1256. ISBN 9781451103182. [info](#)
- DAMJANOV, Ivan. *Pathophysiology*. Illustrated by Matt Chansky. 1st ed. Philadelphia: Saunders/Elsevier, 2009. vii, 464. ISBN 9781416002291. [info](#)

Teaching methods

Education will be performed by interactive seminars, practicals and lectures.

Assessment methods

Oral examinations following each semester organized by a guarantor of the theme.

Commissional exam after the 7th semester, a committee of examiners (teachers of the subjects) will examine learning outputs of all topics.

Language of instruction

Czech

The course is also listed under the following terms [Accreditation spring](#).

VLUB021 Úvod do studia biochemie ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

0/2/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. RNDr. Eva Táborská, CSc.](#) (lecturer)

Supervisor

[prof. RNDr. Eva Táborská, CSc.](#)

[Department of Biochemistry - Theoretical Departments - Faculty of Medicine](#)

Supplier department: [Department of Biochemistry - Theoretical Departments - Faculty of Medicine](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Language of instruction

Czech

Further comments (probably available only in Czech)

Information on the per-term frequency of the course: Předmět bude uskutečněn při naplnění minimálně 20 studenty.

The course is also listed under the following terms [Accreditation spring](#).

VLUB031 Úvod do studia biochemie ✱

Faculty of Medicine

Autumn 2016

Extent and Intensity

0/2. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. RNDr. Eva Táborská, CSc.](#) (lecturer)

Supervisor

[prof. RNDr. Eva Táborská, CSc.](#)

[Department of Biochemistry - Theoretical Departments - Faculty of Medicine](#)

Supplier department: [Department of Biochemistry - Theoretical Departments - Faculty of Medicine](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL) (2)

Language of instruction

Czech

VLUM091 Emergency medicine ✱

Faculty of Medicine

Spring 2015

Extent and Intensity

0/0. 3 credit(s). Type of Completion: k (colloquium).

Teacher(s)

[MUDr. Martin Doleček, Ph.D.](#) (lecturer)

[prof. MUDr. Roman Gál, Ph.D.](#) (lecturer)

[MUDr. Jan Maláška, Ph.D.](#) (lecturer)

[doc. MUDr. Petr Štourač, Ph.D.](#) (lecturer)

[Irena Vaňurová](#) (seminar tutor)

[Lenka Dobrovolná](#) (assistant)

[Martina Matoušková](#) (assistant)

Supervisor

[doc. MUDr. Petr Štourač, Ph.D.](#)

[Department of Anaesthesiology and Intensive Care Medicine - Institutions shared with the](#)

[Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Contact Person: [MUDr. Martin Doleček, Ph.D.](#)

Supplier department: [Department of Anaesthesiology and Intensive Care Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Timetable

Mon 2. 3. to Fri 29. 5. each working day 13:00–16:00 [N02144](#)

Prerequisites (in Czech)

[VLFA0722p Pharmacology - L](#)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

The capacity limit for the course is 30 student(s).

Current registration and enrolment status: enrolled: 0/30, only registered: 0/30

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

Information on course enrolment limitations: Předmět je určen studentům 5.ročníku VL

The course is also listed under the following terms [Spring 2014](#).

VLVL101p Internal medicine - lecture ✳

Faculty of Medicine

Spring 2018

Extent and Intensity

0/0. 0 credit(s). Type of Completion: -.

Teacher(s)

[prof. MUDr. Petr Brhel, CSc.](#) (lecturer)

[prof. MUDr. Petr Dítě, DrSc.](#) (lecturer)

[prof. MUDr. Lubomír Elbl, CSc.](#) (lecturer)

[prof. MUDr. Aleš Hep, CSc.](#) (lecturer)

[doc. MUDr. Milan Kozák, Ph.D.](#) (lecturer)

[prof. MUDr. Jaroslav Meluzín, CSc.](#) (lecturer)

[doc. MUDr. Miroslav Novák, CSc.](#) (lecturer)

[MUDr. Věra Olšovská, Ph.D.](#) (lecturer)

[MUDr. Jindřich Olšovský, Ph.D.](#) (lecturer)

[prof. MUDr. Miroslav Penka, CSc.](#) (lecturer)

[MUDr. Yvona Pospíšilová](#) (lecturer)

[MUDr. Aleš Průcha](#) (lecturer)
[MUDr. Ivan Řiháček, Ph.D.](#) (lecturer)
[prof. MUDr. Jarmila Siegelová, DrSc.](#) (lecturer)
[prof. MUDr. Jana Skříčková, CSc.](#) (lecturer)
[prof. MUDr. Miroslav Souček, CSc.](#) (lecturer)
[doc. MUDr. Kamil Ševela, CSc.](#) (lecturer)
[doc. MUDr. Miroslav Tomáška, CSc.](#) (lecturer)
[prof. MUDr. Jiří Vítovec, CSc.](#) (lecturer)
[MUDr. Jitka Vlašínová, Ph.D.](#) (lecturer)
[doc. MUDr. Vladimír Zbořil, CSc.](#) (lecturer)

Supervisor

[prof. MUDr. Miroslav Souček, CSc.](#)
[Second Department of Internal Medicine - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)
Contact Person: [Eva Kašpárková](#)
Supplier department: [Second Department of Internal Medicine - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Prerequisites (in Czech)

([VLFA0822p Pharmacology II - L](#) || [VLFA0722p Pharmacology - L](#)) &&
[VSIP0622p Introduction to internal II-pr](#) && [VLDM7X1p Diagn.imaging -lect.](#) && ([VLVL7X65c Internal medicine part 5](#) || [VLVL9X65c Internal medicine part 5](#)) &&
[VSOT7X1c Otorhinolaryngology](#) && [VLIN7X21 Infectious diseases-pract.](#)

Splněné prekvizity. Teoretické znalosti z patologické anatomie, patologické fyziologie, farmakologie z problematiky týkající se bloku č. 3. Aktivní účast na seminářích.

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Particulars lectures about special problems in Internal Medicine.

Syllabus

- Heart failure
- Echocardiography
- Therapy of bradycardia, pacemakers
- Unstable angina
- Functional gastrointestinal disease
- Nonfarmacology therapy of tachyarrhythmias
- Disorders of acid-base balance
- Kidney and farmakotherapy of Internal diseases
- Cardiovascular diseases and chronic stress
- Hypertension therapy

- Iodine-associated thyroid disease
- Management of treatment typ 2 diabetes
- Peptic ulcer disease
- Inflammatory bowel disease
- Genetics and arrhythmia
- Nutrition enteral and parenteral

Literature

- Davidson s Principles and Practise of Medicine. 20th Edition. N.A. Boon, N.R.Colledge, B.R.Walker
- Dítě Petr et all :Vnitřní lékařství Druhé,doplněné a přepracované vydání
- Klener P. et all. Vnitřní lékařství Druhé doplněné vydání. Praha. Galén . 2006,
- Souček M., et all: Vnitřní lékařství pro stomatology

Teaching methods

lecture

Assessment methods

Lectures are selective,optional.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course can also be completed outside the examination period.

The course is taught annually.

The course is taught: every week.

Teacher's information

Přednášky probíhají v posluchárně KAMPUSu v Bohunicích a posluchárně 1. chirurgické kliniky FN u sv. Anny na Pekařské ul.

The course is also listed under the following terms [Spring 2000](#), [Spring 2001](#), [Spring 2002](#), [Spring 2003](#), [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VLVL11Xpp Internal Medicine - Pre-graduation Practice ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/30/0. 22 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Zdeněk Adam, CSc.](#) (seminar tutor)

[MUDr. Irena Andršová, Ph.D.](#) (seminar tutor)

[MUDr. Denisa Bakešová](#) (seminar tutor)

[MUDr. Otakar Bednařík](#) (seminar tutor)

[MUDr. Katarína Bielaková, Ph.D.](#) (seminar tutor)

[doc. MUDr. Mojmír Blaha, CSc.](#) (seminar tutor)
[Mgr. Marek Borský](#) (seminar tutor)
[MUDr. Dagmar Brančíková, Ph.D.](#) (seminar tutor)
[MUDr. Lucie Brázdilová](#) (seminar tutor)
[Mgr. Petra Bučková](#) (seminar tutor)
[MUDr. Alena Buliková, Ph.D.](#) (seminar tutor)
[MUDr. Šárka Buřilová](#) (seminar tutor)
[MUDr. Libor Červínek, Ph.D.](#) (seminar tutor)
[prof. MUDr. Petr Dítě, DrSc.](#) (seminar tutor)
[prof. MUDr. Michael Doubek, Ph.D.](#) (seminar tutor)
[Ing. Dana Dvořáková, CSc.](#) (seminar tutor)
[MUDr. Tereza Effenbergerová](#) (seminar tutor)
[MUDr. Michal Eid](#) (seminar tutor)
[doc. RNDr. Lenka Fajkusová, CSc.](#) (seminar tutor)
[MUDr. Blanka Fischerová, Ph.D.](#) (seminar tutor)
[MUDr. Zdeněk Fojtík, Ph.D.](#) (seminar tutor)
[MUDr. František Folber, Ph.D.](#) (seminar tutor)
[MUDr. Markéta Hadrabová](#) (seminar tutor)
[MUDr. Jana Halámková, Ph.D.](#) (seminar tutor)
[prof. MUDr. Aleš Hep, CSc.](#) (seminar tutor)
[MUDr. Tomáš Horňák](#) (seminar tutor)
[MUDr. Štěpán Hrabovský](#) (seminar tutor)
[doc. MUDr. Andrea Janíková, Ph.D.](#) (seminar tutor)
[MUDr. Bohuslav Kianička, Ph.D.](#) (seminar tutor)
[doc. MUDr. Igor Kiss, Ph.D.](#) (seminar tutor)
[MUDr. Jarmila Kissová, Ph.D.](#) (seminar tutor)
[MUDr. Adam Koudelka](#) (seminar tutor)
[doc. MUDr. Milan Kozák, Ph.D.](#) (seminar tutor)
[MUDr. Zdeněk Král, CSc.](#) (seminar tutor)
[prof. MUDr. Marta Krejčí, Ph.D.](#) (seminar tutor)
[MUDr. Darja Krusová, Ph.D.](#) (seminar tutor)
[doc. MUDr. Lubomír Křivan, Ph.D.](#) (seminar tutor)
[MUDr. Andrea Křivanová, Ph.D.](#) (seminar tutor)
[MUDr. Hana Lejdarová](#) (seminar tutor)
[MUDr. Denis Lekeš](#) (seminar tutor)
[doc. Mgr. Martina Lengerová, Ph.D.](#) (seminar tutor)
[Mgr. Tomáš Loja, Ph.D.](#) (seminar tutor)
[RNDr. Jitka Malčíková, Ph.D.](#) (seminar tutor)
[prof. MUDr. Hana Matějovská Kubešová, CSc.](#) (seminar tutor)
[prof. MUDr. Jiří Mayer, CSc.](#) (seminar tutor)
[MUDr. Róbert Mazúr](#) (seminar tutor)
[prof. MUDr. Jaroslav Meluzín, CSc.](#) (seminar tutor)
[MUDr. Eva Mičulková](#) (seminar tutor)
[MUDr. Jozef Michalka](#) (seminar tutor)
[doc. MUDr. Mgr. Marek Mráz, Ph.D.](#) (seminar tutor)
[doc. MUDr. Helena Němcová, CSc.](#) (seminar tutor)
[doc. MUDr. Miroslav Novák, CSc.](#) (seminar tutor)

[MUDr. Ivo Novotný, CSc.](#) (seminar tutor)
[MUDr. Monika Ondráčková](#) (seminar tutor)
[MUDr. Lenka Ostřížková](#) (seminar tutor)
[MUDr. Martina Palacková](#) (seminar tutor)
[MUDr. Ivo Palásek](#) (seminar tutor)
[MUDr. Anna Panovská, Ph.D.](#) (seminar tutor)
[prof. MUDr. Miroslav Penka, CSc.](#) (seminar tutor)
[prof. RNDr. Šárka Pospíšilová, Ph.D.](#) (seminar tutor)
[MUDr. Yvona Pospíšilová](#) (seminar tutor)
[doc. MUDr. Luděk Pour, Ph.D.](#) (seminar tutor)
[MUDr. Markéta Protivánková](#) (seminar tutor)
[prof. MUDr. Zdeněk Ráčil, Ph.D.](#) (seminar tutor)
[Ing. Filip Rázga, Ph.D.](#) (seminar tutor)
[MUDr. Lukáš Semerád](#) (seminar tutor)
[prof. MUDr. Jana Skříčková, CSc.](#) (seminar tutor)
[prof. MUDr. Vladimír Soška, CSc.](#) (seminar tutor)
[prof. MUDr. Miroslav Souček, CSc.](#) (seminar tutor)
[doc. MUDr. Petr Szturz, Ph.D.](#) (seminar tutor)
[MUDr. David Šálek](#) (seminar tutor)
[RNDr. Ludmila Šebejová, Ph.D.](#) (seminar tutor)
[doc. MUDr. Kamil Ševela, CSc.](#) (seminar tutor)
[Hana Škabrahová, DiS.](#) (seminar tutor)
[MUDr. Lenka Šmardová](#) (seminar tutor)
[doc. MUDr. Jiří Špác, CSc.](#) (seminar tutor)
[prof. MUDr. Jindřich Špinar, CSc.](#) (seminar tutor)
[prof. MUDr. Lenka Špinarová, Ph.D., FESC](#) (seminar tutor)
[MUDr. Martin Štork](#) (seminar tutor)
[doc. MUDr. Josef Šumbera, CSc.](#) (seminar tutor)
[MUDr. Zuzana Šustková](#) (seminar tutor)
[MVDr. Boris Tichý, Ph.D.](#) (seminar tutor)
[MUDr. Jiří Tomášek, Ph.D.](#) (seminar tutor)
[doc. MUDr. Miroslav Tomáška, CSc.](#) (seminar tutor)
[doc. Mgr. Martin Trbušek, Dr.](#) (seminar tutor)
[MUDr. Jakub Trizuljak](#) (seminar tutor)
[Mgr. Eva Vetešníková](#) (seminar tutor)
[prof. MUDr. Jiří Vítovec, CSc.](#) (seminar tutor)
[MUDr. Jitka Vlašínová, Ph.D.](#) (seminar tutor)
[MUDr. Ondřej Výška](#) (seminar tutor)
[prof. MUDr. Rostislav Vyzula, CSc.](#) (seminar tutor)
[prof. MUDr. Pavel Weber, CSc.](#) (seminar tutor)
[MUDr. Barbora Weinbergerová](#) (seminar tutor)
[prof. MUDr. Karel Zeman, CSc.](#) (seminar tutor)
[MUDr. Daniela Žáčková, Ph.D.](#) (seminar tutor)
[Zdeňka Dvořáková](#) (assistant)
[Jitka Firešová](#) (assistant)
[Eva Kašpárková](#) (assistant)
[Iva Kazdová](#) (assistant)

[Jitka Macháčková](#) (assistant)
[Jarmila Mouková](#) (assistant)
[Alena Stodůlková](#) (assistant)
[Libuše Vlasáková](#) (assistant)
[Hana Zemanová](#) (assistant)
[Klára Zouharová](#) (assistant)

Supervisor

[prof. MUDr. Miroslav Souček, CSc.](#)

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Contact Person: [Eva Kašpárková](#)

Supplier department: [Second Department of Internal Medicine - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Prerequisites

The preconditions of starting the course is completing theoretical subjects of pathological physiology, pharmacology and internal propedeutice and bloc 1-6 Internal Medicine.

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Students are working at the patients s bed under the physician s supervision.They perform independent examinations and suggest diagnostic and therapeutic procedures. They take care of all clinical documentation and administration connected with patients hospitalization. During the practice of 7 weeks the also work in specialized out- patient departments. Expert seminars are part of the practice. After the completion of practice the student will be able to work independently.

Learning outcomes

The outcome is to learn all practilaly knowledges necessary for work on internal department.

Syllabus

- 1.Students are autonomous working at the patients s bed under the physician s supervision
- 2.Perform independent examinations and suggest diagnostic and therapeutic procedures.
- 3.Students are working at the polyclinic under the physician s supervision
- 4.Expert seminars are part of the practice.
- 5.They take care of all clinical documentation and administration connected with patients hospitalization.

Literature

recommended literature

- Souček M. a kol. Vnitřní lékařství. Praha Grada Publishing 2011, ISBN 978-80-247-2110-1

not specified

- Dítě Petr et al. :Vnitřní lékařství Druhé,doplněné a přepracované vydání
- Klener P. et al. Vnitřní lékařství Druhé doplněné vydání. Praha. Galén . 2006, 1158s., ISBN 978-80-7262-430-0
- Davidson s Principles and Practise of Medicine. 20th Edition. N.A. Boon,
- *Harrison's principles of internal medicine*. Edited by Dennis L. Kassper. 16th ed. New York: McGraw-Hill, 2005. xxix, 1301. ISBN 0071391428. [info](#)
- *Harrison's principles of internal medicine*. Edited by Dennis L. Kassper. 16th ed. New York: McGraw-Hill, 2005. xxvii, 129. ISBN 007139141X. [info](#)

Teaching methods

In the course of pregraduate practice the students verify and strengthen their own theoretical and practical knowledge of clinical examination and laboratory investigation of internal diseases. They work independently under the supervision of physicians in various departments and ambulance.

Assessment methods

The attendance of students is obligatory. The practice is closed by the state rigorous examination.

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

Information on completion of the course: SRZ skládá student na klinice, kde stážoval
The course can also be completed outside the examination period.

The course is taught annually.

The course is taught: in blocks.

Information on the extent and intensity of the course: Souvislý blok 7 týdnů. Studenti jsou vypsáni na předpromoční praxi dle termínů a pracovišť. Jeden týden praxe si mohou domluvit na jiné interní klinice.

Teacher's information

V den zahájení stáže - v pondělí si studenti přinesou zámeček k uzamčení šatní skříňky, bílý plášť ,přezůvky a fonendoskop. Po ukončení 7. týdenní blokové stáže jsou povinni opět šatní skříňku uvolnit. Studenti jsou rozděleni na jednotlivá oddělení, pracují samostatně pod dozorem lékařů. Během stáže probíhají odborné semináře. Účast studentů je povinná. Poslední-7. týden mohou absolvovat na jiném interním pracovišti. Před ukončením stáže absolvují studenti praktickou část SRZ na pracovišti kde stážovali. Předpromoční praxe je zakončena Státní rigorózní zkouškou.

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#),

[Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

VLVL11XX Internal Medicine - State Exam ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/0/0. 0 credit(s). Type of Completion: SRZK (closing examination).

Teacher(s)

[doc. MUDr. Stanislav Janoušek, CSc.](#) (lecturer)
[prof. MUDr. Zdeněk Adam, CSc.](#) (seminar tutor)
[MUDr. Otakar Bednařík](#) (seminar tutor)
[doc. MUDr. Mojmír Blaha, CSc.](#) (seminar tutor)
[MUDr. Dagmar Brančíková, Ph.D.](#) (seminar tutor)
[MUDr. Kristián Brat](#) (seminar tutor)
[MUDr. Alena Buliková, Ph.D.](#) (seminar tutor)
[MUDr. Libor Červinek, Ph.D.](#) (seminar tutor)
[prof. MUDr. Petr Dítě, DrSc.](#) (seminar tutor)
[prof. MUDr. Michael Doubek, Ph.D.](#) (seminar tutor)
[MUDr. Blanka Fischerová, Ph.D.](#) (seminar tutor)
[MUDr. Zdeněk Fojtík, Ph.D.](#) (seminar tutor)
[MUDr. František Folber, Ph.D.](#) (seminar tutor)
[prof. MUDr. Aleš Hep, CSc.](#) (seminar tutor)
[doc. MUDr. Andrea Janíková, Ph.D.](#) (seminar tutor)
[MUDr. Jarmila Kissová, Ph.D.](#) (seminar tutor)
[doc. MUDr. Milan Kozák, Ph.D.](#) (seminar tutor)
[MUDr. Zdeněk Král, CSc.](#) (seminar tutor)
[prof. MUDr. Marta Krejčí, Ph.D.](#) (seminar tutor)
[MUDr. Darja Krusová, Ph.D.](#) (seminar tutor)
[MUDr. Andrea Křivanová, Ph.D.](#) (seminar tutor)
[prof. MUDr. Hana Matějovská Kubešová, CSc.](#) (seminar tutor)
[prof. MUDr. Jiří Mayer, CSc.](#) (seminar tutor)
[prof. MUDr. Jaroslav Meluzín, CSc.](#) (seminar tutor)
[MUDr. Jozef Michalka](#) (seminar tutor)
[doc. MUDr. Helena Němcová, CSc.](#) (seminar tutor)
[doc. MUDr. Miroslav Novák, CSc.](#) (seminar tutor)
[MUDr. Ivo Novotný, CSc.](#) (seminar tutor)
[MUDr. Lenka Ostřížková](#) (seminar tutor)
[MUDr. Martina Palacková](#) (seminar tutor)
[MUDr. Ivo Palásek](#) (seminar tutor)
[MUDr. Anna Panovská, Ph.D.](#) (seminar tutor)
[prof. MUDr. Miroslav Penka, CSc.](#) (seminar tutor)
[MUDr. Vlasta Polcarová](#) (seminar tutor)
[prof. RNDr. Šárka Pospíšilová, Ph.D.](#) (seminar tutor)

[MUDr. Yvona Pospíšilová](#) (seminar tutor)
[doc. MUDr. Luděk Pour, Ph.D.](#) (seminar tutor)
[MUDr. Markéta Protivánková](#) (seminar tutor)
[prof. MUDr. Zdeněk Ráčil, Ph.D.](#) (seminar tutor)
[MUDr. Svatava Snopková, Ph.D.](#) (seminar tutor)
[prof. MUDr. Miroslav Souček, CSc.](#) (seminar tutor)
[doc. MUDr. Petr Szturz, Ph.D.](#) (seminar tutor)
[MUDr. Lenka Šmardová](#) (seminar tutor)
[prof. MUDr. Jindřich Špinar, CSc.](#) (seminar tutor)
[prof. MUDr. Lenka Špinarová, Ph.D., FESC](#) (seminar tutor)
[doc. MUDr. Miroslav Tomáška, CSc.](#) (seminar tutor)
[doc. Mgr. Martin Trbušek, Dr.](#) (seminar tutor)
[prof. MUDr. Jiří Vítovec, CSc.](#) (seminar tutor)
[prof. MUDr. Jiří Vorlíček, CSc.](#) (seminar tutor)
[prof. MUDr. Rostislav Vyzula, CSc.](#) (seminar tutor)
[prof. MUDr. Karel Zeman, CSc.](#) (seminar tutor)
[MUDr. Daniela Žáčková, Ph.D.](#) (seminar tutor)
[Zdeňka Dvořáková](#) (assistant)
[Eva Kašpárková](#) (assistant)

Supervisor

[prof. MUDr. Miroslav Souček, CSc.](#)
[Second Department of Internal Medicine - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)
Contact Person: [Eva Kašpárková](#)
Supplier department: [Second Department of Internal Medicine - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Prerequisites

([VLFA0822p Pharmacology II - L](#) || [VLFA0722p Pharmacology - L](#)) &&
[VLNE9X1p Neurology - lecture](#) && [VLKY9X1p Psychiatry - lect.](#) &&
[VLVZ9X1c Health Care and Policy](#) && [VSDV9X22p Dermatovenereology II-1](#) &&
[VLAM9X1p Intensive care med. - lect.](#) && ([VLVL7X61c Internal medicine part 1](#) ||
[VLVL9X61c Internal medicine part 1](#)) && [VLVL9X62c Internal medicine part 2](#) &&
[VLVL9X63c Internal medicine part 3](#) && [VLVL9X64c Internal medicine part 4](#) && ([VLVL9X65c Internal medicine part 5](#) || [VLVL7X65c Internal medicine part 5](#)) &&
[VLVL9X66c Internal medicine part 6](#) && [VLPD1033c Pediatrics III-practice](#) &&
[VLIN9X22 Infectious diseases II](#) && [VLSD7X1p Forensic med.-lectures](#) &&
[VSEI7X1 EPI](#) && [VLLO7X1 Ophthalmology - lec.](#) &&
[VSOT7X1p Otorhinolaryngology-lect.](#) && [VSLP7X1 Medical Psychology](#) &&
[VLPL9X1 Prevent. Med.](#) && [VLON091 Clinical oncology](#) &&
[VLST7X1p stomatology -1](#) && [VSLE7X1p Medical Ethics 2 - lecture](#) &&
[VLPG1022c Gynecol. and obst. II- pract.](#) && VYCET (3 , [VLPS07X Posudkové lékařství](#) || [VLPS071 Medical Assessment Service](#) , [VSAT081 Fundament.of AntimicrobTherap](#) , [VLKA091 Clinical anatomy](#) , [VSNO071 Ophthalmology news](#) , [VSPM071 Palliative Medicine](#) , [VLKB091 Clinical Biochemistry](#) , [VLKF091 Clinical Pharmacology](#) , [BMBS051 Biostatistics - basic course](#) , [VLPM071 Legal Aspects in Medicine](#) , [VLEP041 The Economics of Health Care](#) , [VLIA081 Clin.immunol. alergol.](#) , [VLKM081 Commun.in medicine](#) , [VLRL041 Medicinal plants](#) , [VLTL081 Sports](#)

[Medicine](#) , [VSDL071 Diagnostics and management in orthopaedic surgery](#) ,
[VSAL081 Anaesth. and Tr. of Pain I](#) , [VSFP071 Neonatal Physiology and Pathol](#)) &&
[VLCH9X33c Surgery III - practicals](#) && ([VLAJ0222 English 1 II -p](#) ||
[VSAJ0222 English 1 II -p](#) || [VSNJ0222 German 1 II -p](#)) && [VSSP03X Individual project](#)

Prerequisite for the state exam in internal medicine is examination of Clinical Examination in Internal Medicine, completing practical tuition blocks 1-6, and successful completion of all tests in 5th year and completing 7-week practice before of graduation. ([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

In the course of pregraduate practice the students verify and strengthen their own theoretical and practical knowledge of clinical examination and laboratory investigation of internal diseases. They work independently under the supervision of physicians in various departments. The attendance of students is obligatory. The practice is closed by the state rigorous examination.

Syllabus

- Before the state rigorous examination the students verify and strengthen their own theoretical and practical knowledge in the 7. weeks course of pregraduate practice.
- 1. Students are autonomous working at the patients' bed under the physician's supervision
- 2. Perform independent examinations and suggest diagnostic and therapeutic procedures.
- 3. Students are working at the polyclinic under the physician's supervision
- 4. Expert seminars are part of the practice.
- 5. They take care of all clinical documentation and administration connected with patients' hospitalization.
- The practice is closed by the state rigorous examination.

Literature

- Klener P. et al. Vnitřní lékařství Druhé doplněné vydání. Praha. Galén . 2006, 1158s., ISBN 978-80-7262-430-0
- Náhradní obsah: Souček M. akol. Vnitřní lékařství. Praha. Grada 2011, ISBN 978-80-247-2110-1
- Dítě Petr et al : Vnitřní lékařství Druhé, doplněné a přepracované vydání
- Harrison's principles of internal medicine. Edited by Dennis L. Kasper. 16th ed. New York : McGraw-Hill, 2005. xxvii, 129. ISBN 007139141X.

- Davidson s Principles and Practise of Medicine. 20th Edition. N.A. Boon,

Teaching methods

Independent work under the supervision of physicians in various clinical departments

Assessment methods

The practice is closed by the oral state rigorous examination.

Language of instruction

Czech

Further comments (probably available only in Czech)

Study Materials

Information on completion of the course: SRZ skládá student na klinice, kde stážoval

The course can also be completed outside the examination period.

The course is taught annually.

The course is taught: in blocks.

Information on the extent and intensity of the course: Souvislý blok 7 týdnů. Studenti jsou vypsáni na předpromoční praxi dle termínů a pracovišť. Jeden týden praxe si mohou domluvit na jiné interní klinice.

Teacher's information

Ke státní rigorózní zkoušce se studenti dostaví ráno v 8.00 hod na sekretariát II.interní kliniky,Pekařská. U zkoušky si student vythne 1 složenou otázku ze 3 podotázek. Zkouška probíhá před komisí, která je složena ze 3 a více členů.

The course is also listed under the following terms [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

VLVL7X61p Internal Medicine - part 1 - lecture ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

1/0/0. 0 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Martina Doubková, Ph.D.](#) (seminar tutor)

Supervisor

[MUDr. Martina Doubková, Ph.D.](#)

[Department of Pulmonary Diseases and Tuberculosis - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Supplier department: [Department of Pulmonary Diseases and Tuberculosis - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Language of instruction

Czech

Further Comments

The course is taught each semester.

The course is taught: in blocks.

VLVL7X65c Internal medicine part 5 - Functional Diagnostics and Rehabilitation ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/3/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Petr Dobšák, CSc.](#) (seminar tutor)

[MUDr. Pavel Homolka, Ph.D.](#) (seminar tutor)

[prof. MUDr. Jarmila Siegelová, DrSc.](#) (seminar tutor)

[MUDr. Michaela Sosíková, Ph.D.](#) (seminar tutor)

[MUDr. Hana Svačinová, Ph.D.](#) (seminar tutor)

[MUDr. Pavel Vank](#) (seminar tutor)

[Mgr. Leona Dunklerová](#) (assistant)

[Ing. Soňa Pavlová](#) (assistant)

Supervisor

[prof. MUDr. Petr Dobšák, CSc.](#)

[Department of Sports Medicine and Rehabilitation - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Contact Person: [prof. MUDr. Jarmila Siegelová, DrSc.](#)

Supplier department: [Department of Sports Medicine and Rehabilitation - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Timetable of Seminar Groups

VLVL7X65c/09: Mon 18. 9. to Fri 22. 9. each working day 7:30–12:20 [N03329](#)

VLVL7X65c/10: Mon 8. 1. to Fri 12. 1. each working day 7:30–12:20 [N03329](#)

VLVL7X65c/11: Mon 11. 12. to Fri 15. 12. each working day 7:30–12:20 [N03329](#)

VLVL7X65c/12: Mon 27. 11. to Fri 1. 12. each working day 7:30–12:20 [N03329](#)

VLVL7X65c/15: Mon 16. 10. to Fri 20. 10. each working day 7:30–12:20 [N03329](#)

VLVL7X65c/16: Mon 2. 10. to Fri 6. 10. each working day 7:30–12:20 [N03329](#)

VLVL7X65c/30: Mon 6. 11. to Fri 10. 11. each working day 7:30–12:20 [N04901](#)

VLVL7X65c/33: Mon 13. 11. to Fri 17. 11. each working day 7:30–12:20 [N04901](#)

Prerequisites (in Czech)

[VSPF0622p Pathophysiol. II - lect.](#) && [VSPA0622p Pathology II - lecture](#) &&

[VLCP0622c Introduc. to surgery II -pr.](#) && [VSIP0622c Introduction to internal II-pr](#) &&

[VLLM0522p Medical Microbiology II - lect](#) && [VLIM051p Immunology - lecture](#) &&
[VLFA0621c Pharmacology I - p](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

This course unit provides detailed information about key diagnostic functional tests in clinical medicine, all of which are conducted inside the lab. Students will be able to apply the basic concepts by conducting self-made examinations and recording their own physiological responses to exercise. Students can further understand the human body's ability to perform exercise, to adapt to stressful conditions, to improve the exercise performance, to design appropriate therapeutic exercise rehabilitation programs and to evaluate the outcomes. All the topics are presented using a variety of teaching methods, including lectures, seminars, group activities, practical work and a tutorial. All lectures and seminars offer also the comprehensive resource that frames the latest and most significant research findings and makes it easier for students to learn.

Learning outcomes

After completing the course the student will know:

- principles of implementation, indications and contraindications of CPX (cardiopulmonary exercise testing) in clinical and outpatient practice (especially spiroergometric testing, basic principles of functional diagnostics of respiratory functions and investigation of autonomic nervous regulations)
- reactions of the organism to various types of exertion and the differences between the physiological and pathological reactions of the basic functional parameters to the physical load
- the importance of prescribing exercise therapy in internal medicine, especially in patients with cardiovascular or respiratory diseases, and metabolic disorders
- the importance of different training types for cardiac patients (phase I. - IV. of cardiovascular rehabilitation)

Syllabus

- **The part of the teaching programme of internal medicine**
- **1 Introduction**
- **2 Reaction and adaptation to physical stress**
 - 2.1 Gas transport system
 - 2.1.1 Respiration
 - 2.1.2 Circulation
 - 2.2 Energy metabolism
 - 2.3 Body fluids and ions, acid - base balance
 - 2.4 Neuromuscular system
- **3 Stress tests**

- 3.1 Characteristics
- 3.2 Indications and contraindications
- 3.3 Stress testing procedure
- 3.4 Criteria of evaluation and interpretation
- 3.5 Methods
- 3.6 Special approaches to stress testing
 - 3.6.1 Stress testing in children and adolescents
 - 3.6.2 Stress testing in clinical diagnostics
 - 3.6.3 Stress testing in therapeutical and rehabilitation programmes
 - 3.6.4 Stress testing in different groups of population
- **4 Fundamentals of exercise therapy and rehabilitation**
 - 4.1 Exercise therapy as a part of rehabilitation
 - 4.1.1 Definition and division into constituent parts
 - 4.1.2 Therapeutical rehabilitation
 - 4.2 Prescription of exercise therapy
 - 4.2.1 Principles
 - 4.2.2 Physiologic efficiency of physical activities
 - 4.2.3 Kinds of physical activities
 - 4.2.4 Stress intensity
 - 4.2.5 Frequency and duration of stress
- **5 Stress testing and exercise therapy in selected diseases**
 - 5.1 Cardiovascular and haematologic diseases
 - 5.1.1 Functional disorders of circulation
 - 5.1.2 Congenital heart diseases
 - 5.1.3 Valvular heart diseases
 - 5.1.4 Acute inflammatory diseases
 - 5.1.5 Cardiomyopathy
 - 5.1.6 Atherosclerosis
 - 5.1.7 Coronary artery diseases
 - 5.1.8 Heart failure
 - 5.1.9 Arrhythmias
 - 5.1.10 Arterial hypertension
 - 5.1.11 Chronic ischaemic arterial obstructive disease of lower limbs
 - 5.1.12 Anaemia
 - 5.2 Pulmonary diseases
 - 5.2.1 Bronchial asthma
 - 5.2.2 Chronic obstructive pulmonary disease
 - 5.2.3 Interstitial lung diseases
 - 5.2.4 Cystic fibrosis
 - 5.3 Gastrointestinal diseases
 - 5.3.1 Peptic ulcer
 - 5.3.2 Constipation
 - 5.3.3 Hepatitis
 - 5.4 Metabolic, nutritional and endocrine diseases and disorders
 - 5.4.1 Obesity (exogenous, alimentary)
 - 5.4.2 Malnutrition (protein - energy type)
 - 5.4.3 Anorexia nervosa

- 5.4.4 Diabetes mellitus
- 5.4.5 Thyropathy
- 5.5 Other diseases and disorders
 - 5.5.1 States after cytostatic therapy in children
 - 5.5.2 Renal diseases
 - 5.5.3 Osteoporosis
 - 5.5.4 Arthropathy
- 5.6 Case presentations
 - 5.6.1 Heart failure and coronary artery disease
 - 5.6.2 Bronchial asthma
 - 5.6.3 Diabetes mellitus
 - 5.6.4 Other current cases

Literature

recommended literature

- PLACHETA, Zdeněk, Jarmila SIEGELOVÁ and Miloš ŠTEJFA. *Zátěžová diagnostika v ambulantní a klinické praxi*. Vyd. 1. Praha: Grada, 1999. 276 s. ISBN 8071692719. [info](#)
- PLACHETA, Zdeněk. *Zátěžové vyšetření a pohybová léčba ve vnitřním lékařství*. 1. vyd. Brno: Masarykova univerzita, 2001. 179 s. ISBN 8021026146. [info](#)
- [SOUČEK, Miroslav](#), [Jindřich ŠPINAR](#), [Jiří VORLÍČEK](#), [Zdeněk ADAM](#), [Dagmar ADÁMKOVÁ KRÁKOROVÁ](#), [Lenka BABIČKOVÁ](#), [Karola BALŠÍKOVÁ](#), [Drahomíra BARTOŠOVÁ](#), [Otakar BEDNAŘÍK](#), [Richard BERGER](#), [Šárka BOHATÁ](#), [Petr BRHEL](#), [Tomáš BRYCHTA](#), [Yvona BRYCHTOVÁ](#), [Alena BULIKOVÁ](#), [Petr BURKONĚ](#), [Ivan ČAPOV](#), [Aleš ČERMÁK](#), [Eva ČEŠKOVÁ](#), [Milan DASTYCH](#), [Regina DEMLOVÁ](#), [Petr DÍTĚ](#), [Jiří DOLINA](#), [Michael DOUBEK](#), [Martina DOUBKOVÁ](#), [Lenka DUBSKÁ](#), [Ladislav DUŠEK](#), [Pavel FABIAN](#), [Vuk FAIT](#), [Zdeněk FOJTÍK](#), [Lenka FORETOVÁ](#), [Tomáš FREIBERGER](#), [Renata GAILLYOVÁ](#), [Roman GÁL](#), [Ladislav GROCH](#), [Marek HAKL](#), [Jana HALÁMKOVÁ](#), [Aleš HEP](#), [Jitka HILLOVÁ MANNOVÁ](#), [Ota HLINOMAZ](#), [Ivo HOFÍREK](#), [Jan HOLČÍK](#), [Alena HOLČÍKOVÁ](#), [Alena HONDLOVÁ](#), [Anna HRAZDIROVÁ](#), [Jan HRUDA](#), [Petr HUSA](#), [Libuše HUSOVÁ](#), [Richard CHALOUPKA](#), [Václav CHALOUPKA](#), [Josef CHOVANEC](#), [Stanislav JANOUŠEK](#), [Jana JURÁNKOVÁ](#), [Ladislav KABELKA](#), [Zdeněk KADAŇKA](#), [Bohdan KADLEC](#), [Zdeněk KALA](#), [Bohuslav KIANIČKA](#), [Dagmar KINDLOVÁ](#), [Igor KISS](#), [Jarmila KISSOVÁ](#), [Martin KLABUSAY](#), [Ivo KOCÁK](#), [Jiří KÖNIG](#), [Jana KOPTÍKOVÁ](#), [Zdeněk KOŘÍSTEK](#), [Zdeněk KRÁL](#), [Milan KRATOCHVÍL](#), [Lenka KRBKOVÁ](#), [Marta KREJČÍ](#), [Petr KRIFTA](#), [Petr KROUPA](#), [Darja KRUSOVÁ](#), [Lucie KŘIKAVOVÁ](#), [Růžena LÁBROVÁ](#), [Radek LAKOMÝ](#), [Jan LATA](#), [Jolana LIPOLDOVÁ](#), [Jiří LITZMAN](#), [Ondřej LUDKA](#), [Jan MALÁSKA](#), [Hana MATĚJOVSKÁ KUBEŠOVÁ](#), [Jiří MATOUŠEK](#), [Pavel MATUŠKA](#), [Miloslava MATÝŠKOVÁ](#), [Jaroslav MELUZÍN](#), [Hana MELUZÍNOVÁ](#), [Zdeněk MERTA](#), [Blanka MIČÁNKOVÁ ADAMOVÁ](#), [Miroslav MORÁN](#), [Vojtěch MORNSTEIN](#), [Jan MUŽÍK](#), [Tomáš NEBESKÝ](#), [Anna NEČASOVÁ](#), [Marta NEDBÁLKOVÁ](#), [Miroslava NEKULOVÁ](#), [Petr NĚMEC](#), [Jiří NEUBAUER](#), [Pavel NOHEL](#), [Jana BĚLOBRÁDKOVÁ](#), [Miroslav](#)

[NOVÁK](#), [Bronislava NOVOTNÁ](#), [Petr ŠTOURAC](#) and [Vojtěch THON](#). *Vnitřní lékařství (Internal Medicine)*. 1.vyd. Praha, Brno: Grada, 2011. 1788 pp. Vnitřní lékařství. ISBN 978-80-247-2110-1. [info](#)

- ČEŠKA, Richard. *Interna*. 1. vyd. Praha: Triton, 2010. xix, 855. ISBN 9788073874230. [info](#)
- [ŠPINAR, Jindřich](#). *Propedeutika a vyšetřovací metody vnitřních nemocí (Propedeutics and basic examination in internal medicine)*. Praha: Grada, 2008. 255 pp. 1. vydání. ISBN 978-80-247-1749-4. [info](#)
- MCARDLE, William D., Frank I. KATCH and Victor L. KATCH. *Exercise physiology : nutrition, energy, and human performance*. Eighth edition. Philadelphia: Wolters Kluwer Health, 2015. lix, 1028. ISBN 1451193831. [info](#)

Teaching methods

Lessons are taking place in blocks of one week. Attendance at the tuition is obligatory.

The students work in groups of 5-6 members at the patient's bed. Expert seminars are the part of education.

Assessment methods

written test at the end of the course

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught each semester.

Information on the extent and intensity of the course: 2.

Listed among pre-requisites of other courses

- [VLCH11XX Surgery - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSN0071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLT081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [VLKB091 Clinical Biochemistry](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLVL7X65c](#) (Do I meet enrolment requirements?)
- [VLPD11XX Paediatrics - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) &&

VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

- **[VLPG11XX](#)** Obstetric and Gynaecology - State Exam
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && [VLVL9X66c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VSNO071](#), [VLKA091](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSDL071](#), [VLRL041](#), [VLIA081](#), [VLKM081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- **[VLRL11XX](#)** Family Medicine and Geriatrics
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLIN9X22](#) && [VLPL9X1](#) && [VLON091](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) (Do I meet enrolment requirements?)
- **[VLVL101p](#)** Internal medicine - lecture
([VLFA0822p](#) || [VLFA0722p](#)) && [VSIP0622p](#) && [VLDM7X1p](#) && ([VLVL7X65c](#) || [VLVL9X65c](#)) && [VSOT7X1c](#) && [VLIN7X21](#) (Do I meet enrolment requirements?)
- **[VLVL11XX](#)** Internal Medicine - State Exam
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- **[VLZP11XX](#)** Public Health - State Exam
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3,

[VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

The course is also listed under the following terms [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#).

VLVL9X61c Internal medicine part 1 - Pneumology *

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Jana Skříčková, CSc.](#) (lecturer)
[MUDr. Zdeněk Merta, CSc.](#) (seminar tutor)
[MUDr. Kristián Brat](#) (assistant)
[MUDr. Martina Doubková, Ph.D.](#) (seminar tutor)
[MUDr. Anna Hrazdírová](#) (seminar tutor)
[MUDr. Lenka Jakubíková, Ph.D.](#) (seminar tutor)
[MUDr. Bohdan Kadlec, Ph.D.](#) (seminar tutor)
[MUDr. Yvonne Staňková, Ph.D.](#) (seminar tutor)
[MUDr. Marcela Tomíšková](#) (seminar tutor)
[MUDr. Pavel Turčáni, Ph.D.](#) (seminar tutor)
[MUDr. Vladimír Herout](#) (seminar tutor)
[MUDr. Marek Plutinský](#) (seminar tutor)
[MUDr. Petr Malenka, Ph.D.](#) (seminar tutor)

Supervisor

[MUDr. Martina Doubková, Ph.D.](#)
[Department of Pulmonary Diseases and Tuberculosis - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Contact Person: [Kateřina Tichá](#)

Supplier department: [Department of Pulmonary Diseases and Tuberculosis - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Timetable of Seminar Groups

VLVL9X61c/09: Mon 25. 9. to Fri 29. 9. each working day 7:30–12:20 [N01176](#)

VLVL9X61c/10: Mon 8. 1. to Fri 12. 1. each working day 7:30–12:20 [N01176](#)

VLVL9X61c/11: Mon 18. 12. to Fri 22. 12. each working day 7:30–12:20 [N01176](#)

VLVL9X61c/12: Mon 4. 12. to Fri 8. 12. each working day 7:30–12:20 [N01176](#)

VLVL9X61c/15: Mon 20. 11. to Fri 24. 11. each working day 7:30–12:20 [N01176](#)

VLVL9X61c/16: Mon 6. 11. to Fri 10. 11. each working day 7:30–12:20 [N01176](#), pouze pro studenty pediatrického směru

VLVL9X61c/32: No timetable has been entered into IS.

VLVL9X61c/33: No timetable has been entered into IS.

Prerequisites (in Czech)

[VLCH0832c Surgery II - practicals](#) && ([VLFA0822p Pharmacology II - L](#) || [VLFA0722p Pharmacology - L](#))

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

At the end of the course students should be able to understand pathology and basic differential diagnosis of lung diseases, basic X-ray interpretation.

Syllabus

- The lessons are focused on gaining both theoretical and practical experience covering the entire area of pulmonology. The practice is done at the bedside and by demonstrating different methods of examination. The theory is discussed in seminars organized in the Departments classroom. Day 1: Lung cancer. Day 2: COPD, asthma. Day 3: Tuberculosis. Day 4: Pneumonia. Day 5: Interstitial lung diseases.

Literature

recommended literature

- Doporučené postupy v pneumologii, Vítězslav Kolek a spol., ISBN: 978-80-7345-359-6
- [SKŘIČKOVÁ, Jana](#). Nádory plic. In *Onkologie - minimum pro praxi, Jiří Tomášek a kol.* 1. vyd. Praha: Axonite CZ, 2015. p. 174-184, 10 pp. ISBN 978-80-88046-01-1. [info](#)
- [SKŘIČKOVÁ, Jana](#). Jiné nádory plic a průdušek (Other pulmonary and bronchial tumours). In Vítězslav Kolek. *Pneumologie. 2., rozš. vyd.* Praha: Maxdorf, 2014. p. 335-339, 5 pp. Jessenius. ISBN 978-80-7345-387-9. [info](#)
- [SKŘIČKOVÁ, Jana](#). Pneumonie u imunokompromitovaných nemocných (Pneumonia in immunocompromised patients). In Vítězslav Kolek. *Pneumologie. 2., rozš. vyd.* Praha: Maxdorf, 2014. p. 209-210, 2 pp. Jessenius. ISBN 978-80-7345-387-9. [info](#)
- [SKŘIČKOVÁ, Jana](#). Sekundární nádory plic (Secondary tumours of the lung). In Vítězslav Kolek. *Pneumologie. 2., rozš. vyd.* Praha: Maxdorf, 2014. p. 340-342, 3 pp. Jessenius. ISBN 978-80-7345-387-9. [info](#)
- [SKŘIČKOVÁ, Jana](#). Záněty mediastina (Mediastinal inflammations). In Vítězslav Kolek. *Pneumologie. 2., rozš. vyd.* Praha: Maxdorf, 2014. p. 379-380, 2 pp. Jessenius. ISBN 978-80-7345-387-9. [info](#)

- [SKŘIČKOVÁ, Jana](#), Vítězslav KOLEK, [Zdeněk ADAM](#), [Zbyněk BORTLIČEK](#), [Petr BRABEC](#), [Petr BRHEL](#), [Petr BURKON](#), [Ivana ČERVINKOVÁ](#), [Petr ČOUPEK](#), [Michael DOUBEK](#), [Martina DOUBKOVÁ](#), [Ladislav DUŠEK](#), [Ivo HANKE](#), [Karel HEJDUK](#), Tereza JAKUBCOVÁ, Petr JAKUBEC, [Lenka JAKUBÍKOVÁ](#), [Andrea JANÍKOVÁ](#), [Václav JEDLIČKA](#), [Ladislav KABELKA](#), [Bohdan KADLEC](#), [Jana KOPTÍKOVÁ](#), Renata KOUKALOVÁ, [Marta KREJČÍ](#), [Ondřej MÁJEK](#), [Zdeněk MERTA](#), [Mojmír MOULIS](#), [Jan MUŽÍK](#), [Tomáš NEBESKÝ](#), [Tomáš PAVLÍK](#), [Adam PEŠTÁL](#), [Marek PLUTINSKÝ](#), [Eva POKOJOVÁ](#), [Luděk POUR](#), Blanka ROBEŠOVÁ, [Zdeněk ŘEHÁK](#), [Ondřej SLÁMA](#), [Yvonne STAŇKOVÁ](#), [Petr SZTURZ](#), [Miroslav TOMIŠKA](#), [Marcela TOMIŠKOVÁ](#), Alžběta VAŠÍKOVÁ and [Ondřej VENCLÍČEK](#). *Základy moderní pneumoonkologie (Tumours of lung, pleura)*. Praha: Maxdorf, 2012. 491 pp. Jessenius. ISBN 978-80-7345-298-8. [info](#)
- [SKŘIČKOVÁ, Jana](#). *Nádory plic a průdušek*. I. Praha: TRITON, 2010. p. 498-505, 8 pp. Interna. ISBN 978-80-7387-423-0. [info](#)
- [SKŘIČKOVÁ, Jana](#). *Onemocnění mediastina*. I. Praha: TRITON, 2010. p. 512-515, 4 pp. ISBN 978-80-7387-423-0. [info](#)

not specified

- [SKŘIČKOVÁ, Jana](#). Karcinom plic (Lung cancer). In Vítězslav Kolek. *Pneumologie*. 2., rozš. vyd. Praha: Maxdorf, 2014. p. 315-334, 20 pp. Jessenius. ISBN 978-80-7345-387-9. [info](#)
- [SKŘIČKOVÁ, Jana](#). Nádory mediastina (Mediastinal tumours). In Vítězslav Kolek. *Pneumologie*. 2., rozš. vyd. Praha: Maxdorf, 2014. p. 371-378, 8 pp. Jessenius. ISBN 978-80-7345-387-9. [info](#)

Teaching methods

practical group projects, presentations by professionals in the sectors

Assessment methods

The semester is closed by completing a simple multiple-choice test covering the information presented at the seminars. A 100% participation is a precondition for granting the credit.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course can also be completed outside the examination period.

The course is taught each semester.

Information on the extent and intensity of the course: Dále klinika zajišťuje: 3 + 3 hod. - ČJ a AJ přednášek z Klinické onkologie (V. ročník), přednášku 2 hod. VI. roč., 10 seminářů VI. roč., 1 hod. před z Kl. onkologie - magistři.

Listed among pre-requisites of other courses

- [VLCH11XX Surgery - State Exam](#) ([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) ||

[VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

- **[VLDP11XX](#) Paediatrics - State Exam**

([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

- **[VLRL11XX](#) Family Medicine and Geriatrics**

([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLIN9X22](#) && [VLPL9X1](#) && [VLON091](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) (Do I meet enrolment requirements?)

- **[VLVL11XX](#) Internal Medicine - State Exam**

([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

- **[VLZP11XX](#) Public Health - State Exam**

([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) &&

[VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLR041](#), [VLT081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

Teacher's information

Před začátkem výuky si zástupce studentů vyzvedne klíč od suterénní šatny na sekretariátě kliniky (1. patro, pavilon E). Po převlečení se schází studenti v učebně KNPT v přízemí pavilonu E (vedle ambulance funkčního vyšetřování).

The course is also listed under the following terms [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#).

VLVL9X62c Internal medicine part 2 - Cardiology and Angiology ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/3/0. 4 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Blanka Fischerová, Ph.D.](#) (seminar tutor)

[MUDr. Július Godava](#) (seminar tutor)

[MUDr. Anna Chaloupka](#) (seminar tutor)

[doc. MUDr. Lubomír Křivan, Ph.D.](#) (seminar tutor)

[MUDr. František Lehar, Ph.D.](#) (seminar tutor)

[prof. MUDr. Jaroslav Meluzín, CSc.](#) (seminar tutor)

[MUDr. Tereza Mikušová](#) (seminar tutor)

[MUDr. Hana Moravcová](#) (seminar tutor)

[MUDr. Andrej Nagy](#) (seminar tutor)

[MUDr. Abdul Qadeer Negahban](#) (seminar tutor)

[doc. MUDr. Miroslav Novák, CSc.](#) (seminar tutor)

[MUDr. Hana Poloczková](#) (seminar tutor)

[MUDr. Karin Poloková](#) (seminar tutor)

[MUDr. Zdeňka Pospíšilová, Ph.D.](#) (seminar tutor)

[MUDr. Robert Prosecký](#) (seminar tutor)

[MUDr. Filip Souček](#) (seminar tutor)

[prof. MUDr. Lenka Špinarová, Ph.D., FESC](#) (seminar tutor)

[doc. MUDr. Josef Šumbera, CSc.](#) (seminar tutor)

[MUDr. Klaudia Vyskočilová, Ph.D.](#) (seminar tutor)

[prof. MUDr. Karel Zeman, CSc.](#) (seminar tutor)

[Lenka Hochmanová](#) (assistant)

[Jitka Macháčková](#) (assistant)

[Alena Stodůlková](#) (assistant)
[prof. MUDr. Jiří Vítovec, CSc.](#) (assistant)
[Hana Zemanová](#) (assistant)

Supervisor

[prof. MUDr. Jiří Vítovec, CSc.](#)
[First Department of Internal Medicine - Cardioangiology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)
Contact Person: [prof. MUDr. Lenka Špinarová, Ph.D., FESC](#)
Supplier department: [First Department of Internal Medicine - Cardioangiology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Timetable of Seminar Groups

VLVL9X62c/01: Mon 9. 10. to Fri 20. 10. each working day 7:30–12:20 [N01908](#)
VLVL9X62c/02: Mon 25. 9. to Fri 6. 10. each working day 7:30–12:20 [C-6.034](#)
VLVL9X62c/03: Mon 8. 1. to Fri 19. 1. each working day 7:30–12:20 [N13191a](#)
VLVL9X62c/04: Mon 18. 12. to Fri 5. 1. each working day 7:30–12:20 [C-6.034](#)
VLVL9X62c/05: Mon 4. 12. to Fri 15. 12. each working day 7:30–12:20 [C-6.034](#)
VLVL9X62c/06: Mon 20. 11. to Fri 1. 12. each working day 7:30–12:20 [N13191a](#)
VLVL9X62c/30: Mon 23. 10. to Fri 3. 11. each working day 7:30–12:20 [C-6.034](#)
VLVL9X62c/31: Mon 6. 11. to Fri 17. 11. each working day 7:30–12:20 [C-6.034](#)
VLVL9X62c/34: No timetable has been entered into IS.

Prerequisites

[VLCH0832c Surgery II - practicals](#) && ([VLFA0822p Pharmacology II - L](#) || [VLFA0722p Pharmacology - L](#))
VLCH0832c;(VLFA0822p; VLFA0722p)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The student should know the basic physical examination and functional tests in cardiology, should interpret ECG and recognize important arrhythmias. He/she must be able to describe basic examination in cardiology. He/she must be able to describe signs and symptoms of the most frequent cardiovascular disease, like hypertension, ischemic heart disease, myocardial infarction, arrhythmias, pulmonary embolism, peripheral artery disease, cardiogenic shock, syncope, pulmonary oedema, aortic aneurysm. He/she must know the basic pathology of congenital and acquired valve disease, endocarditis, myocarditis and pericarditis. He/she must know the cardiovascular pharmacology as well as non-pharmacological treatment including pacing, resynchronisation and defibrillation. He/she must be able to describe the methods in invasive cardiology and cardio surgery. He/she must know the cardiovascular risk factors and to describe the pathophysiology of atherosclerosis.

Learning outcomes

The student have to know the basic physical examination and functional tests in cardiology, should interpret ECG and recognize important arrhythmias. He/she must be able to describe basic examination in cardiology. He/she must be able to describe signs and symptoms of the most frequent cardiovascular disease vide objectives of the subject

Syllabus

- **Cardiology**

Chronic coronary artery disease

stable angina pectoris, silent ischemia angina pectoris inversa, etiology, pathophysiology, differential diagnosis of the chest pain, methods of examination, risk factors, primary and secondary prevention, complications, therapy, prognosis, classification (CCSC)

Acute coronary artery disease

nonstable angina pectoris, acute myocardial infarction, sudden death, etiology and pathophysiology, methods of examination, complications, therapy, prognosis

Myocarditis

virus, bacterial and parainfectious etiology, pathophysiology, methods of examination, complications, relation to dilated cardiomyopathy, prognosis, therapy

Endocarditis

noninfectious, bacterial endocarditis , etiology and pathophysiology, typical forms, high risk population (valvular disease, after valvular replacement, intravenous drug users, imunocompromised patients), methods of exmaination, differential diagnosis, surgical vs. nonsurgical treatment, indications, prognosis.

Tachyarrhythmias

supraventricular (atrial fibrillation, atrial flutter, other supraventricular tachcardias), ventricular (ventricular tachycardia, fast ventricular tachycardia, ventricular fibrillation), premature beats, etiology, pathophysiology, differentila diagnosis, farmacologic, nonfarmacologic treatment including radiofrequency catether ablations and implantable cardiovertors-defbillators.

Bradyarrhythmias

sinus bradycardia, rythm of AV junction, sinoatrial arrest and block, AV block II. and III. ventricular asystole, etiology and pathophysiology, differential diagnosis,

syncope, methods of examination, HUT test, pharmacologic treatment, cardiac pacemaker implantation.

Left ventricular insufficiency

acute (Killip classification) etiology, pathophysiology, therapy, chronic, NYHA classification, etiology, pathophysiology, treatment (including heart transplantation), prognosis.

Cor pulmonale

acute (incl. acute pulmonary embolism), chronic, etiology, pathophysiology, differential diagnosis primary pulmonary hypertension, therapy, prognosis

Heart valvular disease

etiology and pathophysiology, congenital, febris rheumatica, single valvular disease, multiple valvular disease, differential diagnosis, complications, pharmacologic, surgical, catheterization therapy, prognosis

Congenital valvular disease in adults

defect of atrial septum, defect of ventricular septum, Fallot tetralogy, Ebstein's anomaly, transposition of main vessels, ductus arteriosus persistens, etiology, pathophysiology, therapy, prognosis

Venous disease

acute vein thrombophlebitis (flebothrombosis), etiology and pathophysiology, extraordinary forms (phlegmasia alba and coerulea dolens) differential diagnosis, methods of examination, complications, therapy, prevention, varicose complex, consequences of recurrent thrombophlebitis, superior and inferior vena cava syndrome.

Arterial disease

ischemic arterial disease, thrombangitis obliterans, acute peripheral artery strokes (embolisation and thrombosis). coarctation of the aorta, aortic dissection, etiology, pathophysiology, differential diagnosis, methods of examination, complications, therapy, prognosis.

Arterial hypertension

essential and secondary hypertension, etiology, pathophysiology, classification methods of examination, complications, therapy, prognosis

Pericarditis and pericardial effusion

virus, bacterial malignant and noninfectious etiology, pathophysiology, differential diagnosis, methods of examination, complications, therapy, prognosis

Cardiomyopathy

definition, primary (idiopathic), secondary (specific), morfologic stratification, hypertrophic, dilated and restrictive), arrhythmogenic right ventricle dysplasia, etiology pathophysiology, differential diagnosis, methods of examination, complications, therapy, prognosis

Methods of examination in cardiology

anamnesis, laboratory assesment, noninvasive methods (electrocardiography, X ray methods, NMR, echocardiography, radionuclear methods, stress examinations, signal averaged ECG, Holter monitoring, heart rate variability, baroreflex sensitivity), invasive (right and left heart cathetrization, coronary angiography, eledtrophysiology, heart biopsy)

Literature

recommended literature

- *Davidson's principles and practice of medicine*. Edited by Brian R. Walker. 22nd ed. Edinburgh: Churchill Livingstone/Elsevier, 2014. xix, 1372. ISBN 9780702050350. [info](#)
- [SOUČEK, Miroslav](#), [Jindřich ŠPINAR](#), [Jiří VORLÍČEK](#), [Zdeněk ADAM](#), [Dagmar ADÁMKOVÁ KRÁKOROVÁ](#), Lenka BABIČKOVÁ, [Karola BALŠÍKOVÁ](#), [Drahomíra BARTOŠOVÁ](#), [Otakar BEDNAŘÍK](#), Richard BERGER, [Šárka BOHATÁ](#), [Petr BRHEL](#), Tomáš BRYCHTA, [Yvona BRYCHTOVÁ](#), [Alena BULIKOVÁ](#), [Petr BURKON](#), [Ivan ČAPOV](#), [Aleš ČERMÁK](#), [Eva ČEŠKOVÁ](#), [Milan DASTYCH](#), [Regina DEMLOVÁ](#), [Petr DÍTĚ](#), [Jiří DOLINA](#), [Michael DOUBEK](#), [Martina DOUBKOVÁ](#), [Lenka DUBSKÁ](#), [Ladislav DUŠEK](#), [Pavel FABIAN](#), [Vuk FAIT](#), [Zdeněk FOJTÍK](#), [Lenka FORETOVÁ](#), [Tomáš FREIBERGER](#), [Renata GAILLYOVÁ](#), [Roman GÁL](#), Ladislav GROCH, [Marek HAKL](#), [Jana HALÁMKOVÁ](#), [Aleš HEP](#), Jitka HILLOVÁ MANNOVÁ, Ota HLINOMAZ, Ivo HOFÍREK, [Jan HOLČÍK](#), [Alena HOLČÍKOVÁ](#), Alena HONDLOVÁ, [Anna HRAZDIROVÁ](#), Jan HRUDA, [Petr HUSA](#), Libuše HUSOVÁ, [Richard CHALOUPKA](#), Václav CHALOUPKA, [Josef CHOVANEC](#), Stanislav JANOUŠEK, Jana JURÁNKOVÁ, [Ladislav KABELKA](#), [Zdeněk KADAŇKA](#), [Bohdan KADLEC](#), [Zdeněk KALA](#), [Bohuslav KIANIČKA](#), Dagmar KINDLOVÁ, [Igor KISS](#), [Jarmila KISSOVÁ](#), [Martin KLABUSAY](#), [Ivo KOCÁK](#), Jiří KÖNIG, [Jana KOPTÍKOVÁ](#), [Zdeněk KOŘÍSTEK](#), [Zdeněk KRÁL](#), Milan KRATOCHVÍL, [Lenka KRBKOVÁ](#), [Marta KREJČÍ](#), Petr KRIFTA, Petr KROUPA, [Darja KRUSOVÁ](#), Lucie KŘIKAVOVÁ, [Růžena LÁBROVÁ](#), [Radek LAKOMÝ](#), Jan LATA, Jolana LIPOLDOVÁ, [Jiří LITZMAN](#), [Ondřej LUDKA](#), [Jan MALÁSKA](#), [Hana MATĚJOVSKÁ KUBEŠOVÁ](#), Jiří MATOUŠEK, Pavel

MATUŠKA, Miloslava MATÝŠKOVÁ, [Jaroslav MELUZÍN](#), [Hana MELUZÍNOVÁ](#), [Zdeněk MERTA](#), [Blanka MIČÁNKOVÁ ADAMOVIČ](#), Miroslav MORÁŇ, [Vojtěch MORNSTEIN](#), [Jan MUŽÍK](#), Tomáš NEBESKÝ, Anna NEČASOVÁ, [Marta NEDBÁLKOVÁ](#), Miroslava NEKULOVÁ, [Petr NĚMEC](#), Jiří NEUBAUER, Pavel NOHEL, Jana BĚLOBRÁDKOVÁ, [Miroslav NOVÁK](#), [Bronislava NOVOTNÁ](#), [Petr ŠTOURAC](#) and [Vojtěch THON](#). *Vnitřní lékařství (Internal Medicine)*. 1.vyd. Praha, Brno: Grada, 2011. 1788 pp. Vnitřní lékařství. ISBN 978-80-247-2110-1. [info](#)

Teaching methods

Course is organized as 10 days intership at cardiological clinics. Course is composed of collective seminars to the given topics and practical bed-side demonstrations in small groups.

Assessment methods

The condition for giving course unit credit is full attendance in all lessons and completion of final credit.

Language of instruction

Czech

Further Comments

The course is taught each semester.

Listed among pre-requisites of other courses

- [VLCH11XX Surgery - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [VLPD11XX Paediatrics - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

- [VLRL11XX Family Medicine and Geriatrics](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VSDV9X22p](#)
&& [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) &&
[VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) &&
[VLVL9X66c](#) && [VLIN9X22](#) && [VLPL9X1](#) && [VLON091](#) && [VYCET\(3,](#)
[VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#),
[VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#),
[VTL081](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSFP071](#)) && [VLCH9X33c](#) &&
([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) (Do I meet enrolment requirements?)
- [VLVL11XX Internal Medicine - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#)
&& [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) &&
[VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) ||
[VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) &&
[VLSD7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) &&
[VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) &&
[VYCET\(3,](#) [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#),
[VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#),
[VLRL041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) &&
([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment
requirements?)
- [VLZP11XX Public Health - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#)
&& [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) &&
[VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) ||
[VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) &&
[VLSD7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) &&
[VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && [VYCET\(3,](#)
[VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#),
[VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#),
[VTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) ||
[VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

The course is also listed under the following terms [Autumn 1999](#), [Spring 2000](#), [Autumn 2000](#), [Spring 2001](#), [Autumn 2001](#), [Spring 2002](#), [Autumn 2002](#), [Spring 2003](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#).

VLVL9X63c Internal medicine part 3 - Nefrology, Diabetology, Revmatology and Endocrinology *

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/3/0. 4 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Bohuslav Kianička, Ph.D.](#) (lecturer)
[MUDr. Jan Svojanovský, Ph.D.](#) (lecturer)
[MUDr. Karola Balšíková](#) (seminar tutor)
[doc. MUDr. Mojmír Blaha, CSc.](#) (seminar tutor)
[MUDr. Darja Krusová, Ph.D.](#) (seminar tutor)
[doc. MUDr. Helena Němcová, CSc.](#) (seminar tutor)
[doc. MUDr. Petr Němec, Ph.D.](#) (seminar tutor)
[MUDr. Věra Olšovská, Ph.D.](#) (seminar tutor)
[MUDr. Jindřich Olšovský, Ph.D.](#) (seminar tutor)
[MUDr. Aleš Průcha](#) (seminar tutor)
[MUDr. Ivan Řiháček, Ph.D.](#) (seminar tutor)
[prof. MUDr. Vladimír Soška, CSc.](#) (seminar tutor)
[MUDr. Otmar Stránský](#) (seminar tutor)
[doc. MUDr. Kamil Ševela, CSc.](#) (seminar tutor)
[doc. MUDr. Jiří Špác, CSc.](#) (seminar tutor)
[MUDr. Dalibor Zeman](#) (seminar tutor)
[Eva Kašpárková](#) (assistant)
[Hana Zemanová](#) (assistant)

Supervisor

[prof. MUDr. Miroslav Souček, CSc.](#)
[Second Department of Internal Medicine - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)
Contact Person: [Eva Kašpárková](#)
Supplier department: [Second Department of Internal Medicine - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Timetable of Seminar Groups

VLVL9X63c/09: Mon 8. 1. to Fri 19. 1. each working day 7:30–12:20 [N04001](#)
VLVL9X63c/10: Mon 18. 12. to Fri 5. 1. each working day 7:30–12:20 [N04001](#)
VLVL9X63c/11: Mon 4. 12. to Fri 15. 12. each working day 7:30–12:20 [N04001](#)
VLVL9X63c/12: Mon 20. 11. to Fri 1. 12. each working day 7:30–12:20 [N04001](#)
VLVL9X63c/15: Mon 6. 11. to Fri 17. 11. each working day 7:30–12:20 [N04001](#)
VLVL9X63c/16: Mon 23. 10. to Fri 3. 11. each working day 7:30–12:20 [N04001](#)
VLVL9X63c/32: No timetable has been entered into IS.
VLVL9X63c/33: No timetable has been entered into IS.

Prerequisites

[VLCH0832c Surgery II - practicals](#) && ([VLFA0822p Pharmacology II - L](#) || [VLFA0722p Pharmacology - L](#))
Prerequisites have been met. Theoretical knowledge of pathological anatomy, pathological physiology, pharmacology. Active participation in seminars.
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

After the completion of lessons the student will understand the problems of diseases taught in the block No. 3 : diabetology, nephrology, endokrinology, rheumatology. diseases of water, elektroyte, mineral and acid-base metabolism. He/she will be able to diagnose and know the therapy of these disorders.

Learning outcomes

After the completion of lessons the student will understand the problems of diseases taught in the block No. 3 : diabetology, nephrology, endokrinology, rheumatology. diseases of water, elektroyte, mineral and acid-base metabolism. He/she will be able to diagnose and know the therapy of these disorders.

Syllabus

- Kidney and urinary disease.
- Laboratoty diagnostic test and clinical examination of the kidney and urinary tract diseases.
- Glomerular diseases.
- Nefrotic syndrome.
- Diabetis nephropathy
- Tumorous of the kidney and urinary tract.
- Tubulointerstitial disease. reflux nephropathy. Renal vascular disease.
- Acute and chronic renal failure.
- Renal replacemet therapy.
- Haemodialysis.
- Renal transplantation.
- Endokrine disease.
- Laboratoty diagnostic test and clinical examination of the endocrine diseases.
- Hypothalamic and pituitary disease.
- Diabetes insipidus.
- Acromegaly.Gigantism.
- Hyperprolactinaemia
- Cushing s disease.
- Thyroid and parathyroid glands diseases.
- Thyroid enlargement. Goitre diffuse. Solitary thyroid nodule.
- Autoimmune thyroid disease.
- Thyrotoxicosis. Thyrotoxic crisis(thyroid storm).
- Hypothyroidism.
- Hypothyroidism.
- Thyroid neoplasma.
- The parathyroid glands disease.
- Hyperparathyroidism, primary, secondary,tertiary.

- Pseudohypoparathyroidism
- Adrenal glands diseases.
- Cushing s syndrome.
- Adrenal insufficiency.
- Congenital adrenal hyperplasia
- Pheochromocytoma.
- Neuroendocrine tumours
- Diabetes mellitus
- Aetiology and pathogenesis of diabetes
- Investigations. Insulin delivery. Insulin regimens.
- Oral-antidiabetic drugs .
- Diabetes mellitus typ 1 - aetiology,pathogenesis, diagnostic,therapy.
- Diabetes mellitus typ 2 - aetiology,pathogenesis,diagnostic,therapy.
- Diabetes in pregnancy. Gestational diabetes.
- Diabetic ketoacidosis,
- Nonketotic hyperosmolar diabetic coma.
- Hypoglycaemia. Hypoglycaemic coma.
- Management of the diabetes. Dietary management.
- Long-term complications of diabetes
- Diabetic retinopathy.Diabetic neuropathy.
- The diabetic foot.
- Inflammatory joint disease.
- Laboratory diagnostic test and clinical examination of the inflammatory joint diseases.
- Rheumatoid arthritis.
- Seronegative spondylarthritis
- Systemic connective tissue disease.
- Systemic lupus erythematosus.
- Systemic sclerosis
- Polymyositis and dermatomyositis
- Sjogren s syndrome
- Systemic vasculitis
- Other forms of vasculitis
- Musculoskeletal manifestations of disease in other systems
- Osteoporosis, osteomalacia, osteonecrosis, drug-induced lupus syndrome, myositis.
- Psoriasis
- Gout
- Paget s disease
- Osteoarthritis. Spinal and back disease.
- Acute rheumatic fever
- Disorders of acid-base balance
- Investigation of water and electrolytes
- Metabolic acidosis, metabolic alkalosis,respiratory acidosis, respiratory alkalosis, mixed acid-base disorders
- Disorders of amino acid metabolism
- Metabolic disease.

- Obesity. Hyperlipidemia. Metabolic bone disease.
- Malabsorption.
- Nutrition, enteral and parenteral alimentation
- Artificial alimentation

Literature

recommended literature

- Češka R. akol. Interna Triton Praha, 2012, ISBN 978-80-7387-423-0
- Souček M. a kol. Vnitřní lékařství. Grada Publishing 2011, 1577s. ISBN 978-80-247-2110-1

not specified

- Klener P. et all. Vnitřní lékařství Druhé doplněné vydání. Praha. Galén . 2006,
- Dítě, P. a kol. Vnitřní lékařství. Druhé, doplněné a přepracované vydání Galen, 2007. 586 s.
- Davidson s Principles and Practise of Medicine. 20th Edition. N.A. Boon, N.R.Colledge, B.R.Walker

Teaching methods

Lessons are taking place in blocks of 14 days. Attendance at the tuition is obligatory. The students work in groups of 5-6 members at the patient s bed step by step in all specialized department of the clinic. Expert seminars are the part of education.

Assessment methods

Succesfull written test on problems of internal medicine – block 3 is necessary for getting the credit. The test it consist of 20 questions and the student must make out correctly 60% of questions.

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught each semester.

Listed among pre-requisites of other courses

- [VLCH11XX Surgery - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#)
&& [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) &&
[VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) ||
[VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) &&
[VLSD7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) &&
[VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) &&
VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#),
[VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#),
[VLRL041](#), [VLTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) &&
([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) ([Do I meet enrolment requirements?](#))

- **VLDP11XX Paediatrics - State Exam**
 ([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#)
 && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) &&
[VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) ||
[VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) &&
[VLS7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) &&
[VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLP1022c](#) &&
 VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#),
[VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#),
[VLR041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) &&
 ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment
 requirements?)
- **VLRL11XX Family Medicine and Geriatrics**
 ([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VSDV9X22p](#)
 && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) &&
[VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) &&
[VLVL9X66c](#) && [VLIN9X22](#) && [VLPL9X1](#) && [VLON091](#) && VYCET(3,
[VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#),
[VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLR041](#),
[VTL081](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSFP071](#)) && [VLCH9X33c](#) &&
 ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) (Do I meet enrolment requirements?)
- **VLVL11XX Internal Medicine - State Exam**
 ([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#)
 && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) &&
[VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) ||
[VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) &&
[VLS7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) &&
[VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLP1022c](#) &&
 VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#),
[VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#),
[VLR041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) &&
 ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment
 requirements?)
- **VLZP11XX Public Health - State Exam**
 ([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#)
 && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) &&
[VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) ||
[VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) &&
[VLS7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) &&
[VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLP1022c](#) && VYCET(3,
[VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#),
[VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLR041](#),
[VTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) ||
[VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

Teacher's information

<https://is.muni.cz/auth/el/1411/podzim2009/VLVL9X63c/op/>

V den zahájení stáže - v pondělí si studenti přinesou zámeček k uzamčení šatní skříňky. Po ukončení blokové stáže t.j. v pátek jsou povinni opět šatní skříňku uvolnit!!!!!!!!!!!!!!
Děkuji za pochopení. První den výuky se studenti dostaví na sekretariát II. interní kliniky, FN Pekařská, budova J, 1.poschodí, kde dostanou stážovací kartu. Ve stážích studenti potřebují bílý plášť, prezůvky a fonendoskop. V první polovině stáže probíhá výuka u lůžka. Po přestávce následuje odborný seminář. Součástí seminářů jsou odborné prezentace studentů podle rozpisu v ISu. Udělení zápočtu na konci stáže je podmíněn úspěšným absolvováním písemného testu, který má 20 složených otázek, požadavek 60% správně zodpovězených otázek.

The course is also listed under the following terms [Autumn 1999](#), [Spring 2000](#), [Autumn 2000](#), [Spring 2001](#), [Autumn 2001](#), [Spring 2002](#), [Autumn 2002](#), [Spring 2003](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

VLVL9X64c Internal medicine part 4 - Gastroenterology and Haematology ✱

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/3/0. 4 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Zdeněk Adam, CSc.](#) (seminar tutor)
[MUDr. Denisa Bakešová](#) (seminar tutor)
[MUDr. Otakar Bednařík](#) (seminar tutor)
[MUDr. Dagmar Brančíková, Ph.D.](#) (seminar tutor)
[MUDr. Lucie Brázdilová](#) (seminar tutor)
[Mgr. Petra Bučková](#) (seminar tutor)
[MUDr. Alena Buliková, Ph.D.](#) (seminar tutor)
[MUDr. Libor Červínek, Ph.D.](#) (seminar tutor)
[prof. MUDr. Petr Dítě, DrSc.](#) (seminar tutor)
[prof. MUDr. Michael Doubek, Ph.D.](#) (seminar tutor)
[MUDr. Michal Eid](#) (seminar tutor)
[MUDr. Zdeněk Fojtík, Ph.D.](#) (seminar tutor)
[MUDr. František Folber, Ph.D.](#) (seminar tutor)
[MUDr. Markéta Hadrabová](#) (seminar tutor)
[prof. MUDr. Aleš Hep, CSc.](#) (seminar tutor)
[MUDr. Miluše Hertlová, CSc.](#) (seminar tutor)
[MUDr. Tomáš Hornák](#) (seminar tutor)
[MUDr. Štěpán Hrabovský](#) (seminar tutor)
[doc. MUDr. Andrea Janíková, Ph.D.](#) (seminar tutor)

[MUDr. Jarmila Kissová, Ph.D.](#) (seminar tutor)
[RNDr. Martin Komenda, Ph.D.](#) (seminar tutor)
[MUDr. Zdeněk Král, CSc.](#) (seminar tutor)
[prof. MUDr. Marta Krejčí, Ph.D.](#) (seminar tutor)
[MUDr. Radek Kroupa, Ph.D.](#) (seminar tutor)
[MUDr. Jana Křivánková](#) (seminar tutor)
[MUDr. Andrea Křivanová, Ph.D.](#) (seminar tutor)
[prof. MUDr. Jiří Mayer, CSc.](#) (seminar tutor)
[MUDr. Róbert Mazúr](#) (seminar tutor)
[MUDr. Eva Mičulková](#) (seminar tutor)
[MUDr. Jozef Michalka](#) (seminar tutor)
[MUDr. Ivo Novotný, CSc.](#) (seminar tutor)
[MUDr. Monika Ondráčková](#) (seminar tutor)
[MUDr. Lenka Ostřížková](#) (seminar tutor)
[MUDr. Martina Palacková](#) (seminar tutor)
[MUDr. Ivo Palásek](#) (seminar tutor)
[MUDr. Anna Panovská, Ph.D.](#) (seminar tutor)
[prof. MUDr. Miroslav Penka, CSc.](#) (seminar tutor)
[MUDr. Yvona Pospíšilová](#) (seminar tutor)
[doc. MUDr. Luděk Pour, Ph.D.](#) (seminar tutor)
[MUDr. Markéta Protivánková](#) (seminar tutor)
[prof. MUDr. Zdeněk Ráčil, Ph.D.](#) (seminar tutor)
[MUDr. Lukáš Semerád](#) (seminar tutor)
[doc. MUDr. Petr Szturz, Ph.D.](#) (seminar tutor)
[MUDr. David Šálek](#) (seminar tutor)
[MUDr. Lenka Šmardová](#) (seminar tutor)
[MUDr. Martin Štork](#) (seminar tutor)
[MUDr. Zuzana Šustková](#) (seminar tutor)
[doc. MUDr. Miroslav Tomáška, CSc.](#) (seminar tutor)
[MUDr. Jakub Trizuljak](#) (seminar tutor)
[Mgr. Eva Vetešníková](#) (seminar tutor)
[MUDr. Barbora Weinbergerová](#) (seminar tutor)
[MUDr. Daniela Žáčková, Ph.D.](#) (seminar tutor)
[Zdeňka Dvořáková](#) (assistant)
[Jitka Firešová](#) (assistant)
[Jarmila Mouková](#) (assistant)
[Hana Zemanová](#) (assistant)
[Klára Zouharová](#) (assistant)

Supervisor

[MUDr. Jiří Dolina, Ph.D.](#)
[Department of Internal Gastroenterology - Institutions shared with the Faculty Hospital
Brno - Adult Age Medicine - Faculty of Medicine](#)
Supplier department: [Department of Internal Gastroenterology - Institutions shared with
the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Timetable of Seminar Groups

VLVL9X64c/01: Mon 18. 12. to Fri 22. 12. each working day 8:30–13:20 [N14190](#), Mon
1. 1. to Fri 5. 1. each working day 8:30–13:20 [N15190](#)

VLVL9X64c/02: Mon 4. 12. to Fri 8. 12. each working day 8:30–13:20 [N14190](#), Mon 11. 12. to Fri 15. 12. each working day 8:30–13:20 [N15190](#)
VLVL9X64c/03: Mon 20. 11. to Fri 24. 11. each working day 8:30–13:20 [N14190](#), Mon 27. 11. to Fri 1. 12. each working day 8:30–13:20 [N15190](#)
VLVL9X64c/04: Mon 6. 11. to Fri 10. 11. each working day 8:30–13:20 [N14190](#), Mon 13. 11. to Fri 17. 11. each working day 8:30–13:20 [N15190](#)
VLVL9X64c/05: Mon 23. 10. to Fri 27. 10. each working day 8:30–13:20 [N14190](#), Mon 30. 10. to Fri 3. 11. each working day 8:30–13:20 [N15190](#)
VLVL9X64c/06: Mon 9. 10. to Fri 13. 10. each working day 8:30–13:20 [N14190](#), Mon 16. 10. to Fri 20. 10. each working day 8:30–13:20 [N15190](#)
VLVL9X64c/30: Mon 8. 1. to Fri 12. 1. each working day 8:30–13:20 [N14190](#), Mon 15. 1. to Fri 19. 1. each working day 8:30–13:20 [N15190](#)
VLVL9X64c/31: Mon 25. 9. to Fri 29. 9. each working day 8:30–13:20 [N14190](#), Mon 2. 10. to Fri 6. 10. each working day 8:30–13:20 [N15190](#)
VLVL9X64c/34: Mon 18. 12. to Fri 22. 12. each working day 8:30–13:20 [N15190](#), Mon 1. 1. to Fri 5. 1. each working day 8:30–13:20 [N14190](#)

Prerequisites (in Czech)

[VLCH0832c Surgery II - practicals](#) && ([VLFA0822p Pharmacology II - L](#) || [VLFA0722p Pharmacology - L](#))
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The main objectives can be summarized as follows. To understand the basic teaching of gastroenterology during the stay on Clinic of Internal Medicine - Gastroenterology and to understand the basic knowledge of hematology during the stay on Clinic of Internal Medicine Hematooncology.

Syllabus

- Internal medical education, block IV, at the internal hematooncological department consists of 5 seminars and practical case presentation in patients. 1. Malignant lymphoproliferative disease, 2. Anemia. 3. Acute and chronic leukaemia. 4. Inherited and acquired coagulopathy. 4. Palliative and supportive treatment.

Literature

recommended literature

- [ADAM, Zdeněk](#), [Marta KREJČÍ](#), [Jiří VORLÍČEK](#), Zuzana ADAMOVÁ, Jaroslav BAČOVSKÝ, [Viera BAJČIOVÁ](#), [Otakar BEDNARÍK](#), [Jan BLATNÝ](#), Tomáš BŮCHLER, [Igor CRHA](#), [Aleš ČERMÁK](#), [Hana DOLEŽELOVÁ](#), [Ladislav](#)

[DUŠEK](#), [Karel DVOŘÁK](#), [Pavel FABIAN](#), [Vuk FAIT](#), [Antonín FASSMANN](#), [Jindřich FIALA](#), Lukáš FIALA, Jindřich FÍNEK, [Lenka FORETOVÁ](#), [Radim GROSMAN](#), [Jana HALÁMKOVÁ](#), Miroslav HEŘMAN, [Martin HUSER](#), [Ludmila HYNKOVÁ](#), [Richard CHALOUPKA](#), [Libuše KALVODOVÁ](#), [Igor KISS](#), [Iva KOČMANOVÁ](#), [Martin KOMENDA](#), [Jana KOPTÍKOVÁ](#), [Zdeněk KOŘÍSTEK](#), [Renata KOUKALOVÁ](#), [Zdeněk KRÁL](#), [Eva LÉTALOVÁ](#), [Milan MACHÁLKA](#), [Josef MALIŠ](#), [Miloslava MATÝŠKOVÁ](#), [Jiří MAYER](#), [Vojtěch MORNSTEIN](#), [Mojmír MOULIS](#), [Jan MUŽÍK](#), Miroslav MYSLIVEČEK, Milan NAVRÁTIL, Tomáš NEBESKÝ, [Miroslav NEČAS](#), [Rudolf NENUTIL](#), [Jiří NEUBAUER](#), [Martin ONDRÁK](#), [Zdeněk PAVELKA](#), [Miroslav PENKA](#), [Vojtěch PEŘINA](#), [Katarína PETRÁKOVÁ](#), [Petr POKORNÝ](#), [Luděk POUR](#), [Jiří PRÁŠEK](#), [Zdeněk RÁČIL](#), [Martin REPKO](#), [Zdeněk ŘEHÁK](#), [Jiří SCHOVANEC](#), [Ondřej SLÁMA](#), [Petr SMÍŠEK](#), [Jan STARÝ](#), [Petr SZTURZ](#), [Marek SVOBODA](#), [Vlastimil ŠČUDLA](#), [Roman ŠEFR](#), [Pavel ŠEVČÍK](#), [Pavel ŠLAMPA](#), [Lenka ŠMARDOVÁ](#), [Jiří ŠNAJDAUF](#), [Jaroslav ŠTĚRBA](#), [Michal TICHÝ](#), [Jiří TOMÁŠEK](#), [Miroslav TOMIŠKA](#), [Marcela TOMIŠKOVÁ](#), [Vít UNZEITIG](#), [Jiří VANÍČEK](#), [Vladimír VAŠKŮ](#), [Rostislav VYZULA](#), [Barbora WEINBERGEROVÁ](#), [Marie ZÍTKOVÁ](#) and [Karel ZITTERBART](#). *Obecná onkologie (General oncology)*. První vydání. Praha: Galén, 2011. 394 pp. ISBN 978-80-7262-715-8. [URL](#) [info](#)

- [ADAM, Zdeněk](#), [Marta KREJČÍ](#) and [Jiří VORLÍČEK](#). *Speciální onkologie. Příznaky, diagnostika a léčba maligních chorob (Special oncology. Symptoms, diagnostics and therapy of malignant disease)*. 1. vyd. Praha: Galén, 2010. 418 pp. Med. ISBN 978-80-7262-648-9. [info](#)

not specified

- [ADAM, Zdeněk](#), [Marta KREJČÍ](#) and [Jiří VORLÍČEK](#). *Hematologie : přehled maligních hematologických nemocí*. 2., dopl. a zcela přeprac. Praha: Grada, 2008. 390 s.,x. ISBN 9788024725024. [info](#)
- [ADAM, Zdeněk](#) and [Jiří VORLÍČEK](#). *Hematologie : pro praktické lékaře*. 1. vyd. Praha: Galén, 2007. 314 s. ISBN 9788072624539. [info](#)
- [ADAM, Zdeněk](#) and [Jiří VORLÍČEK](#). *Hematologie pro praktické lékaře*. 1. vyd. : Galén, 2007. 315 pp. ISBN 978-80-7262-453-9. [info](#)
- [DÍTĚ, Petr](#) and ET AL. *Vnitřní lékařství*. Druhé vydání. Praha: GALÉN, Na Bělidle 34, 2007. 586 pp. ISBN 978-80-7262-496-6. [info](#)
- [ADAM, Zdeněk](#) and [Karel DVOŘÁK](#). *Diagnostické a léčebné postupy u maligních chorob. Druhé, aktualizované a doplněné vydání: Přehled maligních lymfoproliferativních onemocnění dle REAL a WHO klasifikace*. Praha: Grada Publishing, 2004. p. 423-433, 10 pp. ISBN 80-247-0896-5. [info](#)

Teaching methods

Lessons are taking place in blocks of 14 days. Attendance at the tuition is obligatory. The students work in groups of 5-6 members at the patient s bed step by step in all specialized department of the clinic. Expert seminars are the part of education.

Assessment methods

credit

Language of instruction

Czech

Further Comments

[Study Materials](#)

The course can also be completed outside the examination period.

The course is taught each semester.

Listed among pre-requisites of other courses

- [VLCH11XX Surgery - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [VLPD11XX Paediatrics - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [VLRL11XX Family Medicine and Geriatrics](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLIN9X22](#) && [VLPL9X1](#) && [VLON091](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) (Do I meet enrolment requirements?)
- [VLVL11XX Internal Medicine - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) &&

[VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

- **[VLZP11XX](#) Public Health - State Exam**
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLS7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

The course is also listed under the following terms [Autumn 1999](#), [Spring 2000](#), [Autumn 2000](#), [Spring 2001](#), [Autumn 2001](#), [Spring 2002](#), [Autumn 2002](#), [Spring 2003](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

VLVL9X65 Vnitřní lékařství blok 5 - cvičení ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/3.2/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Hana Matějovská Kubešová, CSc.](#) (seminar tutor)

Supervisor

[prof. MUDr. Hana Matějovská Kubešová, CSc.](#)

[Department of Internal Medicine, Geriatrics and Practical Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Supplier department: [Department of Internal Medicine, Geriatrics and Practical Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Language of instruction

Czech

VLVL9X66c Internal medicine part 6 - Occupational Medicine ✱

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/3/0. 2 credit(s). Type of Completion: k (colloquium).

Teacher(s)

[prof. MUDr. Petr Brhel, CSc.](#) (lecturer)
[MUDr. Markéta Petrovová, Ph.D.](#) (lecturer)
MUDr. Petr Malenka, PhD (seminar tutor)
MUDr. Ondřej Sochor (lecturer)
Mgr. Petr Juhas (lecturer)
MUDr. Jiří Lešovský (seminar tutor)
[MUDr. Dana Lorenzová](#) (seminar tutor)
[MUDr. Petr Malenka, Ph.D.](#) (seminar tutor)
[Bohdana Furiková](#) (assistant)

Supervisor

[prof. MUDr. Petr Brhel, CSc.](#)
[Department of Occupational Medicine - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)
Contact Person: [prof. MUDr. Petr Brhel, CSc.](#)
Supplier department: [Department of Occupational Medicine - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Timetable of Seminar Groups

VLVL9X66c/09: Mon 2. 10. to Fri 6. 10. each working day 7:30–12:20 [N02029](#)
VLVL9X66c/10: Mon 15. 1. to Fri 19. 1. each working day 7:30–12:20 [N02029](#)
VLVL9X66c/11: Mon 9. 10. to Fri 13. 10. each working day 7:30–12:20 [N02029](#)
VLVL9X66c/12: Mon 11. 12. to Fri 15. 12. each working day 7:30–12:20 [N02029](#)
VLVL9X66c/15: Mon 27. 11. to Fri 1. 12. each working day 7:30–12:20 [N02029](#)
VLVL9X66c/16: Mon 13. 11. to Fri 17. 11. each working day 7:30–12:20 [N02029](#),
pediatrie+náhradní termín
VLVL9X66c/32: No timetable has been entered into IS.
VLVL9X66c/33: No timetable has been entered into IS.
VLVL9X66c/34: No timetable has been entered into IS.

Prerequisites (in Czech)

[VLCH0832c Surgery II - practicals](#) && ([VLFA0822p Pharmacology II - L](#) ||
[VLFA0722p Pharmacology - L](#))
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Teaching is focused on the occupational medicine, occupational diseases and accidents at work. Students become familiar with exposure factors in the working environment professional in various sectors of economic activity, the methods of monitoring and evaluation as subsequent health risks. Receive information about the most common and serious types of damage to health from work -occupational diseases, job related injuries, work related diseases. Students get acquainted with the principles of the formation and development of selected occupational diseases, their diagnosis, treatment, prevention. They are well informed about the legal issues in the field (czech list of occupational diseases, the duty doctor for suspected occupational diseases, reporting occupational diseases, social and legal consequences of recognition of occupational diseases). After successful completion of the course the student is able to: -assess and explain the relationships and connections between work activity, factors of working environment and subsequent health risks. - apply knowledge and skills gained from clinical occupational health advisory and legislation work in practice - on health at work, assessing fitness for work, organizing company preventive care, implementation of preventive examinations of workers, in preventing and rehabilitation of occupational diseases. - implement and evaluate the basic diagnostic methods in occupational medicine - spirometry, rhinomanometrie, audiometry, stress testing, EKG, finger pletysmografie, cold test. - treat the results of other objective investigative methods (EMG, X-ray heart, lung, three-phase scintigraphy, and allergy skin tests) in relation to the criteria of occupational disease.

Syllabus

- 1 Introduction: The impact of work and working conditions on the health of workers. The prevention diagnostics, treatment, and medicolegal aspects of diseases caused or exacerbated by working conditions: occupational diseases, accidents at work, work-related diseases. 2 Occupational health services in the Czech Republic. Aims and functions of an occupational health service, types of service Occupational health ethics Knowledge of the work environment, specific workplace hazards Medical examinations: pre-placement, periodic and special medical examinations, occupational history, biological monitoring, medical records Treatment Health education Rehabilitation and resettlement 3 Occupational diseases and toxicology List of occupational diseases (appendix of government decree no. 290/1995) Occupational diseases due to chemical agents, poisoning by lead or a compound of lead, poisoning by a nitro- or amino- or chloroderivate of benzene or of a homologue of benzene, poisoning by organophosphates, poisoning by chemical asphyxiants (carbon monoxide, hydrogen cyanide) Occupational diseases due to physical agents, work-related cumulative trauma disorders of the hand and arm, hand-arm vibration syndrome, noise induced hearing loss, non-stochastic and stochastic health effects of ionizing

radiation, dysbarism, disorders due to heat Occupational lung disorders, pneumoconioses (silicosis, coal workers' pneumoconiosis, asbestosis), asthma, extrinsic allergic alveolitis- farmer's lung), acute inflammation, malignancy Occupational dermatoses, primary irritant contact dermatitis, allergic contact dermatitis, neoplasms Occupational infections, infections due to exposure to infected humans or their tissues, infections transmitted from animals to humans (zoonoses), travel-associated infectious diseases 4 Mental health at work 5 The main areas of law relevant to occupational health , workers compensation law

Literature

required literature

- Brhel, P., Manoušková, M., Hrnčič, E. Pracovní lékařství. Základy primární pracovnělékařské péče. 1. vydání. Brno: NCO NZO, 2005, 338 s., ISBN 80-7013-414-3

recommended literature

- Brhel, P., Pícka, K. Úvod do průmyslové toxikologie (Industrial Toxicology). 1. vydání. Brno: Masarykova univerzita, 1998, 58 s. ISBN 80-210-1738-4.
- Šubrt, B., Tuček, M. Pracovnělékařské služby. Povinnosti zaměstnavatelů. 1. vydání. Praha: Anag, 2013, 328 s. ISBN 978-80-7263-820-8
- Brhel, P., Valková, V. Occupational Disorders. An Overview for Foreign Students. 1. vydání. Brno: Masarykova Univerzita, 1997. 40 s. ISBN 80-210-1559-4.
- Rosenstock, L. (ed). Textbook of clinical and environmental medicine. 2nd ed. Philadelphia: Elsevier Saunders, 2005. xviii, 133. ISBN 0-7216-8974-4.

not specified

- Pelclová D. a kol. Nemoci z povolání a intoxikace. 3., doplněné vydání. Praha: Karolinum, 2014, 316 s. ISBN 978-80-246-2597-3.
- Kolektiv. Soubor seminárních prací studentů - kapitoly z pracovního lékařství. Brno: KPL LF MU, 2013. Dostupné ve studijních materiálech oboru.

Teaching methods

The teaching process contains lectures, seminars and practice classes. The lecture will take place in the lecture hall of the Dept. of Occupational Medicine (Klinika pracovního lékařství) on the first floor at n. 17, Výstavní street in Brno, from 13:30.

Assessment methods

100% presence is required. For each issue is group discussion. Practical training - implementation and evaluation of basic diagnostic methods in occupational medicine. Final evaluation of the colloquium, an oral interview of one of the 20 questions. If you have any questions please contact us by email - petr.malenka@fnusa.cz

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught each semester.

Listed among pre-requisites of other courses

- [VLCH11XX Surgery - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [VLPD11XX Paediatrics - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [VLPG11XX Obstetric and Gynaecology - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && [VLVL9X66c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VSNO071](#), [VLKA091](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLTL081](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSDL071](#), [VLRL041](#), [VLIA081](#), [VLKM081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [VLRL11XX Family Medicine and Geriatrics](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLIN9X22](#) && [VLPL9X1](#) && [VLON091](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTL081](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) (Do I meet enrolment requirements?)

- [VLVL11XX Internal Medicine - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#)
&& [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) &&
[VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) ||
[VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) &&
[VLSD7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) &&
[VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) &&
VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#),
[VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#),
[VRL041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) &&
([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment
requirements?)
- [VLZP11XX Public Health - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#)
&& [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) &&
[VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) ||
[VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) &&
[VLSD7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) &&
[VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3,
[VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#),
[VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VRL041](#),
[VTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) ||
[VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

Teacher's information

Výuka probíhá ve výukové místnosti Kliniky pracovního lékařství, Výstavní 17, Brno, v 1. patře od 7:30 do 12:20 hodin. Z kapacitních důvodů výukové místnosti nelze v průběhu semestru navyšovat počet studentů ve skupině (22 míst+ 3 přistavky). Absence musí být omluvena a po domluvě nahrazena. Podrobné organizační informace obdrží studenti první den výuky v 7:30 hod. V pondělí studenti s sebou nepotřebují bílý plášť, prezůvky a fonendoskop. Studenty, kteří absolvují v zemích EU studijní pobyt v rámci Erasmu tak, že se termín kříží s výukou pracovního lékařství v CR žádáme, aby využili možnost absolvovat stáž z pracovního lékařství v rámci studijního pobytu v zahraničí. Uznáváme i ukončení předmětu v zemích EU.

The course is also listed under the following terms [Autumn 1999](#), [Spring 2000](#), [Autumn 2000](#), [Spring 2001](#), [Autumn 2001](#), [Spring 2002](#), [Autumn 2002](#), [Spring 2003](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#).

VLVP02122c Research preparation II ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

0/2/0. 5 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. PharmDr. Petr Babula, Ph.D.](#) (lecturer)
[doc. MUDr. Markéta Bébarová, Ph.D.](#) (lecturer)
[doc. MUDr. Julie Bienertová Vašků, Ph.D.](#) (lecturer)
[prof. RNDr. Petr Dubový, CSc.](#) (lecturer)
[doc. MVDr. Aleš Hampl, CSc.](#) (lecturer)
[prof. MUDr. Markéta Hermanová, Ph.D.](#) (lecturer)
[prof. MUDr. Kateřina Kaňková, Ph.D.](#) (lecturer)
[Mgr. Jiří Kratochvíl, Ph.D.](#) (lecturer)
[prof. RNDr. Vojtěch Mornstein, CSc.](#) (lecturer)
[MUDr. Petr Müller, Ph.D.](#) (lecturer)
[prof. MUDr. Marie Nováková, Ph.D.](#) (lecturer)
[MUDr. Zuzana Nováková, Ph.D.](#) (lecturer)
[prof. RNDr. Šárka Pospíšilová, Ph.D.](#) (lecturer)
[Mgr. Vladimír Rotrekl, Ph.D.](#) (lecturer)
[PharmDr. Jana Rudá, Ph.D.](#) (lecturer)
[doc. MUDr. Iva Slaninová, Ph.D.](#) (lecturer)
[prof. MUDr. David Šmajš, Ph.D.](#) (lecturer)
[prof. RNDr. Eva Táborská, CSc.](#) (lecturer)
[doc. RNDr. Josef Tomandl, Ph.D.](#) (lecturer)
[Mgr. Stjepan Uldrijan, CSc.](#) (lecturer)
[MUDr. Eva Závodná, Ph.D.](#) (lecturer)

Supervisor

[prof. MUDr. Kateřina Kaňková, Ph.D.](#)
Faculty of Medicine
Contact Person: [Mgr. Stjepan Uldrijan, CSc.](#)
Supplier department: [Faculty of Medicine](#)

Prerequisites (in Czech)

[VLVP01121 Introduction to research Ip](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

The capacity limit for the course is 20 student(s).

Current registration and enrolment status: enrolled: **0/20**, only registered: **15/20**

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Language of instruction

Czech

Further Comments

The course is taught annually.
The course is taught: every week.

Listed among pre-requisites of other courses

- [VLVP03123c Introduction to research and experimental methodology III - training](#)
[VLVP02122c \(Do I meet enrolment requirements?\)](#)
- [VLVP03123p Introduction to research and experimental methodology III - lecture](#)
[VLVP02122c \(Do I meet enrolment requirements?\)](#)

The course is also listed under the following terms [Spring 2014](#), [Spring 2015](#), [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VLVP02122p Introduction to research and experimental methodology II - lecture ✱

Faculty of Medicine

Spring 2018

Extent and Intensity

2/0/0. 0 credit(s). Type of Completion: -.

Teacher(s)

[prof. MUDr. Kateřina Kaňková, Ph.D.](#) (lecturer)

[Mgr. Stjepan Uldrijan, CSc.](#) (lecturer)

Supervisor

[prof. MUDr. Kateřina Kaňková, Ph.D.](#)

[Faculty of Medicine](#)

Contact Person: [Mgr. Stjepan Uldrijan, CSc.](#)

Supplier department: [Faculty of Medicine](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

The capacity limit for the course is 20 student(s).

Current registration and enrolment status: enrolled: 0/20, only registered: 15/20

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

Teacher's information

ROZVRH VÝUKY PŘEDMĚTU „VĚDECKÁ PŘÍPRAVA II - PŘEDNÁŠKA“ Jarní semestr akademického roku 2016/2019 Změna tématu a termínu vyhrazena. Případné dotazy a připomínky směřujte na Dr. Uldrijana: uldrijan@med.muni.cz, Tel. 54949 4040

1. týden: st 24.2. není výuka 2. týden: st 2.3. (16:20 – 18:00, A19/113) Svoboda a odpovědnost vědce doc. Mgr. Josef Kuře, Dr. phil. (Ústav lékařské etiky LF MU) 3. týden: st 9.3. (16:20 – 18:00, A11/327) Situovaná věda Ing. Mgr. Zdeňka Jastrzemska, Ph.D. (Katedra filozofie, FF MU) 4. týden: st 16.3. (16:20 – 18:00, A16/217) Jak efektivně vyhledávat odborné informace v online databázích Mgr. Jiří Kratochvíl, Ph.D. (Knihovna univerzitního kampusu, MU) 5. týden: st 23.3. (16:20 – 18:00, A16/217) Jak správně citovat Mgr. Jiří Kratochvíl, Ph.D. (Knihovna univerzitního kampusu, MU) 6. týden: st 30.3. (16:20 – 18:00, A11/327) Informace o formátu prezentací výzkumných projektů studentů / Zadání termínů prezentací Mgr. Stjepan Uldrijan, CSc. (Biologický ústav LF MU) 7. týden: st 6.4. není výuka 8. týden: st 13.4. není výuka 9. týden: st 20.4. není výuka 10. týden: st 27.4. (16:20 – 18:00, A11/327) Prezentace výzkumných projektů studentů vede Mgr. Stjepan Uldrijan, CSc. (Biologický ústav LF MU) 11. týden: st 4.5. (16:20 – 18:00, A11/327) Prezentace výzkumných projektů studentů vede Mgr. Stjepan Uldrijan, CSc. (Biologický ústav LF MU) 12. týden: st 11.5. (16:20 – 18:00, A11/327) Prezentace výzkumných projektů studentů vede Mgr. Stjepan Uldrijan, CSc. (Biologický ústav LF MU) 13. týden: st 18.5. (16:20 – 18:00, A11/327) Prezentace výzkumných projektů studentů vede Mgr. Stjepan Uldrijan, CSc. (Biologický ústav LF MU) 14. týden: st 25.5. není výuka

Doplňující informace k přednáškám: Jak efektivně vyhledávat odborné informace v online databázích identifikace informativně kvalitní webové stránky + efektivní vyhledávání v Medline PubMed, Medviku, Web of Science a Scopus včetně přístupu k plnému textu. Jak správně citovat - proč se má citovat, jaké jsou citační metody, co jsou to bibliografické citace, co je považováno za plagiátorství Situovaná věda Přednáška se bude věnovat různým typům faktorů, které mají vliv na podobu vědy. S pomocí konkrétních příkladů z dějin vědy se pokusí ukázat, že vědu není možné chápat a zkoumat pouze jako ideál racionality, ale že je potřeba ji reflektovat z mnohem širšího společensko-kulturního kontextu. Studenti pochopí, že na formulování, obhajování a šíření určité vědecké teorie může mít vliv nejen použitá metodologie a racionální argumentace, ale také například filozofické představy o hranicích poznání, náboženské učení o ctnosti a hříchu nebo politické a ekonomické zájmy. Svoboda a odpovědnost vědce - Etický přesah vědecké práce - Subjekt a objektivita - Věda a etika (modely vzájemného vztahu) - Věda a (s)vědomí - Svoboda bádání a odpovědnost badatele

Literatura: B. E. ROLLIN, Science and Ethics. Cambridge: Cambridge University Press, 2006, s. 11-30. E. MORIN, Věda a svědomí. Praha: Atlantis 1995.

The course is also listed under the following terms [Spring 2014](#), [Spring 2015](#), [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VLVP03123c Introduction to research and experimental methodology III - training *

Faculty of Medicine
Autumn 2019
Extent and Intensity

0/2/0. 5 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. PharmDr. Petr Babula, Ph.D.](#) (lecturer)
[doc. MUDr. Markéta Bébarová, Ph.D.](#) (lecturer)
[doc. MUDr. Julie Bienertová Vašků, Ph.D.](#) (lecturer)
[prof. RNDr. Petr Dubový, CSc.](#) (lecturer)
[doc. MVDr. Aleš Hampl, CSc.](#) (lecturer)
[prof. MUDr. Markéta Hermanová, Ph.D.](#) (lecturer)
[MUDr. Ota Hlinomaz, CSc.](#) (lecturer)
[prof. MUDr. Kateřina Kaňková, Ph.D.](#) (lecturer)
[Mgr. Jiří Kratochvíl, Ph.D.](#) (lecturer)
[doc. Mgr. Lumír Krejčí, Ph.D.](#) (lecturer)
[RNDr. Michal Masařík, Ph.D.](#) (lecturer)
[doc. MUDr. Robert Mikulík, Ph.D.](#) (lecturer)
[prof. RNDr. Vojtěch Mornstein, CSc.](#) (lecturer)
[MUDr. Petr Müller, Ph.D.](#) (lecturer)
[prof. MUDr. Marie Nováková, Ph.D.](#) (lecturer)
[MUDr. Zuzana Nováková, Ph.D.](#) (lecturer)
[MUDr. Marek Orban](#) (lecturer)
[prof. RNDr. Šárka Pospíšilová, Ph.D.](#) (lecturer)
[prof. MUDr. Irena Rektorová, Ph.D.](#) (lecturer)
[Mgr. Vladimír Rotrekl, Ph.D.](#) (lecturer)
[PharmDr. Jana Rudá, Ph.D.](#) (lecturer)
[doc. MUDr. Iva Slaninová, Ph.D.](#) (lecturer)
[prof. MUDr. Martin Smrčka, Ph.D., MBA](#) (lecturer)
[prof. MUDr. David Šmajš, Ph.D.](#) (lecturer)
[prof. MUDr. Vladimír Šrámek, Ph.D.](#) (lecturer)
[prof. RNDr. Eva Táborská, CSc.](#) (lecturer)
[doc. RNDr. Josef Tomandl, Ph.D.](#) (lecturer)
[Mgr. Stjepan Uldrijan, CSc.](#) (lecturer)
[MUDr. Eva Závodná, Ph.D.](#) (lecturer)

Supervisor

[prof. MUDr. Kateřina Kaňková, Ph.D.](#)
[Faculty of Medicine](#)
Contact Person: [doc. MUDr. Markéta Bébarová, Ph.D.](#)
Supplier department: [Faculty of Medicine](#)

Timetable

Thu 13:00–14:50 [A18/208](#)

Prerequisites (in Czech)

[VLVP02122c Research preparation II](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

The capacity limit for the course is 20 student(s).

Current registration and enrolment status: enrolled: **15/20**, only registered: **0/20**

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Language of instruction

Czech

Further Comments

The course is taught annually.

Listed among pre-requisites of other courses

- [VLVP04124c Vědecká příprava IV](#)
[VLVP03123c](#) (Do I meet enrolment requirements?)
- [VLVP04124p Introduction to research and experimental methodology IV - lecture](#)
[VLVP03123c](#) (Do I meet enrolment requirements?)

The course is also listed under the following terms [Autumn 2014](#), [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VLVP03123p Introduction to research and experimental methodology III - lecture ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

2/0/0. 0 credit(s). Type of Completion: -.

Teacher(s)

[doc. MUDr. Markéta Bébarová, Ph.D.](#) (lecturer)

[prof. MUDr. Kateřina Kaňková, Ph.D.](#) (lecturer)

Supervisor

[prof. MUDr. Kateřina Kaňková, Ph.D.](#)

[Faculty of Medicine](#)

Contact Person: [doc. MUDr. Markéta Bébarová, Ph.D.](#)

Supplier department: [Faculty of Medicine](#)

Timetable

Thu 13:00–14:50 [A18/208](#)

Prerequisites (in Czech)

[VLVP02122c Research preparation II](#)

(Do I meet enrolment requirements?)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

The capacity limit for the course is 20 student(s).

Current registration and enrolment status: enrolled: **15/20**, only registered: **0/20**

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Language of instruction

Czech

Further Comments[Study Materials](#)

The course is taught annually.

The course is also listed under the following terms [Autumn 2014](#), [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VLVP04124c Vědecká příprava IV ✱

Faculty of Medicine

Spring 2018

Extent and Intensity

0/2/0. 5 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. PharmDr. Petr Babula, Ph.D.](#) (lecturer)
[doc. MUDr. Markéta Bébarová, Ph.D.](#) (lecturer)
[doc. MUDr. Julie Bienertová Vašků, Ph.D.](#) (lecturer)
[prof. RNDr. Petr Dubový, CSc.](#) (lecturer)
[doc. MVDr. Aleš Hampl, CSc.](#) (lecturer)
[prof. MUDr. Kateřina Kaňková, Ph.D.](#) (lecturer)
[Mgr. Jiří Kratochvíl, Ph.D.](#) (lecturer)
[prof. RNDr. Vojtěch Mornstein, CSc.](#) (lecturer)
[MUDr. Petr Müller, Ph.D.](#) (lecturer)
[prof. MUDr. Marie Nováková, Ph.D.](#) (lecturer)
[MUDr. Zuzana Nováková, Ph.D.](#) (lecturer)
[Mgr. Vladimír Rotrekl, Ph.D.](#) (lecturer)
[PharmDr. Jana Rudá, Ph.D.](#) (lecturer)
[doc. MUDr. Iva Slaninová, Ph.D.](#) (lecturer)
[prof. MUDr. David Šmajš, Ph.D.](#) (lecturer)
[prof. RNDr. Eva Táborská, CSc.](#) (lecturer)
[doc. RNDr. Josef Tomandl, Ph.D.](#) (lecturer)
[Mgr. Stjepan Uldrijan, CSc.](#) (lecturer)
[MUDr. Eva Závodná, Ph.D.](#) (lecturer)

Supervisor

[prof. MUDr. Kateřina Kaňková, Ph.D.](#)
[Faculty of Medicine](#)
Contact Person: [Mgr. Stjepan Uldrijan, CSc.](#)
Supplier department: [Faculty of Medicine](#)

Prerequisites (in Czech)

[VLVP03123c Introduction to research IIIc](#)
(Do I meet enrolment requirements?)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

The capacity limit for the course is 20 student(s).

Current registration and enrolment status: enrolled: **0/20**, only registered: **15/20**

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Language of instruction

Czech

Further Comments

The course is taught annually.

The course is taught: every week.

Listed among pre-requisites of other courses

- [VLVP05125c Vědecká příprava V - training](#)
[VLVP04124c \(Do I meet enrolment requirements?\)](#)
- [VLVP05125p Introduction to research and experimental methodology \(Academic writing\) V - lecture](#)
[VLVP04124c \(Do I meet enrolment requirements?\)](#)

The course is also listed under the following terms [Spring 2015](#), [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VLVP04124p Introduction to research and experimental methodology IV - lecture ✳

Faculty of Medicine

Spring 2018

Extent and Intensity

2/0/0. 0 credit(s). Type of Completion: -.

Teacher(s)

[doc. MUDr. Markéta Bébarová, Ph.D.](#) (lecturer)

[prof. MUDr. Kateřina Kaňková, Ph.D.](#) (lecturer)

Supervisor

[prof. MUDr. Kateřina Kaňková, Ph.D.](#)

[Faculty of Medicine](#)

Contact Person: [doc. MUDr. Markéta Bébarová, Ph.D.](#)

Supplier department: [Faculty of Medicine](#)

Prerequisites (in Czech)

[VLVP03123c Introduction to research IIIc](#)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

The capacity limit for the course is 20 student(s).

Current registration and enrolment status: enrolled: **0/20**, only registered: **15/20**

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Language of instruction

Czech

Further Comments

The course is taught annually.

The course is taught: every week.

The course is also listed under the following terms [Spring 2015](#), [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VLVP05125c Vědecká příprava V - training ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2/0. 5 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. PharmDr. Petr Babula, Ph.D.](#) (lecturer)
[doc. MUDr. Markéta Bébarová, Ph.D.](#) (lecturer)
[doc. MUDr. Julie Bienertová Vašků, Ph.D.](#) (lecturer)
[prof. RNDr. Petr Dubový, CSc.](#) (lecturer)
[doc. MVDr. Aleš Hampl, CSc.](#) (lecturer)
[Mgr. Robert Helán, Ph.D.](#) (lecturer)
[prof. MUDr. Markéta Hermanová, Ph.D.](#) (lecturer)
[MUDr. Ota Hlinomaz, CSc.](#) (lecturer)
[prof. MUDr. Kateřina Kaňková, Ph.D.](#) (lecturer)
[Mgr. Jiří Kratochvíl, Ph.D.](#) (lecturer)
[doc. Mgr. Lumír Krejčí, Ph.D.](#) (lecturer)
[RNDr. Michal Masařík, Ph.D.](#) (lecturer)
[doc. MUDr. Robert Mikulík, Ph.D.](#) (lecturer)
[prof. RNDr. Vojtěch Mornstein, CSc.](#) (lecturer)
[MUDr. Petr Müller, Ph.D.](#) (lecturer)
[prof. MUDr. Marie Nováková, Ph.D.](#) (lecturer)
[MUDr. Zuzana Nováková, Ph.D.](#) (lecturer)
[MUDr. Marek Orban](#) (lecturer)
[prof. RNDr. Šárka Pospíšilová, Ph.D.](#) (lecturer)
[prof. MUDr. Irena Rektorová, Ph.D.](#) (lecturer)
[Mgr. Vladimír Rotrekl, Ph.D.](#) (lecturer)

[PharmDr. Jana Rudá, Ph.D.](#) (lecturer)
[doc. MUDr. Iva Slaninová, Ph.D.](#) (lecturer)
[prof. MUDr. Martin Smrčka, Ph.D., MBA](#) (lecturer)
[prof. MUDr. David Šmajš, Ph.D.](#) (lecturer)
[prof. MUDr. Vladimír Šrámek, Ph.D.](#) (lecturer)
[prof. RNDr. Eva Táborská, CSc.](#) (lecturer)
[doc. RNDr. Josef Tomandl, Ph.D.](#) (lecturer)
[Mgr. Stjepan Uldrijan, CSc.](#) (lecturer)
[MUDr. Eva Závodná, Ph.D.](#) (lecturer)

Supervisor

[prof. MUDr. Kateřina Kaňková, Ph.D.](#)
[Faculty of Medicine](#)
Contact Person: [Mgr. Stjepan Uldrijan, CSc.](#)
Supplier department: [Faculty of Medicine](#)

Prerequisites (in Czech)

[VLVP04124c Research preparation](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

The capacity limit for the course is 20 student(s).

Current registration and enrolment status: enrolled: 16/20, only registered: 1/20

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Language of instruction

Czech

Further Comments

The course is taught annually.

The course is taught: every week.

Listed among pre-requisites of other courses

- [VLVP06126c Introduction to research and experimental methodology VI - training](#)
[VLVP05125c](#) ([Do I meet enrolment requirements?](#))
- [VLVP06126p Vědecká příprava VI](#)
[VLVP05125c](#) ([Do I meet enrolment requirements?](#))

The course is also listed under the following terms [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VLVP05125p Introduction to research and experimental methodology (Academic writing) V - lecture ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

2/0/0. 0 credit(s). Type of Completion: -.

Teacher(s)

[Mgr. Robert Helán, Ph.D.](#) (lecturer)

[prof. MUDr. Kateřina Kaňková, Ph.D.](#) (lecturer)

Supervisor

[prof. MUDr. Kateřina Kaňková, Ph.D.](#)

[Faculty of Medicine](#)

Contact Person: [Mgr. Robert Helán, Ph.D.](#)

Supplier department: [Faculty of Medicine](#)

Prerequisites (in Czech)

[VLVP04124c Research preparation](#)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

The capacity limit for the course is 20 student(s).

Current registration and enrolment status: enrolled: **16/20**, only registered: **1/20**

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Language of instruction

Czech

Further Comments

[Study Materials](#)

The course is taught annually.

The course is taught: every week.

The course is also listed under the following terms [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VLVP06126c Introduction to research and experimental methodology VI - training ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

0/2/0. 5 credit(s). Type of Completion: z (credit).

Teacher(s)

[RNDr. Jiří Jarkovský, Ph.D.](#) (seminar tutor)

[Mgr. et Mgr. Jiří Kalina](#) (seminar tutor)

[prof. MUDr. Kateřina Kaňková, Ph.D.](#) (seminar tutor)

Supervisor

[doc. RNDr. Ladislav Dušek, Ph.D.](#)

[Institute for Biostatistics and Analyses of the Faculty of Medicine - Other Departments for Educational and Scientific Research Activities - Faculty of Medicine](#)

Contact Person: [RNDr. Jiří Jarkovský, Ph.D.](#)

Supplier department: [Institute for Biostatistics and Analyses of the Faculty of Medicine - Other Departments for Educational and Scientific Research Activities - Faculty of Medicine](#)

Prerequisites (in Czech)

[VLVP05125c Research preparation Vc](#)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

The capacity limit for the course is 20 student(s).

Current registration and enrolment status: enrolled: 0/20, only registered: 19/20

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Language of instruction

Czech

Further Comments

The course is taught annually.

The course is taught: every week.

Listed among pre-requisites of other courses

- [VLVP07127c Vědecká příprava VII](#)
[VLVP06126c \(Do I meet enrolment requirements?\)](#)
- [VLVP07127p Introduction to research and experimental methodology VII - lecture](#)
[VLVP06126c \(Do I meet enrolment requirements?\)](#)

The course is also listed under the following terms [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VLVP06126p Vědecká příprava VI *

Faculty of Medicine

Spring 2018

Extent and Intensity

0/2/0. 0 credit(s). Type of Completion: -.

Teacher(s)

[doc. MUDr. Markéta Bébarová, Ph.D.](#) (lecturer)
[doc. MUDr. Julie Bienertová Vašků, Ph.D.](#) (lecturer)
[prof. RNDr. Petr Dubový, CSc.](#) (lecturer)
[doc. MVDr. Aleš Hampl, CSc.](#) (lecturer)
[prof. MUDr. Markéta Hermanová, Ph.D.](#) (lecturer)
[MUDr. Ota Hlinomaz, CSc.](#) (lecturer)
[prof. MUDr. Kateřina Kaňková, Ph.D.](#) (lecturer)
[Mgr. Jiří Kratochvíl, Ph.D.](#) (lecturer)
[doc. Mgr. Lumír Krejčí, Ph.D.](#) (lecturer)
[RNDr. Michal Masařík, Ph.D.](#) (lecturer)
[doc. MUDr. Robert Mikulík, Ph.D.](#) (lecturer)
[prof. RNDr. Vojtěch Mornstein, CSc.](#) (lecturer)
[MUDr. Petr Müller, Ph.D.](#) (lecturer)
[prof. MUDr. Marie Nováková, Ph.D.](#) (lecturer)
[MUDr. Zuzana Nováková, Ph.D.](#) (lecturer)
[MUDr. Marek Orban](#) (lecturer)
[prof. RNDr. Šárka Pospíšilová, Ph.D.](#) (lecturer)
[prof. MUDr. Irena Rektorová, Ph.D.](#) (lecturer)
[Mgr. Vladimír Rotrekl, Ph.D.](#) (lecturer)
[PharmDr. Jana Rudá, Ph.D.](#) (lecturer)
[doc. MUDr. Iva Slaninová, Ph.D.](#) (lecturer)
[prof. MUDr. Martin Smrčka, Ph.D., MBA](#) (lecturer)
[prof. MUDr. David Šmajš, Ph.D.](#) (lecturer)
[prof. MUDr. Vladimír Šrámek, Ph.D.](#) (lecturer)
[prof. RNDr. Eva Táborská, CSc.](#) (lecturer)
[doc. RNDr. Josef Tomandl, Ph.D.](#) (lecturer)
[Mgr. Stjepan Uldrijan, CSc.](#) (lecturer)
[Mgr. Vladimír Vinarský, Ph.D.](#) (lecturer)
[MUDr. Eva Závodná, Ph.D.](#) (lecturer)

Supervisor

[prof. MUDr. Kateřina Kaňková, Ph.D.](#)
[Faculty of Medicine](#)
Contact Person: [Mgr. Stjepan Uldrijan, CSc.](#)
Supplier department: [Faculty of Medicine](#)

Prerequisites (in Czech)

[VLVP05125c Research preparation Vc](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

The capacity limit for the course is 20 student(s).

Current registration and enrolment status: enrolled: 0/20, only registered: 19/20

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Language of instruction

Czech

Further Comments

The course is taught annually.

The course is taught: every week.

The course is also listed under the following terms [Spring 2016](#), [Spring 2019](#).

VLVP07127c Vědecká příprava VII ***Faculty of Medicine**

Autumn 2019

Extent and Intensity

0/2/0. 5 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. PharmDr. Petr Babula, Ph.D.](#) (lecturer)
[doc. MUDr. Marek Baláž, Ph.D.](#) (lecturer)
[doc. MUDr. Markéta Bébarová, Ph.D.](#) (lecturer)
[doc. MUDr. Julie Bienertová Vašků, Ph.D.](#) (lecturer)
[prof. RNDr. Petr Dubový, CSc.](#) (lecturer)
[doc. MVDr. Aleš Hampl, CSc.](#) (lecturer)
[prof. MUDr. Markéta Hermanová, Ph.D.](#) (lecturer)
[MUDr. Ota Hlinomaz, CSc.](#) (lecturer)
[MUDr. Petr Janků, Ph.D.](#) (lecturer)
[prof. MUDr. Kateřina Kaňková, Ph.D.](#) (lecturer)
[prof. MUDr. Tomáš Kašpárek, Ph.D.](#) (lecturer)
[Mgr. Jiří Kratochvíl, Ph.D.](#) (lecturer)
[doc. Mgr. Lumír Krejčí, Ph.D.](#) (lecturer)
[RNDr. Michal Masařík, Ph.D.](#) (lecturer)
[doc. MUDr. Robert Mikulík, Ph.D.](#) (lecturer)
[MUDr. Eduard Minks, Ph.D.](#) (lecturer)
[prof. RNDr. Vojtěch Mornstein, CSc.](#) (lecturer)
[MUDr. Petr Müller, Ph.D.](#) (lecturer)
[prof. MUDr. Marie Nováková, Ph.D.](#) (lecturer)
[MUDr. Zuzana Nováková, Ph.D.](#) (lecturer)
[MUDr. Marek Orban](#) (lecturer)
[doc. RNDr. Monika Pávková Goldbergová, Ph.D.](#) (lecturer)
[prof. RNDr. Šárka Pospíšilová, Ph.D.](#) (lecturer)
[prof. MUDr. Ivan Rektor, CSc.](#) (lecturer)
[prof. MUDr. Irena Rektorová, Ph.D.](#) (lecturer)
[Mgr. Vladimír Rotrekl, Ph.D.](#) (lecturer)
[PharmDr. Jana Rudá, Ph.D.](#) (lecturer)
[doc. MUDr. Filip Růžička, Ph.D.](#) (lecturer)
[doc. MUDr. Iva Slaninová, Ph.D.](#) (lecturer)
[prof. MUDr. Martin Smrčka, Ph.D., MBA](#) (lecturer)
[prof. MUDr. David Šmajš, Ph.D.](#) (lecturer)

[prof. MUDr. Vladimír Šrámek, Ph.D.](#) (lecturer)
[prof. RNDr. Eva Tábořská, CSc.](#) (lecturer)
[doc. RNDr. Josef Tomandl, Ph.D.](#) (lecturer)
[Mgr. Stjepan Uldrijan, CSc.](#) (lecturer)
[RNDr. Petr Vaňhara, Ph.D.](#) (lecturer)
[MUDr. Eva Závodná, Ph.D.](#) (lecturer)

Supervisor

[prof. MUDr. Kateřina Kaňková, Ph.D.](#)
[Faculty of Medicine](#)

Contact Person: [Mgr. Stjepan Uldrijan, CSc.](#)

Supplier department: [Faculty of Medicine](#)

Prerequisites (in Czech)

[VLVP06126c Vědecká příprava VI - cvičení](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

The capacity limit for the course is 20 student(s).

Current registration and enrolment status: enrolled: 17/20, only registered: 0/20

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Language of instruction

Czech

Further Comments

The course is taught annually.

The course is taught: every week.

Listed among pre-requisites of other courses

- [VLVP08128c Research preparation VIII - practice](#)
[VLVP07127c](#) ([Do I meet enrolment requirements?](#))
- [VLVP08128p Epidemiologie a klinické studie VIII - lecture](#)
[VLVP07127c](#) ([Do I meet enrolment requirements?](#))
- [VLVP09129p Introduction to research and experimental methodology IX](#)
[VLVP07127c](#) ([Do I meet enrolment requirements?](#))

The course is also listed under the following terms [Autumn 2016](#), [Accreditation autumn](#).

VLVP07127p Introduction to research and experimental methodology VII - lecture ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

2/0/0. 0 credit(s). Type of Completion: -.

Teacher(s)

[prof. MUDr. Kateřina Kaňková, Ph.D.](#) (lecturer)

[PharmDr. Ondřej Zendulka, Ph.D.](#) (lecturer)

Supervisor

[prof. MUDr. Kateřina Kaňková, Ph.D.](#)

[Faculty of Medicine](#)

Contact Person: [PharmDr. Ondřej Zendulka, Ph.D.](#)

Supplier department: [Faculty of Medicine](#)

Timetable

Thu 30. 11. 16:00–18:00 [A19/326](#), Thu 7. 12. 16:00–18:00 [A19/326](#)

Prerequisites (in Czech)

[VLVP06126c Vědecká příprava VI - cvičení](#)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

The capacity limit for the course is 20 student(s).

Current registration and enrolment status: enrolled: **17/20**, only registered: **0/20**

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Language of instruction

Czech

Further Comments

[Study Materials](#)

The course is taught annually.

The course is also listed under the following terms [Autumn 2016](#), [Accreditation autumn](#).

VLVP08128c Research preparation VIII - practice *

Faculty of Medicine

Spring 2018

Extent and Intensity

0/2/0. 5 credit(s). Type of Completion: z (credit).

Teacher(s)

[doc. MUDr. Markéta Bébarová, Ph.D.](#) (lecturer)

[doc. MUDr. Julie Bienertová Vašků, Ph.D.](#) (lecturer)

[prof. RNDr. Petr Dubový, CSc.](#) (lecturer)

[MUDr. Kamil Ďuriš, Ph.D.](#) (lecturer)

[doc. MVDr. Aleš Hampl, CSc.](#) (lecturer)

[prof. MUDr. Markéta Hermanová, Ph.D.](#) (lecturer)

[MUDr. Ota Hlinomaz, CSc.](#) (lecturer)
[prof. MUDr. Kateřina Kaňková, Ph.D.](#) (lecturer)
[Mgr. Jiří Kratochvíl, Ph.D.](#) (lecturer)
[doc. Mgr. Lumír Krejčí, Ph.D.](#) (lecturer)
[RNDr. Michal Masařík, Ph.D.](#) (lecturer)
[doc. MUDr. Robert Mikulík, Ph.D.](#) (lecturer)
[prof. RNDr. Vojtěch Mornstein, CSc.](#) (lecturer)
[MUDr. Petr Müller, Ph.D.](#) (lecturer)
[prof. MUDr. Marie Nováková, Ph.D.](#) (lecturer)
[MUDr. Zuzana Nováková, Ph.D.](#) (lecturer)
[prof. RNDr. Šárka Pospíšilová, Ph.D.](#) (lecturer)
[Mgr. Vladimír Rotrekl, Ph.D.](#) (lecturer)
[PharmDr. Jana Rudá, Ph.D.](#) (lecturer)
[doc. MUDr. Iva Slaninová, Ph.D.](#) (lecturer)
[prof. MUDr. Martin Smrčka, Ph.D., MBA](#) (lecturer)
[prof. MUDr. David Šmajš, Ph.D.](#) (lecturer)
[prof. MUDr. Vladimír Šrámek, Ph.D.](#) (lecturer)
[prof. RNDr. Eva Táborská, CSc.](#) (lecturer)
[doc. RNDr. Josef Tomandl, Ph.D.](#) (lecturer)
[Mgr. Stjepan Uldrijan, CSc.](#) (lecturer)
[Mgr. Vladimír Vinarský, Ph.D.](#) (lecturer)
[MUDr. Eva Závodná, Ph.D.](#) (lecturer)

Supervisor

[prof. MUDr. Kateřina Kaňková, Ph.D.](#)
[Faculty of Medicine](#)
Contact Person: [Mgr. Stjepan Uldrijan, CSc.](#)
Supplier department: [Faculty of Medicine](#)

Prerequisites (in Czech)

[VLVP07127c Research preparation VII](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

The capacity limit for the course is 20 student(s).

Current registration and enrolment status: enrolled: 0/20, only registered: 17/20

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Language of instruction

Czech

Further Comments

The course is taught annually.

The course is taught: every week.

Listed among pre-requisites of other courses

- [VLVP09129c Research preparation IX - practice](#)
[VLVP08128c \(Do I meet enrolment requirements?\)](#)

The course is also listed under the following terms [Spring 2019](#), [Accreditation spring](#).

VLVP08128p Epidemiologie a klinické studie VIII - lecture



Faculty of Medicine

Spring 2018

Extent and Intensity

2/0/0. 0 credit(s). Type of Completion: -.

Teacher(s)

[prof. MUDr. Kateřina Kaňková, Ph.D.](#) (lecturer)

[PharmDr. Ondřej Zendulka, Ph.D.](#) (lecturer)

Supervisor

[prof. MUDr. Kateřina Kaňková, Ph.D.](#)

[Faculty of Medicine](#)

Contact Person: [PharmDr. Ondřej Zendulka, Ph.D.](#)

Supplier department: [Faculty of Medicine](#)

Prerequisites (in Czech)

[VLVP07127c Research preparation VII](#)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

The capacity limit for the course is 20 student(s).

Current registration and enrolment status: enrolled: **0**/20, only registered: **17**/20

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Language of instruction

Czech

Further Comments

The course is taught annually.

The course is taught: every week.

The course is also listed under the following terms [Spring 2019](#), [Accreditation spring](#).

VLVP09129c Research preparation IX - practice *

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2/0. 5 credit(s). Type of Completion: z (credit).

Teacher(s)

[doc. MUDr. Markéta Bébarová, Ph.D.](#) (lecturer)
[doc. MUDr. Julie Bienertová Vašků, Ph.D.](#) (lecturer)
[prof. RNDr. Petr Dubový, CSc.](#) (lecturer)
[MUDr. Kamil Ďuriš, Ph.D.](#) (lecturer)
[doc. MVDr. Aleš Hampl, CSc.](#) (lecturer)
[prof. MUDr. Markéta Hermanová, Ph.D.](#) (lecturer)
[MUDr. Ota Hlinomaz, CSc.](#) (lecturer)
[prof. MUDr. Kateřina Kaňková, Ph.D.](#) (lecturer)
[Mgr. Jiří Kratochvíl, Ph.D.](#) (lecturer)
[doc. Mgr. Lumír Krejčí, Ph.D.](#) (lecturer)
[RNDr. Michal Masařík, Ph.D.](#) (lecturer)
[doc. MUDr. Robert Mikulík, Ph.D.](#) (lecturer)
[prof. RNDr. Vojtěch Mornstein, CSc.](#) (lecturer)
[MUDr. Petr Müller, Ph.D.](#) (lecturer)
[prof. MUDr. Marie Nováková, Ph.D.](#) (lecturer)
[MUDr. Zuzana Nováková, Ph.D.](#) (lecturer)
[prof. RNDr. Šárka Pospíšilová, Ph.D.](#) (lecturer)
[Mgr. Vladimír Rotrekl, Ph.D.](#) (lecturer)
[PharmDr. Jana Rudá, Ph.D.](#) (lecturer)
[doc. MUDr. Iva Slaninová, Ph.D.](#) (lecturer)
[prof. MUDr. Martin Smrčka, Ph.D., MBA](#) (lecturer)
[prof. MUDr. David Šmajš, Ph.D.](#) (lecturer)
[prof. MUDr. Vladimír Šrámek, Ph.D.](#) (lecturer)
[prof. RNDr. Eva Táborská, CSc.](#) (lecturer)
[doc. RNDr. Josef Tomandl, Ph.D.](#) (lecturer)
[Mgr. Stjepan Uldrijan, CSc.](#) (lecturer)
[Mgr. Vladimír Vinarský, Ph.D.](#) (lecturer)
[MUDr. Eva Závodná, Ph.D.](#) (lecturer)

Supervisor

[prof. MUDr. Kateřina Kaňková, Ph.D.](#)

[Faculty of Medicine](#)

Contact Person: [Mgr. Stjepan Uldrijan, CSc.](#)

Supplier department: [Faculty of Medicine](#)

Prerequisites (in Czech)

[VLVP08128c Research preparation VIII - p.](#)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

The capacity limit for the course is 20 student(s).

Current registration and enrolment status: enrolled: **8/20**, only registered: **6/20**

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Language of instruction

Czech

Further Comments

The course is taught annually.

The course is taught: every week.

The course is also listed under the following terms [Accreditation autumn](#).

VLVP09129p Introduction to research and experimental methodology IX ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2/0. 0 credit(s). Type of Completion: -.

Teacher(s)

[prof. MUDr. Kateřina Kaňková, Ph.D.](#) (lecturer)

[doc. RNDr. Josef Tomandl, Ph.D.](#) (lecturer)

Supervisor

[prof. MUDr. Kateřina Kaňková, Ph.D.](#)

[Faculty of Medicine](#)

Contact Person: [doc. RNDr. Josef Tomandl, Ph.D.](#)

Supplier department: [Faculty of Medicine](#)

Prerequisites (in Czech)

[VLVP07127c Research preparation VII](#)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

The capacity limit for the course is 20 student(s).

Current registration and enrolment status: enrolled: 13/20, only registered: 1/20

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Language of instruction

Czech

Further Comments

[Study Materials](#)

The course is taught annually.

The course is taught: every week.

The course is also listed under the following terms [Accreditation autumn](#).

VLVZ9X1c Public Health - practice *

Faculty of Medicine

Spring 2018

Extent and Intensity

0/2/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[Mgr. Pavlína Kaňová, Ph.D.](#) (seminar tutor)

[MUDr. Kräuff Rainer Schwanhaeuser Wulff, MBA, Ph.D. et Ph.D., M.A.](#) (seminar tutor)

[Ing. Jitka Dušková, Ph.D.](#) (seminar tutor)

[Mgr. Bc. Michal Koščík, Ph.D.](#) (seminar tutor)

[Mgr. Aleš Peřina, Ph.D.](#) (seminar tutor)

[Zdeňka Jochová](#) (assistant)

Supervisor

[Mgr. Pavlína Kaňová, Ph.D.](#)

[Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [Mgr. Pavlína Kaňová, Ph.D.](#)

Supplier department: [Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Prerequisites

([VLFA0822p Pharmacology II - L](#) || [VLFA0722p Pharmacology - L](#)) &&

[VSSL051p Social Medicine - lecture](#)

Prerequisites according to the MU study and examination regulations.

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The course in Health Care and Policy introduces the students to the analysis of health care systems, managerial and policy issues and techniques for decision-making in health care.

The subjects covered include health services research, health policy, health economics, and law.

Learning outcomes

By the end of this course student should be able to:

- describe the term Public Health, describe theoretical framework and practice of Public Health;
- identify managerial and policy issues and techniques for decision-making in health care;
- demonstrate knowledge and understanding of a diverse range of global and national

health policies, including current and emerging trends and also of disciplines relevant to the study of health policy, planning and financing (epidemiology, health economic and other social sciences);

- apply his knowledge and skills using a multidisciplinary approach to formulate and evaluate health policies and plans.

Syllabus

- PUBLIC HEALTH:
- 1. Information on the course Public Health. Introduction to public health as a subject for teaching, research and healthcare practice area.
- 2. Methods and research capabilities in the field of public health.
- 3. Ethical issues in public health and their possible solutions.
- 4. Causes of increasing health care spending.
- 5. Transformation of health.
- 6. Transit demography, epidemiological transformation and health needs.
- 7. Information base for the description and evaluation of public health.
- 8. Medical informatics and its application.
- 9. Health economics. The concept, theoretical background, main areas of interest (subjects), health economics
- 10. The market and health care.
- 11. Types of health systems in the world, their strengths and weaknesses. International comparisons, strengths and weaknesses.
- 12. Healthcare management, its development, benefits and pitfalls. Economic tools for managing healthcare systems.
- 13. Benefits and risks of economic analysis, waste in health care.
- 14. Medical insurance (public health insurance, private health insurance).
- 15. Healthcare financing (sources of finance, structure of cash expenditure on health care reimbursement forms).
- 16. Effectiveness and efficiency, explanation of terms, their measurement and evaluation.
- 17. Accessibility of health care services.
- 18. The quality of health care, definitions, characteristics, possibilities for evaluation.
- 19. Evaluation of health care services (importance and evaluation methods, used indicators and their interpretation).
- 20. Medical needs (the needs, requirements and consumption of services).
- 21. Management theory and management of medical facilities.
- 22. Prevention and its obstacles (motivation to prevent, categorization prevention, prevention of barriers).
- 23. Primary care and self-care.
- 24. Medical education; role, importance and types of health literacy.
- 25. Educational program (preparation, implementation, evaluation).
- 26. Forms of decentralization.
- 27. Privatization of health care facilities.
- 28. Cumulative assessment of the activities of the healthcare system (performance - responsiveness, decent financing, stewardship, methodology, interpretation).
- 29. The role of the state in health care.

- 30. The government protecting the public health.
- 31. Healthcare policy (term, focus, tools and healthcare policy goals).
Regionalization and decentralization.
- 32. The European healthcare policy (source and basis of European healthcare policy, program WHO Health 2020).
- 33. Current issues in healthcare development.
-
- MEDICAL LAW AND HEALTHCARE MANAGEMENT:
- 1. Management theory and management of healthcare facilities.
- 2. State administration and local government in healthcare. Estates chamber, origin and historical development, current role. The basic rules of professional conduct, rights and obligations of members of the ČLK (Czech Medical Chamber).
- 3. The role of law in health care; basic legal standards in health care.
- 4. The rights and duties of citizens in health care (citizens' rights, patient rights, patient's right to information).
- 5. The provider of health care services, operating conditions; standardization and accreditation of health care providers; system providers, health care services, types and forms of health care.
- 6. The system of medical professions, the basic assumptions practice medicine; medical specialized education, lifelong learning for physicians.
- 7. Basic duties of health care professionals.
- 8. Lex artis (state of the art), definition, legal basis for liability.
- 9. Informed consent for medical procedures, denial of medical care, requirements for a negative reverse (denial of health care).
- 10. Legal liability in health care (civil liability of health care providers; criminal liability of doctors, the disciplinary responsibility of a doctor, offenses and administrative violations in health care)

Literature

required literature

- POVINNÁ LITERATURA
- *
- [HOLČÍK, Jan](#). *Systém péče o zdraví a zdravotní gramotnost (System of health care and health literacy)*. 1. vydání. Brno: Masarykova univerzita, 2010. 293 pp. Škola a zdraví pro 21. století. ISBN 978-80-210-5239-0. [info](#)
- ŽÁČEK, A. and [J. HOLČÍK](#). *Sociální lékařství II, Úvod do veřejného zdravotnictví*. Brno: Masarykova univerzita, 1992. 130 pp. ISBN 80-210-0375-8. [info](#)
- HOLČÍK, Jan, Adolf ŽÁČEK and Ilona KOUPILOVÁ. *Sociální lékařství*. 3. nezměn. vyd. Brno: Masarykova univerzita, 2006. 137 s. ISBN 9788087192153. [info](#)
- TĚŠINOVÁ, Jolana, Roman ŽDÁREK a Radek POLICAR. *Medicínské právo*. Vyd. 1. V Praze: C.H.Beck, 2011. xxxiii, 41. ISBN 9788074000508
- *
- DOPORUČENÁ LITERATURA

- *
- MAAYTOVÁ, Alena. Otázky ekonomiky zdravotnictví s ohledem na zvyšování efektivnosti. 1. vyd. Praha: Wolters Kluwer Česká republika, 2012. 164 s. ISBN 9788073579128
- DUDOVÁ, Jana. Právo na ochranu veřejného zdraví. Ochrana veřejného zdraví před rizikovými faktory venkovního prostředí. 1. vyd. Praha: LINDE Praha, a.s., 2011. 420 s. 899. publ. ISBN 978-80-7201-854-3.
- Key concepts in public health. Edited by Frances Wilson - Mzwandile Mabhala. 1st ed. Los Angeles: SAGE Publications, 2009. xiii, 312. ISBN 978-1-4129-4880-7
- *
- *

recommended literature

- REQUIRED LITERATURE
- *
- 1. Bonita R, Beaglehole R, Kjellström: Basic epidemiology. 2nd edition. Geneva - Switzerland: World Health Organization; 2006. pp 39-60, 99-114, 165-177.
- 2. Stone DB, Armstrong WR, Macrina DM, Pankau JW: Introduction to epidemiology. Dubuque, IA - USA: Brown & Benchmark Publishers; 1996. pp 1-10, 163-190.
- 3. Farmer R, Lawrenson R, Miller D: Epidemiology and public health medicine. 5th edition. Oxford - U.K.: Blackwell Publishing; 2004. pp 143-177.
- 4. Varkey P: Mayo clinic preventive medicine and public health board review. Edited by Prathibha Varkey. New York - United States: Mayo Clinic Scientific Press - Oxford University Press; 2010. pp 253-299.
- 5. Study material for public health and healthcare administration (20 chapters / questions) CAN BE BORROWED at the Department of Public Health A21, office 321. Students MUST return it back the day of examination in good condition.
- The study material is part of the Public Health State Examination Questions (Group C)
- 6. Seminar papers (Forty-two) in the subject's vault VLVZ9X1c - Public Health State Examination Questions (Group D).
- *
- *
- RECOMMENDED LITERATURE
- *

Teaching methods

Seminars / practices and class discussion.

Reading and studying ALL REQUIRED LITERATURE.

For those who will have to write research projects and seminar papers during third, fourth and fifth year, it is strongly recommended to enrol the following courses:

VSIL021 - Information literacy - (3 credits) - e-learning.

VSKP041 - A course of working with information sources and tools (4 credits).

Assessment methods

REQUIREMENTS TO OBTAIN THE CREDIT:

1. 100 % attendance to seminars / practices during the semester.
2. It will be required to successfully complete the prerequisite subjects.
3. Absences will be tolerated just due to medical reasons - Students must provide appropriate documentation or medical excuse.
+ Students must be aware that even with justified absences (medical excuse), a minimum of 80% attendance is required to obtain the credit. In case a student will have more than 20 % justified / unjustified absences, he / she will have to repeat the course in the following school year.
4. Fulfilment of given tasks:
+ In case of unjustified absence (per each one), a 1,500-2,000 word seminar paper and a 5-8 minutes power point presentation on the seminar paper topic will be given. If the seminar paper is rejected due to deficiencies and it is not corrected and submitted again, the student will not fulfil with the subject's requirements, and he / she will not get the credit (See Absence and latecomer policy, Academic misconduct, plagiarism detection and unethical issues).
5. Active participation during the seminars / practices / lectures.
6. Pass the credit test. Students will be allowed to take the credit test only if they have fulfilled numeral 4 (requirements to obtain the credit).

CREDIT TEST INFORMATION:

1. Get at least 70 % (14 out of 20 questions) in the credit test, which is a requisite to sit for examination.
2. Each student must register in the Information System (IS) in one of the offered credit test terms. The credit test has fixed examination terms / dates - (Only during the examination period, except the examination pre-term). No extra-terms will be given.
3. Students registered to a credit test term will fail the term if:
 - a-) arrive late to the test. No late arrival will be allowed after the start of the credit test.
 - b-) they are not present and previously do not cancel the term in the stipulated periods (see IS).
4. In case of failure, EACH STUDENT CAN RETAKE THE CREDIT TEST TWO MORE TIMES, only in given terms (according to Masaryk University study and

examination regulations).

5. In case of failure during the third term (second resit), the student must repeat the course in the following school year.
6. All credit test questions are based on ALL REQUIRED LITERATURE, seminars and lectures.

The credit test is a written examination → 20 multiple choice question test, with only one correct answer - (to pass the test, it is required a minimum of 14 correct answers / points).

SCORE:

- Passed → 14 and more correct answers / points.
- Failed → 13,5 or less correct answers / points.

In order to omit / avoid guessing while answering the MCQ test / examination, the following system will be used:

- Correct answer = 1 point.
- No answer = 0 point.
- Wrong answer = -0,5 point.

Test scoring will be according to the next formula:

Final score = Number of correct answers - (Number of wrong answers / two).

For example:

15 correct answers (15 x 1 point = 15 points) - Passed.

5 wrong answers (5 x -0,5 = -2,5 points).

15 - 2,5 = 12,5. The final score of the test will be 12,5 answers / points.

Final result = Failed.

** For that reason, only answer the question when you are sure of the answer.

ABSENCE AND LATECOMER POLICY:

1. Justified, unjustified absences and late coming to classes:
 - a-) Justified absences → just due to medical reasons - Student must provide appropriate documentation or medical excuse in original.
 - b-) Unjustified absences → the student does not present the medical excuse (original) in the following week of the absence.
 - c-) Late coming to classes → the student arrives after attendance has been taken (3

minutes).

2. Measures against absenteeism or late coming to classes:

a-) Every unjustified absence or late coming to classes leads to a 1,500-2,000 word seminar paper plus a 5-8 minutes power point presentation on the same topic (the topics will be assigned in the same week of the absence or late coming).

b-) The seminar paper must be submitted on the subject's vault within the next 6 days of the incident (absence or late coming), in other case it will be rejected → They will not get the credit.

c-) Students will receive an email with the seminar paper instructions, and the word and power point frames.

d) Students take full responsibility for their seminar paper(s) and power point presentation(s). (See Academic misconduct, plagiarism detection and unethical issues).

3. THERE WILL BE NO EXCEPTIONS. In the following cases, students will be not get the credit / allowed to take the credit test:

* Not submitting the assigned seminar paper.

* If the seminar paper is rejected due to deficiencies and is not corrected and submitted again.

* If despite the fact the seminar paper is accepted but the power point presentation is not shown in class.

* If the seminar paper is rejected three times.

* If the seminar paper has plagiarism or any unethical issues.

ACADEMIC MISCONDUCT, PLAGIARISM DETECTION AND UNETHICAL ISSUES:

1. Any attempts of ACADEMIC MISCONDUCT, such as cheating or assisting someone else to cheat during the credit test, will result in disciplinary actions, such as:

a-) You will be required to hand over your examination paper and asked to leave the examination room. This means, you failed the examination (examination term), with the respective score F / 4, on your academic records in the information system.

b-) Opening disciplinary proceedings.

c-) Failing the subject / course.

d-) Expulsion from university.

2. During the examination, it is forbidden to:

a-) Use smart phones / Tablets.

b-) Use laptops.

c-) To wear earphones or headphones (if not medical prescribed).

d-) To talk.

*In such cases, disciplinary actions will be taken (See above numeral 1).

3. Every seminar paper will be checked / scanned on university and external systems for

online plagiarism detection.

4. Cases of suspected plagiarism will be investigated and given to the Disciplinary Committee as a motion to open disciplinary proceedings, according to the Disciplinary Code for Faculty Students.

5. Unethical issues will lead to seminar paper rejection → not getting the credit → repeating the course next school year or expulsion from university.

6. The plagiarism scan system is able to detect cut and paste from other languages with its respective translation into English. Avoid complications. Simply read the source and use your own words and cite (quote) the source of information.

7. Students MUST be aware that before acceptance, all citations are controlled (compared with the original source). It will not be tolerated any attempts to create or manipulate citations (ACADEMIC MISCONDUCT). → Seminar paper rejection → not getting the credit → repeating the course next school year or expulsion from university.

Language of instruction

Czech

Further Comments

[Study Materials](#)

The course can also be completed outside the examination period.

The course is taught annually.

The course is taught: every week.

Listed among pre-requisites of other courses

- [VLCH11XX Surgery - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLS7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLR041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [VLPD11XX Paediatrics - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLS7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#),

[VLRL041](#), [VLTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

- **[VLPG11XX](#)** Obstetric and Gynaecology - State Exam
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && [VLVL9X66c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VSNO071](#), [VLKA091](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLTL081](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSDL071](#), [VLRL041](#), [VLIA081](#), [VLKM081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- **[VLVL11XX](#)** Internal Medicine - State Exam
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- **[VLZP11XX](#)** Public Health - State Exam
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

The course is also listed under the following terms [Autumn 1999](#), [Spring 2000](#), [Autumn 2000](#), [Spring 2001](#), [Autumn 2001](#), [Spring 2002](#), [Autumn 2002](#), [Spring 2003](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VLVZ9X1p Public Health - lecture ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

1/0/0. 0 credit(s). Type of Completion: -.

Teacher(s)

[prof. MUDr. Bc. Zuzana Derflerová Brázdová, DrSc.](#) (lecturer)

[Mgr. Pavlína Kaňová, Ph.D.](#) (lecturer)

[Mgr. Bc. Michal Koščík, Ph.D.](#) (lecturer)

[MUDr. Kräuff Rainer Schwanhaeuser Wulff, MBA, Ph.D. et Ph.D., M.A.](#) (lecturer)

[Zdeňka Jochová](#) (assistant)

Supervisor

[Mgr. Pavlína Kaňová, Ph.D.](#)

[Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [Mgr. Pavlína Kaňová, Ph.D.](#)

Supplier department: [Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Prerequisites

([VLFA0822p Pharmacology II - L](#) || [VLFA0722p Pharmacology - L](#)) &&

[VSSL051p Social Medicine - lecture](#)

Prerequisites according to the MU study and examination regulations.

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The course in Health Care and Policy introduces the students to the analysis of health care systems, managerial and policy issues and techniques for decision-making in health care. The subjects covered include health services research, health policy, health economics, and law.

Learning outcomes

By the end of this course student should be able to:

- describe the term Public Health, describe theoretical framework and practice of Public Health;
- identify managerial and policy issues and techniques for decision-making in health care;
- demonstrate knowledge and understanding of a diverse range of global and national health policies, including current and emerging trends and also of disciplines relevant to the study of health policy, planning and financing (epidemiology, health economic and other social sciences);
- apply his knowledge and skills using a multidisciplinary approach to formulate and evaluate health policies and plans.

Syllabus

- PUBLIC HEALTH:
- 1. Information on the course Public Health. Introduction to public health as a subject for teaching, research and healthcare practice area.
- 2. Methods and research capabilities in the field of public health.
- 3. Ethical issues in public health and their possible solutions.
- 4. Causes of increasing health care spending.
- 5. Transformation of health.
- 7. Transit demography, epidemiological transformation and health needs.
- 8. Information base for the description and evaluation of public health.
- 9. Medical informatics and its application.
- 10. Health economics. The concept, theoretical background, main areas of interest (subjects), health economics
- 11. The market and health care.
- 12. Types of health systems in the world, their strengths and weaknesses. International comparisons, strengths and weaknesses.
- 13. Healthcare management, its development, benefits and pitfalls. Economic tools for managing healthcare systems.
- 14. Benefits and risks of economic analysis, waste in health care.
- 15. Medical insurance (public health insurance, private health insurance).
- 16. Healthcare financing (sources of finance, structure of cash expenditure on health care reimbursement forms).
- 17. Effectiveness and efficiency, explanation of terms, their measurement and evaluation.
- 18. Accessibility of health care services.
- 19. The quality of health care, definitions, characteristics, possibilities for evaluation.
- 20. Evaluation of health care services (importance and evaluation methods, used indicators and their interpretation).
- 21. Medical needs (the needs, requirements and consumption of services).
- 22. Management theory and management of medical facilities.
- 23. Prevention and its obstacles (motivation to prevent, categorization prevention, prevention of barriers).
- 24. Primary care and self-care.
- 25. Medical education; role, importance and types of health literacy.
- 26. Educational program (preparation, implementation, evaluation).
- 27. Forms of decentralization.
- 28. Privatization of health care facilities.
- 29. Cumulative assessment of the activities of the healthcare system (performance - responsiveness, decent financing, stewardship, methodology, interpretation).
- 30. The role of the state in health care.
- 31. The government protecting the public health.
- 32. Healthcare policy (term, focus, tools and healthcare policy goals). Regionalization and decentralization.
- 33. The European healthcare policy (source and basis of European healthcare policy, program WHO Health 2020).
- 34. Current issues in healthcare development.
-

- MEDICAL LAW AND HEALTHCARE MANAGEMENT:
- 1. Management theory and management of healthcare facilities.
- 2. State administration and local government in healthcare. Estates chamber, origin and historical development, current role. The basic rules of professional conduct, rights and obligations of members of the ČLK (Czech Medical Chamber).
- 3. The role of law in health care; basic legal standards in health care.
- 4. The rights and duties of citizens in health care (citizens' rights, patient rights, patient's right to information).
- 5. The provider of health care services, operating conditions; standardization and accreditation of health care providers; system providers, health care services, types and forms of health care.
- 6. The system of medical professions, the basic assumptions practice medicine; medical specialized education, lifelong learning for physicians.
- 7. Basic duties of health care professionals.
- 8. Lex artis (state of the art), definition, legal basis for liability.
- 9. Informed consent for medical procedures, denial of medical care, requirements for a negative reverse (denial of health care).
- 10. Legal liability in health care (civil liability of health care providers; criminal liability of doctors, the disciplinary responsibility of a doctor, offenses and administrative violations in health care)

Literature

required literature

- POVINNÁ LITERATURA
- *
- HOLČÍK, Jan. Systém péče o zdraví a zdravotní gramotnost. 1. vydání. Brno: Masarykova univerzita, 2010. 293 s. Škola a zdraví pro 21. století. ISBN 978-80-210-5239-0.
- ŽÁČEK, A. a J. HOLČÍK. Sociální lékařství II, Úvod do veřejného zdravotnictví. Brno: Masarykova univerzita, 1992. 130 s. ISBN 80-210-0375-8.
- HOLČÍK, Jan, Adolf ŽÁČEK a Ilona KOUPILOVÁ. Sociální lékařství. 3. nezměn. vyd. Brno: Masarykova univerzita, 2006. 137 s. ISBN 80-210-3954-X.
- TĚŠINOVÁ, Jolana, Roman ŽDÁREK a Radek POLICAR. Medicínské právo. Vyd. 1. V Praze: C.H.Beck, 2011. xxxiii, 41. ISBN 9788074000508
- *
- DOPORUČENÁ LITERATURA
- *
- Key concepts in public health. Edited by Frances Wilson - Mzwandile Mabhala. 1st ed. Los Angeles: SAGE Publications, 2009. xiii, 312. ISBN 978-1-4129-4880-7
- MAAYTOVÁ, Alena. Otázky ekonomiky zdravotnictví s ohledem na zvyšování efektivnosti. 1. vyd. Praha: Wolters Kluwer Česká republika, 2012. 164 s. ISBN 9788073579128

- DUDOVÁ, Jana. Právo na ochranu veřejného zdraví. Ochrana veřejného zdraví před rizikovými faktory venkovního prostředí. 1. vyd. Praha: LINDE Praha, a.s., 2011. 420 s. 899. publ. ISBN 978-80-7201-854-3.
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recommended literature

- REQUIRED LITERATURE
- *
- 1. Bonita R, Beaglehole R, Kjellström: Basic epidemiology. 2nd edition. Geneva - Switzerland: World Health Organization; 2006. pp 39-60, 99-114, 165-177.
- 2. Stone DB, Armstrong WR, Macrina DM, Pankau JW: Introduction to epidemiology. Dubuque, IA - USA: Brown & Benchmark Publishers; 1996. pp 1-10, 163-190.
- 3. Farmer R, Lawrenson R, Miller D: Epidemiology and public health medicine. 5th edition. Oxford - U.K.: Blackwell Publishing; 2004. pp 143-177.
- 4. Varkey P: Mayo clinic preventive medicine and public health board review. Edited by Prathibha Varkey. New York - United States: Mayo Clinic Scientific Press - Oxford University Press; 2010. pp 253-299.
- 5. Study material for public health and healthcare administration (20 chapters / questions) CAN BE BORROWED at the Department of Public Health A21, office 321. Students MUST return it back the day of examination in good condition.
- The study material is part of the Public Health State Examination Questions (Group C)
- 6. Seminar papers (Forty-two) in the subject's vault VLVZ9X1c - Public Health State Examination Questions (Group D).
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- RECOMMENDED LITERATURE
- *

Teaching methods

Lectures.

Reading and studying ALL REQUIRED LITERATURE.

For those who will have to write research projects and seminar papers during third, fourth and fifth year, it is strongly recommended to enrol the following courses:

VSIL021 - Information literacy - (3 credits) - e-learning.

VSKP041 - A course of working with information sources and tools (4 credits).

Assessment methods

1. It will be required to successfully complete the prerequisite subjects and to have obtained the subject's credit - VLVZ9X1c.

*** This subject is part of the Public Health State Examination ***

See VLZP11XX - Public Health State Examination.

Language of instruction

Czech

Further Comments

The course can also be completed outside the examination period.

The course is also listed under the following terms [Autumn 1999](#), [Spring 2000](#), [Autumn 2000](#), [Spring 2001](#), [Autumn 2001](#), [Spring 2002](#), [Autumn 2002](#), [Spring 2003](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VLZP11XX Public Health - State exam ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/0/0. 0 credit(s). Type of Completion: SRZK (closing examination).

Teacher(s)

[prof. MUDr. Bc. Zuzana Derflerová Brázdová, DrSc.](#) (lecturer)

[doc. MUDr. Jindřich Fiala, CSc.](#) (lecturer)

[prof. MUDr. Drahoslava Hrubá, CSc.](#) (lecturer)

[Mgr. Pavlína Kaňová, Ph.D.](#) (lecturer)

[MUDr. Marie Kolářová, CSc.](#) (lecturer)

[MUDr. Kräuff Rainer Schwanhaeuser Wulff, MBA, Ph.D. et Ph.D., M.A.](#) (lecturer)

[doc. MUDr. Jan Šimůnek, CSc.](#) (lecturer)

[MUDr. Miroslava Zavřelová](#) (lecturer)

[Mgr. Jana Fialová, Ph.D.](#) (assistant)

[Zdeňka Jochová](#) (assistant)

[Marie Sekaninová](#) (assistant)

Supervisor

[prof. MUDr. Drahoslava Hrubá, CSc.](#)

[Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Supplier department: [Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Prerequisites

([VLFA0822p Pharmacology II - L](#) || [VLFA0722p Pharmacology - L](#)) &&

[VLNE9X1p Neurology - lecture](#) && [VLKY9X1p Psychiatry - lect.](#) &&

[VLVZ9X1c Health Care and Policy](#) && [VSDV9X22p Dermatovenereology II-1](#) &&

[VLAM9X1p Intensive care med. - lect.](#) && ([VLVL7X61c Internal medicine part 1](#) ||

[VLVL9X61c Internal medicine part 1](#)) && [VLVL9X62c Internal medicine part 2](#) &&

[VLVL9X63c Internal medicine part 3](#) && [VLVL9X64c Internal medicine part 4](#) && (

[VLVL9X65c Internal medicine part 5](#) || [VLVL7X65c Internal medicine part 5](#)) &&

[VLVL9X66c Internal medicine part 6](#) && [VLPD1033c Pediatrics III-practice](#) &&
[VLIN9X22 Infectious diseases II](#) && [VLSD7X1p Forensic med.-lectures](#) &&
[VSEI7X1 EPI](#) && [VLLO7X1 Ophthalmology - lec.](#) &&
[VSOT7X1p Otorhinolaryngology-lect.](#) && [VLPL9X1 Prevent. Med.](#) &&
[VLON091 Clinical oncology](#) && [VLST7X1p stomatology -I](#) && [VSLE7X1p Medical Ethics 2 - lecture](#) && [VLPG1022c Gynecol. and obst. II- pract.](#) && VYCET (3 ,
[VLPS07X Posudkové lékařství](#) || [VLPS071 Medical Assessment Service](#) ,
[VSAT081 Fundament.of AntimicrobTherap](#) , [VLKA091 Clinical anatomy](#) ,
[VSNO071 Ophthalmology news](#) , [VSPM071 Palliative Medicine](#) , [VLKB091 Clinical Biochemistry](#) , [VLKF091 Clinical Pharmacology](#) , [BMBS051 Biostatistics - basic course](#) ,
[VLPM071 Legal Aspects in Medicine](#) , [VLEP041 The Economics of Health Care](#) ,
[VLIA081 Clin.immunol. alergol.](#) , [VLKM081 Commun.in medicine](#) ,
[VLRL041 Medicinal plants](#) , [VLTLO81 Sports Medicine](#) , [VSDL071 Diagnostics and management in orthopaedic surgery](#) , [VSAL081 Anaesth. and Tr. of Pain I](#) ,
[VSFP071 Neonatal Physiology and Pathol](#)) && [VLCH9X33c Surgery III - practicals](#)
&& ([VLAJ0222 English 1 II -p](#) || [VSAJ0222 English 1 II -p](#) || [VSNJ0222 German 1 II -p](#)
) && [VSSP03X Individual project](#)

Prerequisites according to the MU study and examination regulations.

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

To understand the principles of relationship between human and environment, life conditions and life style. Factors for prevention and promotion of health. Prevention: types, different significance for health prevention and promotion.

The most important non-communicable diseases: epidemiology, aetiology, prevention.

Syllabus

- PREVENTIVE MEDICINE AND HYGIENE:
- 1. METHODS OF MEASUREMENT OF NUTRITIONAL INTAKE:
Questionnaire and laboratory methods - presentation. Self-evaluation of short-term recalls and long-term nutritional habits. .
- 2. PREVENTION OF THE MUSCULOSKELETICAL DISTURBANCES:
ergonomic approaches to the optimalization of working conditions. Risk of the sedentary position. Exercises lowering the static load. .
- 3. PREVENTION OF THE STRESS: Tests for self-availability to be stressed by the obvious load. Techniques for relaxation.
- 4. TREATMENT OF TOBACCO ADDICTION.
- 5. PROGRAMMES OF DRUGS ABUSE PRIMARY PREVENTION.

- 6. NUTRITION AND FOOD: food labelling, nutritional and health recommendations, nutritional safety .
- 7. ENVIRONMENT AND HEALTH: noise, light, radiation, living, water.
- 8. TOXICOLOGY IN PREVENTION.
- 9. WORK AND HEALTH.
- 10. EPIDEMIOLOGIC STUDY ABOUT THE NUTRITION OF TARGET POPULATIONS: proposals for the development of questionnaires, selection of a population sample, use of standardised questionnaires, digitalized information and data, evaluation of obtained results at individual and group basis.
- 11. SPECIAL TOXIKOLOGY: power point presentations on chosen chemical xenobiotics (Pb, Hg, Cr, Cd, toluene, benzene, trichloretylene): their sources in the environment and working exposure, way of exposures, effects on humans. Clinical manifestations of poisoning, therapy. Primary and secondary prevention.
- 12. KOMPLEX PREVENTION OF CARDIOVASCULAR DISEASES: anamnesis, clinical and biochemical measurements of the main risk factors (smoking, nutrition, physical activity, blood lipids, anthropometry); evaluation of the results, preventive proposals.
- 13. SMOKING CESSATION AMONG THE HOSPITALIZED PATIENTS: Practical application of the 4A programme used for smoking cessation at some clinics.
- 14. BREAST-FEEDING PROMOTION: Practical application of the knowledge about the postnatal cure for newborns with the concern on the breast-feeding promotion.
- 15. EPIDEMIOLOGIC STUDIES WITH DIFFERENT AIMS: Preference of the different foods among children. The frequencies of the fast food consumption among children. Approaches of different target population groups to the non-smoking activities. Frequency of the fruit and vegetables consumption, dairy products among children.
- 16. CONSEQUENCES OF PRENATAL EXPOSURE TO SMOKING, during childhood and adulthood. Review of scientific literature.
- 17. BASIC OF RISK ASSESMENT, MANAGEMENT AND COMMUNICATION: examples of case-studies.
- 18. MAN AND ENVIRONMENT: Physical, biological, chemical and social factors in macro- and microenvironment. Their interactions. Ways of adaptation and compensation for keeping the homeostasis. "health" and "disease", their determinants.
- 19. PREVENTION: primary and secondary prevention, tasks and aims. The most important world and Czech primary prevention programmes.
- 20. NOISE: sources, impact on health, possibilities for control.
- 21. LIGHT AND ILLUMINATION: physiology of seeing, optimal working conditions. The physiologic sense of colours.
- 22. RADIATION: different types, their sources and impact on human health. Possibilities of control.
- 23. COMPLEX OF MICROCLIMATE: external and internal conditions. Ways of thermoregulation. Work places with extreme microclimate, rules for drinking schedule. Long-term and short-term thermal load.

- 24. **BIOLOGICAL RHYTHMS:** circadian and other types, their influence on the performances. Shift work as a risk for health. Active and passive rest. Hygiene of sleeping.
- 25. **AIR AND HEALTH:** the most common contaminants of ambient air, their sources and human exposure. Smog. Health consequences of the exposure to polluted air.
- 26. **BASIC TOXICOLOGY:** ways of exposure, intake, uptake; metabolism of xenobiotics, genetic polymorphism in the microsomal enzymes; excretion. Health insure caused by chemical exposure, carcinogenesis. Similarities and differences between children and adults in toxicology.
- 27. **HOUSING AND HEALTH:** the most common risk factors at homes, health consequences of exposure (housing-related diseases, sick building syndrome, multiple chemical sensitivity). Ventilation, types and sense.
- 28. **WATER AND HEALTH:** the hygienic limits for drinking water, indicators of sewage contaminants. Trace elements in drinking water. Diseases related to water pollution. The principles for safety source of water.
- 29. **NUTRITION AND HEALTH:** diseases related to malnutrition and food contaminants. The role of nutrition in health promotion. Dietary guidelines. The ways for measurement of nutritional habits.
- 30. **WASTE AND HEALTH:** the types of waste products, their sources. Hygienic rules for safe destruction of waste products.
- 31. **NATURAL AND MAN-MADE CHEMICALS IN ENVIRONMENT:** their types, point and areal sources. Environment in the Czech Republic. Principles of the monitoring of environmental pollutants. "Natural pesticides".
- 32. **SMOKING AND HEALTH:** Smoking as the most important single preventable risk factor of premature morbidity and mortality. Dependence on smoking as a psychiatric disease. Involuntary smoking and health consequences of exposure.
- 33. **WORKING AND HEALTH:** risk occupational factors and related diseases. The rules for safety of occupational environment and health protection of workers.
- 34. **STRESS AND HEALTH:** physiologic response on stress situations. Stress-related diseases. Rules for the prevention of stress.
- 35. **NON-COMMUNICABLE DISEASES:** epidemiology, aetiology, prevention; Cardiovascular diseases, Cancer, Respiratory diseases, Allergy, Diabetes mellitus, Osteoporosis.
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- **EPIDEMIOLOGY OF INFECTIOUS DISEASES:**
 - 1. General information about the course Epidemiology of infectious diseases. Goals of the epidemiology.
 - 2. The basic knowledge of epidemiology - understanding the epidemiological methodology (descriptive, analytic, experimental epidemiology).
 - 3. Epidemic process; aetiology and risk factors of epidemic diseases.
 - 4. Form of sources of infection.
 - 5. Contagiosity in particular stage of the disease.
 - 6. Carriership of pathogenic microorganisms. Animals as source of infection.
 - 7. Transmission of infectious diseases, phases of transmission.

- 8. Susceptibility of the population to the infection.
- 9. Active and passive vaccination.
- 10. Natural, social-economic factors.
- 11. Global epidemiology, epidemiologic surveillance.
- 12. Programme of eradication and elimination of infectious diseases.
- 13. Principles of control of infectious diseases - elimination of the source, interruption of transmission of infectious agents, measures in a focus of infection.
- 14. Surveillance of nosocomial infections (NI), aetiology NI, risk factors of acquiring NI, sources and localization NI, the principles of control NI.
- 15. Decontamination, disinfection and sterilization.
- 16. Epidemiological characteristics of the intestinal infections and prevention of their spreading.
- 17. Epidemiological characteristics of the airborne infections and prevention of their spreading.
- 18. Epidemiological characteristics of blood infections and prevention of their spreading.
- 19. Animals as sources of infection.
- 20. Infections of the skin and superficial mucous membrane - epidemiological characteristics and preventing their transmission.
- 21. Infections as occupational diseases and their prevention.
- 22. Infections in travelling and their prevention.
- 23. Epidemiological inspection in hospitals; the monitoring of the microbiological quality of the hospital environment.
- 24. The control of the disinfection and sterilization. Interpretation of the results.
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- **SOCIAL / COMMUNITY MEDICINE AND PUBLIC HEALTH:**
- 1. Public health - characteristics and general information.
- 2. Healthcare system (content, features, surroundings, current issues of healthcare system development).
- 3. Health situation in the Czech Republic, its current development and international comparisons.
- 4. Mortality as an indicator of health (health indicators based on death records, life expectancy, health aggregates).
- 5. Measuring disease frequency in the population (incidence, prevalence, mean duration of illness, relationships between indicators of morbidity).
- 6. Demography vs epidemiological transformation.
- 7. Social determinants of health.
- 8. Causes of increase in health care spending.
- 9. Health economics. The concept, theoretical background, main areas of interest (subjects).
- 10. The market and health care (market failure).
- 11. Types of healthcare systems in the world, their strengths and weaknesses.
- 12. Medical insurance (public health insurance, private health insurance).
- 13. Healthcare financing (sources of finance, structure of cash expenditure on health care reimbursement forms).

- 14. Effectiveness and efficiency, explanation of terms, their measurement and evaluation.
- 15. Accessibility of health care services.
- 16. The quality of health care, definitions, characteristics, possibilities for evaluation.
- 17. Evaluation of health care services (importance and evaluation methods, used indicators and their interpretation).
- 18. Medical needs (the needs, requirements and consumption of services).
- 19. Prevention and its obstacles (motivation to prevent, categorization prevention, prevention of barriers).
- 20. Primary care and self-care.
- 21. Medical education; role, importance and types of health literacy.
- 22. Educational program (preparation, implementation, evaluation).
- 23. Forms of decentralization.
- 24. Privatization of health care facilities.
- 25. Medical informatics and its application (information systems).
- 26. Cumulative assessment of the activities of the healthcare system (performance - responsiveness, decent financing, stewardship, methodology, interpretation).
- 27. The role of the state in health care.
- 28. The government protecting the public health.
- 29. Healthcare policy (term, focus, tools and healthcare policy goals).
Regionalization and decentralization.
- 30. The European healthcare policy (source and basis of European healthcare policy, program WHO Health 2020).

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• MEDICAL LAW AND HEALTHCARE MANAGEMENT:

- 1. Management theory and management of healthcare facilities.
- 2. State administration and local government in healthcare. Estates chamber, origin and historical development, current role. The basic rules of professional conduct, rights and obligations of members of the ČLK (Czech Medical Chamber).
- 3. The role of law in health care; basic legal standards in health care.
- 4. The rights and duties of citizens in health care (citizens' rights, patient rights, patient's right to information).
- 5. The provider of health care services, operating conditions; standardization and accreditation of health care providers; system providers, health care services, types and forms of health care.
- 6. The system of medical professions, the basic assumptions practice medicine; medical specialized education, lifelong learning for physicians.
- 7. Basic duties of health care professionals.
- 8. Lex artis (state of the art), definition, legal basis for liability.
- 9. Informed consent for medical procedures, denial of medical care, requirements for a negative reverse (denial of health care).
- 10. Legal liability in health care (civil liability of health care providers; criminal liability of doctors, the disciplinary responsibility of a doctor, offenses and administrative violations in health care)

Literature

required literature

- ŽÁČEK, A. and J. HOLČÍK. Sociální lékařství II, Úvod do veřejného zdravotnictví. Brno: Masarykova univerzita, 1992. 130 pp. ISBN 80-210-0375-8.
- KOTULÁN, Jaroslav and Drahoslava HRUBÁ. *Preventivní lékařství SO*. 1. vyd. Brno: Masarykova univerzita, 1993. [info](#)
- *
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recommended literature

- Required literature for PREVENTIVE MEDICINE AND HYGIENE
- *
- 1. Lener J et al: Medical hygiene. Prague - Czech Republic: Vydavatesltví Karolinum; 1997. pp 1-128.
- 2. Bártová J, Havránek J, Hrnčíř E, Lener J, Petrová K: General and environmental hygiene. Edited by J. Bártová. Prague - Czech Republic: 3rd Medical Faculty Charles University Prague; 1994. pp 5-87.
- 3. Varkey P: Mayo clinic preventive medicine and public health board review. Edited by Prathibha Varkey. New York - United States: Mayo Clinic Scientific Press - Oxford University Press; 2010. pp 111-232.
- 4. Brázdová Z, Fiala J: Dietary guidelines in the Czech Republic. Brno: Acta Facultatis Medicae Universitas Masarykianae; 1998.
- 5. Bonita R, Beaglehole R, Kjellström: Basic epidemiology. 2nd edition. Geneva - Switzerland: World Health Organization; 2006. pp 99-177.
- 6. www.who.int (information not found in the books).
- *
- *
- Required literature for EPIDEMIOLOGY
- *
- 1. Bakoss P, Baška T, Bazovská S, Kmety E, Maďar R et al: Compendium of epidemiology. Edited by Pavol Bakoss. Bratislava - Slovak Republic: Comenius University Bratislava; 1999. pp 3-138.
- 2. Stone DB, Armstrong WR, Macrina DM, Pankau JW: Introduction to epidemiology. Dubuque, IA - USA: Brown & Benchmark Publishers; 1996. pp 22-63, 115-150.
- 3. Farmer R, Lawrenson R, Miller D: Epidemiology and public health medicine. 5th edition. Oxford - U.K.: Blackwell Publishing; 2004. pp 7-13, 91-126.
- 4. Bonita R, Beaglehole R, Kjellström: Basic epidemiology. 2nd edition. Geneva - Switzerland: World Health Organization; 2006. pp 117-131.
- 5. www.who.int (information not found in the books).
- 6. www.cdc.gov (information not found in the books).
- 7. <http://ecdc.europa.eu/en/Pages/home.aspx> (information not found in the books).
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- Required literature for SOCIAL / COMMUNITY MEDICINE, PUBLIC HEALTH AND HEALTHCARE ADMINISTRATION
- *
- 1. Study material for public health and healthcare administration (20 chapters / questions) CAN BE BORROWED at the Department of Public Health A21, office 321. Students MUST return it back the day of examination in good condition.
- 2. Bonita R, Beaglehole R, Kjellström: Basic epidemiology. 2nd edition. Geneva - Switzerland: World Health Organization; 2006. pp 1-60, 83-113, 165-176.
- 3. Seminar papers (Forty-two) in the subject's vault VLZP11XX - Public Health State Examination Questions (Group D).
- *
- *
- Recommended literature for PREVENTIVE MEDICINE AND HYGIENE
- Hrubá D: Occupational Medicine Practice. Basic Toxicology. (Fundamental abstracts from textbooks. LF MU: 1997).

Teaching methods

Reading and studying ALL REQUIRED LITERATURE.

The Public Health State Examination is an oral examination, in which each student randomly selects a question from every set (group) of questions, as follows:

- Preventive medicine and hygiene.
- Epidemiology.
- Public health.
- Healthcare law, administration and management - 42 seminar papers (public health subjects vault - See the Information System).

Assessment methods

PUBLIC HEALTH STATE EXAMINATION INFORMATION:

1. To sit for a state examination, it will be required to successfully complete all the prerequisite subjects.
2. The state examination is oral in front of a committee.
3. Students MUST succeed in ALL questions. Failing one question leads to examination failure. In the following term the student must answer a new question from each set again.
4. Each student must register in the Information System (IS) in one of the offered examination terms. The examination has fixed examination terms / dates - (Only during the examination period, except the examination pre-term). No extra-terms will be given.
5. Students registered to an examination term will fail the term if:
 - a-) arrive late the examination day.
 - b-) they are not present and previously did not cancel the term in the stipulated periods (see IS).
6. In case of failure, EACH STUDENT CAN RETAKE THE STATE EXAMINATION

TWO MORE TIMES, only in given terms (according to Masaryk University study rules).

7. In case of failure during the third term (second resit), the student must repeat the course in the following school year.

8. All state examination questions are based on ALL REQUIRED LITERATURE, seminars and lectures on each examined subject (Social medicine; epidemiology of infectious diseases; preventive medicine; public health; and healthcare law, administration and management).

ACADEMIC MISCONDUCT, PLAGIARISM DETECTION AND UNETHICAL ISSUES:

1. Any attempts of ACADEMIC MISCONDUCT, such as cheating or assisting someone else to cheat during the credit test, will result in disciplinary actions, such as:

- a-) You will be required to hand over your examination paper and asked to leave the examination room. This means, you failed the examination (examination term), with the respective score F / 4, on your academic records in the information system.
- b-) Opening disciplinary proceedings.
- c-) Failing the subject / course.
- d-) Expulsion from university.

2. During the examination, it is forbidden to:

- a-) Use smart phones / Tablets.
- b-) Use laptops.
- c-) To wear earphones or headphones (if not medical prescribed).
- d-) To talk.

*In such cases, disciplinary actions will be taken (See above numeral 1).

Language of instruction

Czech

Further Comments

[Study Materials](#)

The course can also be completed outside the examination period.

The course is also listed under the following terms [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2. 2 credit(s). Type of Completion: z (credit).

Supervisor

[Mgr. Ladislav Červený](#)

[Language Centre, Faculty of Medicine Division - Language Centre](#)

Supplier department: [Language Centre, Faculty of Medicine Division - Language Centre](#)

Prerequisites (in Czech)

[VSNJ0222 German 1 II -p](#) || [VSRJ0222 Russian 1 II -p](#) || [VSSJ0222 Spanish 1 II -p](#) ||

[VSFJ0222 French 1 II -p](#)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [Stomatology](#) (programme LF, M-ST)
- [General Medicine](#) (programme LF, M-VL)

Syllabus

- **MEDICAL ENGLISH.** *Syllabus.*
- 1st week: Registration for lessons.
- 2nd week: UNIT 1: The Human Body. *Grammar:* Definite Article, Indefinite Article, Absence of Articles; Plural, much - many, little - few. *Conversation:* Theme 1: Laboratory.
- 3rd week: UNIT 2: Musculoskeletal System. *Grammar:* The Construction "there is/are", Word Order of the English Sentence. *Conversation:* Theme 2: Hospital.
- 4th week: UNIT 3: Cardiovascular System. *Grammar:* Modal Verbs, their Periphrastic Forms. *Conversation:* Theme 3: Operating Theatre.
- 5th week: UNIT 4: Haematic and Lymphatic System. *Grammar:* Basic Verbal Tenses (Present, Past, Future).
- 6th week: UNIT 5: Gastrointestinal System (Mouth, Pharynx, Esophagus, Stomach, Intestines). *Grammar:* Passive Voice, Numerals. *Conversation:* Theme 4: Operation.
- 7th week: UNIT 5: Gastrointestinal System (Accessory Organs of Digestion). *Grammar:* Comparison of Adjectives and Adverbs. Telling the Time in English. *Conversation:* Theme 5: Artificial Respiration.
- 8th week: UNIT 6: Respiratory System. *Grammar:* Personal, Possessive, Interrogative, Demonstrative and Replacive, and Indefinite Pronouns. *Conversation:* Theme 6: Wounds.
- 9th week: UNIT 7: Integumentary System. *Grammar:* Relative, Reflexive and Emphasising Pronouns. *Conversation:* Theme 7: Shock.
- 10th week: UNIT 8: Urinary System. *Grammar:* Present Perfect and Past Perfect Tense.

- 11th week: UNIT 9: Endocrine System. *Grammar*: Adverbial Clauses of Purpose; Transgressives. *Conversation*: Theme 8: Poisoning.
- 12th week: UNIT 10: Nervous System. *Grammar*: Gerund; Object + Infinitive, Subject + Infinitive Constructions. *Conversation*: Theme 9: Injuries to Bones, Joints and Muscles.
- 13th week: UNIT 11: Organs of Senses (Taste, Smell, Sight). *Grammar*: Present Conditional, Past Conditional; Adverbial Clauses of Condition. *Conversation*: Theme 10: Burns.
- 14th week: UNIT 11: Organs of Senses (Hearing). *Grammar*: Indirect Questions, Sequence of Tenses.
- 15th week: Credit Test, Credit Acknowledgement.

Literature

- [KOBYLKOVÁ, Anděla](#). *English for medical students*. 2. vyd. Brno: Masarykova univerzita, 1998. 107 pp. ISBN 80-210-1771-6. [info](#)
- TOPILOVÁ, Věra. *Anglicko-český/česko-anglický lékařský slovník*. 1. vyd. Praha: Grada Publishing, 1999. 880 pp. ISBN 80-7169-284-0. [info](#)
- MURRAY, Jonathan P. *Anglicko-český lékařský terminologický slovník*. 1. vyd. Jinočany: Nakladatelství a vydavatelství H & H, 1995. 341 pp. ISBN 80-85787-43-1. [info](#)
- PARKINSON, Joy. *Angličtina pro lékaře. Manuál pro praxi. (Manual of English for the Overseas Doctor.)*. 1. vyd. Praha: Grada Publishing, 2004. 416 pp. ISBN 80-247-0289-4. [info](#)
- První tři tituly jsou základní, ostatní doplňkové.

Assessment methods (in Czech)

Výuka probíhá formou cvičení. Přítomnost ve cvičeních se bezpodmínečně vyžaduje, tolerují se maximálně dvě řádně omluvené absence; nejlépe je neúčast nahradit v nejbližším vhodném termínu. Výuka je ukončena zápočtem (z) udělovaným na základě docházky a úspěšného absolvování zápočtového testu z probrané učební látky.

Language of instruction

Czech

Further comments (probably available only in Czech)

Information on completion of the course: Studenti se státní jazykovou zkouškou, příp. jejím ekvivalentem (TOEFL, FCE apod.) mohou vykonat zkoušku kdykoliv během semestru.

The course can also be completed outside the examination period.

The course is taught annually.

The course is taught: every week.

Teacher's information

Aktuální informace o předmětu, konzultačních hodinách atd. jsou zveřejňovány na nástěnkách oddělení cizích jazyků. Kontakt s vyučujícími zajišťuje sekretariát pracoviště (Komenského nám. 2), tel. 549 498 170.

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#),

[Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#),
[Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VSAL081 Anaesthesiology and Treatment of Pain I ✱

Faculty of Medicine

Spring 2018

Extent and Intensity

2/0/0. 3 credit(s). Type of Completion: k (colloquium).

Teacher(s)

[MUDr. Lukáš Dadák, Ph.D.](#) (lecturer)
[MUDr. Jitka Zemanová](#) (lecturer)
[doc. MUDr. Petr Štourač, Ph.D.](#) (lecturer)
[MUDr. Jozef Klučka](#) (lecturer)
[MUDr. Ivo Křikava, Ph.D.](#) (lecturer)
[MUDr. Jan Maláska, Ph.D.](#) (lecturer)
[MUDr. Pavel Suk, Ph.D.](#) (lecturer)
[prof. MUDr. Vladimír Šrámek, Ph.D.](#) (lecturer)
[MUDr. Roman Štoudek](#) (lecturer)
[MUDr. Robert Vach](#) (lecturer)
[MUDr. Katarína Zdražilová](#) (lecturer)
[MUDr. Václav Zvoníček, Ph.D.](#) (lecturer)
[MUDr. Ivan Čundrle, Ph.D.](#) (seminar tutor)
[MUDr. Martin Helán, Ph.D.](#) (seminar tutor)
[MUDr. Jan Hruďa, Ph.D.](#) (seminar tutor)
[MUDr. Miloš Chobola](#) (seminar tutor)
[MUDr. Milan Jelínek](#) (seminar tutor)
[MUDr. Michal Zimmer](#) (seminar tutor)
[Simona Holčáková](#) (assistant)
[Mgr. Veronika Jálová, Ph.D.](#) (assistant)
[Eva Podborská](#) (assistant)
[Irena Vaďurová](#) (assistant)

Supervisor

[doc. MUDr. Petr Štourač, Ph.D.](#)
[Department of Paediatric Anaesthesiology and Intensive Care Medicine - Institutions shared with the Faculty Hospital Brno \(paediatric medicine\) - Faculty of Medicine](#)
Contact Person: [MUDr. Lukáš Dadák, Ph.D.](#)
Supplier department: [Department of Paediatric Anaesthesiology and Intensive Care Medicine - Institutions shared with the Faculty Hospital Brno \(paediatric medicine\) - Faculty of Medicine](#)

Prerequisites

[VLFA0722c Pharmacology Iip](#) || SOUHLAS || [VLFA0621c Pharmacology I - p](#)
Finished 3rd year of medicine and farmacology.
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

At the end of the course students should be able to:
understand basic concepts of general and regional anesthesia;
learn basic skills of airway management

Learning outcomes

Student will be able to: provide airway management on the manequine; discuss perioperative management of the patient; describe goals and complications of general and regional anaesthesia; propose prescription of basic pain killers for acute or chronic pain.

Syllabus

- Preoperative evaluation and premedication;
- Airway management
- General anaesthesia
- Regional anaesthesia
- Pain management

Literature

- *Anestezie*. Edited by Reinhard Larsen - Jarmila Drábková. 2. vyd. Praha: Grada, 2004. 1376 s. ISBN 8024704765. [info](#)
- *Anesthesia*. Edited by Ronald D. Miller. 5th ed. New York: Churchill Livingstone, 2000. xx, 1662. ISBN 0443079889. [info](#)

Bookmarks

<https://is.muni.cz/auth/ln/tag/LF:VSAL081!>

Assessment methods

Lectures in the beginning of spring semester. Internship in operating room and pain clinic from April to September.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course can also be completed outside the examination period.

The course is taught annually.

The course is taught: in blocks.

Information on the extent and intensity of the course: 6 přednášek, 5 dopoledních stáží á 4 h.

Listed among pre-requisites of other courses

- [VLCH11XX Surgery - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#)
&& [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) &&

[VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

- **[VLPD11XX](#) Paediatrics - State Exam**

([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

- **[VLPG11XX](#) Obstetric and Gynaecology - State Exam**

([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && [VLVL9X66c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VSNO071](#), [VLKA091](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSDL071](#), [VLRL041](#), [VLIA081](#), [VLKM081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

- **[VLRL11XX](#) Family Medicine and Geriatrics**

([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLIN9X22](#) && [VLPL9X1](#) && [VLON091](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) (Do I meet enrolment requirements?)

- **[VLVL11XX](#) Internal Medicine - State Exam**

([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) &&

VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

- [VLZP11XX Public Health - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [VSAL082 Anaesthesiology and Treatment of Pain II](#)
[VSAL081](#) (Do I meet enrolment requirements?)

Teacher's information

V případě většího zájmu jsou upřednostněni studenti vyšších ročníků.

The course is also listed under the following terms [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VSAL082 Anaesthesiology and Treatment of Pain II *

Faculty of Medicine

Spring 2018

Extent and Intensity

2/0/0. 3 credit(s). Type of Completion: k (colloquium).

Teacher(s)

[MUDr. Lukáš Dadák, Ph.D.](#) (lecturer)

[MUDr. Jitka Zemanová](#) (lecturer)

[doc. MUDr. Petr Štourač, Ph.D.](#) (lecturer)

[MUDr. Olga Gimunová, Ph.D.](#) (lecturer)

[MUDr. Martin Helán, Ph.D.](#) (lecturer)

[MUDr. Jan Hruša, Ph.D.](#) (lecturer)

[MUDr. Milan Jelínek](#) (lecturer)

[MUDr. Ivo Kříkava, Ph.D.](#) (lecturer)

[MUDr. Jan Maláska, Ph.D.](#) (lecturer)

[MUDr. Pavel Suk, Ph.D.](#) (lecturer)

[prof. MUDr. Vladimír Šrámek, Ph.D.](#) (lecturer)

[MUDr. Roman Štoudek](#) (lecturer)

[MUDr. Katarína Zdražilová](#) (lecturer)

[MUDr. Václav Zvoníček, Ph.D.](#) (lecturer)

[Simona Holčáková](#) (assistant)

[Mgr. Veronika Jálová, Ph.D.](#) (assistant)

[Eva Podborská](#) (assistant)

Supervisor

[doc. MUDr. Petr Štourač, Ph.D.](#)

[Department of Paediatric Anaesthesiology and Intensive Care Medicine - Institutions shared with the Faculty Hospital Brno \(paediatric medicine\) - Faculty of Medicine](#)

Contact Person: [MUDr. Lukáš Dadák, Ph.D.](#)

Supplier department: [Department of Paediatric Anaesthesiology and Intensive Care Medicine - Institutions shared with the Faculty Hospital Brno \(paediatric medicine\) - Faculty of Medicine](#)

Prerequisites (in Czech)

[VSAL081 Anaesth. and Tr. of Pain I](#)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

At the end of the course students should be able to:
understand basic concepts of general and regional anesthesia;
learn basic skills of airway management

Syllabus

- Preoperative evaluation and premedication;
- Airway management
- General anaesthesia
- Regional anaesthesia
- Pain management

Literature

- *Anestezie*. Edited by Reinhard Larsen - Jarmila Drábková. 2. vyd. Praha: Grada, 2004. 1376 s. ISBN 8024704765. [info](#)
- *Anesthesia*. Edited by Ronald D. Miller. 5th ed. New York: Churchill Livingstone, 2000. xx, 1662. ISBN 0443079889. [info](#)
- *Anestezie*. Edited by Reinhard Larsen - Jarmila Drábková. 1. vyd. Praha: Grada, 1998. 935 s. ISBN 8071691798. [info](#)

Bookmarks

<https://is.muni.cz/auth/ln/tag/LF:VSAL082!>

Assessment methods

Lectures in the beginning of the semester. Internship in operating room during semester.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course can also be completed outside the examination period.

The course is taught annually.

The course is taught: in blocks.

Listed among pre-requisites of other courses

- **VLPG11XX Obstetric and Gynaecology - State Exam**
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && [VLVL9X66c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VSNO071](#), [VLKA091](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLT081](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSDL071](#), [VRL041](#), [VLIA081](#), [VLKM081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- **VLRL11XX Family Medicine and Geriatrics**
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLIN9X22](#) && [VLPL9X1](#) && [VLON091](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VRL041](#), [VLT081](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) (Do I meet enrolment requirements?)

Teacher's information

<https://is.muni.cz/auth/el/1411/jaro2016/VSAL082/index.qwarp>

V případě většího zájmu jsou upřednostněni studenti vyšších ročníků.

The course is also listed under the following terms [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VSAN0131p Anatomy I - lecture ✨

Faculty of Medicine

Autumn 2015

Extent and Intensity

2/0/0. 0 credit(s). Type of Completion: -.

Teacher(s)

[prof. RNDr. Petr Dubový, CSc.](#) (lecturer)

[doc. RNDr. Ladislava Horáčková, Ph.D.](#) (lecturer)

[doc. MUDr. Pavel Matonoha, CSc.](#) (lecturer)

[MUDr. Lenka Vargová, Ph.D.](#) (lecturer)
[MUDr. Kateřina Hábová](#) (seminar tutor)
[MUDr. Ivana Hradilová Sviženská, CSc.](#) (seminar tutor)
[MUDr. Marek Joukal, Ph.D.](#) (seminar tutor)
[MUDr. Iona Klusáková, Ph.D.](#) (seminar tutor)
[MUDr. Roman Kopáček](#) (seminar tutor)
[RNDr. Michaela Račanská, Ph.D.](#) (seminar tutor)
[MUDr. Jan Sklenský](#) (seminar tutor)
[MUDr. Drahomíra Stančeva Pernicová, Ph.D.](#) (seminar tutor)
[MUDr. Roman Trubač](#) (seminar tutor)
[MUDr. Ondřej Volný, Ph.D.](#) (seminar tutor)
[Mgr. Kateřina Vymazalová, Ph.D.](#) (seminar tutor)
[Dana Procházková](#) (assistant)

Supervisor

[prof. RNDr. Petr Dubový, CSc.](#)
[Department of Anatomy - Theoretical Departments - Faculty of Medicine](#)
Contact Person: [prof. RNDr. Petr Dubový, CSc.](#)
Supplier department: [Department of Anatomy - Theoretical Departments - Faculty of Medicine](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

At the end of the course students should be able to:

1. Name all parts of the human skeleton including the detailed relief.
2. Describe correctly joints of the bones.
3. Describe the movements occurring at each joint.
4. Characterize the newborn skull.
5. Distinguish the male and female skull and pelvis.
6. Identify individual muscles of the human body, discuss their attachments and innervations.
7. Define actions of individual muscles and muscular groups.

Syllabus

- 1. Anatomical terminology. RTG anatomy. General osteology. Skeleton of the spine and thorax.
- 2. Skeleton of the upper extremity.
- 3. Skeleton of the lower extremity.
- 4. Bones of the neurocranium.
- 5. Bones of the splanchnocranium.
- 6. Cavities of the skull. Skull.
- 7. General arthrology. Joints of the spine, thorax and the skull.

- 8. Joints of the upper extremity.
- 9. Joints of the lower extremity. Pelvis.
- 10. General myology. Muscles and fasciae of the head.
- 11. Muscles of the neck, thorax, abdomen, and back.
- 12. Muscles of the upper limb.
- 13. Muscles of the lower limb.
- 14. Digestive system I.(oral cavity)

Literature

recommended literature

- Základy anatomie - 4b. Periferní nervový systém, smyslové orgány a kůže Miloš Grim, Rastislav Druga et al., ISBN-13: 978-80-7492-156-8, Galén
- KACHLÍK, David and Ondřej VOLNÝ. *Memorix anatomy : comprehensive book of human anatomy in English and Latin*. Illustrated by Radovan Hudák - Jan Balko - Simona Felšöová - Šárka Zaváza. 1st edition. Praha: Triton, 2015. xvii, 610. ISBN 9788073879501. [info](#)
- HUDÁK, Radovan and David KACHLÍK. *Memorix anatomie*. 2. vyd. Kroměříž: Triton, 2013. xxi, 605. ISBN 9788073877125. [info](#)
- GRIM, Miloš and Rastislav DRUGA. *Regional anatomy*. Edited by Josef Stingl. 1. vyd. Praha: Galén, 2012. 123 s. ISBN 9788024621159. [info](#)
- DRAKE, Richard L., Wayne VOGL, Adam W. M. MITCHELL and Henry GRAY. *Gray's anatomy for students*. 2nd ed. Philadelphia: Churchill Livingstone/Elsevier, 2010. xxv, 1103. ISBN 9780443069529. [info](#)
- *Atlas of anatomy : Latin nomenclature*. Edited by Anne Marie Gilroy - Brian R. MacPherson - Lawrence M. Ross - Michael S. New York: Thieme Medical, 2009. xv, 656. ISBN 9781604060997. [info](#)
- NETTER, Frank H. *Anatomický atlas člověka*. Edited by John T. Hansen, Translated by Libor Páč - Petr Dubový. Vyd. 2., rozš. Praha: Grada, 2005. [14], 542. ISBN 8024711532. [info](#)
- GRIM, Miloš and Rastislav DRUGA. *Základy anatomie*. První vydání. Praha: Galén, 2005. 163 stran. ISBN 8024609894. [info](#)
- GRIM, Miloš and Rastislav DRUGA. *Základy anatomie*. 1. vyd. Praha: Galén, 2002. 119 s. ISBN 8072621793. [info](#)
- GRIM, Miloš and Rastislav DRUGA. *Základy anatomie. I., Obecná anatomie a pohybový systém*. 1. vyd. Praha: Karolinum, 2001. 159 s. : i. ISBN 80-7276-111-4. [info](#)

Teaching methods

Lectures

Assessment methods

Assessment is carried out after completion of following subjects within the scope of anatomy final examination: VSAN0131s Anatomy I – seminar, VSAN0232p Anatomy II – lecture, VSAN0232s Anatomy II – seminar, VSAN0232c Anatomy II – dissection, VSAN0333p Anatomy III – lecture, VSAN0333s Anatomy III – seminar, VSAN0333c Anatomy III – dissection, VSAN0333 Anatomy III.

Language of instruction

Czech

Follow-Up Courses

- [VSAN0131s Anatomy I - seminar](#)
- [VSAN0232c Anatomy II - practice](#)
- [VSAN0232p Anatomy II - lecture](#)
- [VSAN0232s Anatomy II - seminar](#)
- [VSAN0333c Anatomy III - practice](#)
- [VSAN0333p Anatomy III - lecture](#)
- [VSAN0333s Anatomy III - seminar](#)

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

The course is taught: every week.

Information on course enrolment limitations: Mimo studenty LF, max. 15 studentů z PřF

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#).

VSAN0131s Anatomy I - seminar ✳

Faculty of Medicine

Autumn 2015

Extent and Intensity

0/2/0. 4 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Kateřina Hábová](#) (seminar tutor)
[doc. RNDr. Ladislava Horáčková, Ph.D.](#) (seminar tutor)
[MUDr. Ivana Hradilová Sviženská, CSc.](#) (seminar tutor)
[MUDr. Marek Joukal, Ph.D.](#) (seminar tutor)
[MUDr. Iлона Klusáková, Ph.D.](#) (seminar tutor)
[MUDr. Roman Kopáček](#) (seminar tutor)
[doc. MUDr. Pavel Matonoha, CSc.](#) (seminar tutor)
[RNDr. Michaela Račanská, Ph.D.](#) (seminar tutor)
[MUDr. Jan Sklenský](#) (seminar tutor)
[MUDr. Drahomíra Stančeva Pernicová, Ph.D.](#) (seminar tutor)
[MUDr. Roman Trubač](#) (seminar tutor)
[MUDr. Lenka Vargová, Ph.D.](#) (seminar tutor)
[MUDr. Ondřej Volný, Ph.D.](#) (seminar tutor)
[Mgr. Kateřina Vymazalová, Ph.D.](#) (seminar tutor)
[Dana Procházková](#) (assistant)

Supervisor

[prof. RNDr. Petr Dubový, CSc.](#)

[Department of Anatomy - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [prof. RNDr. Petr Dubový, CSc.](#)

Supplier department: [Department of Anatomy - Theoretical Departments - Faculty of Medicine](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

At the end of the course students should be able to:

1. Name all parts of the human skeleton including the detailed relief.
2. Describe correctly joints of the bones.
3. Describe the movements occurring at each joint.
4. Characterize the newborn skull.
5. Distinguish the male and female skull and pelvis.
6. Identify individual muscles of the human body, discuss their attachments and innervations.
7. Define actions of individual muscles and muscular groups.
8. Define skeletal structures demonstrated by radiographs in basic projections

Syllabus

- 1. Introduction into the study of anatomy. Anatomical terminology. RTG anatomy.
- 2. General osteology. Skeleton of the spine and thorax.
- 3. Skeleton of the upper extremity.
- 4. Skeleton of the lower extremity.
- 5. Neurocranium.
- 6. Splanchnocranium.
- 7. Cavities of the skull. Skull. Craniometry. Skull of the newborn.
- 8. Joints of the spine, thorax and skull. Joints of the upper extremity.
- 9. Joints of the lower extremity. Pelvis
- 10. Oral examination (osteology, arthrology).
- 11. Muscles of the head, neck, thorax, and back.
- 14. Muscles of the abdomen. Inguinal canal. Credits.

Literature

recommended literature

- Základy anatomie - 4b. Periferní nervový systém, smyslové orgány a kůže Miloš Grim, Rastislav Druga et al., ISBN-13: 978-80-7492-156-8, Galén
- KACHLÍK, David and Ondřej VOLNÝ. *Memorix anatomy : comprehensive book of human anatomy in English and Latin*. Illustrated by Radovan Hudák - Jan

Balko - Simona Felšóová - Šárka Zaváza. 1st edition. Praha: Triton, 2015. xvii, 610. ISBN 9788073879501. [info](#)

- HUDÁK, Radovan and David KACHLÍK. *Memorix anatomie*. 2. vyd. Kroměříž: Triton, 2013. xxi, 605. ISBN 9788073877125. [info](#)
- GRIM, Miloš and Rastislav DRUGA. *Regional anatomy*. Edited by Josef Stingl. 1. vyd. Praha: Galén, 2012. 123 s. ISBN 9788024621159. [info](#)
- DRAKE, Richard L., Wayne VOGL, Adam W. M. MITCHELL and Henry GRAY. *Gray's anatomy for students*. 2nd ed. Philadelphia: Churchill Livingstone/Elsevier, 2010. xxv, 1103. ISBN 9780443069529. [info](#)
- *Atlas of anatomy : Latin nomenclature*. Edited by Anne Marie Gilroy - Brian R. MacPherson - Lawrence M. Ross - Michael S. New York: Thieme Medical, 2009. xv, 656. ISBN 9781604060997. [info](#)
- NETTER, Frank H. *Anatomický atlas člověka*. Edited by John T. Hansen, Translated by Libor Páč - Petr Dubový. Vyd. 2., rozš. Praha: Grada, 2005. [14], 542. ISBN 8024711532. [info](#)
- GRIM, Miloš and Rastislav DRUGA. *Základy anatomie*. První vydání. Praha: Galén, 2005. 163 stran. ISBN 8024609894. [info](#)
- GRIM, Miloš and Rastislav DRUGA. *Základy anatomie*. 1. vyd. Praha: Galén, 2002. 119 s. ISBN 8072621793. [info](#)
- GRIM, Miloš and Rastislav DRUGA. *Základy anatomie. 1., Obecná anatomie a pohybový systém*. 1. vyd. Praha: Karolinum, 2001. 159 s. : i. ISBN 80-7276-111-4. [info](#)

Teaching methods

Practice with the human anatomical specimens

Assessment methods

Completion of the subject is assessed by the course-unit credit. A precondition for obtaining the course-unit credit is 95% attendance at the seminars (1 non-attendance tolerated).

Language of instruction

Czech

Follow-Up Courses

- [VSAN0232c Anatomy II - practice](#)
- [VSAN0232p Anatomy II - lecture](#)
- [VSAN0232s Anatomy II - seminar](#)
- [VSAN0333c Anatomy III - practice](#)
- [VSAN0333p Anatomy III - lecture](#)
- [VSAN0333s Anatomy III - seminar](#)

Further Comments

[Study Materials](#)

The course is taught annually.

The course is taught: every week.

The course is also listed under the following terms [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#).

VSAN0232c Anatomy II - practice ✱

Faculty of Medicine

Spring 2019

Extent and Intensity

0/2/0. 2 credit(s). Recommended Type of Completion: z (credit). Alternate Types of Completion: -.

Teacher(s)

[doc. RNDr. Ladislava Horáčková, Ph.D.](#) (seminar tutor)

[MUDr. Ivana Hradilová Sviženská, CSc.](#) (seminar tutor)

[MUDr. Marek Joukal, Ph.D.](#) (seminar tutor)

[MUDr. Ilona Klusáková, Ph.D.](#) (seminar tutor)

[MUDr. Roman Kopáček](#) (seminar tutor)

[MUDr. Kateřina Kubičková](#) (seminar tutor)

[doc. MUDr. Pavel Matonoha, CSc.](#) (seminar tutor)

[RNDr. Michaela Račanská, Ph.D.](#) (seminar tutor)

[MUDr. Drahomíra Stančeva Pernicová, Ph.D.](#) (seminar tutor)

[MUDr. Roman Trubač](#) (seminar tutor)

[MUDr. Lenka Vargová, Ph.D.](#) (seminar tutor)

[Mgr. Kateřina Vymazalová, Ph.D.](#) (seminar tutor)

[Dana Procházková](#) (assistant)

Supervisor

[prof. RNDr. Petr Dubový, CSc.](#)

[Department of Anatomy - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [prof. RNDr. Petr Dubový, CSc.](#)

Supplier department: [Department of Anatomy - Theoretical Departments - Faculty of Medicine](#)

Prerequisites (in Czech)

[VSAN0131s Anatomy I s](#) && [ZC011 Handling chemical substances](#)

(Do I meet enrolment requirements?)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

At the end of the course students should be able to:

1. Describe all components (bones, joints, muscles, vessels and nerves) of the upper and lower extremities, and back
2. Relate features of extremities and back with respect to adjacent structures
3. Review arrangement of layers from the superficial to deep onness in all regions of the

upper and lower limbs and back

4. Create the anatomical prosection of some studied region using specified dissecting procedures
5. Distinguish abnormalities of the prosections.

Syllabus

- 1st day: Back - skin incisions, subcutis - nerves, vessels; Upper limb - dissection of the deltoid and scapular regions, skin incisions in the arm; Lower limb - dissection of the gluteal region
- 2nd day: Back - dissection of the trapezius, latissimus dorsi; Upper limb - completion of the dissection of the arm; Lower limb - dissection of the anterior femoral region
- 3rd day: Back - dissection of the rhomboids, levator scapulae, erector spinae; Upper limb - dissection of the forearm - skin, subcutis, superficial muscles; Lower limb - dissection of the posterior femoral and crural regions
- 4th day: Back - dissection of the splenius, semispinalis, serrati; Upper limb - completion of the dissection of the forearm, palm; Lower limb - completion of the dissection of the crus, dorsum of foot
- 5th day: Back - dissection of the deep nuchal muscles, suboccipital trigone, multifidi; Upper limb - completion of the dissection of the palm, dorsum of hand; Lower limb - completion of the dissection of the dorsum of foot, sole
- 6th day: Examination (the result will be included in the result of the final anatomy exam)

Literature

recommended literature

- HUDÁK, Radovan and David KACHLÍK. *Memorix anatomie*. 3. vydání. Praha: TRITON, 2015. xxi, 607. ISBN 9788073879594. [info](#)
- DRAKE, Richard L., Wayne VOGL, Adam W. M. MITCHELL and Henry GRAY. *Gray's anatomy for students*. 2nd ed. Philadelphia: Churchill Livingstone/Elsevier, 2010. xxv, 1103. ISBN 9780443069529. [info](#)

Teaching methods

Anatomical dissection of the human body

Assessment methods

Completion of the course is assessed by the course-unit credit. A precondition for obtaining the course-unit credit is 100% attendance and demonstration of the basic knowledge during an examination at the close of the dissection course. When 100% attendance could not be fulfilled due to an illness (medical confirmation required) the dissection course has to be substituted in full extent during the second week of the examination period of the semester. The results of the examination will be included in the results of the practical part of the final examination in Anatomy. A minimum of 6 out of 10 possible points (grade E) in the examination at the end of the course is required for fulfillment. For unsuccessful students a resit date will be offered (involved in the final exam date).

Language of instruction

Czech

Follow-Up Courses

- [VSAN0333c Anatomy III - practice](#)
- [VSAN0333p Anatomy III - lecture](#)
- [VSAN0333s Anatomy III - seminar](#)

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: in blocks.

Note related to how often the course is taught: blokové pitvy 15. týden.

Teacher's information

Student musí mít plášť, plastové návleky přes obuv, anatomickou pinzetu 14,5 nebo 16 cm a držátko skalpelových čepelí č.4 s čepelkami č. 23 nebo 21.

A student has to wear the lab coat and plastic shoe covers, use the dressing forceps 14.5 or 16 cm long, and scalpel handle No. 4 with scalpel blades No. 23 or 21.

The course is also listed under the following terms [Spring 2000](#), [Spring 2001](#), [Spring 2002](#), [Spring 2003](#), [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#).

VSAN0232p Anatomy II - lecture ✨

Faculty of Medicine

Spring 2019

Extent and Intensity

3/0/0. 0 credit(s). Type of Completion: -.

Teacher(s)

[prof. RNDr. Petr Dubový, CSc.](#) (lecturer)

[doc. RNDr. Ladislava Horáčková, Ph.D.](#) (lecturer)

[MUDr. Ivana Hradilová Svíženská, CSc.](#) (lecturer), [RNDr. Michaela Račanská, Ph.D.](#) (deputy)

[doc. MUDr. Pavel Matonoha, CSc.](#) (lecturer)

[MUDr. Lenka Vargová, Ph.D.](#) (lecturer)

[MUDr. Marek Joukal, Ph.D.](#) (seminar tutor)

[MUDr. Ilona Klusáková, Ph.D.](#) (seminar tutor)

[MUDr. Roman Kopáček](#) (seminar tutor)

[MUDr. Kateřina Kubíčková](#) (seminar tutor)

[RNDr. Michaela Račanská, Ph.D.](#) (seminar tutor)

[MUDr. Drahomíra Stančeva Pernicová, Ph.D.](#) (seminar tutor)

[MUDr. Roman Trubač](#) (seminar tutor)

[Mgr. Kateřina Vymazalová, Ph.D.](#) (seminar tutor)

[Dana Procházková](#) (assistant)

Supervisor

[prof. RNDr. Petr Dubový, CSc.](#)

[Department of Anatomy - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [prof. RNDr. Petr Dubový, CSc.](#)

Supplier department: [Department of Anatomy - Theoretical Departments - Faculty of Medicine](#)

Prerequisites (in Czech)

[VSAN0131s Anatomy I s](#) && [ZC011 Handling chemical substances](#)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

At the end of the course students should be able to:

1. Define the components of the major organ systems (digestive, respiratory, urinary, male and female genital, cardiovascular and lymphatic)
2. Explain the morphology of the organs
3. Create apprehension about position and spatial relationships of particular organs and organ systems
4. Explain anatomy, development and basic functions of the skin and its derivatives
5. Identify all components of the upper and lower extremities
6. Relate structures of the upper limb with respect to adjacent structures
7. Relate structures of the lower limb with respect to adjacent structures

Syllabus

- 1. Digestive system II (pharynx to rectum).
- 2. Digestive system III (liver, pancreas, spleen, peritoneum).
- 3. Respiratory system.
- 4. Urinary system. Male genital system I.
- 5. Male genital system II. Pelvic floor I.
- 6. Female genital system. Pelvic floor II.
- 7. Heart.
- 8. Arteries.
- 9. Veins, lymphatic system.
- 10. Regional anatomy of the upper extremity.
- 11. Regional anatomy of the lower extremity.
- 12. Regional anatomy of the lower extremity.
- 13. Regional anatomy of the back.
- 14. Skin.

Literature

recommended literature

- HUDÁK, Radovan and David KACHLÍK. *Memorix anatomie*. 3. vydání. Praha: TRITON, 2015. xxi, 607. ISBN 9788073879594. [info](#)
- DRAKE, Richard L., Wayne VOGL, Adam W. M. MITCHELL and Henry GRAY. *Gray's anatomy for students*. 2nd ed. Philadelphia: Churchill Livingstone/Elsevier, 2010. xxv, 1103. ISBN 9780443069529. [info](#)

Teaching methods

lectures

Assessment methods

Assessment is carried out after completion of following subjects within the scope of anatomy final examination: VSAN0232s Anatomy II – seminar, VSAN0232c Anatomy II – dissection, VSAN0333p Anatomy III – lecture, VSAN0333s Anatomy III – seminar, VSAN0333c Anatomy III – dissection.

Language of instruction

Czech

Follow-Up Courses

- [VSAN0232c Anatomy II - practice](#)
- [VSAN0232s Anatomy II - seminar](#)
- [VSAN0333c Anatomy III - practice](#)
- [VSAN0333p Anatomy III - lecture](#)
- [VSAN0333s Anatomy III - seminar](#)

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

The course is taught: every week.

Information on course enrolment limitations: Mimo studenty LF, max. 15 studentů PŘF

The course is also listed under the following terms [Spring 2000](#), [Spring 2001](#), [Spring 2002](#), [Spring 2003](#), [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#).

VSAN0232s Anatomy II - seminar ✱

Faculty of Medicine

Spring 2019

Extent and Intensity

0/2. 4 credit(s). Type of Completion: z (credit).

Teacher(s)

[doc. RNDr. Ladislava Horáčková, Ph.D.](#) (seminar tutor)

[MUDr. Ivana Hradilová Svíženská, CSc.](#) (seminar tutor)

[MUDr. Marek Joukal, Ph.D.](#) (seminar tutor)

[MUDr. Iлона Klusáková, Ph.D.](#) (seminar tutor)

[MUDr. Roman Kopáček](#) (seminar tutor)

[doc. MUDr. Pavel Matonoha, CSc.](#) (seminar tutor)

[RNDr. Michaela Račanská, Ph.D.](#) (seminar tutor)
[MUDr. Drahomíra Stančeva Pernicová, Ph.D.](#) (seminar tutor)
[MUDr. Roman Trubač](#) (seminar tutor)
[MUDr. Lenka Vargová, Ph.D.](#) (seminar tutor)
[Mgr. Kateřina Vymazalová, Ph.D.](#) (seminar tutor)
[Dana Procházková](#) (assistant)

Supervisor

[prof. RNDr. Petr Dubový, CSc.](#)
[Department of Anatomy - Theoretical Departments - Faculty of Medicine](#)
Contact Person: [prof. RNDr. Petr Dubový, CSc.](#)
Supplier department: [Department of Anatomy - Theoretical Departments - Faculty of Medicine](#)

Prerequisites (in Czech)

[VSAN0131s Anatomy I s](#) && [ZC011 Handling chemical substances](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

At the end of the course students should be able to:

1. Define practically the components of the digestive, respiratory, urinary, male and female genital, cardiovascular and lymphatic systems using the human cadavers and prosections
2. Identify basic morphological features of the organs
3. Demonstrate position of viscera, their blood supply and innervation in human cadavers
4. Analyse spatial relationships of particular organs and organ systems
5. Appraise features of viscera and vessels at radiographs
6. Explain anatomy, development and basic functions of the skin and its derivatives

Syllabus

- 1. Digestive system I (oral cavity) + muscles of the head and neck.
- 2. Digestive system II (pharynx to rectum)+ muscles of the abdomen.
- 3. Digestive system III (liver, pancreas, spleen, peritoneum) **Test I: digestive system + muscles of the head, neck and abdomen.**
- 4. Respiratory system + muscles of the thorax.
- 5. Urinary system. Male genital system I.
- 6. Male genital system II. Pelvic floor I.
- 7. Female genital system. Pelvic floor II **Test II: respiratory and urogenital systems + muscles of the thorax and pelvic floor.**
- 8. Heart.
- 9. Arteries.
- 10. Veins, lymphatic system. **Test III: Cardiovascular system.**

- 11. Regional anatomy of the upper extremity.
- 12. Regional anatomy of the lower extremity.
- 13. Regional anatomy of the back.
- 14. Radiologic anatomy. Credits.
- 15. Dissection course (dissection of the back and limbs).

Literature

recommended literature

- HUDÁK, Radovan and David KACHLÍK. *Memorix anatomie*. 3. vydání. Praha: TRITON, 2015. xxi, 607. ISBN 9788073879594. [info](#)
- DRAKE, Richard L., Wayne VOGL, Adam W. M. MITCHELL and Henry GRAY. *Gray's anatomy for students*. 2nd ed. Philadelphia: Churchill Livingstone/Elsevier, 2010. xxv, 1103. ISBN 9780443069529. [info](#)

Teaching methods

Practice with the human anatomical specimens.

Assessment methods

Completion of the course is assessed by the course-unit credit. A precondition for obtaining the course-unit credit is 95% attendance at the seminars (1 excused non-attendance tolerated) and demonstration of the basic knowledge of the semester schoolwork in the form of 3 tests, each containing 10 questions (each correctly answered question is evaluated by 1 point). There is 15 minute time limit for each test. A minimum of 6 out of 10 possible points in each test is required for fulfilment. For unsuccessful students and students who could not sit for the test due to an illness (medical confirmation required) a resit (alternate) date will be offered. The students who could not sit for the regular date (due to an illness) and did not pass the test during the alternate date will be offered one resit date. For obtaining the course-unit credit on a resit date it is necessary to obtain a minimum of 6 out of 10 possible points in the test.

Language of instruction

Czech

Follow-Up Courses

- [VSAN0232c Anatomy II - practice](#)
- [VSAN0333c Anatomy III - practice](#)
- [VSAN0333p Anatomy III - lecture](#)
- [VSAN0333s Anatomy III - seminar](#)

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

Information on course enrolment limitations: Mimo studenty LF, max. 15 studentů z PřF

Listed among pre-requisites of other courses

- [aVLFY0321c Physiology I - practice](#)
([aVLBI0222p](#) || [VSBI0222p](#)) && ([aVLBF011p](#) || [VSBF011p](#)) && ([aVLAN0222s](#) || [VSAN0232s](#)) ([Do I meet enrolment requirements?](#))

- [aVLFY0321p Physiology I - lecture](#)
([aVLBI0222p](#) || [VSBI0222p](#)) && ([aVLBF011p](#) || [VSBF011p](#)) && ([aVLAN0222s](#)
||[VSAN0232s](#)) ([Do I meet enrolment requirements?](#))
- [aVLFY0321s Physiology I - seminar](#)
([aVLBI0222p](#) || [VSBI0222p](#)) && ([aVLBF011p](#) || [VSBF011p](#)) && ([aVLAN0222s](#)
||[VSAN0232s](#)) ([Do I meet enrolment requirements?](#))

The course is also listed under the following terms [Spring 2001](#), [Spring 2002](#), [Spring 2003](#), [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#).

VSAN0333c Anatomy III - practice ✱

Faculty of Medicine

Autumn 2016

Extent and Intensity

0/2/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[doc. RNDr. Ladislava Horáčková, Ph.D.](#) (seminar tutor)
[MUDr. Ivana Hradilová Sviženská, CSc.](#) (seminar tutor)
[MUDr. Marek Joukal, Ph.D.](#) (seminar tutor)
[MUDr. Ilona Klusáková, Ph.D.](#) (seminar tutor)
[MUDr. Roman Kopáček](#) (seminar tutor)
[doc. MUDr. Pavel Matonoha, CSc.](#) (seminar tutor)
[RNDr. Michaela Račanská, Ph.D.](#) (seminar tutor)
[MUDr. Drahomíra Stančeva Pernicová, Ph.D.](#) (seminar tutor)
[MUDr. Roman Trubač](#) (seminar tutor)
[MUDr. Lenka Vargová, Ph.D.](#) (seminar tutor)
[Mgr. Kateřina Vymazalová, Ph.D.](#) (seminar tutor)
[Dana Procházková](#) (assistant)

Supervisor

[prof. RNDr. Petr Dubový, CSc.](#)
[Department of Anatomy - Theoretical Departments - Faculty of Medicine](#)
 Contact Person: [prof. RNDr. Petr Dubový, CSc.](#)
 Supplier department: [Department of Anatomy - Theoretical Departments - Faculty of Medicine](#)

Prerequisites (in Czech)

[VSAN0232s Anatomy II s](#) && [VSAN0232c Anatomy II p](#) && [VSHE0221c Histology and Embryology I -p](#) && [VSLT0221s Bas. Med. Terminol. II -s](#)
[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

At the end of the course students should be able to:

1. Define topographical regions of the head, neck, thorax, abdomen, and pelvis
2. Identify basic anatomical structures (bones, joints, viscera, vessels, and nerves) in the regions of the head, neck, thorax, abdomen, and pelvis
3. Demonstrate practically particular organs of the head, neck, thorax, abdomen, and pelvis at the human cadaver
4. Create the anatomical prosection of some studied region using specified dissecting procedures
5. Distinguish abnormalities of the prosections.

Syllabus

- Dissection of the head: parotidomasseteric region, anterior facial region, temporal region, occipitofrontal region, cranial cavity, dissection of the brain, pharynx, parapharyngeal space, soft palate, infratemporal fossa, larynx, nasal cavity, orbit, temporal bone.
- Dissection of the neck: skin incisions, subcutaneous tissue, infrahyoid muscles, carotid triangle, suprahyoid region, cervical and brachial plexuses, subclavian triangle.
- Dissection of the thorax: skin incisions, subcutaneous tissue, muscular layer, axillary fossa, intercostal spaces, thoracic cavity, pleura and lungs, pericardium and heart, mediastinum.
- Dissection of the abdomen: skin incisions, subcutaneous tissue, muscular layer, inguinal region, abdominal cavity, situs viscerum, removal of organs, branches of the abdominal aorta, retroperitoneal space.
- Dissection of the pelvis: perineal region, external genital organs, ischioanal fossa, pelvic floor, organs of the lesser pelvis, the wall of the pelvis.

Literature

recommended literature

- Základy anatomie - 4b. Periferní nervový systém, smyslové orgány a kůže Miloš Grim, Rastislav Druga et al., ISBN-13: 978-80-7492-156-8, Galén
- KACHLÍK, David and Ondřej VOLNÝ. *Memorix anatomy : comprehensive book of human anatomy in English and Latin*. Illustrated by Radovan Hudák - Jan Balko - Simona Felšöová - Šárka Zaváza. 1st edition. Praha: Triton, 2015. xvii, 610. ISBN 9788073879501. [info](#)
- HUDÁK, Radovan and David KACHLÍK. *Memorix anatomie*. 2. vyd. Kroměříž: Triton, 2013. xxi, 605. ISBN 9788073877125. [info](#)
- DUBOVÝ, Petr. *Gross anatomy and structure of the human nervous system*. Third edition. Brno: Masarykova univerzita, 2012. 90 stran. ISBN 9788021061255. [info](#)
- GRIM, Miloš and Rastislav DRUGA. *Regional anatomy*. Edited by Josef Stingl. 1. vyd. Praha: Galén, 2012. 123 s. ISBN 9788024621159. [info](#)

- DRUGA, Rastislav, Miloš GRIM and Petr DUBOVÝ. *Anatomie centrálního nervového systému*. První vydání. Praha: Galén, 2011. 219 stran. ISBN 9788072627066. [info](#)
- ŽLÁBEK, Karel. *Pitevní cvičení z normální anatomie*. 3., nezměněné. Brno: Masarykova univerzita, 2011. 66 pp. ISBN 978-80-210-5471-4. [info](#)
- DRAKE, Richard L., Wayne VOGL, Adam W. M. MITCHELL and Henry GRAY. *Gray's anatomy for students*. 2nd ed. Philadelphia: Churchill Livingstone/Elsevier, 2010. xxv, 1103. ISBN 9780443069529. [info](#)
- [DUBOVÝ, Petr](#). *Instructions for Anatomical Dissection Course*. 1. dotisk 2. vyd. Brno: Masarykova univerzita, 2010. 71 pp. ISBN 978-80-210-4229-2. [info](#)
- *Atlas of anatomy : Latin nomenclature*. Edited by Anne Marie Gilroy - Brian R. MacPherson - Lawrence M. Ross - Michael S. New York: Thieme Medical, 2009. xv, 656. ISBN 9781604060997. [info](#)
- NETTER, Frank H. *Anatomický atlas člověka*. Edited by John T. Hansen, Translated by Libor Páč - Petr Dubový. Vyd. 2., rozš. Praha: Grada, 2005. [14], 542. ISBN 8024711532. [info](#)
- GRIM, Miloš and Rastislav DRUGA. *Základy anatomie*. 1. vyd. Praha: Galén, 2002. 119 s. ISBN 8072621793. [info](#)

Teaching methods

Anatomical dissection of the human body

Assessment methods

Completion of the subject is assessed by the course-unit credit. A precondition for obtaining the course-unit credit is 100% attendance and demonstration of basic knowledge during examination at the close of the practicals. The student who fails the 100% attendance due to an illness (after presentation of a medical certificate) substitutes the course to the full extent during the examination period of the semester. A minimum of 6 out of 10 possible points (grade E) in each examination is required for fulfillment. The results of the examination will be included in the results of the practical part of the final examination in Anatomy. The unsuccessful student will be re-examined at the respective date of the theoretical part of the final examination in Anatomy.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: in blocks.

Note related to how often the course is taught: blokové pitvy 13. a 14. týden.

Teacher's information

Student musí mít plášť, plastové návleky přes obuv, anatomickou pinzetu 14,5 nebo 16 cm a držátko skalpelových čepelek č.4 s čepečkami č. 23 nebo 21.

A student has to wear the lab coat and plastic shoe covers, use the dressing forceps 14.5 or 16 cm long, and scalpel handle No. 4 with scalpel blades No. 23 or 21.

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#),

[Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#),
[Autumn 2014](#), [Autumn 2015](#).

VSAN0333p Anatomy III - lecture ✱

Faculty of Medicine

Autumn 2016

Extent and Intensity

3/0/0. 7 credit(s). Recommended Type of Completion: zk (examination). Alternate Types of Completion: RZk (examination).

Teacher(s)

[prof. RNDr. Petr Dubový, CSc.](#) (lecturer), [MUDr. Ivana Hradilová Svíženská, CSc.](#) (deputy)

[MUDr. Ivana Hradilová Svíženská, CSc.](#) (lecturer)

[doc. MUDr. Pavel Matonoha, CSc.](#) (lecturer)

[MUDr. Marek Joukal, Ph.D.](#) (seminar tutor)

[MUDr. Roman Kopáček](#) (seminar tutor)

[MUDr. Kateřina Kubičková](#) (seminar tutor)

[RNDr. Michaela Račanská, Ph.D.](#) (seminar tutor)

[MUDr. Drahomíra Stančeva Pernicová, Ph.D.](#) (seminar tutor)

[MUDr. Roman Trubač](#) (seminar tutor)

[Mgr. Kateřina Vymazalová, Ph.D.](#) (seminar tutor)

[Dana Procházková](#) (assistant)

[doc. RNDr. Ladislava Horáčková, Ph.D.](#) (alternate examiner)

[MUDr. Ilona Klusáková, Ph.D.](#) (alternate examiner)

[MUDr. Lenka Vargová, Ph.D.](#) (alternate examiner)

Supervisor

[prof. RNDr. Petr Dubový, CSc.](#)

[Department of Anatomy - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [prof. RNDr. Petr Dubový, CSc.](#)

Supplier department: [Department of Anatomy - Theoretical Departments - Faculty of Medicine](#)

Prerequisites (in Czech)

[VSAN0232s Anatomy II s](#) && [VSAN0232c Anatomy II p](#) && [VSHE0221c Histology and Embryology I -p](#) && [VSLT0221s Bas. Med. Terminol. II -s](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

At the end of the course students should be able to:

1. Describe organs of senses, endocrine glands, peripheral and central nervous systems
2. Explain function of senses, endocrine glands, peripheral and central nervous systems
3. Relate organs of senses, endocrine glands, peripheral and central nervous systems with respect to adjacent structures
4. Identify distribution and function of the sympathetic and parasympathetic components of the autonomic nervous system
5. Define topographical regions of the head, neck, thorax, abdomen, and pelvis
6. Identify basic anatomical structures (bones, joints, viscera, vessels, and nerves) in the regions of the head, neck, thorax, abdomen, and pelvis
7. Review mutual continuity between particular organ systems.

Syllabus

- 1. Basic anatomy of the nervous system. Structure of the spinal cord I. Topographic anatomy of the head I.
- 2. Structure of the spinal cord II. Structure of the brain stem I. Topographic anatomy of the head II.
- 3. Structure of the brain stem II. Topographic anatomy of the neck I.
- 4. Cranial nerves III., IV., VI., VII. Topographic anatomy of the neck II.
- 5. Cranial nerve V. Topographic anatomy of the mediastinum I.
- 6. Cranial nerves IX., X., XI., XII. Topographic anatomy of the mediastinum II.
- 7. Structure of the cerebellum. Structure of the diencephalon. Topographic anatomy of the mediastinum III.
- 8. Visual system. Topographic anatomy of the abdomen I.
- 9. Auditory system. Topographic anatomy of the abdomen II.
- 10. Structure of the telencephalon. Topographic anatomy of the abdomen III.
- 11. Autonomic nervous system (structure). Topographic anatomy of the pelvis.
- 12. and 13. Dissections.
- 14. RTG anatomy.

Literature

recommended literature

- KACHLÍK, David and Ondřej VOLNÝ. *Memorix anatomy : comprehensive book of human anatomy in English and Latin*. Illustrated by Radovan Hudák - Jan Balko - Simona Fejšová - Šárka Zaváza. 1st edition. Praha: Triton, 2015. xvii, 610. ISBN 9788073879501. [info](#)
- HUDÁK, Radovan and David KACHLÍK. *Memorix anatomie*. 2. vyd. Kroměříž: Triton, 2013. xxi, 605. ISBN 9788073877125. [info](#)
- DUBOVÝ, Petr. *Gross anatomy and structure of the human nervous system*. Third edition. Brno: Masarykova univerzita, 2012. 90 stran. ISBN 9788021061255. [info](#)
- DUBOVÝ, Petr. *Gross anatomy and structure of the human nervous system*. Third edition. Brno: Masarykova univerzita, 2012. 90 stran. ISBN 9788021061255. [info](#)
- DRUGA, Rastislav, Miloš GRIM and Petr DUBOVÝ. *Anatomie centrálního nervového systému*. První vydání. Praha: Galén, 2011. 219 stran. ISBN 9788072627066. [info](#)

- ŽLÁBEK, Karel. *Pitevní cvičení z normální anatomie*. 3., nezměněné. Brno: Masarykova univerzita, 2011. 66 pp. ISBN 978-80-210-5471-4. [info](#)
- DRAKE, Richard L., Wayne VOGL, Adam W. M. MITCHELL and Henry GRAY. *Gray's anatomy for students*. 2nd ed. Philadelphia: Churchill Livingstone/Elsevier, 2010. xxv, 1103. ISBN 9780443069529. [info](#)
- [DUBOVÝ, Petr](#). *Instructions for Anatomical Dissection Course*. 1. dotisk 2. vyd. Brno: Masarykova univerzita, 2010. 71 pp. ISBN 978-80-210-4229-2. [info](#)
- *Atlas of anatomy : Latin nomenclature*. Edited by Anne Marie Gilroy - Brian R. MacPherson - Lawrence M. Ross - Michael S. New York: Thieme Medical, 2009. xv, 656. ISBN 9781604060997. [info](#)
- NETTER, Frank H. *Anatomický atlas člověka*. Edited by John T. Hansen, Translated by Libor Páč - Petr Dubový. Vyd. 2., rozš. Praha: Grada, 2005. [14], 542. ISBN 8024711532. [info](#)
- GRIM, Miloš and Rastislav DRUGA. *Základy anatomie*. 1. vyd. Praha: Galén, 2002. 119 s. ISBN 8072621793. [info](#)

Teaching methods

lectures

Assessment methods

The subject is evaluated in the scope of the final examination.

Final examination:

The final examination in Anatomy consists of a practical and a theoretical part. To pass successfully the exam, the student has to obtain at least the grade E in both practical and theoretical parts of the final examination.

The practical part of final examination is represented by the results of the examinations in Anatomy II - Dissection and Anatomy III - Dissection. The student, who has not obtained at least grade E during above-mentioned courses, will be re-examined at the respective date of the theoretical part of the final examination in Anatomy.

The theoretical part of final examination first proceeds in the form of a test with subsequent oral examination. To be entitled to proceed to oral examination, the student has to obtain at least 12 out of 16 points in the test. When successful at the test the student does not repeat it during a re-sit date. In the course of oral examination the student answers 4 questions selected by lot out of 4 preannounce sets of questions and presents an anatomical description of the imaging technique.

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

The course can also be completed outside the examination period.

The course is taught annually.

The course is taught: every week.

Information on course enrolment limitations: Mimo studenty LF, max. 15 studentů z PřF, tito studenti neabsolvují pitvy

Listed among pre-requisites of other courses

- [aVLLP0532c Clinical Introduction II - practice](#)
[aVLLP0431c](#) && ([aVLAN0222p](#) || [VSAN0333p](#)) && ([aVLHE0322c](#) ||

[VSHE0322c](#) && ([aVLBC0422c](#) || [VSBC041c](#)) && [aVLFY0422c](#) (Do I meet enrolment requirements?)

- [aVLLP0633c](#) Clinical Introduction III - practice
[aVLLP0532c](#) && ([aVLAN0222p](#) || [VSAN0333p](#)) && [aVLHE0322p](#) && [aVLBC0422p](#) && [aVLFY0422p](#) (Do I meet enrolment requirements?)
- [aVLPA0521c](#) Pathology I - practice
([aVLAN0222p](#) || [VSAN0333p](#)) && ([aVLHE0322p](#) || [VSHE0322p](#)) && ([aVLLM0421c](#) || [VLLM0421c](#)) (Do I meet enrolment requirements?)
- [aVLPA0521p](#) Pathology I - lecture
([aVLAN0222p](#) || [VSAN0333p](#)) && ([aVLHE0322p](#) || [VSHE0322p](#)) && ([aVLLM0421c](#) || [VLLM0421c](#)) (Do I meet enrolment requirements?)
- [aVLTZ0552](#) Theoretical Bases of Clinical Medicine II - seminar
[aVLTZ0451c](#) && ([aVLAN0222p](#) || [VSAN0333p](#)) (Do I meet enrolment requirements?)
- [VLADV041](#) Vybrané kapitoly anatomie dětského věku
[VLAN0222p](#) || [VSAN0333p](#) (Do I meet enrolment requirements?)
- [VLLP0532c](#) Clinical Introduction II
[VLLP0431c](#) && ([VLAN0222p](#) || [VSAN0333p](#)) && ([VLHE0322c](#) || [VSHE0322c](#)) && ([VLBC0422c](#) || [VSBC041c](#)) && ([VLFY0422c](#) || [VSFY0422c](#)) (Do I meet enrolment requirements?)
- [VLLP0633c](#) Clinical Introduction III - practice
[VLLP0532c](#) && ([VLAN0222p](#) || [VSAN0333p](#)) && [VLHE0322p](#) && [VLBC0422p](#) && [VLFY0422p](#) (Do I meet enrolment requirements?)
- [VLPA0521c](#) Pathology I - practicals
([VLFY0422p](#) || [VSFY0422p](#)) && ([VSBC041p](#) || [VLBC0422p](#)) && ([VLAN0222p](#) || [VSAN0333p](#)) && ([VLHE0322p](#) || [VSHE0322p](#)) && [VLLM0421c](#) (Do I meet enrolment requirements?)

[Zobrazit další předměty](#)

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#), [Autumn 2015](#).

VSAN0333s Anatomy III - seminar ✨

Faculty of Medicine

Autumn 2016

Extent and Intensity

0/2/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[doc. RNDr. Ladislava Horáčková, Ph.D.](#) (seminar tutor)

[MUDr. Ivana Hradilová Sviženská, CSc.](#) (seminar tutor)

[MUDr. Marek Joukal, Ph.D.](#) (seminar tutor)

[MUDr. Iлона Klusáková, Ph.D.](#) (seminar tutor)
[MUDr. Roman Kopáček](#) (seminar tutor)
[doc. MUDr. Pavel Matonoha, CSc.](#) (seminar tutor)
[RNDr. Michaela Račanská, Ph.D.](#) (seminar tutor)
[MUDr. Drahomíra Stančeva Pernicová, Ph.D.](#) (seminar tutor)
[MUDr. Roman Trubač](#) (seminar tutor)
[MUDr. Lenka Vargová, Ph.D.](#) (seminar tutor)
[Mgr. Kateřina Vymazalová, Ph.D.](#) (seminar tutor)
[Dana Procházková](#) (assistant)

Supervisor

[prof. RNDr. Petr Dubový, CSc.](#)
[Department of Anatomy - Theoretical Departments - Faculty of Medicine](#)
Contact Person: [prof. RNDr. Petr Dubový, CSc.](#)
Supplier department: [Department of Anatomy - Theoretical Departments - Faculty of Medicine](#)

Prerequisites (in Czech)

[VSAN0232s Anatomy II s](#) && [VSAN0232c Anatomy II p](#) && [VSHE0221c Histology and Embryology I -p](#) && [VSLT0221s Bas. Med. Terminol. II -s](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

At the end of the course students should be able to:

1. Define organs of senses, endocrine glands, and organs of peripheral and central nervous systems
2. Identify particular anatomical features of the eye, ear, central and peripheral nervous systems (i.e. brain, spinal cord, and peripheral nerves) and endocrine system including their blood supply
3. Characterize function of organs of senses, endocrine glands, peripheral and central nervous systems
4. Discuss the distribution and function of the sympathetic and parasympathetic nervous systems
5. Relate studied organs with respect to adjacent structures

Syllabus

- 1. Basic anatomy of the nervous system. Anatomy of the spinal cord.
- 2. Anatomy of the brainstem, attachments of the cranial nerves.
- 3. Anatomy of the cerebellum. Anatomy of the diencephalon.
- 4. Anatomy of the telencephalon, basal ganglia.
- 5. Cranial nerves III., IV., VI., VII. Skull base.
- 6. Cranial nerve V. Pterygopalatine and infratemporal fossa.

- 7. Cranial nerves IX., X., XI., XII. . Regions of the neck.
- 8. Cervical plexus. Autonomic nervous system. Regions of the abdomen, projection of organs, inguinal canal.
- 9. Visual system. Orbital region.
- 10. Auditory system. Temporal region, scalp.
- 11. Meninges, ventricles, and blood supply of the CNS. Anatomical baseline for imaging of the brain.
- 12.and 13. Dissections. Credits (dissection). Practical examination II.
- 14. RTG anatomy. Credits (seminars).

Literature

recommended literature

- Základy anatomie - 4b. Periferní nervový systém, smyslové orgány a kůže Miloš Grim, Rastislav Druga et al., ISBN-13: 978-80-7492-156-8, Galén
- KACHLÍK, David and Ondřej VOLNÝ. *Memorix anatomy : comprehensive book of human anatomy in English and Latin*. Illustrated by Radovan Hudák - Jan Balko - Simona Felšöová - Šárka Zaváza. 1st edition. Praha: Triton, 2015. xvii, 610. ISBN 9788073879501. [info](#)
- HUDÁK, Radovan and David KACHLÍK. *Memorix anatomie*. 2. vyd. Kroměříž: Triton, 2013. xxi, 605. ISBN 9788073877125. [info](#)
- DUBOVÝ, Petr. *Gross anatomy and structure of the human nervous system*. Third edition. Brno: Masarykova univerzita, 2012. 90 stran. ISBN 9788021061255. [info](#)
- GRIM, Miloš and Rastislav DRUGA. *Regional anatomy*. Edited by Josef Stingl. 1. vyd. Praha: Galén, 2012. 123 s. ISBN 9788024621159. [info](#)
- DRUGA, Rastislav, Miloš GRIM and Petr DUBOVÝ. *Anatomie centrálního nervového systému*. První vydání. Praha: Galén, 2011. 219 stran. ISBN 9788072627066. [info](#)
- DRAKE, Richard L., Wayne VOGL, Adam W. M. MITCHELL and Henry GRAY. *Gray's anatomy for students*. 2nd ed. Philadelphia: Churchill Livingstone/Elsevier, 2010. xxv, 1103. ISBN 9780443069529. [info](#)
- *Atlas of anatomy : Latin nomenclature*. Edited by Anne Marie Gilroy - Brian R. MacPherson - Lawrence M. Ross - Michael S. New York: Thieme Medical, 2009. xv, 656. ISBN 9781604060997. [info](#)
- NETTER, Frank H. *Anatomický atlas člověka*. Edited by John T. Hansen, Translated by Libor Páč - Petr Dubový. Vyd. 2., rozš. Praha: Grada, 2005. [14], 542. ISBN 8024711532. [info](#)
- GRIM, Miloš and Rastislav DRUGA. *Základy anatomie*. 1. vyd. Praha: Galén, 2002. 119 s. ISBN 8072621793. [info](#)

Teaching methods

Practice with the human anatomical specimens

Assessment methods

Completion of the subject is assessed by the course-unit credit. A precondition for obtaining the course-unit credit is 95% attendance at the seminars (1 non-attendance tolerated).

Language of instruction

Czech
Follow-Up Courses

- [VSAN0333c Anatomy III - practice](#)

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

Information on course enrolment limitations: Mimo studenty LF, max. 15 studentů z PřF

The course is also listed under the following terms [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#), [Autumn 2015](#).

VSAT081 Fundamentals of Antimicrobial Therapy ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

2/0. 3 credit(s). Type of Completion: k (colloquium).

Teacher(s)

[MUDr. Lenka Černohorská, Ph.D.](#) (lecturer)

[MUDr. Renata Tejkalová](#) (lecturer)

[Ing. Veronika Holá, Ph.D.](#) (seminar tutor)

[MUDr. Ondřej Zahradníček](#) (assistant)

Supervisor

[prof. MUDr. Miroslav Votava, CSc.](#)

[Department of Microbiology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Contact Person: [MUDr. Renata Tejkalová](#)

Supplier department: [Department of Microbiology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Prerequisites

([VLLM0421c Med.Microbiol.](#) && [VLLM0522c Medical Microbiology II-pract.](#)) || ([STLM0421c Medical Microbiology - practice](#) && [STLM0522c Medical Microbiology II-prac.](#))

Subject is recommended for 4th and 5th year students, mostly after having exam from pharmacology.

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

The subject gives larger knowledge of antibiotics and their use in medical microbiology. Main objectives can be summarized as follows:

* to review a survey of medically important antimicrobial drugs, to get more practical information concerning individual groups of antibiotics (mostly from the point of view of a general practitioner)

* to have survey of factors of resistance of bacteria, and to know, what are the multiresistant strains of bacteria and what is their importance (MRSA, producers of ESBL, VRE etc.) * to get some information concerning basic guidelines for treatment of infections of respiratory ways, gastrointestinal tract, urinary system, genital system, bloodstream, tissues; hospital infections

* to understand basically treatment of immunocompromised persons, pregnant and lactating females, newborns and small babies

Syllabus

- **I. Theoretical basis of action of antimicrobial drugs**
- 1. Classification of antimicrobial agents, comparison with decontamination methods. Term "antibiotic", primarily bactericidal and bacteriostatic antibiotics.
- 2. Individual groups of antibiotics according to chemical similarity and effect mechanism - I Beta-lactam antibiotics, penicillins, cephalosporins, monobactams, carbapenems, polypeptides, quinolones
- 3. Individual groups of antibiotics according to chemical similarity and effect mechanism - II Aminoglycosides, aminopenicillins, tetracyclins, macrolides (including azalides and ketolides), lincosamids, sulphonamids, glycopeptides, ansamycins, other antibiotics
- 4. Survey of main mechanisms of resistance. Resistance to beta-lactam antibiotics: beta-lactamases, PBP alteration, decrease of permeability. Beta-lactamases globally. In vitro testing of susceptibility and resistance.
- 5. Epidemiologically important factors of resistance. ESBL. MRSA and MRSCN. Resistance to glycopeptides, VRE, VISA and VRSA. Note about other important resistance factors (to aminoglycosides, to macrolides, mostly MLS type in streptococci and staphylococci). Importance of nosocomial strains with factors of increased resistance, Their surveillance and measures when they occur. Detection of individual resistance factors
- **II. Treatment of infections of individual organ systems in practice**
- 6. Basics of antibiotic treatment of bloodstream infections, proper blood culture sampling, interpretation of finding in relation to therapy
- 7. Basics of treatment of locomotor system, pyogenic and anaerobic infections. Penetration of individual antibiotic groups to the tissues. Basics of antibiotic treatment of neural system and eye
- 8. Antibiotic treatment in gastrointestinal infections, including stomatological problems. Basics of antibiotic treatment of respiratory infections and otitis.
- 9. Basics of antibiotic therapy of urinary, genital and skin infections. 10. Basics of use of antivirals, antimycotics and antiparasitic drugs in various infections
- **III. Treatment of special cases. Basics of proper practice, treatment economics**
- 11. Treatment of neutropenic patients.

- 12. Basic rules for treatment in liver and kidney problems, in pregnancy, lactation and in children
- 13. Basics of proper antibiotic practice, antibiotic centers, prescription limits, economy of antimicrobial treatment.
- 14. Theme reserved

Literature

required literature

- Powerpointové prezentace, dostupné ve studijních materiálech. - Powerpoint slideshows, available in Study materials

recommended literature

- BENEŠ, Jiří. *Infekční lékařství*. 1. vyd. Praha: Galén, 2009. xxv, 651. ISBN 9788072626441. [info](#)
- JINDRÁK, Vlastimil, Dana HEDLOVÁ and Pavla URBÁŠKOVÁ. *Antibiotická politika a prevence infekcí v nemocnici*. První vydání. Praha: Mladá fronta, 2014. 709 stran. ISBN 9788020428158. [info](#)
- SIMON, Claus and Wolfgang STILLE. *Antibiotika v současné lékařské praxi*. Edited by Miroslav Hejzlar. 1. vyd. Praha: Grada, 1998. 711 s. ISBN 8071692689. [info](#)

Teaching methods

seminary, self-study

Assessment methods

Time schedule: Subject has the form of two-lesson seminars.

To get the colloquium, students have to be successful at the colloquial test, and also to participate on the lessons (max. 3 absences, partially may be substituted by a referate, more info on the first lesson).

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

Information on the extent and intensity of the course: 14 x 2 hodiny.

Listed among pre-requisites of other courses

- [VLCH11XX Surgery - State Exam](#)
([VLFA0822p](#) || [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && [VYCET\(3, \[VLPS07X\]\(#\) || \[VLPS071\]\(#\), \[VSAT081\]\(#\), \[VLKA091\]\(#\), \[VSNO071\]\(#\), \[VSPM071\]\(#\), \[VLKB091\]\(#\), \[VLKF091\]\(#\), \[BMBS051\]\(#\), \[VLPM071\]\(#\), \[VLEP041\]\(#\), \[VLIA081\]\(#\), \[VLKM081\]\(#\), \[VLRL041\]\(#\), \[VLTL081\]\(#\), \[VSDL071\]\(#\), \[VSAL081\]\(#\), \[VSFP071\]\(#\)\)](#) && [VLCH9X33c](#) &&

[\(VLAJ0222 || VSAJ0222 || VSNJ0222\)](#) && [VSSP03X](#) (Do I meet enrolment requirements?)

- **[VLDP11XX](#)** Paediatrics - State Exam

[\(VLFA0822p || VLFA0722p\)](#) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && [\(VLVL7X61c || VLVL9X61c\)](#) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && [\(VLVL9X65c || VLVL7X65c\)](#) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLR041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && [\(VLAJ0222 || VSAJ0222 || VSNJ0222\)](#) && [VSSP03X](#) (Do I meet enrolment requirements?)

- **[VLPG11XX](#)** Obstetric and Gynaecology - State Exam

[\(VLFA0822p || VLFA0722p\)](#) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && [VLVL9X66c](#) && [\(VLVL9X65c || VLVL7X65c\)](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VSNO071](#), [VLKA091](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSDL071](#), [VLR041](#), [VLIA081](#), [VLKM081](#), [VSFP071](#)) && [VLCH9X33c](#) && [\(VSAJ0222 || VSNJ0222\)](#) && [VSSP03X](#) (Do I meet enrolment requirements?)

- **[VLR11XX](#)** Family Medicine and Geriatrics

[\(VLFA0822p || VLFA0722p\)](#) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && [\(VLVL7X61c || VLVL9X61c\)](#) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && [\(VLVL9X65c || VLVL7X65c\)](#) && [VLVL9X66c](#) && [VLIN9X22](#) && [VLPL9X1](#) && [VLON091](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLR041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSFP071](#)) && [VLCH9X33c](#) && [\(VLAJ0222 || VSAJ0222 || VSNJ0222\)](#) (Do I meet enrolment requirements?)

- **[VLVL11XX](#)** Internal Medicine - State Exam

[\(VLFA0822p || VLFA0722p\)](#) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && [\(VLVL7X61c || VLVL9X61c\)](#) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && [\(VLVL9X65c || VLVL7X65c\)](#) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLR041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && [\(VLAJ0222 || VSAJ0222 || VSNJ0222\)](#) && [VSSP03X](#) (Do I meet enrolment requirements?)

- **[VLZP11XX](#)** Public Health - State Exam

[\(VLFA0822p || VLFA0722p\)](#) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#)

&& [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) || [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) || [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLS7X1p](#) && [VSEI7X1](#) && [VL7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLP1022c](#) && VYCET(3, [VLPS07X](#) || [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLR041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) || [VSAJ0222](#) || [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

Teacher's information

Na jaře 2010 je předmět vyučován v úterý 16.50 až 18.30 v posluchárně I. patologického ústavu, budova H, FN u sv. Anny. E-mailový a telefonický kontakt - E-mail and phone contact:

MUDr. Renata Tejkalová: renata.tejkalova@fnusa.cz, TEL 543 183 096 (popřípadě 543 183 109, 543 183 097)

Doc. MUDr. Filip Růžička, PhD: fruzic@fnusa.cz, TEL 543 183 090 (přednosta ústavu/head)

prof. MUDr. Miroslav Votava, CSc.: miroslav.votava@fnusa.cz, TEL 543 183 117

as. MUDr. Ondřej Zahradníček: zahradnicek@fnusa.cz, TEL 543 183 113

odb. as. MUDr. Lenka Černohorská, PhD.: lenka.cernohorska@fnusa.cz, TEL 543 183 097

odb. as. Mgr. Monika Dvořáková Heroldová, PhD: monika.heroldova@fnusa.cz

as. Mgr. Barbora Žaloudíková: barzal@cktch.cz

as. Mgr. Martina Mahelová: 150878@mail.muni.cz

Předmět převážně vyučuje dr. Tejkalová, vedoucí antibiotického střediska Mikrobiologického ústavu LF MU a FN u sv. Anny v Brně. (Dr. Tejkalová je převážně zaměstnankyní fakultní nemocnice, proto ji nenajdete v seznamu kmenových učitelů ústavu.)

The course is also listed under the following terms [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2019](#), [Accreditation spring](#).

VSBC0221p Biochemistry I - lecture ✨

Faculty of Medicine

Spring 2016

Extent and Intensity

2/0. 4 credit(s). Type of Completion: zk (examination).

Teacher(s)

[doc. RNDr. Jiří Dostál, CSc.](#) (lecturer)
[RNDr. Hana Paulová, CSc.](#) (lecturer)
[Mgr. Jiří Slanina, Ph.D.](#) (lecturer)
[prof. RNDr. Eva Táborská, CSc.](#) (lecturer)
[doc. RNDr. Josef Tomandl, Ph.D.](#) (lecturer)
[Ing. Martina Čarnecká, Ph.D.](#) (assistant)
[Mgr. Gabriela Dovrtělová](#) (assistant)
[Mgr. Jana Gregorová, Ph.D.](#) (assistant)
[MUDr. Miroslava Hlaváčová](#) (assistant)
[Mgr. Katarína Kostolanská](#) (assistant)
[MUDr. Michaela Králíková, Ph.D.](#) (assistant)
[Mgr. Milena Matejovičová, Ph.D.](#) (assistant)
[Lenka Nerudová](#) (assistant)
[Mgr. Kristýna Nosková](#) (assistant)
[Mgr. Lucie Novotná](#) (assistant)
[Mgr. Ondřej Peš, Ph.D.](#) (assistant)
[Mgr. Anna Pleskačová](#) (assistant)
[Mgr. Roman Sándor](#) (assistant)
[PharmDr. Kristýna Šebrlová, Ph.D.](#) (assistant)
[Mgr. Marie Tomandlová, Ph.D.](#) (assistant)
[PharmDr. Miroslav Turjap, Ph.D.](#) (assistant)

Supervisor

[prof. RNDr. Eva Táborská, CSc.](#)
[Department of Biochemistry - Theoretical Departments - Faculty of Medicine](#)
Supplier department: [Department of Biochemistry - Theoretical Departments - Faculty of Medicine](#)

Prerequisites (in Czech)

[VSLC011s Med. Chem. - seminar](#) && [VSLC011c Medical chemistry practice](#) &&
[ZC011 Handling chemical substances](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [Dietitian](#) (programme LF, B-SZ)
- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

The aim of the course is to obtain knowledge on essential metabolic processes on the cell level. The graduate is acquainted with properties and function of enzymes, is oriented in

catabolic and anabolic pathways of metabolism of saccharides, lipids and proteins and their consequences. Understands the principles of cell bioenergetics. Become familiar with the function of cell membranes, principle of cell compartmentation and membrane transport. Has knowledge on protein synthesis including processes replication, transcription, translation and posttranslational modifications. Understands the relation between the structure and function of proteins. Is acquainted with function of hemoglobin in oxygen transport. Molecular bases of some diseases are introduced. The course provides the essential knowledge for future understanding of metabolism on organ and inter-organ level and its disturbances.

Syllabus

- Membrane structure, the assembly and recycling of membranes. Specialized structures of plasma membrane – lipid rafts, caveols, tight junctions. Membrane transport. Enzymes. Characteristic features of biocatalysis, enzyme structure and function, nomenclature and classification of enzymes. Enzyme cofactors, review of structures and functions. Mechanisms of enzyme action. Kinetics of enzyme catalyzed reactions. Assays of enzyme activity, the conditions used. Factors affecting catalytic activity of enzymes, types of enzyme inhibition. Metabolism: basic concepts and design. Biological oxidations, generation of high-energy compounds. Saccharide metabolism: the glycolytic pathway and aerobic decarboxylation of pyruvate. Gluconeogenesis. Glycogen biosynthesis and breakdown. The pentose phosphate pathway. The glucuronate pathway. Interconversions of monosaccharides and of their derivatives. Protein and amino acid metabolism. The common reactions in amino acid degradation. The ureosynthetic cycle. Metabolic breakdown of individual amino acids. Biosynthesis and breakdown of fatty acids, ketogenesis. Synthesis of triacylglycerols. Metabolism of phospholipids and glycolipids. Synthesis of eicosanoids. Biosynthesis and transformations of cholesterol, biosynthesis of bile acids. Interrelationships among the major pathways involved in energy metabolism. The citric acid cycle. Synthesis of haem. Mitochondria. Oxidative phosphorylation - mitochondrial electron transport chain, synthesis of ATP. Structure of haemoglobin, structure-function relationships (the oxygen saturation curve, inducement of haemoglobin saturation and oxygen transport. Bohr effect. Normal haemoglobin types in blood, haemoglobin concentration. Other forms (glycohaemoglobin, methaemoglobin, carboxyhaemoglobin) and abnormal haemoglobins. Biosynthesis and catabolism of purine and pyrimidine nucleotides. Chromatin, DNA replication. DNA transcription. Regulation of gene expression. Protein synthesis and post-translational processing.

Literature

required literature

- KOOLMAN, Jan and Klaus-Heinrich RÖHM. *Barevný atlas biochemie*. Grada. Praha, 2012. 498 pp. ISBN 978-80-247-2977-0. [info](#)
- KOOLMAN, Jan and Klaus-Heinrich ROEHM. *Color Atlas of Biochemistry*. 3rd ed. : Georg Thieme Verlag, 2013. ISBN 978-3-13-100373-7. [info](#)

recommended literature

- LEDVINA, Miroslav, Alena STOKLASOVÁ and Jaroslav CERMAN. *Biochemie pro studující medicíny, I. a II. díl*. Druhé vydání. Praha: Karolinum, 2009. 546 pp. ISBN 978-80-246-1414-4. [info](#)

Teaching methods

Teaching form are lectures. Supplementary subjects are seminars VSBC021s

Assessment methods

Student must have course-unit credit of seminar in the day of exam. Examination has written and oral part. The examination has two parts. The computer test (ROPOT) is the first part of the examination. The test consists of 25 questions. An essential knowledge ranging over all studied topics is required. Above all, the structural formulas of compounds with biochemical significance, chemical equations of elemental reactions in major metabolic pathways (with particular formulas), and basic principles of metabolic control. Only those students who gain 14 correct answers at a minimum will be permitted to sit for the oral examination. The oral part of examination: Students select three questions and have about 30 minutes for the written preparation. They should summarize their answers as concisely and accurately as possible. It is recommended to follow these items: - to write a brief synopsis emphasizing the main ideas. - to draw metabolic pathways in structural formulas with a short comment. - where appropriate, to draw a picture (e.g. membranes, respiratory chain etc.). A good and concise preparation reflects the students' knowledge and understanding the biochemistry and will be considered in the final classification.

Language of instruction

Czech

Further comments (probably available only in Czech)

Information on completion of the course: zkoušku lze konat až po absolvování zkoušky z Lékařské chemie

The course is taught annually.

The course is taught: every week.

Information on course enrolment limitations: Přihlášení ke zkoušce je podmíněno vykonáním zkoušky z Lékařské chemie.

Listed among pre-requisites of other courses

- [BVTO0311c Medical toxicology - laboratory course](#)
[BVBC0221p](#)||[VSBC0221p](#)&&[BVEK011p](#) ([Do I meet enrolment requirements?](#))
- [BVTO0311p Medical toxicology - lecture](#)
[BVBC0221p](#)||[VSBC0221p](#)&&[BVEK011p](#) ([Do I meet enrolment requirements?](#))
- [VLIM051c Immunology - practice](#)
([VLBC0422p](#) ||[VSBC0221p](#)) && ([VSFY0422p](#) || [VLFY0422p](#)) ([Do I meet enrolment requirements?](#))
- [VLIM051p Immunology - lecture](#)
([VLBC0422p](#) ||[VSBC0221p](#)) && ([VSFY0422p](#) || [VLFY0422p](#)) ([Do I meet enrolment requirements?](#))

Teacher's information

<http://www.med.muni.cz/toCP1250.cs/biochem/vyuka.html>

The course is also listed under the following terms [Spring 2002](#), [Spring 2003](#), [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#).

VSBC0221s Biochemistry I - seminar ✳

Faculty of Medicine

Spring 2016

Extent and Intensity

0/2. 1 credit(s). Type of Completion: z (credit).

Teacher(s)

[Ing. Martina Čarnecká, Ph.D.](#) (seminar tutor)
[doc. RNDr. Jiří Dostál, CSc.](#) (seminar tutor)
[MUDr. Michaela Králíková, Ph.D.](#) (seminar tutor)
[Mgr. Milena Matejovičová, Ph.D.](#) (seminar tutor)
[RNDr. Hana Paulová, CSc.](#) (seminar tutor)
[Mgr. Jiří Slanina, Ph.D.](#) (seminar tutor)
[prof. RNDr. Eva Táborská, CSc.](#) (seminar tutor)
[doc. RNDr. Josef Tomandl, Ph.D.](#) (seminar tutor)
[Mgr. Marie Tomandlová, Ph.D.](#) (seminar tutor)
[Mgr. Jana Gregorová, Ph.D.](#) (assistant)
[MUDr. Miroslava Hlaváčová](#) (assistant)
[Lenka Nerudová](#) (assistant)
[Mgr. Ondřej Peš, Ph.D.](#) (assistant)
[PharmDr. Kristýna Šebrlová, Ph.D.](#) (assistant)

Supervisor

[prof. RNDr. Eva Táborská, CSc.](#)
[Department of Biochemistry - Theoretical Departments - Faculty of Medicine](#)
Supplier department: [Department of Biochemistry - Theoretical Departments - Faculty of Medicine](#)

Prerequisites (in Czech)

[VSLC011c Medical chemistry practice](#) && [VSLC011s Med. Chem. - seminar](#) &&
[ZC011 Handling chemical substances](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [Dietitian](#) (programme LF, B-SZ)
- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

Seminars are complementary to Biochemistry lecture (VSBC021p). At the end of the course student understand and can describe the major metabolic pathways and their significance.

Syllabus

- Introduction into the metabolism of cells (differences between prokaryotic and eukaryotic cell, compartmentation of metabolic processes, non-covalent interactions). Structure of haemoglobin and its relationship to the function. Hb types in the blood of healthy subjects, HbCO and MetHb, abnormal Hb types. Enzymes - reaction rate, progress curve, the Michaelis plot and K_m , enzyme inhibition. Coenzymes, their relationship to vitamins. Written test I (Biochemical methods, haemoglobin, enzymology, coenzymes.) Membrane structure and assembly. Transport across membranes. Metabolism of glucose: Glycolysis under anaerobic and aerobic conditions and the oxidation of pyruvate. Gluconeogenesis. Glycogenesis and glycogenolysis. Metabolism of proteins. Common features of amino acid conversion. The synthesis of urea. Nitrogen balance. Important reactions in amino acid catabolism. Written test II (Membranes, transport across membranes, metabolism of saccharides and amino acids.) Biosynthesis and desaturation of fatty acids. The sources of essential fatty acids. Metabolism of triacylglycerols. Metabolism of phospholipids. Biosynthesis of eicosanoids. Peroxidation of lipids. Written test III (Metabolism of lipids.) The citric acid cycle. The respiratory chain and oxidative phosphorylation. Replication, transcription, proteosynthesis.

Literature

required literature

- Podklady k seminářům dostupné v Informačním systému
- Seminar texts available in Information system

Teaching methods

Course is based on group discussion to the given topics. The outlines of discussion are in the recommended textbook. Complementary materials are available in section Study materials.

Assessment methods

Conditions for giving the course-unit credit Three short tests are written during the semester. Students that will obtain 52/75 points or more during the semester are not obliged to write the credit test. The other students will write the credit test with the 30 questions in the last week of the semester. The limit for passing the credit test is 14 points. All absences must be made up before writing the credit test. Students that will not fulfill this limit will be allowed to repeat the test once. Students that will not fulfill this requirement will not be given the course-unit credit. Obtaining of course-unit credits of practices and seminars is the pre-requisite for registration to the examination of Biochemistry I.

Language of instruction

Czech

Further Comments

The course is taught annually.

The course is taught: every week.

The course is also listed under the following terms [Spring 2002](#), [Spring 2003](#), [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#).

VSBC041c Biochemistry II -practice ✱

Faculty of Medicine

Spring 2016

Extent and Intensity

0/3/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[Ing. Martina Čarnecká, Ph.D.](#) (seminar tutor)
[doc. RNDr. Jiří Dostál, CSc.](#) (seminar tutor)
[Mgr. Jana Gregorová, Ph.D.](#) (seminar tutor)
[MUDr. Miroslava Hlaváčová](#) (seminar tutor)
[MUDr. Michaela Králíková, Ph.D.](#) (seminar tutor)
[Mgr. Milena Matejovičová, Ph.D.](#) (seminar tutor)
[RNDr. Hana Paulová, CSc.](#) (seminar tutor)
[Mgr. Ondřej Peš, Ph.D.](#) (seminar tutor)
[Mgr. Jiří Slanina, Ph.D.](#) (seminar tutor)
[PharmDr. Kristýna Šebrlová, Ph.D.](#) (seminar tutor)
[prof. RNDr. Eva Tábořská, CSc.](#) (seminar tutor)
[doc. RNDr. Josef Tomandl, Ph.D.](#) (seminar tutor)
[Mgr. Marie Tomandlová, Ph.D.](#) (seminar tutor)
[Mgr. Katarína Kostolanská](#) (assistant)
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[Mgr. Lucie Novotná](#) (assistant)
[Mgr. Anna Pleskačová](#) (assistant)
[Mgr. Roman Sándor](#) (assistant)

Supervisor

[prof. RNDr. Eva Tábořská, CSc.](#)
[Department of Biochemistry - Theoretical Departments - Faculty of Medicine](#)
Supplier department: [Department of Biochemistry - Theoretical Departments - Faculty of Medicine](#)

Timetable of Seminar Groups

VSBC041c/01: Mon 10:15–12:45 [A16/211](#)
VSBC041c/02: Mon 10:15–12:45 [A16/211](#), *M. Tomandlová*
VSBC041c/03: Mon 10:15–12:45 [A16/211](#)
VSBC041c/04: Mon 7:30–10:00 [A16/211](#)
VSBC041c/05: Mon 7:30–10:00 [A16/211](#), *M. Tomandlová*
VSBC041c/06: Mon 7:30–10:00 [A16/211](#)
VSBC041c/07: Tue 13:00–15:30 [A16/211](#)
VSBC041c/08: Tue 13:00–15:30 [A16/211](#)

VSBC041c/09: Tue 13:00–15:30 [A16/211](#), *M. Hlaváčová*
VSBC041c/10: Wed 10:45–13:15 [A16/211](#)
VSBC041c/11: Wed 10:45–13:15 [A16/211](#), *M. Tomandlová*
VSBC041c/12: Wed 10:45–13:15 [A16/211](#), *M. Králíková*
VSBC041c/13: Thu 14:30–17:00 [A16/211](#)
VSBC041c/14: Thu 14:30–17:00 [A16/211](#)
VSBC041c/15: Thu 14:30–17:00 [A16/211](#), *M. Hlaváčová*
VSBC041c/16: Mon 13:30–16:00 [A16/211](#)
VSBC041c/17: Mon 13:30–16:00 [A16/211](#)
VSBC041c/18: Mon 13:30–16:00 [A16/211](#)
VSBC041c/30: No timetable has been entered into IS.
VSBC041c/31: No timetable has been entered into IS.
VSBC041c/32: No timetable has been entered into IS.
VSBC041c/33: No timetable has been entered into IS.
VSBC041c/34: No timetable has been entered into IS.
VSBC041c/35: No timetable has been entered into IS.
VSBC041c/36: No timetable has been entered into IS.
VSBC041c/37: No timetable has been entered into IS.

Prerequisites (in Czech)

[VSLC011p Med. Chemistry - lecture](#) && [VSBI0222p Biology II-lect.](#) && ([VSBF011p Biophysics](#) || [VLBF011p Biophysics-lect.](#) || [STBF011p Biophysics](#)) && [VSBC0221s Biochemistry I sem](#) && [VSFY0321c Physiology I - practice](#) && [VSFY0321s Physiology I - seminar](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Course is complementary to VSLC0421p and VSLC0421s. The aim of the course is to bring experience with solving practical problems in clinical biochemistry, to acquire practical laboratory skills and to learn students to use results of biochemical analysis for diagnostics.

Syllabus

- Handling biological material. Anticoagulants and their use for blood plasma separation. Communicating results of tests in clinical biochemistry: request forms and laboratory reports.
- Analysis of the absorption spectra of haemoglobin, oxyhaemoglobin and carbonylhaemoglobin. Determination of haemoglobin in blood. Urine test for haemoglobin.
- Determination of total bilirubin in serum. Estimation of bilirubin, urobilinogens and urobilins in urine.

- Determination of total serum proteins by biuret reagent, determination of albumin. Precipitation tests for urine proteins. Detection of proteinuria by diagnostic strips.
- Determination of alanine aminotransferase activity in serum. Determination of alkaline phosphatase activity in serum.
- The enzymatic assay of glucose in blood and urine. Oral glucose tolerance test. Estimation of glycaemia by diagnostic strips. Detection of glucose in urine.
- Determination of total cholesterol in serum. Principles of HDL-cholesterol determination and calculation of the LDL-cholesterol concentration. Chromatography of serum lipids.
- The solubility of uric acid. Murexide test for uric acid. Detection of uric acid in renal calculi. Determination of uric acid in serum and urine.
- Determination of urea in serum and urine. Approximate assessment of the nitrogen balance.
- Appearance and volume of urine, specific gravity and osmolality of urine. Urine pH measurement. Determination of creatinine in blood, serum and urine. Creatinine clearance calculation, calculation of tubular reabsorption and fractional excretion of water.
- Tests in routine urinalysis employing chemical principle: determination of pathological components, multipurpose diagnostic strips in urinalysis.
- Simplified chemical analysis of renal calculi. Practice in urinalysis, seeking for pathological constituents in urine.
- Determination of gastric acid output. Tubeless gastric analyses. Detection of lactic acid.
- Imunochemical assays.

Literature

required literature

- Podklady ke cvičení dostupné v Informačním systému
- Instructions for practicals available in Information system

Teaching methods

laboratory practicals

Assessment methods

Practicals in biochemistry lab.

Full attendance in all lessons (making up all missing and justified lessons), completion of all lab reports and handing them to the teacher till the given data. Obtaining of course-unit credits of practices is the pre-requisite for registration to the examination of Biochemistry I.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

Information on course enrolment limitations: mimo studenty LF, max 5 posluchačů z MU, po dohodě s vedoucím ústavu

Listed among pre-requisites of other courses

- [aVLLM0522c Medical Microbiology II - practice](#) ([VLLM0421c](#) || [aVLLM0421c](#)) && ([aVLBC0422c](#) || [VSBC041c](#)) && ([aVLBC0422s](#) || [VSBC041s](#)) ([Do I meet enrolment requirements?](#))
- [aVLLP0532c Clinical Introduction II - practice](#) ([aVLLP0431c](#) && ([aVLAN0222p](#) || [VSAN0333p](#)) && ([aVLHE0322c](#) || [VSHE0322c](#))) && ([aVLBC0422c](#) || [VSBC041c](#)) && [aVLFY0422c](#) ([Do I meet enrolment requirements?](#))
- [VLLM0522c Medical Microbiology II - practice](#) ([VLLM0421c](#) && ([VLBC0422c](#) || [VSBC041c](#)) && ([VLBC0422s](#) || [VSBC041s](#))) ([Do I meet enrolment requirements?](#))
- [VLLP0532c Clinical Introduction II](#) ([VLLP0431c](#) && ([VLAN0222p](#) || [VSAN0333p](#)) && ([VLHE0322c](#) || [VSHE0322c](#))) && ([VLBC0422c](#) || [VSBC041c](#)) && ([VLFY0422c](#) || [VSFY0422c](#)) ([Do I meet enrolment requirements?](#))

Teacher's information

<http://www.med.muni.cz/toCPI250.cs/biochem/vyuka.html>

The course is also listed under the following terms [Spring 2003](#), [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#).

VSBC041p Biochemistry II -lecture ✨

Faculty of Medicine

Spring 2019

Extent and Intensity

1/0/0. 3 credit(s). Type of Completion: zk (examination).

Teacher(s)

[doc. RNDr. Jiří Dostál, CSc.](#) (lecturer)

[RNDr. Hana Paulová, CSc.](#) (lecturer)

[Mgr. Jiří Slanina, Ph.D.](#) (lecturer)

[prof. RNDr. Eva Tábořská, CSc.](#) (lecturer)

[doc. RNDr. Josef Tomandl, Ph.D.](#) (lecturer)

[Mgr. Stanislav Brejcha](#) (assistant)

[Ing. Martina Čarnecká, Ph.D.](#) (assistant)

[Mgr. Gabriela Dovrtělová](#) (assistant)

[Mgr. Jana Gregorová, Ph.D.](#) (assistant)

[MUDr. Miroslava Hlaváčová](#) (assistant)

[Mgr. Katarína Kostolanská](#) (assistant)

[MUDr. Michaela Králíková, Ph.D.](#) (assistant)

[Mgr. Milena Matejovičová, Ph.D.](#) (assistant)

[Lenka Nerudová](#) (assistant)

[Mgr. Kristýna Nosková](#) (assistant)

[Mgr. Lucie Novotná](#) (assistant)

[Mgr. Ondřej Peš, Ph.D.](#) (assistant)

[Mgr. Anna Pleskačová](#) (assistant)
[Mgr. Roman Sándor](#) (assistant)
[PharmDr. Kristýna Šebrlová, Ph.D.](#) (assistant)
[Mgr. Marie Tomandlová, Ph.D.](#) (assistant)
[PharmDr. Miroslav Turjap, Ph.D.](#) (assistant)

Supervisor

[prof. RNDr. Eva Tábořská, CSc.](#)
[Department of Biochemistry - Theoretical Departments - Faculty of Medicine](#)
Supplier department: [Department of Biochemistry - Theoretical Departments - Faculty of Medicine](#)

Prerequisites (in Czech)

[VSLC011p Med. Chemistry - lecture](#) && [VSBI0222p Biology II-lect.](#) && (
[VSBF011p Biophysics](#) || [VLBF011p Biophysics-lect.](#) || [STBF011p Biophysics](#)) &&
[VSBC0221s Biochemistry I sem](#) && [VSFY0321c Physiology I - practice](#) &&
[VSFY0321s Physiology I - seminar](#)
(Do I meet enrolment requirements?)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The course extends the knowledge of biochemistry acquired in the course Biochemistry I and deals with integration of biochemical processes in human body. Upon completion of this course the student should understand: biochemical processes characteristic for individual organs and tissues and principles of their regulation, metabolic interrelationships between metabolism of nutrients under various conditions in organism, principles of maintenance of homeostasis and acid-base equilibrium in the body. He should also recognize which aspects of the biochemical pathways, when altered, lead to diseases.

Syllabus

- Digestion and absorption of lipids. Blood plasma lipids and the major groups of lipoproteins. Metabolic fate of chylomicrons and VLDL, the metabolism of HDL. The biosynthesis of steroid hormones. The synthesis and hydroxylation of calcitriol. The integration of intermediary metabolism at the tissue and organ level. The metabolic functions of the liver. Catabolism of haemoglobin, bilirubin metabolism. Metabolism of iron. Biotransformation of xenobiotics. Control of metabolism. Mechanism of hormone and neurotransmitter action. Types of cell membrane receptors, intracellular effects of ligand binding; intracellular receptors. Nerve cells. Neurosecretion. The biosynthesis and inactivation of neurotransmitters, neurotransmission across synapses. Cholinergic, adrenergic, and (inhibitory) gabaergic receptors. Body water, the movement of water between ECF and ICF, water excretion. Ionic composition of blood plasma, gradients of

Na⁺ and K⁺ across cell membranes. Osmolality of ECF, regulation of the ECF osmolality and volume, fluid and electrolyte balance. Transport of O₂ and CO₂. Metabolic pathways producing/consuming H⁺ ions. Buffer bases of blood, blood plasma (concentrations of components), ICF, the parameters of acid-base status. The role of the lung, the kidney, and the liver in maintaining acid-base balance. Normal renal functions. Glomerular filtration. Tubular resorption and secretion. The major proteins of blood plasma. The blood-coagulation cascade, inhibition of clotting. Fibrinogen, fibrin, fibrinolysis. Blood cells. The specific immune response. Soluble and cell free antigens, immunoglobulin structures. Circulating immune complexes, secondary reactions. The extracellular matrix. Synthesis and post-translational modifications of collagen, intermolecular crosslinks in collagen and elastin, proteoglycans. Calcification of bone, regulation. Biochemical markers of bone resorption and formation.

Literature

required literature

- KOOLMAN, Jan and Klaus-Heinrich RÖHM. *Barevný atlas biochemie*. Grada. Praha, 2012. 498 pp. ISBN 978-80-247-2977-0. [info](#)
- KOOLMAN, Jan and Klaus-Heinrich ROEHM. *Color Atlas of Biochemistry*. 3rd ed. : Georg Thieme Verlag, 2013. ISBN 978-3-13-100373-7. [info](#)
- RODWELL, Victor W., David A. BENDER, Kathleen M. BOTHAM, Peter J. KENNELLY and P. Antony WEIL. *Harper's Illustrated Biochemistry*. 30th ed. : McGraw-Hill Education, 2015. 817 pp. ISBN 978-1-259-25286-0. [info](#)

recommended literature

- LEDVINA, Miroslav, Alena STOKLASOVÁ and Jaroslav CERMAN. *Biochemie pro studující medicíny, I. a II. díl*. Druhé vydání. Praha: Karolinum, 2009. 546 pp. ISBN 978-80-246-1414-4. [info](#)

Teaching methods

Teaching form are lectures. Supplementary subjects are seminars and practicals (VSBC041c and VSBC041s).

Assessment methods

Student must have course-unit credit of seminar and practicals in the day of exam. The examination has written and oral part. The test consists of 25 questions and is solved on computers in the computer room of Department of Biochemistry (personal university ID /UCO/ and pass-word for IS MUNI is necessary for entrance to the test): As a rule, 10 questions are from practical exercises. Remaining 15 questions cover essential knowledge ranging over all studied topics. Only those students who gain 14 correct answers at a minimum will be permitted to sit for the oral examination. The oral part of examination Students select three questions and have about 30 minutes for the written preparation. They should summarize their answers as concisely and accurately as possible. It is recommended to follow these items: - to write a brief synopsis emphasizing the main ideas. - to draw metabolic pathways in structural formulas with a short comment. - where appropriate, to draw a picture. A good and concise preparation reflects the students'

knowledge and understanding the biochemistry and will be considered in the final classification.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

Information on course enrolment limitations: Přihlášení ke zkoušce je podmíněno vykonáním zkoušky z Biochemie I.

Listed among pre-requisites of other courses

- [aVLIM051c Immunology - practice](#)
([aVLBC0422p](#) || [VSBC041p](#)) && ([VSFY0422p](#) || [aVLFY0422p](#)) (Do I meet enrolment requirements?)
- [aVLIM051p Immunology - lecture](#)
([aVLBC0422p](#) || [VSBC041p](#)) && ([VSFY0422p](#) || [aVLFY0422p](#)) (Do I meet enrolment requirements?)
- [aVLLM0522p Medical Microbiology II - lecture](#)
([VLLM0421c](#) || [aVLLM0421c](#)) && ([aVLBC0422p](#) || [VSBC041p](#)) (Do I meet enrolment requirements?)
- [aVLPF0521c Pathological physiology I - practice](#)
([aVLFY0422p](#) || [VSFY0422p](#)) && ([VSBC041p](#) || [aVLBC0422p](#)) && ([VLLM0421c](#) || [aVLLM0421c](#)) (Do I meet enrolment requirements?)
- [aVLPF0521p Pathological Physiology I - lecture](#)
([aVLFY0422p](#) || [VSFY0422p](#)) && ([VSBC041p](#) || [aVLBC0422p](#)) && ([VLLM0421c](#) || [aVLLM0421c](#)) (Do I meet enrolment requirements?)
- [BMBS051 Biostatistics - basic course](#)
[VLLM0522p](#) && [VLIM051p](#) && ([VSBC041p](#) || [VSBC0422p](#)) && [VSIP0622c](#) (Do I meet enrolment requirements?)
- [VLLM0522p Medical Microbiology II - lecture](#)
[VLLM0421c](#) && ([VLBC0422p](#) || [VSBC041p](#)) (Do I meet enrolment requirements?)
- [VLPA0521c Pathology I - practicals](#)
([VLFY0422p](#) || [VSFY0422p](#)) && ([VSBC041p](#) || [VLBC0422p](#)) && ([VLAN0222p](#) || [VSAN0333p](#)) && ([VLHE0322p](#) || [VSHE0322p](#)) && [VLLM0421c](#) (Do I meet enrolment requirements?)
- [VLPA0521p Pathology I - lecture](#)
([VLFY0422p](#) || [VSFY0422p](#)) && ([VSBC041p](#) || [VLBC0422p](#)) && ([VLAN0222p](#) || [VSAN0333p](#)) && ([VLHE0322p](#) || [VSHE0322p](#)) && [VLLM0421c](#) (Do I meet enrolment requirements?)

[Zobrazit další předměty](#)

Teacher's information

<http://www.med.muni.cz/toCP1250.cs/biochem/vyuka.html>

The course is also listed under the following terms [Spring 2003](#), [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#).

VSBC041s Biochemistry II - seminar ✨

Faculty of Medicine

Spring 2016

Extent and Intensity

0/2/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[doc. RNDr. Jiří Dostál, CSc.](#) (seminar tutor)
[RNDr. Hana Paulová, CSc.](#) (seminar tutor)
[Mgr. Jiří Slanina, Ph.D.](#) (seminar tutor)
[prof. RNDr. Eva Táborská, CSc.](#) (seminar tutor)
[doc. RNDr. Josef Tomandl, Ph.D.](#) (seminar tutor)
[Mgr. Stanislav Brejcha](#) (assistant)
[Ing. Martina Čarnecká, Ph.D.](#) (assistant)
[Mgr. Gabriela Dovrtělová](#) (assistant)
[Mgr. Jana Gregorová, Ph.D.](#) (assistant)
[MUDr. Miroslava Hlaváčová](#) (assistant)
[Mgr. Katarína Kostolanská](#) (assistant)
[MUDr. Michaela Králíková, Ph.D.](#) (assistant)
[Mgr. Milena Matejovičová, Ph.D.](#) (assistant)
[Lenka Nerudová](#) (assistant)
[Mgr. Kristýna Nosková](#) (assistant)
[Mgr. Lucie Novotná](#) (assistant)
[Mgr. Ondřej Peš, Ph.D.](#) (assistant)
[Mgr. Anna Pleskačová](#) (assistant)
[Mgr. Roman Sándor](#) (assistant)
[PharmDr. Kristýna Šebrlová, Ph.D.](#) (assistant)
[Mgr. Marie Tomandlová, Ph.D.](#) (assistant)
[PharmDr. Miroslav Turjap, Ph.D.](#) (assistant)

Supervisor

[prof. RNDr. Eva Táborská, CSc.](#)

[Department of Biochemistry - Theoretical Departments - Faculty of Medicine](#)

Supplier department: [Department of Biochemistry - Theoretical Departments - Faculty of Medicine](#)

Timetable of Seminar Groups

VSBC041s/01: Wed 13:35–15:15 [A16/213](#)

VSBC041s/02: Wed 13:35–15:15 [A16/213](#)

VSBC041s/03: Wed 13:35–15:15 [A16/213](#), *H. Paulová*

VSBC041s/04: Wed 13:35–15:15 [A16/213](#), *H. Paulová*

VSBC041s/05: Wed 7:30–9:10 [A16/213](#), *J. Slanina*

VSBC041s/06: Wed 7:30–9:10 [A16/213](#), *J. Slanina*

VSBC041s/07: Wed 7:30–9:10 [A16/213](#), *H. Paulová*
VSBC041s/08: Wed 7:30–9:10 [A16/213](#), *H. Paulová*
VSBC041s/09: Wed 10:00–11:40 [A16/213](#), *J. Tomandl*
VSBC041s/10: Mon 8:30–10:10 [A16/213](#), *M. Králíková*
VSBC041s/11: Wed 15:30–17:10 [A16/213](#), *J. Dostál*
VSBC041s/12: Wed 15:30–17:10 [A16/213](#), *J. Dostál*
VSBC041s/13: Wed 10:00–11:40 [A16/213](#), *J. Tomandl*
VSBC041s/14: Mon 15:15–16:55 [A9/324](#), *J. Slanina*
VSBC041s/15: Mon 15:15–16:55 [A9/324](#), *J. Slanina*
VSBC041s/16: Mon 8:30–10:10 [A16/213](#), *M. Králíková*
VSBC041s/17: Wed 15:30–17:10 [A16/213](#)
VSBC041s/18: Wed 15:30–17:10 [A16/213](#)
VSBC041s/30: No timetable has been entered into IS. *J. Dostál*
VSBC041s/31: No timetable has been entered into IS. *J. Dostál*
VSBC041s/32: No timetable has been entered into IS. *J. Dostál*
VSBC041s/33: No timetable has been entered into IS. *J. Dostál*
VSBC041s/34: No timetable has been entered into IS. *J. Dostál*
VSBC041s/35: No timetable has been entered into IS. *J. Dostál*
VSBC041s/36: No timetable has been entered into IS. *J. Dostál*
VSBC041s/37: No timetable has been entered into IS. *J. Dostál*

Prerequisites (in Czech)

[VSLC011p Med. Chemistry - lecture](#) && [VSBI0222p Biology II-lect.](#) && ([VSBF011p Biophysics](#) || [VLBF011p Biophysics-lect.](#) || [STBF011p Biophysics](#)) && [VSBC0221s Biochemistry I sem](#) && [VSFY0321c Physiology I - practice](#) && [VSFY0321s Physiology I - seminar](#)
(Do I meet enrolment requirements?)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Seminars are complementary to Biochemistry II lecture (VSBC041p). At the end of the course students understand principles of intermediary metabolism, characteristic features of metabolism of individual organs and tissues and metabolism at various conditions of organism (well fed state, fasting, starvation, metabolic stress, obesity, metabolic syndrome).

Syllabus

- Methods in clinical chemistry (photometry, nephelometry, turbidimetry, electrophoretic methods). Laboratory tests in clinical biochemistry. Sources of error, assessing the significance of a test result. Enzyme assays in clinical diagnostics. Plasma lipoproteins. Cholesterol transport, balance of cholesterol intake and excretion. Blood glucose (sources, consumption, regulation). Diabetes

mellitus. 1st written test (Sources of error of biochemical tests, assessing the significance of results. Digestion, absorption and transport of lipids, lipoproteins, cholesterol, metabolism of lipids at the tissue and organ level, metabolism of steroid hormones). Metabolism of glucose in the absorptive, postabsorptive state, and in prolonged fasting (the liver, adipose tissue, and muscle), diabetes and impairments of saccharide metabolism.) Catabolism of proteins and of amino acid nitrogen. Proteins in nutrition. Absorption of amino acids, utilization of amino acids in tissues, blood transport of fixed ammonia, the glutamine cycle. Integration of metabolism of nutrients: relationships among the major metabolic pathways in the fed state, postabsorptive state, and prolonged starvation. The liver functions – the role in metabolism of nutrients, hormones, and vitamins. Catabolism of haemoglobin, urobilinoids, the types of hyperbilirubinaemia. Biotransformation of xenobiotics. 2nd written test (Proteins in nutrition, nitrogen metabolism, integration of intermediary metabolism of nutrients, biochemical functions of the liver, catabolism of haemoglobin, metabolism of xenobiotics.) Neurotransmitter and hormone receptors. Water and mineral metabolism. Electrolyte composition of blood plasma, buffer bases. Respiration – transport of oxygen and CO₂. The role of the kidney and the liver in acid-base balance. Blood acid-base parameters, the values indicating particular type of disturbance. 3rd written test (Neurotransmitter and hormone receptors, water and mineral metabolism, ionograms, acid-base balance.) Major functions of the kidney. Glomerular filtration. Tubular resorption and secretion. Urine - normal constituents, amounts of nitrogenous compounds excreted per 24 h. The proteinuria types. Urinary sediment, renal stones. Biochemistry of muscle tissue. Energy resources in working muscle. Nitroxide and smooth muscles, mechanism of action.

Literature

required literature

- Podklady pro semináře jsou ve studijních materiálech předmětu VSBC041s. The seminar files are available in IS, Study materials VSBC041s.

Teaching methods

Course is based on group discussion to the given topics. The outlines of discussion are in the recommended textbook. Complementary materials are available in section Study materials.

Assessment methods

course-unit credit. Conditions for giving the course-unit credit. Full attendance in all lessons. Three short tests are written during the semester. Students that will obtain 52/75 points or more during the semester are not obliged to write the credit test. The other students will write the credit test with the 30 questions in the last week of the semester. The limit for passing the credit test is 14 points. All absences must be made before writing the credit test. Students are allowed to repeat the test once. Students that will not fulfill this requirement will not be given the course-unit credit. Obtaining of course-unit credits of practices and seminars is the pre-requisite for registration to the examination of Biochemistry I.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught each semester.

Information on course enrolment limitations: mimo studenty LF, max 5 posluchačů z MU, po dohodě s vedoucím ústavu

Listed among pre-requisites of other courses

- [aVLLM0522c Medical Microbiology II - practice](#) ([VLLM0421c](#) || [aVLLM0421c](#)) && ([aVLBC0422c](#) || [VSBC041c](#)) && ([aVLBC0422s](#) || [VSBC041s](#)) ([Do I meet enrolment requirements?](#))
- [VLLM0522c Medical Microbiology II - practice](#) ([VLLM0421c](#) && ([VLBC0422c](#) || [VSBC041c](#)) && ([VLBC0422s](#) || [VSBC041s](#)) ([Do I meet enrolment requirements?](#))

Teacher's information

<http://www.med.muni.cz/toCP1250.cs/biochem/vyuka.html>

The course is also listed under the following terms [Spring 2003](#), [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#).

VSBF011c Biophysics - practice *

Faculty of Medicine

Autumn 2015

Extent and Intensity

0/4/0. 4 credit(s). Type of Completion: z (credit).

Teacher(s)

[Mgr. Vladan Bernard, Ph.D.](#) (seminar tutor)

[MUDr. Aleš Bourek, Ph.D.](#) (seminar tutor)

[Mgr. Ing. Marek Dostál](#) (seminar tutor)

[MUDr. Lenka Forýtková, CSc.](#) (seminar tutor)

[MUDr. Pavel Grec, CSc.](#) (seminar tutor)

[MUDr. Věra Maryšková](#) (seminar tutor)

[Mgr. Erik Staffa, Ph.D.](#) (seminar tutor)

[Mgr. Daniel Vlk, CSc.](#) (seminar tutor)

Supervisor

[Mgr. Daniel Vlk, CSc.](#)

[Department of Biophysics - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [Mgr. Daniel Vlk, CSc.](#)

Supplier department: [Department of Biophysics - Theoretical Departments - Faculty of Medicine](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

At the end of the course students should be able: understand and explain biophysical principles and laws; operate basic biophysical devices; evaluate obtained data by the basic biophysical methods in light of a scientific, effective, safe and efficient attitude to their use; understand principles of the more complex therapeutical and diagnostical medical devices; discriminate possible usage of the biophysical techniques and medical devices in practice;

Syllabus

- **Practical exercises on biophysics**
- 1. Introduction, regulations of practical exercises, laboratory safety rules, etc. An introduction to the theory of measurement.
- 2. Information (overview and evolution). Medical informatics (definitions, the subject). Information technologies (hardware, software, OS, LAN, WAN).
- 3. Information resources (data mining - data warehousing). Information systems (HIS, expert systems, AI, CME).
- 4. Measurement of liquid viscosity. Measurement of surface tension of liquids
- 5. Eosin absorption curve. Spectrophotometrical determination of concentration of eosin. Refractometric determination of NaCl concentration. Polarimetry.
- 6. Audiometry. Measurement of the blood pressure. Ergometry.
- 7. Temperature measurement with a thermocouple. Measuring surface skin temperature with a thermistor. Measuring environmental parameters (noise).
- 8. Haemolysis of erythrocyte suspension by therapeutic ultrasound. Measuring ionising radiation absorption.
- 9. Measuring the voltage and frequency of electric signals by the oscilloscope. Measuring skin resistance. Measuring tissue model impedance. Analysis of acoustic elements of human voice.
- 10. Electromagnetic radiation. Measuring the cooling effect of the environment. Catathermometry. Measuring the illuminance, Luxmeter.
- 11. Contact and contactless thermography. Thermocamera and thermovision. Physiotherapy.
- 12. Electrodiagnostic, electrotherapeutic methods. Individual measuring of the ECG. Electrical excitability. Effect of the direct and alternating currents.
- 13. Advanced imaging methods. Ultrasound – diagnostic and therapeutic usage. Doppler measuring of the velocity of the blood flow. X-rays and Tomography. NMR.
- 14. Knowledge test.

Literature

- HRAZDIRA, Ivo, Aleš BOUREK and Jiřina ŠKORPÍKOVÁ. *Fundamentals of biophysics and medical technology*. Edited by Vojtěch Mornstein. 1. vydání. Brno: Masaryk University, 2007. viii, 317. ISBN 9788021042285. [info](#)

- [MORNSTEIN, Vojtěch](#). Healthcare informatics and overview of computer literacy for medical students. In: Fundamentals of biophysics and medical technology. In [BOUREK, Aleš](#). *Healthcare informatics and overview of computer literacy for medical students*. In: *Fundamentals of biophysics and medical technology*. 1. vyd. Brno: MU Press, 2007. p. 292-317, 27 pp. ISBN 978-80-210-4228-5. [info](#)
- MORNSTEIN, Vojtěch, Ivo HRAZDIRA and Aleš BOUREK. *Lékařská fyzika a informatika : (se zaměřením na zubní lékařství)*. [1. vydání]. Brno: Neptun, 2007. 352 stran. ISBN 9788086850023. [info](#)
- [HRAZDIRA, Ivo](#) and [Vojtěch MORNSTEIN](#). *Lékařská biofyzika a přístrojová technika (Medical biophysics and technology)*. 1. vyd. Brno: Neptun, 2001. 395 pp. ISBN 80-902896-1-4. [info](#)

Teaching methods

Practical exercises

Assessment methods

Basic requirement is the full attendance in the lessons. Theoretical knowledges of the principles used methods are continuously controled by oral examination, in case of fundamental ignorance, student can be excluded from a lesson. For all tasks students must elaborate comprehensive and unique report, these are graded. If are two or more reports graded as "unsuccessful", student cannot write a closing test. Course is finished by the multiple choice test consisting usually 20 questions, evaluated by 20 points. For successfully mastered test student need at least 10 points.

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

Information on completion of the course: Ukončeno závěrečným testem

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#).

VSBI0121c Biology I - practice ✨

Faculty of Medicine

Autumn 2015

Extent and Intensity

0/3. 5 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. Ing. Petr Dvořák, CSc.](#) (lecturer)
[Mgr. Lukáš Bálek, Ph.D.](#) (seminar tutor)
[Mgr. Kateřina Cetkovská, Ph.D.](#) (seminar tutor)
[Ing. Lívía Eiselleová, Ph.D.](#) (seminar tutor)
[Mgr. Linda Grillová, Ph.D.](#) (seminar tutor)
[Mgr. Iva Gudernová](#) (seminar tutor)

[Mgr. Hana Hříbková](#) (seminar tutor)
[Mgr. Iva Jelínková, Ph.D.](#) (seminar tutor)
[Mgr. Šárka Jelínková](#) (seminar tutor)
[Mgr. Aneta Kohutová](#) (seminar tutor)
[Mgr. Žaneta Konečná](#) (seminar tutor)
[Mgr. Gabriela Páchníková](#) (seminar tutor)
[Mgr. Lenka Paštěková, Ph.D.](#) (seminar tutor)
[MUDr. Martin Pešl, Ph.D.](#) (seminar tutor)
[Mgr. Jakub Pivnička](#) (seminar tutor)
[Mgr. Vladimír Rotrekl, Ph.D.](#) (seminar tutor)
[Anton Salykin, Ph.D.](#) (seminar tutor)
[doc. MUDr. Iva Slaninová, Ph.D.](#) (seminar tutor)
[Mgr. Kateřina Snopková](#) (seminar tutor)
[Mgr. Tereza Váňová](#) (seminar tutor)
[Mgr. Kateřina Vopěnková, Ph.D.](#) (seminar tutor)
[Jana Růžičková](#) (assistant)
[Mgr. Martina Vráblíková](#) (assistant)

Supervisor

[prof. Ing. Petr Dvořák, CSc.](#)

[Department of Biology - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [Mgr. Kateřina Vopěnková, Ph.D.](#)

Supplier department: [Department of Biology - Theoretical Departments - Faculty of Medicine](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

After completion of the course student: operates light microscope; understands the basics of electron microscopy, genetic toxicology, gene engineering or the methods of karyotyping; is able to evaluate the risk of hereditary diseases in a patient on the basis of assigned family anamnesis of this disease; is able to propose and interpret elementary molecular screening methods for some hereditary, neoplastic or microbial diseases. Student is also able to apply this knowledge and skills in other subject, especially histology, pathology and human genetics.

Syllabus

- Week 1 (21.9.-25.9. 2015): Biology - instructions. Non-cellular organisms and infectious agents
- Week 2 (28.9.-2.10.): Prokaryotic cells and their medical significance
- Week 3 (5.10.-9.10.): Microscopic observation of eukaryotic cells
- Week 4 (12.10.-16.10.): In vitro cultivation methods of human cells - implication for medical research

- Week 5 (19.10.-23.10.): Plasma membrane - osmosis, cell fusion
- Week 6 (26.10.-30.10.): Principles of electron microscopy and cellular ultrastructure
- Week 7 (2.11.-6.11.): Structure and replication of DNA. **Control test (knowledge of the weeks 1 to 6 - practices, lectures, seminars)**
- Week 8 (9.11.-13.11.): Transcription and translation
- Week 9 (16.11.-20.11.): Methods of cell cycle studying
- Week 10 (23.11.-27.11.): Mitosis observation under light microscope
- Week 11 (30.11.-4.12.): Biological significance of meiosis - gametogenesis
- Week 12 (7.12.-11.12.): Human karyotype and chromosomal abnormalities
- Week 13 (14.12.-18.12.): no practices - dissection week
- Week 14 (21.12.-23.12.): substitution practices
- Week 15 (4.1.-8.1.): Genetic disorders - autosomal inheritance **Control test (knowledge of the weeks 7 to 12 - practices, lectures, seminars)**

Literature

required literature

- Aktuální protokoly k praktickým cvičením jsou dostupné pouze v elektronické podobě na stránkách informačního systému MU (ISu): Studijní materiály předmětu VSBI0121c
- Actual protocols for practices are provided in electronic form in the Information System of the Masaryk University (www.is.muni.cz): Study Materials of the subject VSBI0121c

Teaching methods

laboratory practice, class discussion

Assessment methods

Practical classes are mandatory.

Bring printed protocol for each practice, and your own writing materials. Download protocol for each practical class from the Study materials in the IS, and study it in advance. Lab shoes, lab coats and disposable gloves are not required.

Requirements for course completion: full attendance in the practical classes (1 absence, excused or unexcused, is allowed); all protocols completed (also for missed lessons) and checked and signed by appropriate teachers; successfully passed 2 written control tests during the semester (20 questions each, 4 possibilities, 1 answer correct, student need to reach at least 14 points out of 20 in each test). In case you do not pass one of the control tests and its re-sit, you have to pass the final test (so-called Credit test) based on knowledge of the whole semester. The test comprises of 20 questions: 10 test questions (multiple answers can be correct, negative marking is obtained for incorrect answers) + 10 given terms for written explanation. At least 14 points out of 20 are needed to pass.

In case of student's late arrival to the practice, poor activity at the practice student is required to write an essay in the length of 2 pages on a given topic. Same for the case of 2nd and any additional absence in practices, excused or unexcused. Find the instructions for essay writing in the Course-related instructions in the IS, bring the essay printed to the teacher who specified the topic and be ready to answer the teacher's questions regarding the topic.

In case of 3 absences, (or more than 3 absences all excused by the Office for Studies within 5 days from the beginning of the absence and introduced into the Information System), it is addressed individually and credit is given only after the proof of the student's knowledge of the whole semester topics (so-called Credit test, see above).

In case of 4 or more unexcused absences, credit is not awarded.

Substitution of practical classes: in case of illness, appointment at the doctor's or foreign policy, student can exceptionally arrange a substitution with another group on the same teaching week. To arrange a substitution, write an e-mail to the contact person of the subject at least 24 hours in advance. Repeated substitution with other groups is not allowed.

Language of instruction

Czech

Follow-Up Courses

- [VSBI0222c Biology II - practice](#)
- [VSBI0222p Biology II - lecture](#)

Further comments (probably available only in Czech)

Study Materials

The course is taught annually.

The course is taught: every week.

Teacher's information

Web page of the course in English:

<https://is.muni.cz/auth/el/1411/podzim2015/aVLBI0121c/index.qwarp>

Stránka předmětu v češtině:

<https://is.muni.cz/auth/el/1411/podzim2015/VLBI0121c/index.qwarp>

Potřeby pro cvičení: vytištěný aktuální protokol, psací potřeby. Protokoly pro každé praktické cvičení je nutno stáhnout ze Studijních materiálů v ISu a nastudovat předem. Přezůvky, pláště a vlastní chirurgické rukavice nejsou vyžadovány. Do učebny si studenti vezmou pouze protokoly a psací potřeby, všechny ostatní věci si odloží do šatny Biologického ústavu (A7, místnost 203), která bude po dobu výuky uzamčena.

Nahrazování cvičení: pokud student výjimečně nemůže absolvovat praktická cvičení se svou skupinou (nemoc, návštěva lékaře), domluví si e-mailem s kontaktní osobou předmětu nahrazení cvičení s jinou skupinou, a to nejméně 24 hodin před plánovaným nahrazením. Výuku lze nahradit pouze v tom samém výukovém týdnu, kdy byla zameškána. Opakované nahrazování výuky s jinými skupinami není povoleno.

Při opakování předmětu je možné na vyžádání uznat absolvovanou praktickou výuku. O uznání je potřeba požádat v prvním týdnu výuky e-mailem s uvedením důvodu.

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#).

VSBI0121p Biology I - lecture ✨

Faculty of Medicine

Autumn 2015

Extent and Intensity

1/0. 0 credit(s). Type of Completion: -.

Teacher(s)

[Mgr. Kateřina Cetkovská, Ph.D.](#) (lecturer)
[prof. Ing. Petr Dvořák, CSc.](#) (lecturer)
[prof. MUDr. Marie Kopecká, CSc.](#) (lecturer)
[doc. Mgr. Lumír Krejčí, Ph.D.](#) (lecturer)
[Mgr. Pavel Krejčí, Ph.D.](#) (lecturer)
[Mgr. Vladimír Rotrekl, Ph.D.](#) (lecturer)
[doc. MUDr. Iva Slaninová, Ph.D.](#) (lecturer)
[prof. MUDr. Augustin Svoboda, CSc., dr. h.c.](#) (lecturer)
[prof. MUDr. David Šmajš, Ph.D.](#) (lecturer)
[RNDr. Mário Špírek, PhD.](#) (lecturer)
[Mgr. Stjepan Uldrijan, CSc.](#) (lecturer)
[doc. Yuh-Man Wadeley, Doctor of Philosophy](#) (lecturer)
[Mgr. Hana Hříbková](#) (seminar tutor)
[Mgr. Kateřina Vopěnková, Ph.D.](#) (seminar tutor)
[Mgr. Martina Vráblíková](#) (assistant)

Supervisor

[prof. Ing. Petr Dvořák, CSc.](#)
[Department of Biology - Theoretical Departments - Faculty of Medicine](#)
Contact Person: [Mgr. Kateřina Vopěnková, Ph.D.](#)
Supplier department: [Department of Biology - Theoretical Departments - Faculty of Medicine](#)

Prerequisites

Knowledge of high-school biology and all previous lectures and practical classes of the subject are prerequisites for studying the course. Expected knowledge for each lecture is specified in the course syllabus. Literature recommended to study before each lecture is detailed in the interactive syllabus of the course.

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

After completion of the course student: understands elementary cellular processes and processes taking place during development of a human body; comprehends the

complexity of intercellular communication and mutual regulation of individual cells in a multicellular organism; is able to deduce and explain the difference between healthy and pathologically-working cell; is able to express basic coherence between malfunction in cellular processes and development of diseases, especially hereditary diseases, cancers or developmental defects; can explain and justify action of some therapeutics with emphasis on modern medicine. Student is also able to apply this knowledge and skills in other subject, especially physiology, pathophysiology and human genetics.

Syllabus

- Week 1: 21. – 25.9. 2015
- Introduction to medical biology - from understanding of cellular principle to modern biomedicine (prof. Ing. Petr Dvořák, CSc.)
- Week 2: 28.9. – 2.10.
- Basic architecture and function of eukaryotic cells (prof. MUDr. Augustin Svoboda, CSc.)
- Week 3: 5.10. – 9.10.
- Plasma membrane structure and function (prof. MUDr. Augustin Svoboda, CSc.)
- Week 4: 12.10. – 16.10.
- Molecular mechanisms of cell adhesions and intercellular communications (prof. MUDr. Augustin Svoboda, CSc.)
- Week 5: 19.10. – 23.10.
- Cytoskeleton and cell migration in health and disease (prof. MUDr. Marie Kopecká, CSc.)
- Week 6: 26.10. – 30.10.
- Mitosis and cytokinesis in normal and cancer cells (prof. MUDr. Marie Kopecká, CSc.)
- Week 7: 2.11. – 6.11.
- Molecular mechanisms regulating cell cycle and cell proliferation (Mgr. Stjepan Uldrijan, CSc.)
- Week 8: 9.11. – 13.11.
- Architecture, molecular biology and pathology of eukaryotic cell nucleus (doc. MUDr. Iva Slaninová, Ph.D.)
- Week 9: 16.11. – 20.11.
- Biosynthesis of proteins in eukaryotic cells (RNDr. Mário Špírek, Ph.D.)
- Week 10: 23.11. – 27.11.
- Regulation of gene expression - principles and examples (prof. MUDr. David Šmajs, Ph.D.)
- Week 11: 30.11. – 4.12.
- Cell death - mechanisms, implication for medical research (doc. MUDr. Iva Slaninová, Ph.D.)
- Week 12: 7.12. – 11.12.
- Introduction to developmental biology (Mgr. Vladimír Rotrekl, Ph.D.)
- Week 13: 14.12. – 18.12.
- no lecture - dissection week
- Week 14: 21.12.-23.12.
- Substitution lecture
- Week 15: 4.1. – 8.1. 2016

- Basic principles and molecular mechanisms regulating early development of mammals - physiology and pathology (Yuh-Man Wadeley, M.Sc., Ph.D.)

Literature

required literature

- *Essential cell biology*. Edited by Bruce Alberts. 3rd ed. New York: Garland Science, 2009. 1 v. ISBN 9780815341307. [info](#)
- ALBERTS, Bruce. *Základy buněčné biologie : úvod do molekulární biologie buňky*. Translated by Arnošt Kotyk. 2. vyd. Ústí nad Labem: Espero Publishing, 2004. xxvi, 630. ISBN 8090290620. [info](#)
- *Medical genetics at a glance*. Edited by D. J. Pritchard - Bruce R. Korf. 3rd ed. Chichester, England: Wiley-Blackwell, 2013. 1 online r. ISBN 9781118689028. [info](#)
- PRITCHARD, D. J. and Bruce R. KORF. *Základy lékařské genetiky*. první české vydání. Praha: Galén, 2007. 182 stran. ISBN 9788072624492. [info](#)

recommended literature

- HARDIN, Jeff, Gregory BERTONI and Lewis J. KLEINSMITH. *Becker's world of the cell*. 8th ed. Boston: Benjamin Cummings, 2012. xxviii, 79. ISBN 9780321709783. [info](#)
- LODISH, Harvey F. *Molecular cell biology*. 6th ed. New York, N.Y.: W.H. Freeman and Company, 2008. xxxvii, 11. ISBN 9780716776017. [info](#)
- SNUSTAD, D. Peter, Michael J. SIMMONS, [Jiřina RELICHOVÁ](#), [Jiří DOŠKAŘ](#), [Jiří FAJKUS](#), [Petr HOŘÍN](#), [Aleš KNOLL](#), [Petr KUGLÍK](#), [Jan ŠMARDA](#), [Jana ŠMARDOVÁ](#), [Renata VESELSKÁ](#) and [Boris VYSKOT](#). *Genetika (Principles of Genetics)*. 1. vyd. Brno: Masarykova univerzita, 2009. 894 pp. Učebnice. ISBN 978-80-210-4852-2. [URL](#) [info](#)
- SNUSTAD, D. Peter and Michael J. SIMMONS. *Principles of genetics*. 5th ed. Hoboken: John Wiley & Sons, Inc, 2009. xix, 823. ISBN 9780470388259. [info](#)
- WEINBERG, Robert A. *The biology of cancer*. 2nd ed. New York: Garland Science, 2014. 1 v. ISBN 9780815345282. [info](#)
- *Principles of development*. Edited by Lewis Wolpert. 2nd ed. Oxford: Oxford University Press, 2002. xxv, 542. ISBN 0198792913. [info](#)

not specified

- CAMPBELL, Neil A. *Biologie*. Edited by Jane B. Reece. Vyd. 1. Brno: Computer Press, 2006. xxxiv, 133. ISBN 8025111784. [info](#)
- CAMPBELL, Neil A. *Biology*. Edited by Jane B. Reece. 7th ed. San Francisco: Pearson/Benjamin Cummings, 2005. xl, 1231. ISBN 080537146X. [info](#)

Teaching methods

lecture

Assessment methods

Lecture attendance is optional. Students continue with following subjects without proof of this semester's knowledge. Biology I (VSBI0121p) is followed by Biology II (VSBI0222p) that ends up with a written examination test. The test is based on knowledge of all topics from both semesters (lectures, seminars, practices).

Language of instruction

Czech

Follow-Up Courses

- [VSBI0222p Biology II - lecture](#)

Further comments (probably available only in Czech)

[Study Materials](#)

Information on completion of the course: neukončuje se

The course is taught annually.

The course is taught: every week.

Teacher's information

Předpokladem ke studiu předmětu je znalost středoškolské biologie a už proběhlých přednášek a cvičení z předmětu - předpokládané znalosti ke každé přednášce jsou specifikovány v sylabu předmětu. Příslušná studijní literatura doporučená ke studiu před každou přednáškou je uvedena v **interaktivní osnově předmětu**:

<https://is.muni.cz/auth/el/1411/podzim2015/VLBI0121p/index.qwarp>

Knowledge of high-school biology and all previous lectures and practical classes of the subject are prerequisites for studying the course. Expected knowledge for each lecture are specified in the course syllabus. Corresponding study literature is detailed in the **interactive syllabus of the course**:

<https://is.muni.cz/auth/el/1411/podzim2015/aVLBI0121p/index.qwarp>

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#).

VSBI0121s Biology I - seminar ✨

Faculty of Medicine

Autumn 2015

Extent and Intensity

0/1. 1 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. Ing. Petr Dvořák, CSc.](#) (lecturer)

[Mgr. Vladimír Rotrekl, Ph.D.](#) (lecturer)

[Mgr. Michal Strouhal, Ph.D.](#) (lecturer)

[prof. MUDr. David Šmajš, Ph.D.](#) (lecturer)

[Mgr. Stjepan Uldrijan, CSc.](#) (lecturer)

[Mgr. Miroslav Vařecha, Ph.D.](#) (lecturer)
[Mgr. Kateřina Cetkovská, Ph.D.](#) (seminar tutor)
[Mgr. Hana Hříbková](#) (seminar tutor)
[Mgr. Kateřina Vopěnková, Ph.D.](#) (seminar tutor)
[Mgr. Martina Vráblíková](#) (assistant)

Supervisor

[prof. Ing. Petr Dvořák, CSc.](#)
[Department of Biology - Theoretical Departments - Faculty of Medicine](#)
Contact Person: [Mgr. Kateřina Vopěnková, Ph.D.](#)
Supplier department: [Department of Biology - Theoretical Departments - Faculty of Medicine](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

After completion of the course student: understands the basis of molecular and comparative analyses used in medicine and biomedical research; is able to explain the principle of basic methods and their application; is able to judge their relevance for individualized medicine. Student is also able to possibly apply this knowledge and skills in his/her future scientific research.

Syllabus

- Week 2: 28.9. - 2.10.
- Modern microscopic imaging and analytical techniques in cell biology
- Week 4: 12.10. - 16.10.
- Human genome, human genome project and postgenomic era
- Week 6: 26.10. - 30.10.
- Epigenetics in development and disease
- Week 8: 9.11. - 13.11.
- Principles and examples of molecular and cellular biology technique
- Week 10: 23.11. - 27.11.
- Molecular biology techniques in diagnostic and therapy
- Week 12: 7.12. - 11.12.
- Modern approaches in studying macromolecular structures and macromolecular interactions - implication for drug development

Literature

required literature

- *Essential cell biology*. Edited by Bruce Alberts. 3rd ed. New York: Garland Science, 2009. 1 v. ISBN 9780815341307. [info](#)

- ALBERTS, Bruce. *Základy buněčné biologie : úvod do molekulární biologie buňky*. Translated by Arnošt Kotyk. 2. vyd. Ústí nad Labem: Espero Publishing, 2004. xxvi, 630. ISBN 8090290620. [info](#)
- *Medical genetics at a glance*. Edited by D. J. Pritchard - Bruce R. Korf. 3rd ed. Chichester, England: Wiley-Blackwell, 2013. 1 online r. ISBN 9781118689028. [info](#)
- PRITCHARD, D. J. and Bruce R. KORF. *Základy lékařské genetiky*. první české vydání. Praha: Galén, 2007. 182 stran. ISBN 9788072624492. [info](#)

recommended literature

- HARDIN, Jeff, Gregory BERTONI and Lewis J. KLEINSMITH. *Becker's world of the cell*. 8th ed. Boston: Benjamin Cummings, 2012. xxviii, 79. ISBN 9780321709783. [info](#)
- LODISH, Harvey F. *Molecular cell biology*. 6th ed. New York, N.Y.: W.H. Freeman and Company, 2008. xxxvii, 11. ISBN 9780716776017. [info](#)
- SNUSTAD, D. Peter, Michael J. SIMMONS, [Jiřina RELICHOVÁ](#), [Jiří DOŠKAŘ](#), [Jiří FAJKUS](#), [Petr HOŘÍN](#), [Aleš KNOLL](#), [Petr KUGLÍK](#), [Jan ŠMARDA](#), [Jana ŠMARDOVÁ](#), [Renata VESELSKÁ](#) and [Boris VYSKOT](#). *Genetika (Principles of Genetics)*. 1. vyd. Brno: Masarykova univerzita, 2009. 894 pp. Učebnice. ISBN 978-80-210-4852-2. [URL](#) [info](#)
- SNUSTAD, D. Peter and Michael J. SIMMONS. *Principles of genetics*. 5th ed. Hoboken: John Wiley & Sons, Inc, 2009. xix, 823. ISBN 9780470388259. [info](#)
- WEINBERG, Robert A. *The biology of cancer*. 2nd ed. New York: Garland Science, 2014. 1 v. ISBN 9780815345282. [info](#)
- *Principles of development*. Edited by Lewis Wolpert. 2nd ed. Oxford: Oxford University Press, 2002. xxv, 542. ISBN 0198792913. [info](#)

not specified

- CAMPBELL, Neil A. *Biologie*. Edited by Jane B. Reece. Vyd. 1. Brno: Computer Press, 2006. xxxiv, 133. ISBN 8025111784. [info](#)
- CAMPBELL, Neil A. *Biology*. Edited by Jane B. Reece. 7th ed. San Francisco: Pearson/Benjamin Cummings, 2005. xl, 1231. ISBN 080537146X. [info](#)

Teaching methods

seminar

Assessment methods

Seminar attendance is mandatory. Possible absence has to be excused by the Office for Studies within 5 days from the beginning of the absence and introduced into the Information System (IS).

Students continue with following subjects without proof of this semester's knowledge. The subject is followed by Biology II-lecture (VSBI0222p) that ends up with a written examination test covering the knowledge of all Biology topics from both semesters (lectures, seminars, practices).

Language of instruction

Czech

Follow-Up Courses

- [VSBI0222p Biology II - lecture](#)

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

The course is taught: every other week.

Teacher's information

Webová stránka předmětu v češtině:

<https://is.muni.cz/auth/el/1411/podzim2015/VLBI0121s/index.qwarp>

Web page of the course in English:

<https://is.muni.cz/auth/el/1411/podzim2015/aVLBI0121s/index.qwarp>

The course is also listed under the following terms [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#).

VSBI0222c Biology II - practice ✱

Faculty of Medicine

Spring 2016

Extent and Intensity

0/3. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[Rakesh Aithal, Ph.D., M.Sc.](#) (seminar tutor)

[Mgr. Veronika Altmannová, Ph.D.](#) (seminar tutor)

[Mgr. Lukáš Bálek, Ph.D.](#) (seminar tutor)

[Mgr. Kateřina Cetkovská, Ph.D.](#) (seminar tutor)

[Ing. Lívía Eiselleová, Ph.D.](#) (seminar tutor)

[Mgr. Linda Grillová, Ph.D.](#) (seminar tutor)

[Mgr. Iva Gudernová](#) (seminar tutor)

[Mgr. Hana Hříbková](#) (seminar tutor)

[Mgr. Iva Jelínková, Ph.D.](#) (seminar tutor)

[Mgr. Šárka Jelínková](#) (seminar tutor)

[Mgr. Aneta Kohutová](#) (seminar tutor)

[Mgr. Žaneta Konečná](#) (seminar tutor)

[Mgr. María Victoria Marini Palomeque, Ph.D.](#) (seminar tutor)

[Mgr. Jarmila Mlčoušková, Ph.D.](#) (seminar tutor)

[Mgr. Gabriela Páchníková](#) (seminar tutor)

[Mgr. Lenka Paštěková, Ph.D.](#) (seminar tutor)

[MUDr. Martin Pešl, Ph.D.](#) (seminar tutor)

[Mgr. Jakub Pivnička](#) (seminar tutor)

[Mgr. Petra Pospíšilová, Ph.D.](#) (seminar tutor)

[Mgr. Vladimír Rotrekl, Ph.D.](#) (seminar tutor)

[Pounami Samadder, Ph.D.](#) (seminar tutor)
[Mgr. Alexandra Sisáková, Ph.D.](#) (seminar tutor)
[Mgr. Zuzana Slabá](#) (seminar tutor)
[doc. MUDr. Iva Slaninová, Ph.D.](#) (seminar tutor)
[Mgr. Kateřina Snopková](#) (seminar tutor)
[RNDr. Mário Špírek, PhD.](#) (seminar tutor)
[Mgr. Barbora Štefanovie](#) (seminar tutor)
[Georgios Valianatos, Ph.D.](#) (seminar tutor)
[Mgr. Tereza Váňová](#) (seminar tutor)
[Mgr. Kateřina Vopěnková, Ph.D.](#) (seminar tutor)
[Jana Růžičková](#) (assistant)
[Mgr. Martina Vráblíková](#) (assistant)

Supervisor

[prof. Ing. Petr Dvořák, CSc.](#)
[Department of Biology - Theoretical Departments - Faculty of Medicine](#)
Contact Person: [Mgr. Kateřina Vopěnková, Ph.D.](#)
Supplier department: [Department of Biology - Theoretical Departments - Faculty of Medicine](#)

Prerequisites (in Czech)

[VSBI0121c Biology I -pract.](#) && [ZC011 Handling chemical substances](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

After completion of the course student: operates light microscope; understands the basics of electron microscopy, genetic toxicology, gene engineering or the methods of karyotyping; is able to evaluate the risk of hereditary diseases in a patient on the basis of assigned family anamnesis of this disease; is able to propose and interpret elementary molecular screening methods for some hereditary, neoplastic or microbial diseases. Student is also able to apply this knowledge and skills in other subject, especially histology, pathology and human genetics.

Syllabus

- Week 1: Genetic disorders - gonosomal inheritance
- Week 2: Deviations from Mendelian genetics
- Week 3: Genetic prognosis and genetic counselling
- Week 4: Human population genetics
- Week 5: DNA cloning and gene engineering. **Control test for knowledge from week 13 of the autumn semester to week 4 of the spring semester (practices and lectures)**
- Week 6: Molecular analysis of human genotype

- Week 7: Molecular diagnostics of human pathogenic bacteria
- Week 8: Restriction mapping of DNA
- Week 9: Molecular diagnostics of cancer disease
- Week 10: Substitution practices
- Week 11: Analysis of protein binding to DNA
- Week 12: Substitution practices
- Week 13: Genetic toxicology (groups not having dissections clashing with the class). **Control test for knowledge from week 5 to week 12 of the spring semester (practices and lectures)**
- Week 14: Genetic toxicology (groups not having dissections clashing with the class). **Control test for knowledge from week 5 to week 12 of the spring semester (practices and lectures)**

Literature

required literature

- Protocols for practices are provided in electronic form in the Information System of the Masaryk University in the Study Materials of the course aZLBI0222c
- Protocols for practices are provided in electronic form in the Information System of the Masaryk University in the Study Materials of the course aZLBI0222c

Teaching methods

laboratory practice, class discussion

Assessment methods

Practical classes are mandatory.

Bring printed protocol for each practicer, and your own writing materials. Download protocol for each practical class from the Study materials in the IS, and study it in advance. Lab shoes, lab coats and disposable gloves are not required.

Requirements for course completion: full attendance in the practical classes (1 absence, excused or unexcused, is allowed); all protocols completed (also for missed lessons) and checked and signed by appropriate teachers; successfully passed 2 written control tests during the semester (20 questions each, 4 possibilities, 1 answer correct, student need to reach at least 14 points out of 20 in each test). In case you do not pass one of the control tests and its re-sit, you have to pass the final test (so-called Credit test) based on knowledge of the whole semester. The test comprises of 20 questions: 10 test questions (multiple answers can be correct, negative marking is obtained for incorrect answers) + 10 given terms for written explanation. At least 14 points out of 20 are needed to pass. In case of student's late arrival to the practice, poor activity at the practice student is required to write an essay in the length of 2 pages on a given topic. Same for the case of 2nd and any additional absence in practices, excused or unexcused. Find the instructions for essay writing in the Course-related instructions in the IS, bring the essay printed to the teacher who specified the topic and be ready to answer the teacher's questions regarding the topic.

In case of 3 absences, (or more than 3 absences all excused by the Office for Studies within 5 days from the beginning of the absence and introduced into the Information System), it is addressed individually and credit is given only after the proof of the student's knowledge of the whole semester topics (so-called Credit test, see above).

In case of 4 or more unexcused absences, credit is not awarded.

Substitution of practical classes: in case of illness, appointment at the doctor's or foreign policy, student can exceptionally arrange a substitution with another group on the same teaching week. To arrange a substitution, write an e-mail to the contact person of the subject at least 24 hours in advance. Repeated substitution with other groups is not allowed.

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

The course is taught: every week.

Listed among pre-requisites of other courses

- [AMOLc Introduction into molecular biology and genetics - practice](#) (![VSBI0222c](#)) && (![VLBI0222c](#)) && (![ZLBI0222c](#)) && !NOWANY([VLBI0222c](#),[ZLBI0222c](#)) && (![PřF:Bi1700c](#)) ([Do I meet enrolment requirements?](#))
- [aVLHE0322c Histology and Embryology II - practice](#) ([aVLHE0221c](#) || [VSHE0221c](#)) && ([aVLBI0222c](#) || [VSBI0222c](#)) ([Do I meet enrolment requirements?](#))
- [aVLHE0322p Histology and Embryology II - lecture](#) ([aVLHE0221c](#) || [VSHE0221c](#)) && ([aVLBI0222c](#) || [VSBI0222c](#)) ([Do I meet enrolment requirements?](#))
- [VLHE0322c Histology and Embryology II - practice](#) ([VLHE0221c](#) || [VSHE0221c](#)) && ([VLBI0222c](#) || [VSBI0222c](#)) ([Do I meet enrolment requirements?](#))
- [VLHE0322p Histology and Embryology II - lecture](#) ([VLHE0221c](#) || [VSHE0221c](#)) && ([VLBI0222c](#) || [VSBI0222c](#)) ([Do I meet enrolment requirements?](#))

Teacher's information

Interaktivní osnova předmětu:

Liché skupiny: https://is.muni.cz/auth/el/1411/jaro2016/VLBI0222c/index_liche.qwarp

Sudé skupiny: https://is.muni.cz/auth/el/1411/jaro2016/VLBI0222c/index_sude.qwarp

Potřeby pro cvičení: vytištěný aktuální protokol, psací potřeby. Protokoly pro každé praktické cvičení je nutno stáhnout ze Studijních materiálů v ISu a nastudovat předem. Přezůvky, pláště a vlastní chirurgické rukavice nejsou vyžadovány. Do učebny si studenti vezmou pouze protokoly a psací potřeby, všechny ostatní věci si odloží do šatny Biologického ústavu (A7, místnost 203), která bude po dobu výuky uzamčena.

Nahrazování cvičení: pokud student výjimečně nemůže absolvovat praktická cvičení se svou skupinou (nemoc, návštěva lékaře), domluví si e-mailem s kontaktní osobou předmětu nahrazení cvičení s jinou skupinou, a to nejméně 24 hodin před plánovaným nahrazením. Výuku lze nahradit pouze v tom samém výukovém týdnu, kdy byla zameškána. Opakované nahrazování výuky s jinými skupinami není povoleno.

Při opakování předmětu je možné na vyžádání uznat absolvovanou praktickou výuku. O uznání je potřeba požádat v prvním týdnu výuky e-mailem s uvedením důvodu.

Interactive syllabus of the course in English:

<https://is.muni.cz/auth/el/1411/jaro2016/aVLBI0222c/index.qwarp>

The course is also listed under the following terms [Spring 2000](#), [Spring 2001](#), [Spring 2002](#), [Spring 2003](#), [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#).

VSBI0222p Biology II - lecture ✨

Faculty of Medicine

Spring 2016

Extent and Intensity

1/0. 4 credit(s). Recommended Type of Completion: zk (examination). Alternate Types of Completion: RZk (examination).

Teacher(s)

[Mgr. Kateřina Cetkovská, Ph.D.](#) (lecturer)
[prof. Ing. Petr Dvořák, CSc.](#) (lecturer)
[doc. Mgr. Lumír Krejčí, Ph.D.](#) (lecturer)
[Mgr. Pavel Krejčí, Ph.D.](#) (lecturer)
[Mgr. Vladimír Rotrekl, Ph.D.](#) (lecturer)
[doc. MUDr. Iva Slaninová, Ph.D.](#) (lecturer)
[prof. MUDr. David Šmajš, Ph.D.](#) (lecturer)
[RNDr. Mário Špírek, PhD.](#) (lecturer)
[Mgr. Stjepan Uldrijan, CSc.](#) (lecturer)
[Mgr. Kateřina Vopěnková, Ph.D.](#) (lecturer)
[doc. Yuh-Man Wadeley, Doctor of Philosophy](#) (lecturer)
[Jana Růžičková](#) (assistant)
[Mgr. Martina Vráblíková](#) (assistant)

Supervisor

[prof. Ing. Petr Dvořák, CSc.](#)
[Department of Biology - Theoretical Departments - Faculty of Medicine](#)
Contact Person: [Mgr. Kateřina Cetkovská, Ph.D.](#)
Supplier department: [Department of Biology - Theoretical Departments - Faculty of Medicine](#)

Prerequisites

[VSBI0121c Biology I -pract.](#) && [ZC011 Handling chemical substances](#)

Knowledge of high-school biology and all previous lectures and practical classes of the subject are prerequisites for studying the course. Expected knowledge for each lecture is specified in the course syllabus. Literature recommended to study before each lecture is detailed in the interactive syllabus of the course.

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

After completion of the course student: understands elementary cellular processes and processes taking place during development of a human body; comprehends the complexity of intercellular communication and mutual regulation of individual cells in a multicellular organism; is able to deduce and explain the difference between healthy and pathologically-working cell; is able to express basic coherence between malfunction in cellular processes and development of diseases, especially hereditary diseases, cancers or developmental defects; can explain and justify action of some therapeutics with emphasis on modern medicine. Student is also able to apply this knowledge and skills in other subject, especially physiology, pathophysiology and human genetics.

Syllabus

- Week 1: 22.2. – 26.2. 2014
- Growth factors and signal transduction in development and disease (Mgr. Pavel Krejčí, Ph.D.)
- Week 2: 29.2. – 4.3.
- Biology and use of stem cells in disease modelling and cell therapy (prof. Ing. Petr Dvořák, CSc.)
- Week 3: 7.3. – 11.3.
- Cell differentiation and tissue engineering (prof. Ing. Petr Dvořák, CSc.)
- Week 4: 14.3. – 18.3.
- Genome instability - from molecular mechanisms of damage and DNA repair to clinical implications (doc. Mgr. Lumír Krejčí, Ph.D)
- Week 5: 21.3. – 25.3.
- Introduction to cancer biology (Mgr. Stjepan Uldrijan, CSc.)
- Week 6: 28.3. – 1.4.
- Oncogenes and oncoviruses in cancer transformation (Mgr. Stjepan Uldrijan, CSc.)
- Week 7: 4.4. – 8.4.
- Tumour suppressor genes - implications for diagnostics and therapy (Mgr. Stjepan Uldrijan, CSc.)
- Week 8: 11.4. – 15.4.
- Paradigm of cancer stem cells (doc. MUDr. Iva Slaninová, Ph.D.)
- Week 9: 18.4. – 22.4.
- Molecular principle of genetically determined diseases (doc. MUDr. Iva Slaninová, Ph.D.)
- Week 10: 25.4. – 29.4.
- Objectives and strategies of molecular therapy (doc. MUDr. Iva Slaninová, Ph.D.)
- Week 11: 2.5. – 6.5.

- Genomics and other omics in current biomedicine (prof. MUDr. David Šmajš, Ph.D.)
- Week 12: 9.5. – 13.5.
- Human microbiome (prof. MUDr. David Šmajš, Ph.D.)
- Week 13: 16.5. – 20.5.
- Bioinformatics in medicine - from molecules to populations (Mgr. Vladimír Rotrekl, Ph.D.)
- Week 14: 23.5. – 27.5.
- Bioinformatics in medicine - from molecules to populations (Mgr. Vladimír Rotrekl, Ph.D.)- groups not having dissections clashing with the lecture

Literature

required literature

- *Essential cell biology*. Edited by Bruce Alberts. 3rd ed. New York: Garland Science, 2009. 1 v. ISBN 9780815341307. [info](#)
- ALBERTS, Bruce. *Základy buněčné biologie : úvod do molekulární biologie buňky*. Translated by Arnošt Kotyk. 2. vyd. Ústí nad Labem: Espero Publishing, 2004. xxvi, 630. ISBN 8090290620. [info](#)
- *Medical genetics at a glance*. Edited by D. J. Pritchard - Bruce R. Korf. 3rd ed. Chichester, England: Wiley-Blackwell, 2013. 1 online r. ISBN 9781118689028. [info](#)
- PRITCHARD, D. J. and Bruce R. KORF. *Základy lékařské genetiky*. první české vydání. Praha: Galén, 2007. 182 stran. ISBN 9788072624492. [info](#)

recommended literature

- HARDIN, Jeff, Gregory BERTONI and Lewis J. KLEINSMITH. *Becker's world of the cell*. 8th ed. Boston: Benjamin Cummings, 2012. xxviii, 79. ISBN 9780321709783. [info](#)
- LODISH, Harvey F. *Molecular cell biology*. 6th ed. New York, N.Y.: W.H. Freeman and Company, 2008. xxxvii, 11. ISBN 9780716776017. [info](#)
- SNUSTAD, D. Peter, Michael J. SIMMONS, [Jiřina RELICHOVÁ](#), [Jiří DOŠKAŘ](#), [Jiří FAJKUS](#), [Petr HOŘÍN](#), [Aleš KNOLL](#), [Petr KUGLÍK](#), [Jan ŠMARDA](#), [Jana ŠMARDOVÁ](#), [Renata VESELSKÁ](#) and [Boris VYSKOT](#). *Genetika (Principles of Genetics)*. 1. vyd. Brno: Masarykova univerzita, 2009. 894 pp. Učebnice. ISBN 978-80-210-4852-2. [URL](#) [info](#)
- SNUSTAD, D. Peter and Michael J. SIMMONS. *Principles of genetics*. 5th ed. Hoboken: John Wiley & Sons, Inc, 2009. xix, 823. ISBN 9780470388259. [info](#)
- WEINBERG, Robert A. *The biology of cancer*. 2nd ed. New York: Garland Science, 2014. 1 v. ISBN 9780815345282. [info](#)
- *Principles of development*. Edited by Lewis Wolpert. 2nd ed. Oxford: Oxford University Press, 2002. xxv, 542. ISBN 0198792913. [info](#)

not specified

- CAMPBELL, Neil A. *Biologie*. Edited by Jane B. Reece. Vyd. 1. Brno: Computer Press, 2006. xxxiv, 133. ISBN 8025111784. [info](#)
- CAMPBELL, Neil A. *Biology*. Edited by Jane B. Reece. 7th ed. San Francisco: Pearson/Benjamin Cummings, 2005. xl, 1231. ISBN 080537146X. [info](#)

Teaching methods

lecture

Assessment methods

Subject is completed with a written examination test, based on knowledge of all topics from both semesters (lectures, seminars, practices). The exam test contains 100 questions with 1 correct answer. Negative marking is obtained for incorrect answers. For successful passing the exam, minimum 68 points out of 200 are needed.

Requirements for attendance at the exam: successful passing of the autumn semester's lecture and seminar, and successful completion of Biology-practices of both autumn and spring semester.

Students have to bring their valid ICIS card to prove their identity at the exam. For more information on the test see:

https://is.muni.cz/auth/el/1411/jaro2016/aVLBI0222p/op/Exam_information_and_instructions_ENG.pdf

Lecture attendance is optional.

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

The course is taught: every week.

Listed among pre-requisites of other courses

- [AMOLp Introduction into molecular biology and genetics - lecture](#) (![VSBI0222p](#)) && (![VLBI0222p](#)) && (![ZLBI0222p](#)) && (![PřF:Bi1700](#)) ([Do I meet enrolment requirements?](#))
- [aVLFY0321c Physiology I - practice](#) ([aVLBI0222p](#) || [VSBI0222p](#)) && ([aVLBF011p](#) || [VSBF011p](#)) && ([aVLAN0222s](#) || [VSAN0232s](#)) ([Do I meet enrolment requirements?](#))
- [aVLFY0321p Physiology I - lecture](#) ([aVLBI0222p](#) || [VSBI0222p](#)) && ([aVLBF011p](#) || [VSBF011p](#)) && ([aVLAN0222s](#) || [VSAN0232s](#)) ([Do I meet enrolment requirements?](#))
- [aVLFY0321s Physiology I - seminar](#) ([aVLBI0222p](#) || [VSBI0222p](#)) && ([aVLBF011p](#) || [VSBF011p](#)) && ([aVLAN0222s](#) || [VSAN0232s](#)) ([Do I meet enrolment requirements?](#))
- [aVLLM0421c Medical Microbiology I - practice](#) ([VSBI0222p](#) || [aVLBI0222p](#)) && ([VLBF011p](#) || [aVLBF011p](#)) ([Do I meet enrolment requirements?](#))
- [aVLLM0421p Medical Microbiology I - lecture](#) ([VSBI0222p](#) || [aVLBI0222p](#)) && ([VLBF011p](#) || [aVLBF011p](#)) ([Do I meet enrolment requirements?](#))

- [aVLMB031 Modern Imaging and Analytical Methods in Cellular Biology and Immunology](#)
[VSBI0222p](#) || [aVLBI0222p](#) || [ZLBI0222p](#) || [aZLBI0222p](#) (Do I meet enrolment requirements?)
- [VLBC0422c Biochemistry II](#)
([VLBI0222p](#) || [VSBI0222p](#)) && [VLBF011p](#) && [VLBC0321s](#) && [VLBC0321c](#) && [VLFY0321c](#) && [VLFY0321s](#) (Do I meet enrolment requirements?)
- [VLBC0422p Biochemistry II - lecture](#)
([VLBI0222p](#) || [VSBI0222p](#)) && [VLBF011p](#) && [VLBC0321s](#) && [VLBC0321c](#) && [VLFY0321c](#) && [VLFY0321s](#) (Do I meet enrolment requirements?)

[Zobrazit další předměty](#)

Teacher's information

Předpokladem ke studiu předmětu je znalost středoškolské biologie a už proběhlých přednášek a cvičení z předmětu - předpokládané znalosti ke každé přednášce jsou specifikovány v sylabu předmětu. Příslušná studijní literatura doporučená ke studiu před každou přednáškou je uvedena v **interaktivní osnově předmětu**:

<https://is.muni.cz/auth/el/1411/jaro2016/VLBI0222p/index.qwarp>

Knowledge of high-school biology and all previous lectures and practical classes of the subject are prerequisites for studying the course. Expected knowledge for each lecture is specified in the course syllabus. Literature recommended to study before each lecture is detailed in the **interactive syllabus of the course**:

<https://is.muni.cz/auth/el/1411/jaro2016/aVLBI0222p/index.qwarp>

The course is also listed under the following terms [Spring 2000](#), [Spring 2001](#), [Spring 2002](#), [Spring 2003](#), [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#).

VSCJ0181 Czech Language for Foreigners I - practice ✨

Faculty of Medicine

Autumn 2015

Extent and Intensity

0/3/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[PhDr. Magdalena Pintarová](#) (seminar tutor), [PhDr. Ivana Rešková, Ph.D.](#) (deputy)

[PhDr. Renata Prucklová](#) (seminar tutor), [PhDr. Ivana Rešková, Ph.D.](#) (deputy)

[Mgr. Martin Punčochář](#) (seminar tutor)

[PhDr. Ivana Rešková, Ph.D.](#) (seminar tutor)

[PhDr. Lenka Řitičková](#) (seminar tutor), [PhDr. Ivana Rešková, Ph.D.](#) (deputy)

[Mgr. Jarmila Šafránková](#) (seminar tutor)

[Mgr. Petra Wachsmuthová](#) (seminar tutor), [PhDr. Ivana Rešková, Ph.D.](#) (deputy)

[PhDr. Jana Vyoralčková](#) (assistant)

Supervisor

[PhDr. Ivana Rešková, Ph.D.](#)

[Language Centre, Faculty of Medicine Division - Faculty Branches of University Departments - Faculty of Medicine](#)

Contact Person: [Mgr. Robert Helán, Ph.D.](#)

Supplier department: [Language Centre, Faculty of Medicine Division - Language Centre](#)

Prerequisites

The main aim of the course Czech for Foreigners is to teach students communicate with patients in Czech without any help of English speaking doctors or interpreters and independently take case history. First year students can understand vocabulary and basic phrases related to students, their families, and their immediate specific surrounding, provided people speak clearly and at a slow rate. The knowledge enables students to communicate in common routine tasks, such as shopping, accommodation, using public transport, orientation in the city, asking the way, being able to describe their place of living and people they know by simple phrases and sentences. Students should also be able to fill in forms with personal data, such as name, nationality and address when applying for residence accommodation.

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the tuition is working knowledge of the Czech language on the A1 level of the "Common European Framework of Reference"(CEFR/Independent User) checked by an examination. After first year students can understand vocabulary and basic phrases related to students, their families, and their immediate specific surrounding, provided people speak clearly and at a slow rate. The knowledge enables students to communicate in common routine tasks, such as shopping, accommodation, using public transport, orientation in the city, asking the way, being able to describe their place of living and people they know by simple phrases and sentences. Students should also be able to fill in forms with personal data, such as name, nationality and address when applying for residence accommodation. Emphasis put on knowüedge of parts of body and basic useful phrases in medical communication.

Syllabus

- 1st week: *Communicative Competency*: Introduction, Greetings. Where are you from? Phrases in the classroom. *Grammar*: Czech alphabet. The sounds of Czech and their pronunciation and spelling. Vowels, diphthongs. Consonants, assimilation of consonants in groups. The verb "to be". Cardinal numerals 1 - 20.
- 2nd week: *Communicative Competency*: What do you do in Brno?. *Grammar*: Word and its forms in Czech. Natural/grammatical genders in Czech. Three genders of Czech nouns. Nominative of singular in nouns, adjectives, pronouns,

and numeral "one". Demonstrative pronouns "ten, ta, to". Cardinal numerals 21-1000.

- 3rd week: *Communicative Competency*: What is my friend like? *Grammar*: Who is it? What is it? Adjectives: hard and soft. Jaký, -á, -é? Possessive pronouns.
- 4th week: TEST 1 (L1 and 2). *Communicative Competency*: My family. *Grammar*: What time is it? Czech verbs (introduction). Project 1: My family.
- 5th week: *Communicative Competency*: Time and activities. *Grammar*: Present tense of verbs (conjugation "-ám", "-uji, -ím, -u"). Verb negation. Time expressions, days of the week, months. Project 2: Likes and dislikes.
- 6th week: TEST 2 (L3). *Communicative Competency*: I like/dislike doing st, I like/don't like st. *Grammar*: Modal verbs. The verb "to have". Accusative case in singular (introduction), see 10th week.
- 7th week: *Communicative Competency*: Where is it? How can I get there? Orientation in the City. *Grammar*: Adverbs of place. The verb "to go". Locative case of nouns in singular (introduction)
- 8th weeks: *Communicative Competency*: My daily routine. University city Brno. *Grammar*: . Where do you go versus Where are you? Project 3: My life in Brno.
- 9th week: TEST 3 (L4). *Communicative Competency*: How to write an informal letter in Czech. Telephone calls. *Grammar*: Parts of body I. Revision.
- 10th week: *Communicative Competency*: Meals. Café, Restaurant. Likes and dislikes: rád+verb, mít rád, líbit se, chutnat. *Grammar*: Present tense, infinitive. Accusative of singular in nouns, adjectives, pronouns, and numeral "one". Verbs nad prepositions used with the accusative.
- 11th week: TEST 4 (ORAL TEST). *Communicative Competency*: Conversation at restaurant. Personal pronouns in the accusative. Bolí mě... .Parts of body II.
- 12th week: *Communicative Competency*: Visit. Czech traditions. Christmas. *Grammar*: Modal verb "to want". Prepositions do-na-v.
- 13th week: TEST 5 (L 1-5). Revision.
- 14th week: FINAL TEST.

Literature

required literature

- HOLÁ LÍDA. *New Czech Step by Step*. 4. opr. vyd. Praha: Akropolis, 2008. 256 pp. ISBN 978-80-86903-73-6. [info](#)
- HOLÁ, Lída. *New Czech step by step : activity book*. 3., opr. vyd. Praha: Filip Tomáš - Akropolis, 2006. 127 s. ISBN 8086903338. [info](#)

recommended literature

- REMEDIOSOVÁ, H. and E. ČECHOVÁ. *Chcete mluvit česky? / Do you want to speak Czech? Textbook 1. A communicative course of contemporary Czech for English speakers (beginning to intermediate level)*. 5. vyd. Liberec: Harry Putz, 2005. 414 pp. ISBN 80-86727-04-1. [info](#)
- GRUNDOVÁ, Dominika. *Needs of Patients. Czech-English Phrasebook for Beginners*. 2., revid. vyd. Praha: Eurolex Bohemia, 2004. 104 pp. ISBN 80-86432-86-6. [info](#)

Teaching methods

The tuition is realised in the form of practical courses. The following teaching methods are used: class discussion, roleplay, work in groups, reading, listening, writing HW (including Projects), word study. Emphasis put on selfstudy!

Assessment methods

The tuition is realised in the form of practical courses. The students' presence in these courses is strictly required, maximally two properly apologised absences are tolerated provided a letter of excuse is handed in at the Department of Studies. It is highly recommended to make up for the absence in the same week. The tuition is finished by a course-unit credit given on the basis of the students' presence, preparation for classes, sitting for Progress Tests and their successful passing of a Final test. The basic limit for passing all tests is 70%. In case of passing five class tests, which are obligatory for all students, the basic limit in the credit test is reduced by 10%. Any copying, recording or leaking tests, use of unauthorized tools, aids and communication devices, or other disruptions of objectivity of exams will be considered non-compliance with the conditions for course completion as well as a severe violation of the study rules. Consequently, the teacher will finish the exam by awarding grade "FFF" in the Information System, and the Dean will initiate disciplinary proceedings that may result in study termination.

Language of instruction

English

Further comments (probably available only in Czech)[Study Materials](#)

The course is taught annually.

The course is taught: every week.

Listed among pre-requisites of other courses

- [aVLCJ0282 Czech Language for Foreigners II - practice](#)
[aVLCJ0181](#) || [VSCJ0181](#) ([Do I meet enrolment requirements?](#))

Teacher's information

Current information about the subject, consultation hours, etc. is accessible on the notice boards at the Language Center, Faculty of Medicine Division. Contact with teachers is provided by the secretary of the department (Kamenice 5, A15), tel.: 549 498 170.

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#).

VSCJ0282 Czech Language for Foreigners II - practice ✳

Faculty of Medicine

Spring 2016

Extent and Intensity

0/3/0. 4 credit(s). Type of Completion: zk (examination).

Teacher(s)

[PhDr. Magdalena Pintarová](#) (seminar tutor), [PhDr. Ivana Rešková, Ph.D.](#) (deputy)
[PhDr. Renata Prucklová](#) (seminar tutor)
[Mgr. Martin Punčochář](#) (seminar tutor)
[PhDr. Ivana Rešková, Ph.D.](#) (seminar tutor)
[PhDr. Lenka Řitičková](#) (seminar tutor), [PhDr. Ivana Rešková, Ph.D.](#) (deputy)
[Mgr. Jarmila Šafránková](#) (seminar tutor)
[Mgr. Petra Wachsmuthová](#) (seminar tutor)
[PhDr. Jana Vyoralčková](#) (assistant)

Supervisor

[PhDr. Ivana Rešková, Ph.D.](#)

[Language Centre, Faculty of Medicine Division - Language Centre](#)

Contact Person: [Mgr. Robert Helán, Ph.D.](#)

Supplier department: [Language Centre, Faculty of Medicine Division - Language Centre](#)

Prerequisites

[VSCJ0181 Czech for Foreigners I -p](#)

The main aim of the course Czech for Foreigners is to teach students communicate with patients in Czech without any help of English speaking doctors or interpreters and independently write case history. First year students can understand vocabulary and basic phrases related to students, their families, and their immediate specific surrounding, provided people speak clearly and at a slow rate. The knowledge enables students to communicate in common routine tasks, such as shopping, accommodation, using public transport, orientation in the city, asking the way, being able to describe their place of living and people they know by simple phrases and sentences. Students should also be able to fill in forms with personal data, such as name, nationality and address when applying for residence accommodation. Medical students will also learn the vocabulary and phrases from the healthcare at the level of A1 and A2 according to the CEFR.

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the tuition is working knowledge of the Czech language on the A2 level of the "Common European Framework of Reference" (CEFR) checked by an examination.

Syllabus

- **Syllabus of Czech for Foreigners II.**
- 1st week: REVISION LESSON. *Conversation:* Daily routine. Visit. Time, Days (expressing dates), Months, Seasons. *Grammar:* Ordinal numerals. The accusative case of personal and possessive pronouns. The phrase Bolí mě+basic parts of body.
- 2nd week: LESSON 6: *Conversation:* What did you do yesterday? *Grammar:* Past tense (regular forms). Second position in Czech sentences. Countries and nationalities.

- 3rd week: REVISION TEST 1. LESSON 6: *Conversation*: Who is who in the world history. Narrate about past events. *Grammar*: Past tense (irregular forms). Adverbs expressing time.
- 4th week: LESSON 7: *Conversation*: Buy, sell and describe an apartment. *Grammar*: Verbs znát-vědět-umět. Verbs and prepositions with the accusative.
- 5th week: PROGRESS TEST 2. LESSON 7: *Conversation*: Reading and writing advertisements. *Grammar*: Indefinite Pronouns and Adverbs. Imperfective and Perfective Verbs (Introduction).
- 6th week: LESSON 7: *Conversation*: Buy, sell and describe an apartment. *Grammar*: Double negative. Prepositions with the accusative (na, pro, za, o). Ordinal numerals.
- 7th week: . LESSON 8: *Conversation*: Plan your future. *Grammar*: Future tense of the verb BÝT, verbs of motion imperfective verbs.
- 8th week: PROGRESS TEST 3. LESSON 8: *Conversation*: Plan your future. *Grammar*: Future tense. Verbs of motion. Where are you going? (Prepositions NA, DO and K/KE).
- 9th week: REVISION LESSON. *Conversation*: Narrate about your past. Plan your future. Describing of Human body. *Grammar*: Past and Future tenses. Where are you going? Where did you go? Where are/were you?
- 10th week: LESSON 9: *Conversation*: Human body. *Grammar*: Modal Verbs. Adverbs of Place. Ordinal Numerals
- 11th week: PROGRESS TEST 4 (ORAL). LESSON 9: *Conversation*: Human body. *Grammar*: Nominative and accusative plural.
- 12th week: LESSON 9: *Conversation*: Body systems. *Grammar*: Accusative object-centered constructions.
- 13th week: PROGRESS TEST 5. LESSON 10: *Conversation*: Travelling. *Grammar*: Genitive of singular.
- 14th week: WRITING. LESSON 10: *Conversation*: Plans for summer holiday. *Grammar*: Prepositions with genitive.
- 15th week: Final Written Exam.

Literature

required literature

- HOLÁ LÍDA. *New Czech Step by Step*. 4. opr. vyd. Praha: Akropolis, 2008. 256 pp. ISBN 978-80-86903-73-6. [info](#)
- HOLÁ, Lída. *New Czech step by step : activity book*. V nakl. Akropolis 4., opr. v. Praha: Akropolis, 2008. 2 sv. ISBN 9788086903736. [info](#)

recommended literature

- GRUNDOVÁ, Dominika. *Needs of Patients. Czech-English Phrasebook for Beginners*. 2., revid. vyd. Praha: Eurolex Bohemia, 2004. 104 pp. ISBN 80-86432-86-6. [info](#)
- REMEDIOSOVÁ, H. and E. ČECHOVÁ. *Chcete mluvit česky? / Do you want to speak Czech? Textbook 1. A communicative course of contemporary Czech for*

English speakers (beginning to intermediate level). 5. vyd. Liberec: Harry Putz, 2005. 414 pp. ISBN 80-86727-04-1. [info](#)

not specified

- The first title is obligatory, the others are recommended.

Teaching methods

The tuition is realised in the form of practical courses. The following teaching methods are used: class discussion, roleplay, work in groups, reading, listening, writing HW (including Projects), word study.

Assessment methods

The tuition is realised in the form of practical courses. The students' presence in these courses is strictly required, maximally two properly apologised absences (i.e. via the Study Department of the Faculty of Medicine) are tolerated. The tuition is finished by an end-of-term examination (ETE) consisting of a WRITTEN and an ORAL part. Passing the examination is conditioned by proper attendance, active participation in practical courses, sitting for Progress Tests and successful passing of written and oral exams. The basic limit for passing all tests is 70%. In case of passing two from three class tests, which are obligatory for all students, the basic limit in the written exam is reduced by 10%. Without successful passing the written exam students will not be allowed to sit for the oral part! Any copying, recording or leaking tests, use of unauthorized tools, aids and communication devices, or other disruptions of objectivity of exams (credit tests) will be considered non-compliance with the conditions for course completion as well as a severe violation of the study rules. Consequently, the teacher will finish the exam by awarding grade "F" in the Information System.

Language of instruction

English

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

The course is taught: every week.

Credit evaluation note: kredity B.

Listed among pre-requisites of other courses

- [aVLCJ0383 Czech Language for Foreigners III - practice](#)
[aVLCJ0282](#) || [VSCJ0282](#) ([Do I meet enrolment requirements?](#))

Teacher's information

Current information about the subject, consultation hours, etc. is accessible on the notice boards at the Language Center, Faculty of Medicine Division. Contact with teachers is provided by the secretary of the department (Kamenice 5, A15), tel.: 549 498 170.

The course is also listed under the following terms [Spring 2000](#), [Spring 2001](#), [Spring 2002](#), [Spring 2003](#), [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#).

VSCJ0383 Czech Language for Foreigners III - practice *

Faculty of Medicine

Autumn 2016

Extent and Intensity

0/2/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[PhDr. Ivana Rešková, Ph.D.](#) (seminar tutor)

[Mgr. Petra Wachsmuthová](#) (seminar tutor), [PhDr. Ivana Rešková, Ph.D.](#) (deputy)

[Mgr. Jarmila Šafránková](#) (seminar tutor)

[PhDr. Magdalena Pintarová](#) (seminar tutor), [PhDr. Ivana Rešková, Ph.D.](#) (deputy)

[Mgr. Martin Punčochář](#) (seminar tutor)

[PhDr. Jana Vyorálková](#) (assistant)

Supervisor

[PhDr. Ivana Rešková, Ph.D.](#)

[Language Centre, Faculty of Medicine Division - Faculty Branches of University Departments - Faculty of Medicine](#)

Contact Person: [Mgr. Robert Helán, Ph.D.](#)

Supplier department: [Language Centre, Faculty of Medicine Division - Language Centre](#)

Timetable of Seminar Groups

VSCJ0383/30: No timetable has been entered into IS.

VSCJ0383/31: No timetable has been entered into IS.

VSCJ0383/32: No timetable has been entered into IS.

VSCJ0383/33: No timetable has been entered into IS.

VSCJ0383/34: No timetable has been entered into IS.

VSCJ0383/35: No timetable has been entered into IS.

Prerequisites

[VSCJ0282 Czech for Foreigners II -p](#)

The main aim of the course Czech for Foreigners is to teach students communicate with patients in Czech without any help of English speaking doctors or interpreters and independently write case history. Second year students can understand basic vocabulary and phrases related to their immediate specific surrounding, such as personal information, information about their studies and jobs. Students are also able to understand the meaning of short, simple notes and messages, read short, simple texts, find specific information in simple materials, and understand short, simple personal letters. Students can communicate in simple and routine tasks requiring a simple and direct exchange of information on familiar topics and activities. Students can use a series of phrases to describe in simple terms their family, educational background and their job. Students can write short, simple notes and messages related to matters in areas of their immediate needs and very simple letters.

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the tuition is working knowledge of the Czech language on the A2 level of the "Common European Framework of Reference" (CEFR)(checked by an examination. The main aim of the course Czech for Foreigners is to teach students communicate with patients in Czech without any help of English speaking doctors or interpreters and independently take case history. Second year students can understand basic vocabulary and phrases related to their immediate specific surrounding, such as personal information, information about their studies and jobs. Students are also able to understand the meaning of short, simple notes and messages, read short, simple texts, find specific information in simple materials, and understand short, simple personal letters. Students can communicate in simple and routine tasks requiring a simple and direct exchange of information on familiar topics and activities. Students can use a series of phrases to describe in simple terms their family, educational background and their job. Students can write short, simple notes and messages related to matters in areas of their immediate needs and very simple letters.

Syllabus

- 1st week: Revision. *Conversation:* Vacation, Travelling. *Grammar:* Revision of accusative forms in sg and plural, prepositions, verbs.
- 2nd week: LESSON 11. *Conversation:* Daily routine, OD-DO. *Grammar:* Genitive singular of nouns, adjectives, possessive and interrogative pronouns. Prepositions used with the genitive. Time prepositions. Verbs with the genitive. *Medical Czech:* Parts of body I (L1).
- 3rd week: LESSON 11. *Conversation:* Czech Recipes. *Grammar:* Partitive genitive. *Medical Czech:* Parts of body II(L1).
- 4th week: PROGRESS TEST 1. LESSON 12. *Conversation:* House cleaning. *Grammar:* The forming of Aspect. *Medical Czech:* Symptoms of diseases (L4).
- 5th week: LESSON 12. *Grammar:* Imperfective versus Perfective verbs. *Medical Czech:* Symptoms of diseases (Useful phrases). Present complaints.
- 6th week: LESSON 13. *Conversation:* How to give directions. *Grammar:* Verbs of motion with prefixes od-/ode- and při-. *Medical Czech:* Nursing I.
- 7th week: PROGRESS TEST 2. LESSON 13. *Grammar:* Verbs jít/chodit-jet/jezdit. *Medical Czech:* Illness, diseases (L3).
- 8th week: LESSON 14. *Conversation:* Biography. PROJECT: A famous person from your country. *Grammar:* Locative of nouns and adjectives in sg. *Medical Czech:* Illness, diseases (L3). Nursing II.
- 9th week: LESSON 17. *Conversation:* University and my study. *Grammar:* Dative of nouns and adjectives in singular. Personal pronouns in dative. *Medical Czech:* Diseases and complaints. (L5)
- 10th week: PROGRESS TEST 3. LESSON 17. *Conversation:* Communication and interaction. Phrases with dative (Je mi...), Likes and dislikes (Chutná mi, líbí se mi). *Grammar:* Verbs and prepositions with the dative. *Medical Czech:* Revision of TM Chapters 3, 4, 5 and Nursing.

- 11th week: DISSECTION WEEK 1. *Conversation and Grammar*: Revision.
- 12th week: DISSECTION WEEK 2. *Medical Czech*: Revision.
- 13th week: PROGRESS TEST 4 (Oral). *Grammar*: Revision of perfective verbs, genitive, dative and locative sg.
- 18th December 2015: FINAL TEST.

Literature

- HOLÁ, Lída. *New Czech step by step*. V nakl. Akropolis 4., opr. v. Praha: Akropolis, 2008. 2 sv. ISBN 9788074700194. [info](#)
- ČERMÁKOVÁ, Iveta. *Talking medicine : Czech for medical students*. 3., rev. English ed. Prague: Karolinum Press, 2012. 261 s. ISBN 9788024621043. [info](#)
- REMEDIOSOVÁ, H. and E. ČECHOVÁ. *Chcete mluvit česky? / Do you want to speak Czech? Textbook 1. A communicative course of contemporary Czech for English speakers (beginning to intermediate level)*. 5. vyd. Liberec: Harry Putz, 2005. 414 pp. ISBN 80-86727-04-1. [info](#)
- GRUNDOVÁ, Dominika. *Needs of Patients. Czech-English Phrasebook for Beginners*. 2., revid. vyd. Praha: Eurolex Bohemia, 2004. 104 pp. ISBN 80-86432-86-6. [info](#)

Teaching methods

The tuition is realised in the form of practical courses. Teaching methods: listening, reading, speaking (class discussion, team work), listening comprehension, projects, homework. Emphasis put on selfstudy!

Assessment methods

The tuition is realised in the form of practical courses. The students' presence in these courses is strictly required; a maximum of two unexcused absences is tolerated. Students are allowed to substitute a maximum of TWO classes with another group. Substitutions are not possible in the weeks when Progress Test take place. If a student has more than two unexcused absences, they will not be allowed to take the Final test. The tuition is finished by a course-unit credit given on the basis of the students' presence, preparation for classes, sitting Progress Tests and their successful passing of a credit test. The basic limit for passing all tests is 70%. In case of passing four Progress tests and one Project, which are obligatory for all students, the basic limit in the credit test is reduced by 10%. Students who score a minimum of 90% in EACH progress test are not obliged to take the credit test. Any copying, recording or leaking tests, use of unauthorized tools, aids and communication devices, or other disruptions of objectivity of exams will be considered non-compliance with the conditions for course completion as well as a severe violation of the study rules. Consequently, the teacher will finish the exam by awarding grade "N" in the Information System, and the Dean will initiate disciplinary proceedings that may result in study termination.

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

Listed among pre-requisites of other courses

- [aVLCJ0484 Czech Language for Foreigners IV - practice](#)
[aVLCJ0383](#) || [VSCJ0383](#) ([Do I meet enrolment requirements?](#))

Teacher's information

Actual information about the subject, consultation hours, etc. is accessible on the notice boards at the Foreign Languages Department. Contact with teachers is provided by the secretary of the department (Kamenice 5, A 15), tel.: 549 498 170.

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#), [Autumn 2015](#).

VSCJ0585 Czech Language for Foreigners V - practice ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[PhDr. Magdalena Pintarová](#) (seminar tutor), [PhDr. Ivana Rešková, Ph.D.](#) (deputy)

[Mgr. Martin Punčochář](#) (seminar tutor)

[PhDr. Ivana Rešková, Ph.D.](#) (seminar tutor)

[Mgr. Jarmila Šafránková](#) (seminar tutor)

[Mgr. Petra Wachsmuthová](#) (seminar tutor), [PhDr. Ivana Rešková, Ph.D.](#) (deputy)

[Mgr. Veronika Tománková, Ph.D.](#) (assistant)

[PhDr. Jana Vyorálková](#) (assistant)

Supervisor

[PhDr. Ivana Rešková, Ph.D.](#)

[Language Centre, Faculty of Medicine Division - Faculty Branches of University Departments - Faculty of Medicine](#)

Contact Person: [Mgr. Veronika Tománková, Ph.D.](#)

Supplier department: [Language Centre, Faculty of Medicine Division - Language Centre](#)

Prerequisites

[VSCJ0484 Czech for Foreigners IV -p](#)

General Czech at the A2 CEFR level. The knowledge of specialist discipline-specific vocabulary covered in the aVLCJ0484 Czech Language for Foreigners IV course.

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the tuition is working knowledge of the Czech language on the B1 level of the "Common European Framework of Reference" (CEFR) checked by an examination. The main aim of the course Czech for Foreigners is to teach students communicate with patients in Czech without any help of English speaking doctors or interpreters and independently write case history.

Learning outcomes

At the end of the course students

- should be able to understand information related to very familiar topics that they regularly encounter at school, in the hospital, and in their free time, provided the information is communicated clearly
- apply medical language in doctor-patient, doctor-doctor, and doctor-nursing staff communication
- take patient's history (Personal, Family, Social and Work History)
- use practical medical vocabulary relating to physical examination of patient and cardiology.

Syllabus

- 1st week: Revision: Travelling. My holiday. *Medical Czech*: FAMILY HISTORY (Revision). *Grammar*: Declension in sg and pl.
- 2nd week: RELATIONS BETWEEN PEOPLE (Czech Step by Step L 19). *Medical Czech*: PERSONAL HISTORY I (TM 20). *Grammar*: Revision of the Instrumental sg. Prepositions with acc and instrumental (L 20). Revision of the Imperative.
- 3rd week: *Medical Czech*: Revision: Diseases. Injuries. PERSONAL HISTORY II. SOCIAL HISTORY (TM 21). *Grammar*: Time expressions (TM 20/page 116). Instrumental plural.
- 4th week: LEKCE 1: SEZNAMUJEME SE: Dopis Davidovi. *Medical Czech*: Practising Personal and Social history(<http://mluvtecesky.net/en/courses/medical1/6/1>, <http://mluvtecesky.net/en/courses/medical1/9/1>). WORK HISTORY (TM 22). *Grammar*: Declension of KDO/CO, někdo/něco, nikdo/nic.
- 5th week: PROGRESS TEST 1. *Medical Czech*: PHYSICAL EXAMINATION OF THE PATIENT (TM 9, <http://mluvtecesky.net/en/courses/medical1/10/1>). *Grammar*: Accusative sg and pl. New verbs used with acc.
- 6th week: LEKCE 2: RODINNÉ VZTAHY. *Medical Czech*: PRESENTING COMPLAINTS(<http://mluvtecesky.net/en/courses/medical1/4/1>). *Grammar*: Revision of personal pronouns in acc. Relative clauses with KTERÝ in sg.
- 7th week: *Medical Czech*: DAY IN HOSPITAL (TM 11). *Grammar*: Locative sg. Adverbs of location and direction (kam? odkud? kudy?), prepositions. Personal pronouns in loc.
- 8th week: LEKCE 3: KDE BYDLÍME A ŽIJEME. *Medical Czech*: HEALTH CONDITION I (TM 12). *Grammar*: Comparison of adjectives and adverbs.
- 9th week: PROGRESS TEST 2 (ORAL). *Medical Czech*: HEALTH CONDITION II.

- 10th week: LEKCE 4: CESTOVÁNÍ. *Medical Czech: HISTORY OF CARDIOVASCULAR DISEASES (TM 22)*. *Grammar: Genitive sg and pl. Personal pronouns in genitive.*
- 11th week. *Medical Czech: CARDIOLOGY* (<http://mluvtecesky.net/en/courses/medical2/2/1>). *Grammar: Prepositions in use.*
- 12th week: PROGRESS TEST 3 (video).
- 13th week: *Medical Czech: REVISION: Taking History (FA, OA, SA, PA). Physical Examination of the patient. Day in Hospital. Health Condition. Cardiology.* *Grammar: Declension in sg and pl, personal pronouns, prepositions.*
- 14th week: FINAL TEST

Literature

required literature

- ČERMÁKOVÁ, Iveta. *Talking medicine : Czech for medical students*. 3., rev. English ed. Prague: Karolinum Press, 2012. 261 s. ISBN 9788024621043. [info](#)
- [REŠKOVÁ, Ivana](#), [Roya MAUTHNER](#), [Emanuel CARVALHEIRO MARQUES](#), [Anshu JHA](#) and [Stuart Andrew HOPKINSON](#). *How to take a patient's history*. 1. vydání. Brno: CJV MU, 2015. 10 pp. [info](#)
- HOLÁ, Lída and Pavla BOŘILOVÁ. *Česky krok za krokem 2*. 1. vyd. Praha: Akropolis, 2009. ISBN 978-80-86903-92-7. [URL](#) [info](#)

Teaching methods

The tuition is realised in the form of practical courses. Teaching methods: listening, reading, speaking (class discussion, team work), listening comprehension, projects, homework. Emphasis put on selfstudy!

Assessment methods

The tuition is realised in the form of practical courses. The students' presence in these courses is strictly required, maximally two properly apologised absences are tolerated. The tuition is finished by a course-unit credit given on the basis of the students' presence, preparation for classes, sitting for Progress Tests and their successful passing of a Final test. The basic limit for passing all tests is 70%. In case of passing all class tests, which are obligatory for all students, the basic limit in the Final test is reduced by 10%. Students who score a minimum of 90% in EACH progress test are not obliged to take the credit test. Any copying, recording or leaking tests, use of unauthorized tools, aids and communication devices, or other disruptions of objectivity of exams will be considered non-compliance with the conditions for course completion as well as a severe violation of the study rules. Consequently, the teacher will finish the exam by awarding grade "N" in the Information System, and the Dean will initiate disciplinary proceedings that may result in study termination.

Language of instruction

English

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

The course is taught: every week.

Listed among pre-requisites of other courses

- [aVLCJ0686 Czech Language for Foreigners VI - practice \(VSCJ0585|| aVLCJ0585\) \(Do I meet enrolment requirements?\)](#)
- [VSCJ0686 Czech Language for Foreigners VI - practice VSCJ0585 \(Do I meet enrolment requirements?\)](#)

Teacher's information

<http://mluvtecesky.net>

Actual information about the subject, consultation hours, etc. is accessible on the notice boards at the Foreign Languages Department. Contact with teachers is provided by the secretary of the department (Kamenice 5, A 15), tel.: 549 498 170.

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#), [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VSCJ0686 Czech Language for Foreigners VI - practice ✳

Faculty of Medicine

Spring 2018

Extent and Intensity

0/2/0. 4 credit(s). Type of Completion: k (colloquium).

Teacher(s)

[PhDr. Magdalena Pintarová](#) (seminar tutor)

[Mgr. Martin Punčochář](#) (seminar tutor)

[PhDr. Ivana Rešková, Ph.D.](#) (seminar tutor)

[Mgr. Jarmila Šafránková](#) (seminar tutor)

[PhDr. Jana Vyorálková](#) (assistant)

Supervisor

[PhDr. Ivana Rešková, Ph.D.](#)

[Language Centre, Faculty of Medicine Division - Language Centre](#)

Contact Person: [Mgr. Veronika Tománková, Ph.D.](#)

Supplier department: [Language Centre, Faculty of Medicine Division - Language Centre](#)

Prerequisites

[VSCJ0585 Czech for Foreigners V -p](#)

General Czech at the A2/B1 CEFR level. The knowledge of specialist discipline-specific vocabulary covered in the aVLCJ0585 Czech Language for Foreigners V course.

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the tuition is working knowledge of the Czech language on the B1 level of the "Common European Framework of Reference" (CEFR) checked by an examination. The main aim of the course Czech for Foreigners is to teach students communicate with patients in Czech without any help of English speaking doctors or interpreters and independently write case history.

Learning outcomes

At the end of the course students

- should be able to understand information related to very familiar topics that they regularly encounter at school, in the hospital, and in their free time, provided the information is communicated clearly
- apply medical language in doctor-patient communication
- take patient's history (Personal, Family, Social and Work History)
- use practical medical vocabulary relating to respiratory and alimentary tract, pharmacy and operating theatre.

Syllabus

- **Czech for Foreigners VI**
- 1st week: REVISION. Personal and Family history. Work and Social history. History of Cardiovascular diseases. Health condition. *Grammar*: Declension in singular.
- 2nd weeks: CESTOVÁNÍ (UNIT 4/1) *Medical Czech*: History of Diseases of Respiratory tract (TM 24) *Grammar*: Locative case in plural.
- 3th week: Casuistry I. Přípomínka (U 4/2). *Medical Czech*: Pulmonology (<http://mluvtecesky.net/en/courses/medical2/5/1>). *Grammar*: Relative pronoun KTERÝ.
- 4th week: PROGRESS TEST 1 (REVISION). *Grammar*: Relative clauses.
- 5th weeks: Casuistry II. *Medical Czech*: History of Diseases of the Alimentary tract (TM 26). *Grammar*: Time and date. Temporal expressions and prepositions.
- 6th week: JACÍ JSME? (UNIT 5/1). *Medical Czech*: Gastroenterology (<http://mluvtecesky.net/en/courses/medical2/7/1>). *Grammar*: Personal pronouns (all cases).
- 7th week: JAK VYPADÁME? (U 5/2). *Medical Czech*: Pharmacy (TM 13). *Grammar*: Instrumental plural (Revision).
- 8th week: MOJE MĚSTO (UNIT 6). *Medical Czech*: Instruments, aids (TM 14). *Grammar*: Comparison (Revision). Declension of numbers.
- 9th week: PROGRESS TEST 2. *Medical Czech*: Doctor's office (TM 16). *Grammar*: Verbs of Motion (prefixes).
- 10th week: Casuistry III. ŽIVOTNÍ STYL (UNIT 7). *Medical Czech*: Presenting complaints I (TM 18). *Grammar*: Temporal clauses with AŽ, KDYŽ, NEŽ. Conjunctions and link words.
- 11th week: *Medical Czech*: Presenting complaints II. *Grammar*: Prepositions (Revision).
- 12th week: PROGRESS TEST 3 (ORAL). *Grammar*: Declension in plural (Revision).
- 13th week: *Medical Czech*: Revision of Pulmonology and GIT. *Grammar*: Declension in sg and pl (Revision).

- 14th week: Final Written Exam.

Literature

required literature

- ČERMÁKOVÁ, Iveta. *Talking Medicine: Czech for Medical Students*. 1. vyd. Praha: Eurolex Bohemia, 2006. 217 pp. ISBN 80-86861-12-0. [info](#)
- Rešková, Ivana a kol. *How to take a patient's history*. Brno: CJV MU 2015.
- HOLÁ, Lída a Pavla BORÍLOVÁ. *Česky krok za krokem 2*. 1. vyd. Praha: Akropolis, 2009. ISBN 978-80-86903-92-7.

Teaching methods

The tuition is realised in the form of practical courses. The following teaching methods are used: class discussion, roleplay, work in groups, reading, listening, writing HW (including Projects), word study.

Assessment methods

The tuition is realised in the form of practical courses. The students' presence in these courses is strictly required; a maximum of two unexcused absences is tolerated. Students are allowed to substitute a maximum of TWO classes with another group. Substitutions are not possible in the weeks when Progress Test take place. Students must inform the teacher of the group in which they intend to substitute their missed class in writing in advance. If they fail to do so, they will not be allowed to attend the class. If a student has more than two unexcused absences, they will not be allowed to take the Final test. The tuition is finished by a colloquium (C) consisting of a WRITTEN and an ORAL part. Passing the examination is conditioned by proper attendance, active participation in practical courses, sitting for Progress Tests and successful passing of written and oral exams. The basic limit for passing all tests is 70%. In case of passing three class tests, which are obligatory for all students, the basic limit in the written exam is reduced by 10%. Without successful passing the written exam students will not be allowed to sit for the oral part! Students who score a minimum of 90% in EACH progress test are not obliged to take the written part of Colloquium. Any copying, recording or leaking tests, use of unauthorized tools, aids and communication devices, or other disruptions of objectivity of exams (credit tests) will be considered non-compliance with the conditions for course completion as well as a severe violation of the study rules. Consequently, the teacher will finish the exam by awarding grade "F" in the Information System.

Language of instruction

English

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

Credit evaluation note: kredity B.

Listed among pre-requisites of other courses

- [aVLCJ0787 Czech Language for Foreigners VII](#)
[VSCJ0686/aVLCJ0686 \(Do I meet enrolment requirements?\)](#)

- [VLFA0722c Pharmacology II - practice](#)
[VLFA0621c](#) && ([VSAJ0222](#) // [VLAJ0222](#) // [VSCJ0686](#) // [VSNJ0222](#) // [VSSJ0222](#)) (*Do I meet enrolment requirements?*)
- [VLFA0722p Pharmacology - lectures](#)
[VLFA0621c](#) && ([VSAJ0222](#) // [VLAJ0222](#) // [VSCJ0686](#) // [VSNJ0222](#) // [VSSJ0222](#)) (*Do I meet enrolment requirements?*)
- [VSCJ0787 Czech Language for Foreigners VII - practice](#)
[VSCJ0686](#) (*Do I meet enrolment requirements?*)

Teacher's information

<http://mluvtecesky.net>

Current information about the subject, consultation hours, etc. is accessible on the notice boards at the Language Center, Faculty of Medicine Division. Contact with teachers is provided by the secretary of the department (Kamenice 5, A15), tel.: 549 498 170.

The course is also listed under the following terms [Spring 2000](#), [Spring 2001](#), [Spring 2002](#), [Spring 2003](#), [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VSCJ0787 Czech Language for Foreigners VII - practice *

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[PhDr. Magdalena Pintarová](#) (seminar tutor), [PhDr. Ivana Rešková, Ph.D.](#) (deputy)

[Mgr. Martin Punčochář](#) (seminar tutor)

[PhDr. Ivana Rešková, Ph.D.](#) (seminar tutor)

[Mgr. Jarmila Šafránková](#) (seminar tutor)

[Mgr. Veronika Tománková, Ph.D.](#) (seminar tutor)

[Mgr. Petra Wachsmuthová](#) (seminar tutor), [PhDr. Ivana Rešková, Ph.D.](#) (deputy)

[PhDr. Jana Vyoralčková](#) (assistant)

Supervisor

[PhDr. Ivana Rešková, Ph.D.](#)

[Language Centre, Faculty of Medicine Division - Faculty Branches of University](#)

[Departments - Faculty of Medicine](#)

Contact Person: [Mgr. Veronika Tománková, Ph.D.](#)

Supplier department: [Language Centre, Faculty of Medicine Division - Language Centre](#)

Timetable of Seminar Groups

VSCJ0787/30: Thu 16:00–17:40 [A11/228](#), M. Punčochář

VSCJ0787/31: Mon 15:55–17:35 [KOM 206](#), M. Pintarová

VSCJ0787/32: Thu 16:00–17:40 [KOM 409](#), J. Šafránková

VSCJ0787/33: Mon 15:20–17:00 [A11/228](#), I. Rešková

VSCJ0787/34: Tue 16:50–18:30 [A11/211](#), M. Pintarová

VSCJ0787/35: Tue 16:00–17:40 [KOM S117](#), I. Rešková

Prerequisites

[VSCJ0686 Czech for Foreigners VI -p](#)

General Czech at the B1 CEFR level. The knowledge of specialist discipline-specific vocabulary covered in the VSCJ0686 Czech Language for Foreigners VI course.

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the tuition is working knowledge of the Czech language on the B1+/B2 level of the "Common European Framework of Reference" (CEFR) checked by an examination. The course seeks to develop in students knowledge of specialized discipline-specific vocabulary and skills for effective doctor-patient communication.

Learning outcomes

At the end of the course students should be able to:

- communicate with patients in Czech without any help of English speaking doctors or interpreters and independently take case history
- use practical medical vocabulary; apply medical language in doctor-patient communication
- present specialized topics in medicine (namely Urology, Surgery, Ophthalmology, ORL and Orthopedics)
- follow and take part in specialized discussions
- negotiate in every-day situations at school, in the hospital, and in their free time
- write simple texts on familiar topics and topics related to their interest, and understand texts that consist of high frequency everyday or job-related language.

Syllabus

- 1st week: Introduction. Revision: INTERNAL MEDICINE I_CARDIOLOGY (www.mluvtecesky.net).
- 2nd week: Revision: INTERNAL MEDICINE II (Pneumology, GIT). Grammar: Revision: Declension in sg including KDO/CO and personal pronouns.
- 3rd week: HISTORY OF RENAL DISEASES (TM 25). Grammar: Verbs of motion with prefixes, long and short verbs (jít–přijít, chodit–přicházet; jet–přijet, jezdit–přijíždět (CC 6).
- 4th week: SURGERY I (www.mluvtecesky.net). Conversation: My hobby. Free time activities. Grammar: Nouns derived from verbs of motion (CC6). Revision: Declension in pl.
- 5th week: PROGRESS TEST 1. SURGERY II. Conversation: The capital city of my country. Grammar: Adjectives and adverbs in use (CC 6, incl. comparative and superlative).

- 6th week: *OFTALMOLOGY I (TM 32)*. Conversation: *Life course. My biography*. Grammar: *Declension of nouns člověk and dítě (CC7)*.
- 7th week: *OFTALMOLOGY II (www.mluvtecesky.net)*. Grammar: *Clauses with ABY (CC7)*.
- 8th week: *OTORHINOLARYNGOLOGY I (TM 33)*. Conversation: *Zdravý životní styl*. Grammar: *Conjunctions and linking words (CC7)*.
- 9th week: *OTORHINOLARYNGOLOGY II (www.mluvtecesky.net)*. Grammar: *Verbal nouns (CC8)*.
- 10th week: *PROGRESS TEST 2. ORTHOPEDICS I (www.mluvtecesky.net)*. Grammar: *Revision of modal verbs (CC9)*
- 11th week: *ORTHOPEDECS II*. Conversation: *The history of my family*.
- 12th week: *PROGRESS TEST 3*. Conversation: *My studies at Masaryk University*.
- 13th week: *FINAL REVISION*.
- 14th week: *FINAL TEST*.

Literature

required literature

- ČERMÁKOVÁ, Iveta. *Talking medicine : Czech for medical students*. 3., rev. English ed. Prague: Karolinum Press, 2012. 261 s. ISBN 9788024621043. [info](#)
- REŠKOVÁ, Ivana, Roye MAUTHNER, Emanuel CARVALHEIRO MARQUES, Anshu JHA and Stuart Andrew HOPKINSON. *How to take a patient's history*. 1. vydání. Brno: CJV MU, 2015. 10 pp. [info](#)
- REŠKOVÁ, Ivana and Magdalena PINTAROVÁ. *Communicative Czech (Intermediate Czech)*. 2. dotisk 2. vydání. : PhDr. Ivana Rešková, 2006. 196 pp. ISBN 80-902180-9-1. [info](#)
- REŠKOVÁ, Ivana. *Communicative Czech (Intermediate Czech): Workbook*. 3. vydání. Brno: Ivana Rešková, 2014. ISBN 978-80-239-6576-6. [info](#)

Teaching methods

The tuition is realised in the form of practical courses. Teaching methods: listening, reading, speaking (class discussion, team work), listening comprehension, projects, homework. Emphasis put on selfstudy!

Assessment methods

The tuition is realised in the form of practical courses. The students' presence in these courses is strictly required, maximally two properly apologised absences are tolerated. The tuition is finished by a course-unit credit given on the basis of the students' presence, preparation for classes, sitting for Progress Tests and their successful passing of a Final test. The basic limit for passing all tests is 70%. In case of passing all class test, which is obligatory for all students, the basic limit in the Final test is reduced by 10%. Students who score a minimum of 90% in EACH progress test are not obliged to take the credit test. Any copying, recording or leaking tests, use of unauthorized tools, aids and communication devices, or other disruptions of objectivity of exams will be considered non-compliance with the conditions for course completion as well as a severe violation of the study rules. Consequently, the teacher will finish the exam by awarding grade "NNN"

in the Information System, and the Dean will initiate disciplinary proceedings that may result in study termination.

Language of instruction

English

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

Listed among pre-requisites of other courses

- [aVLCJ0888 Czech Language for Foreigners VIII](#)
[aVLCJ0787/VSCJ0787](#) ([Do I meet enrolment requirements?](#))
- [VSCJ0888 Czech Language for Foreigners VIII - practice](#)
[VSCJ0787](#) ([Do I meet enrolment requirements?](#))

Teacher's information

<http://mluvtecesky.net>

Actual information about the subject, consultation hours, etc. is accessible on the notice boards at the Foreign Languages Department. Contact with teachers is provided by the secretary of the department (Kamenice 5, A 15), tel.: 549 498 170.

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#), [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VSCJ0888 Czech Language for Foreigners VIII - practice ✳

Faculty of Medicine

Spring 2018

Extent and Intensity

0/2/0. 4 credit(s). Type of Completion: zk (examination).

Teacher(s)

[Mgr. Jarmila Šafránková](#) (seminar tutor)

[Mgr. Linda Doleží, Ph.D.](#) (seminar tutor)

[PhDr. Magdalena Pintarová](#) (seminar tutor)

[Mgr. Martin Punčochář](#) (seminar tutor)

[PhDr. Ivana Rešková, Ph.D.](#) (seminar tutor)

[PhDr. Jana Vyoralčková](#) (assistant)

Supervisor

[PhDr. Ivana Rešková, Ph.D.](#)

[Language Centre, Faculty of Medicine Division - Language Centre](#)

Contact Person: [Mgr. Veronika Tománková, Ph.D.](#)

Supplier department: [Language Centre, Faculty of Medicine Division - Language Centre](#)

Prerequisites

VSCJ0787 Czech for Foreigners VII -p

General Czech at the A2/B1 CEFR level. The knowledge of specialist discipline-specific vocabulary covered in the aVLCJ0787 Czech Language for Foreigners VII course.

(Do I meet enrolment requirements?)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the tuition is working knowledge of the Czech language on the B1/B2 level of the "Common European Framework of Reference" (CEFR)(Independent User) checked by an examination. The main aim of the course Czech for Foreigners is to teach students communicate with patients in Czech without any help of English speaking doctors or interpreters and independently write case history. The seminars concentrate on practising thematic doctor-patients dialogues and specialised medical terminology.

Learning outcomes

At the end of the course students should be able to

- take hematological, rheumatological, gynecological/obstetrical, neurological and psychiatric history
- use practical medical vocabulary
- pply medical language in doctor-patient and doctor-nursing staff communication;
- interpret medical texts (casuistry, report)
- present and discuss specialized topics.

Syllabus

- **Czech for Foreigners VIII**
- 1st week: Revision Lesson. Ophthalmology, ORL, Surgery. Grammar: Revision: Declension in singular. Relative clauses with KTERÝ in singular.
- 2nd week: CHARAKTEROVÉ VLASTNOSTI (UNIT 13). Medical Czech: HEMATOLOGY (TM 27). Grammar: Genitive plural (Revision).
- 3rd week: POČÍTAČ A INTERNET (UNIT 14). Medical Czech: RHEUMATOLOGICAL HISTORY I (TM 28). Grammar: Účelové věty s ABY.
- 4th week: Medical Czech: RHEUMATOLOGY II (<http://mluvtecesky.net/en/courses/medical2/10/1>). Grammar: Předmětné věty s ABY. Modal verbs and expressions.
- 5th week: NA POŠTĚ A V BANCE (UNIT 15). PROGRESS TEST 1. Medical Czech: ENDOCRINOLOGY (TM 29). Grammar: Conjunctions (U 16).
- 6th week: Medical Czech: GYNECOLOGICAL AND OBSTETRICAL HISTORY I(TM 30).Grammar: Declension in plural I.
- 7th week: Vyjádření názoru (UNIT 16). Medical Czech: OBSTETRICS (<http://mluvtecesky.net/en/courses/medical3/4/1>). Grammar:Declension in plural II.

- 8th week: Medical Czech: *NEUROLOGICAL HISTORY* (TM 31). Grammar: Relative clauses with *KTERÝ* in plural.
- 9th week: *PROGRESS TEST 2*. Medical Czech: *NEUROLOGY* (<http://mluvtecesky.net/en/courses/medical3/8/1-11>). Grammar: Conjunctions (U 16).
- 10th week: Medical Czech: *PSYCHIATRIC EXAMINATION* (TM 35). Grammar: Declension of *den, člověk, dítě* (U 17).
- 11th week: Medical Czech: *PSYCHIATRY* (<http://mluvtecesky.net/en/courses/medical3/9/1>). Grammar: Declension of numbers 2, 3, 4 etc. (U 18).
- 12th week: *PROGRESS TEST 3 (ORAL)*. Grammar: Revision.
- 13th week: Medical Czech: *DERMATOLOGY* (<http://mluvtecesky.net/en/courses/medical3/11/1-10>).
- 14th week: Revision. Medical Czech: *DERMATOLOGY* and other clinical fields.
- 15th week: Final Written Exam.

Literature

required literature

- ČERMÁKOVÁ, Iveta. *Talking Medicine: Czech for Medical Students*. 1. vyd. Praha: Eurolex Bohemia, 2006. 217 pp. ISBN 80-86861-12-0. [info](#)
- Rešková, Ivana a kol. *How to take a patient's history*. Brno: CJV MU 2015.
- HOLÁ, Lída and Pavla BOŘILOVÁ. *Česky krok za krokem 2*. 1. vyd. Praha: Akropolis, 2009. ISBN 978-80-86903-92-7. [URL info](#)
- HOLÁ, Lída, Petra BULEJČÍKOVÁ a Silvie PŘEVŘÁTILOVÁ. *Česky krok za krokem 1: pracovní sešit 13-24*. 1. vydání. Praha: Akropolis, 2019. 160 stran. ISBN 9788074701344.

Teaching methods

The tuition is realised in the form of practical courses. The following teaching methods are used: class discussion, roleplay, work in groups, reading, listening, writing HW (including Projects), word study.

Assessment methods

The tuition is realised in the form of practical courses. The students' presence in these courses is strictly required; a maximum of two unexcused absences is tolerated. Students are allowed to substitute a maximum of TWO classes with another group. Substitutions are not possible in the weeks when Progress Test take place. Students must inform the teacher of the group in which they intend to substitute their missed class in writing in advance. If they fail to do so, they will not be allowed to attend the class. If a student has more than two unexcused absences, they will not be allowed to take the Final test. The tuition is finished by an end-of-term examination consisting of a WRITTEN and an ORAL part. Passing the examination is conditioned by proper attendance, ACTIVE PARTICIPATION in practical courses, sitting for Progress Tests and successful passing of written and oral exams. The basic limit for passing all tests is 70%. In case of passing three class tests (3%, 3%, 4%) which are obligatory for all students, the basic limit in the written exam is reduced by 10%. Without successful passing the written exam students will not be allowed to sit for the oral part! Students who score a minimum of 90% in

EACH progress test are not obliged to take the written part of Final exam. Any copying, recording or leaking tests, use of unauthorized tools, aids and communication devices, or other disruptions of objectivity of exams (credit tests) will be considered non-compliance with the conditions for course completion as well as a severe violation of the study rules. Consequently, the teacher will finish the exam by awarding grade "F" in the Information System.

Language of instruction

English

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

Credit evaluation note: kredity B.

Listed among pre-requisites of other courses

- [VSMC0921 Medical Czech for Advanced Students I VSCJ0888 \(Do I meet enrolment requirements?\)](#)
- [VSMC1022 Medical Czech for Advanced Students II VSCJ0888 \(Do I meet enrolment requirements?\)](#)

Teacher's information

<http://mluvtecesky.net>

Current information about the subject, consultation hours, etc. is accessible on the notice boards at the Language Center, Faculty of Medicine Division. Contact with teachers is provided by the secretary of the department (Kamenice 5, A15), tel.: 549 498 170.

The course is also listed under the following terms [Spring 2000](#), [Spring 2001](#), [Spring 2002](#), [Spring 2003](#), [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VSDD051 Diferenciální diagnostika interních a chirurgických onemocnění ✱

Faculty of Medicine

Autumn 2015

Extent and Intensity

0/2. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Miroslav Souček, CSc.](#) (seminar tutor)

[Eva Kašpárková](#) (assistant)

[Lucie Kučerová](#) (assistant)

Supervisor

[prof. MUDr. Miroslav Souček, CSc.](#)

[Second Department of Internal Medicine - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Contact Person: [prof. MUDr. Miroslav Souček, CSc.](#)

Supplier department: [Second Department of Internal Medicine - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

The capacity limit for the course is 40 student(s).

Current registration and enrolment status: enrolled: **40/40**, only registered: **16/40**, only registered with preference (fields directly associated with the programme): **15/40**

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

Note related to how often the course is taught: 6.-15.týden.

Information on course enrolment limitations: Předmět je určen výhradně pro studenty 3. ročníku! Výuka probíhá od 13,00 do 15,00 h. Dif.diagn.int.onem.pro 20 studentů na II. interní klinice, Dif.diagn.chir.onem.pro 20 studentů na I. chirurgické klinice.

The course is also listed under the following terms [Autumn 2013](#), [Autumn 2014](#).

VSDL071 Diagnostics and management in orthopaedic surgery



Faculty of Medicine

Autumn 2019

Extent and Intensity

2/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[doc. MUDr. Zbyněk Rozkydal, Ph.D.](#) (lecturer)

Supervisor

[doc. MUDr. Zbyněk Rozkydal, Ph.D.](#)

[First Department of Orthopedic Surgery - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Supplier department: [First Department of Orthopedic Surgery - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Timetable

Mon 25. 9. to Fri 22. 12. Wed 16:00–17:30 [N01901](#)

Prerequisites

Knowledge of anatomy and physiology of locomotor apparatus, basic knowledge of Orthopaedics - the course VLOR7X1

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

The capacity limit for the course is 15 student(s).

Current registration and enrolment status: enrolled: 17/15, only registered: 0/15, only registered with preference (fields directly associated with the programme): 0/15

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

Learning outcomes of the course Diagnostics and management in Orthopaedics: At the end of the course the student should be able to describe all basic types of diagnoses in orthopaedics, should be able to explain the use of diagnostics methods including of modern diagnostics tools leading to establishing of the diagnosis, should be able to apply knowledges in discussion of differential diagnosis and would be able to propose adequate management.

Learning outcomes

The student will be able to suggest modern diagnostic methods in establishing the diagnosis and will be informed about modern ways in management of musculoskeletal diseases.

Syllabus

- *Clinical examination Osteoarthritis deformans Tumors of musculoskeletal system Infections of bone and joints Total hip and knee replacement Deformities of the spine Congenital abnormalities of locomotor apparatus Entesopathies and tendinopathies Arthroscopy Deformities of the foot Amputation, prosthetics*

Literature

- *Solomon, L, Warwick, D., Nayagam, S.: Apley concise system of orthopaedics*
- *Janiček, P.: Ortopedie. ISBN 80-210-2535-2.*

Teaching methods

Teaching methods: PC presentation, bedside examination of the patients, interpretation of laboratory tests and imaging methods, videos. Survey of management of musculoskeletal diseases.

Assessment methods

The students should be present in all teaching hours of the course. Thereafter they are entitled for one credit. There is no specific examination at the end of the course.

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

Information on course enrolment limitations: Předmět určen jen pro 15 studentů, event. další zájemci mail doc.dr.Rozkydal.

Listed among pre-requisites of other courses

- **VLCHI1XX Surgery - State Exam**
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) // [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLS7X1p](#) && [VSEI7X1](#) && [VL7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLP1022c](#) && [VYCET\(3, VLPS07X // VLPS071, VSAT081, VLKA091, VSNO071, VSPM071, VLKB091, VLKF091, BMBS051, VLPM071, VLEP041, VLIA081, VLKM081, VLRL041, VLTL081, VSDL071, VSAL081, VSFP071\)](#) && [VLCH9X33c](#) && ([VLAJ0222](#) // [VSAJ0222](#) // [VSNJ0222](#)) && [VSSP03X](#) (*Do I meet enrolment requirements?*)
- **VLPII1XX Paediatrics - State Exam**
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) // [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLS7X1p](#) && [VSEI7X1](#) && [VL7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLP1022c](#) && [VYCET\(3, VLPS07X // VLPS071, VSAT081, VLKA091, VSNO071, VSPM071, VLKB091, VLKF091, BMBS051, VLPM071, VLEP041, VLIA081, VLKM081, VLRL041, VLTL081, VSDL071, VSAL081, VSFP071\)](#) && [VLCH9X33c](#) && ([VLAJ0222](#) // [VSAJ0222](#) // [VSNJ0222](#)) && [VSSP03X](#) (*Do I meet enrolment requirements?*)
- **VLPGI1XX Obstetric and Gynaecology - State Exam**
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && [VLVL9X66c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLPD1033c](#) && [VLIN9X22](#) && [VLS7X1p](#) && [VSEI7X1](#) && [VL7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLP1022c](#) && [VYCET\(3, VLPS07X // VLPS071, VSAT081, VSNO071, VLKA091, VSPM071, VLKB091, VLKF091, BMBS051, VLPM071, VLEP041, VLTL081, VSDL071, VSAL081, VSAL082, VSDL071, VLRL041, VLIA081, VLKM081, VSFP071\)](#) && [VLCH9X33c](#) && ([VSAJ0222](#) // [VSNJ0222](#)) && [VSSP03X](#) (*Do I meet enrolment requirements?*)
- **VLRLI1XX Family Medicine and Geriatrics**
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) // [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLIN9X22](#) && [VLPL9X1](#) && [VLON091](#) && [VYCET\(3, VLPS07X // VLPS071, VSAT081, VLKA091, VSNO071, VSPM071, VLKB091, VLKF091, BMBS051, VLPM071, VLEP041, VLIA081, VLKM081, VLRL041, VLTL081, VSDL071, VSAL081, VSAL082, VSFP071\)](#) && [VLCH9X33c](#) && ([VLAJ0222](#) // [VSAJ0222](#) // [VSNJ0222](#)) (*Do I meet enrolment requirements?*)
- **VLVLI1XX Internal Medicine - State Exam**
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) // [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLS7X1p](#) && [VSEI7X1](#) && [VL7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) &&

[VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) // [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VRL041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) // [VSAJ0222](#) // [VSNJ0222](#)) && [VSSP03X](#) (*Do I meet enrolment requirements?*)

- [VLZPI1XX Public Health - State Exam](#)
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) // [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLS7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) // [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VRL041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) // [VSAJ0222](#) // [VSNJ0222](#)) && [VSSP03X](#) (*Do I meet enrolment requirements?*)

The course is also listed under the following terms [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#), [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VSDM051 History of Medicine ✨

Faculty of Medicine

Autumn 2015

Extent and Intensity

0/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[Mgr. Irena Wernerová](#) (lecturer)

Supervisor

[prof. MUDr. Bc. Zuzana Derflerová Brázdová, DrSc.](#)

[Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [Mgr. Irena Wernerová](#)

Supplier department: [Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Timetable

Mon 16. 11. to Fri 4. 12. Tue 15:00–16:40 [A22/116 aula](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

The main objectives are to inform student on the main periods and tendencies of the history of medicine and to contribute to understanding of basic values of health care and health services system. Student will be able to evaluate importance of the history of medicine.

Syllabus

- *1. Origin of medicine and health care. 2. Diseases and healing in a prehistoric society. 3. Christian tradition, Arabic, Chinese and Indian medicine, 4. European medicine in the Middle Ages. 5. Medicine in the Renaissance. 6. Medicine during the Enlightenment. 7. Development of the scientific medicine in the nineteenth century. 8. Medical care in the nineteenth century. 9. The advancement and limits of medicine in the twentieth century. 10. The past, the present, and the future of medicine and health care. 11. Personalities and basic data of the development of the Czech medicine and health care system. 12. The concise history of the Masaryk University, Medical faculty, and the teaching hospital.*

Literature

- *GORDON, Richard. Podivuhodné dějiny lékařství. Translated by Růžena Loulová. 1. vyd. Praha: Melantrich, 1995. ISBN 8070232080. [info](#)*
- *Největší dobrodíní lidstva : historie medicíny od starověku po současnost. Edited by Roy Porter - Jaroslav Hořejší. 1. vyd. Praha: PROSTOR, 2001. 807 s., ob. ISBN 80-7260-052-4. [info](#)*
- *SCHOTT, Heinz. Kronika medicíny. Translated by Zdeněk Bureš. 1. vyd. Praha: Fortuna Print, 1994. 648 s., fo. ISBN 80-85873-16-8. [info](#)*

Teaching methods

seminars

Assessment methods

credit

Language of instruction

Czech

Further comments (probably available only in Czech)

Information on the extent and intensity of the course: 3x2 hodiny.

The course is also listed under the following terms [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#).

VSDV7X21c Dermatovenerology I-practice ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

3/12/0. 1 credit(s). Type of Completion: z (credit).

Teacher(s)

[doc. MUDr. Hana Jedličková, Ph.D.](#) (seminar tutor)
[Bc. Dagmar Němečková](#) (seminar tutor), [prof. MUDr. Věra Semrádová, CSc.](#) (deputy)
[MUDr. Miroslav Nečas, Ph.D.](#) (seminar tutor), [prof. MUDr. Věra Semrádová, CSc.](#)
(deputy)
[doc. MUDr. Jarmila Rulcová, CSc.](#) (seminar tutor)
[MUDr. Sabina Sellner Švestková, Ph.D.](#) (seminar tutor)
[prof. MUDr. Vladimír Vašků, CSc.](#) (seminar tutor)
[Jana Fišerová](#) (assistant)
[Libuše Darmovzalová](#) (assistant)
[Bc. Dagmar Němečková](#) (assistant)

Supervisor

[prof. MUDr. Vladimír Vašků, CSc.](#)
[First Department of Dermatovenerology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)
Supplier department: [First Department of Dermatovenerology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Timetable of Seminar Groups

VSDV7X21c/01: Mon 11. 12. to Fri 15. 12. each working day 7:30–9:45 [N03086](#)
VSDV7X21c/02: Mon 27. 11. to Fri 1. 12. each working day 7:30–9:45 [N03008](#)
VSDV7X21c/04: Mon 30. 10. to Fri 3. 11. each working day 7:30–9:45 [N03008](#)
VSDV7X21c/05: Mon 16. 10. to Fri 20. 10. each working day 7:30–9:45 [N03008](#)
VSDV7X21c/06: Mon 2. 10. to Fri 6. 10. each working day 7:30–9:45 [N03008](#)
VSDV7X21c/07: Mon 18. 9. to Fri 22. 9. each working day 7:30–9:45 [N03008](#)
VSDV7X21c/08: Mon 1. 1. to Fri 5. 1. each working day 7:30–9:45 [N03008](#)
VSDV7X21c/32: Mon 27. 11. to Fri 1. 12. each working day 10:15–12:20 [N03008](#)
VSDV7X21c/34: Mon 13. 11. to Fri 17. 11. each working day 7:30–9:45 [N03008](#)

Prerequisites

[VSPF0622p Pathophysiol. II - lect.](#) && [VSPA0622p Pathology II - lecture](#) && ([STLM0522p Medical Microbiology II-lect.](#) // [VLLM0522p Medical Microbiology II - lect](#)) && ([VLCP0622c Introduc. to surgery II -pr.](#) // [STCP0622c Clin.exam. in surgery II](#)) && [VSIP0622c Introduction to internal II-pr](#) && [VLFA0621c Pharmacology I - p](#)
Essential knowledge of anatomy, physiology, histopathology, biochemistry focused on the skin, ability to work with patient, to work with medical files, good knowledge of differential diagnose and algorithm in therapy.
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the subject is to introduce students in practical aspects of examination approaches, diagnostics and appropriate treatment choices of dermatoses and venereal diseases. During the first semester the training is focused on understanding and

acquisition of basic principles of skin functions, pathophysiology of the most important skin diseases, morphology as a basic examination paradigm and of the most important aspects of the skin allergology, phototherapy and topical treatment in dermatology.

Learning outcomes

Finally the student will be able to investigate patient including using of basic diagnostic tests in dermatovenereology, to choose appropriate topical therapy, further differential diagnose in principal groups of skin and venereal diseases.

Syllabus

- *Ist Day: Morphology.*
- *IInd Day: Skin Barrier Functions.*
- *IIIrd Day: Examination of Skin Function and Skin Allergology.*
- *IVth Day: Phototherapy in Dermatology.*
- *Vth Day: Topical Therapy. Credit.*

Literature

- *ARENBERGER, P. and I. OBSTOVÁ. Obecná dermatovenerologie. 1. vydání. Praha: Czechopress Agency, 2001. 246 pp. ISBN 80-902632-4-0. [info](#)*
- *BUCHVALD, J. and BUCHVALD D. Učebnica dermatovenerológie. 1. vydání. Bratislava: Slovak Academic Press, 2002. ISBN 80-89104-03-7. [info](#)*
- *DITRICHOVÁ, Dagmar, Martina JANSOVÁ and Robert OPAVSKÝ. Repetitorium dermatovenerologie. 1. vyd. Olomouc: Epava, 2002. 304 s. ISBN 808629708X. [info](#)*
- *Feit, J. a kol. Hypertextový atlas dermatopatologie. <http://atlases.muni.cz>*
- *Hunter, J.A.A. Clinical Dermatology. 3rd e., Blackwell Pub. 2002, ISBN: 0443071403*
- *ŠTORK, Jiří. Dermatovenerologie. 1. vyd. Praha: Galén, 2008. xv, 502. ISBN 9788072623716. [info](#)*
- *VLAŠÍN, Zdeněk and Hana a kol. JEDLIČKOVÁ. Praktická dermatologie v obrazech a schématech. 1. vydání. Brno: Vladerma, 2001. 251 pp. ISBN 80-238-6966-3. [info](#)*
- *VOSMÍK, F. a kol. Dermatovenerologie. 1. vydání. Praha: Karolinum, 1999. 396 pp. ISBN 80-7184-633-3. [info](#)*
- *VÁŠKŮ, Vladimír. Psoriáza. 128 stran. ISBN 9788073454302. [info](#)*

Teaching methods

Course is organized as one week intership at dermatovenerological clinics. Course is composed of collective seminars to the given topics and practical bed-side demonstrations in small groups.

Assessment methods

Giving the course-unit credit is conditioned by full (100%) attendance in the lessons and by evaluated knowledge orally by teacher, controls by the head of the department.

Language of instruction

Czech

Further comments (probably available only in Czech)

Information on completion of the course: 100% účast, prokázání znalostí ústně nebo testem.

The course is taught annually.

Listed among pre-requisites of other courses

- [VSDV9X22c Dermatovenerology II - practise](#)
[VSDV7X21c \(Do I meet enrolment requirements?\)](#)
- [VSDV9X22p Dermatovenerology II - lecture](#)
[VSDV7X21c \(Do I meet enrolment requirements?\)](#)

Teacher's information

Průběžné doplňování doporučené literatury, konzultace mimo běžnou výuku pověřenými učiteli.

The course is also listed under the following terms [Autumn 1999](#), [Spring 2000](#), [Autumn 2000](#), [Spring 2001](#), [Autumn 2001](#), [Spring 2002](#), [Autumn 2002](#), [Spring 2003](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#).

VSDV7X21p Dermatovenerology I - lecture ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

3/12/0. 0 credit(s). Type of Completion: -.

Teacher(s)

[doc. MUDr. Eliška Dastychová, CSc.](#) (lecturer), [prof. MUDr. Věra Semrádová, CSc.](#) (deputy)

[MUDr. Miroslav Nečas, Ph.D.](#) (lecturer)

[prof. MUDr. Alena Pospíšilová, CSc.](#) (lecturer)

[doc. MUDr. Jarmila Rulcová, CSc.](#) (lecturer)

[MUDr. Sabina Sellner Švestková, Ph.D.](#) (lecturer)

[prof. MUDr. Věra Semrádová, CSc.](#) (lecturer)

[prof. MUDr. Vladimír Vašků, CSc.](#) (lecturer)

[Jana Fišerová](#) (assistant)

[Bc. Dagmar Němečková](#) (assistant), [prof. MUDr. Věra Semrádová, CSc.](#) (deputy)

Supervisor

[prof. MUDr. Vladimír Vašků, CSc.](#)

[First Department of Dermatovenerology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Supplier department: [First Department of Dermatovenerology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Prerequisites

[VSPF0622p Pathophysiol. II - lect.](#) && [VSPA0622p Pathology II - lecture](#) && ([STLM0522p Medical Microbiology II-lect.](#) // [VLLM0522p Medical Microbiology II - lect](#)) && ([VLCP0622c Introduc. to surgery II -pr.](#) // [STCP0622c Clin.exam. in surgery II](#)) && [VSIP0622c Introduction to internal II-pr](#) && [VLFA0621c Pharmacology I - p](#)
Very good knowledge of theory in modern medicine.
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the subject is to give a actual theoretic base and recent clinical knowledge to chosen problems in dermatovenerology. Special attendance is given to problems of protective functions of the skin realised by different skin barrier systems, skin immunology, teoretical base of light interactions with the skin, phototherapy indications and contraindications, basic allergic reaction and different types of topical treatment.

Learning outcomes

Finally the student will be able to describe and to differentiate pathological findings in common skin diseases to interpret it with basical differential diagnose, with ability to propose investigation and treatment, with the background of knowledge of skin physiology and pathophysiological mechanisms.

Syllabus

- 1.den: Morphology.
- 2.den: Skin Barrier Function.
- 3.den: Examination of the Skin Function and Allergology.
- 4.den: Phototherapy in Dermatology.
- 5.den: Topical Therapy.

Literature

- ARENBERGER, P. and I. OBSTOVÁ. *Obecná dermatovenerologie*. 1. vydání. Praha: Czechopress Agency, 2001. 246 pp. ISBN 80-902632-4-0. [info](#)
- BUCHVALD, J. and BUCHVALD D. *Učebnica dermatovenerológie*. 1. vydání. Bratislava: Slovak Academic Press, 2002. ISBN 80-89104-03-7. [info](#)
- DITRICHOVÁ, Dagmar, Martina JANSOVÁ and Robert OPAVSKÝ. *Repetitorium dermatovenerologie*. 1. vyd. Olomouc: Epava, 2002. 304 s. ISBN 808629708X. [info](#)
- Feit, J. a kol. *Hypertextový atlas dermatopatologie*. <http://atlases.muni.cz>
- Hunter, J.A.A. *Clinical Dermatology*. 3rd e., Blackwell Pub. 2002, ISBN: 0443071403
- ŠTORK, Jiří. *Dermatovenerologie*. 1. vyd. Praha: Galén, 2008. xv, 502. ISBN 9788072623716. [info](#)

- VLAŠÍN, Zdeněk and Hana a kol. JEDLIČKOVÁ. *Praktická dermatologie v obrazech a schématech*. 1. vydání. Brno: Vladerma, 2001. 251 pp. ISBN 80-238-6966-3. [info](#)
- VOSMÍK, F. a kol. *Dermatovenerologie*. 1. vydání. Praha: Karolinum, 1999. 396 pp. ISBN 80-7184-633-3. [info](#)
- VAŠKŮ, Vladimír. *Psoriáza*. 128 stran. ISBN 9788073454302. [info](#)

Teaching methods

Lecture, interactive dialog in seminars, study of theoretical background simultaneously.

Assessment methods

Giving the course-unit credit is conditioned by 100% attendance and current examination of knowledge. Evaluation of acquired knowledge in clinical dermatology by work with in patient, orally evaluation of basical knowledge of dermatovenerology by teacher during the practicals, possible control by supervisor/head of the department.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught each semester.

The course is taught: in blocks.

Teacher's information

Průběžná aktualizace doporučené literatury, při detailním zájmu studentů o určitou oblast oboru doporučení literatury, příp. jiných zdrojů mimo základní seznam. Konzultace mimo vlastní výuku u pověřených učitelů možné.

The course is also listed under the following terms [Autumn 1999](#), [Spring 2000](#), [Autumn 2000](#), [Spring 2001](#), [Autumn 2001](#), [Spring 2002](#), [Autumn 2002](#), [Spring 2003](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#).

VSDV9X22c Dermatovenerology II-practicals ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

7/20/0. 1 credit(s). Type of Completion: z (credit).

Teacher(s)

[doc. MUDr. Eliška Dastychová, CSc.](#) (seminar tutor)

[doc. MUDr. Hana Jedličková, Ph.D.](#) (seminar tutor)

[MUDr. Miroslav Nečas, Ph.D.](#) (seminar tutor), [prof. MUDr. Věra Semrádová, CSc.](#)

(deputy)

[MUDr. Veronika Slonková, Ph.D.](#) (seminar tutor), [prof. MUDr. Věra Semrádová, CSc.](#)

(deputy)

[prof. MUDr. Vladimír Vašků, CSc.](#) (seminar tutor)

[Libuše Darmovzalová](#) (assistant)

[Jana Fišerová](#) (assistant)
[Bc. Dagmar Němečková](#) (assistant)

Supervisor

[prof. MUDr. Vladimír Vašků, CSc.](#)
[First Department of Dermatovenerology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)
Supplier department: [First Department of Dermatovenerology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Timetable of Seminar Groups

VSDV9X22c/01: Mon 6. 11. to Fri 10. 11. each working day 7:30–12:20 [N03086](#)
VSDV9X22c/02: Mon 23. 10. to Fri 27. 10. each working day 7:30–12:20 [N03008](#)
VSDV9X22c/03: Mon 9. 10. to Fri 13. 10. each working day 7:30–12:20 [N03008](#)
VSDV9X22c/04: Mon 25. 9. to Fri 29. 9. each working day 7:30–12:20 [N03008](#)
VSDV9X22c/05: Mon 8. 1. to Fri 12. 1. each working day 7:30–12:20 [N03008](#)
VSDV9X22c/06: Mon 18. 12. to Fri 22. 12. each working day 7:30–12:20 [N03008](#)
VSDV9X22c/30: Mon 20. 11. to Fri 24. 11. each working day 7:30–12:20 [N03903](#)
VSDV9X22c/31: Mon 4. 12. to Fri 8. 12. each working day 7:30–12:20 [N03903](#)
VSDV9X22c/34: No timetable has been entered into IS.

Prerequisites

[VSDV7X21c Dermatovenerology I-c](#)

Student is able to investigate patient including using of basical diagnostic tests in dermatovenerology, to choice appropriate topical therapy, further differential diagnose in principal groups of skin and venereal diseases.

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the subject is to introduce students in practical aspects of examination approaches, diagnostics and appropriate treatment choices of dermatoses and venereal diseases. During the first semester the training is focused on detail understanding of basic clinical approaches in dermatology and veneorology, acquiring of used and some specialised diagnostic procedures and approaches in the main groups of skin diseases.

Learning outcomes

Finally the student will be able of individuall clinical work with patient, to interpret pathological skin and mucous membrany findings, diferential diagnose and proposal of investigation plan and therapy.

Syllabus

- *Ist Day: Examinations in Veneorology. Clinical Dermatology.*
- *IInd Day: Clinical Dermatology. Evaluation of Clinical Findings in Patients. Skin Mycoses.*

- *IIIrd Day: Clinical Dermatology. Evaluation of Clinical Findings in Patients. Practical Aspects of Eczema Diseases and Their Differential Diagnostics.*
- *IVth Day: Clinical Dermatology. Evaluation of Clinical Findings in Patients. Elaboration of Case Record. Practical aspects of Phototherapy.*
- *Vth Day: Clinical Dermatology. Evaluation of Clinical Findings in Patients. Evaluation of Case Record. Autoimmune Diseases of Connective Tissue. Final Evaluation of the Student. Credit.*

Literature

- *BUCHVALD, J. and BUCHVALD D. Učebnica dermatovenerológie. 1. vydání. Bratislava: Slovak Academic Press, 2002. ISBN 80-89104-03-7. [info](#)*
- *DITRICHOVÁ, Dagmar, Martina JANSOVÁ and Robert OPAVSKÝ. Repetitorium dermatovenerologie. 1. vyd. Olomouc: Epava, 2002. 304 s. ISBN 808629708X. [info](#)*
- *Feit, J. a kol. Hypertextový atlas dermatopatologie. <http://atlases.muni.cz>*
- *Hunter, J.A.A. Clinical Dermatology. 3rd e., Blackwell Pub. 2002, ISBN: 0443071403*
- *ŠTORK, Jiří. Dermatovenerologie. 1. vyd. Praha: Galén, 2008. xv, 502. ISBN 9788072623716. [info](#)*
- *VLAŠÍN, Zdeněk and Hana a kol. JEDLIČKOVÁ. Praktická dermatologie v obrazech a schématech. 1. vydání. Brno: Vladerma, 2001. 251 pp. ISBN 80-238-6966-3. [info](#)*
- *VOSMÍK, F. a kol. Dermatovenerologie. 1. vydání. Praha: Karolinum, 1999. 396 pp. ISBN 80-7184-633-3. [info](#)*
- *VÁŠKŮ, Vladimír. Psoriáza. 128 stran. ISBN 9788073454302. [info](#)*

Teaching methods

Course is organized as one week intership at dermatovenerological clinics. Course is composed of collective seminars to the given topics and practical bed-side demonstrations in small groups.

Assessment methods

Giving the course-unit credit is conditioned by 100% attendance of lessons and by elaborated case record. Evaluation of knowledge during the course, periodical controls by supervisor/head of the department.

Language of instruction

Czech

Further comments (probably available only in Czech)

Information on completion of the course: Zápočet je udělován na základě splnění docházky, zpracování elaborátu a po prokázání znalostí nabytých v průběhu obou bloků stáží. Znalosti k zápočtu prokazují studenti ústně, případně i formou testu. Přednosta kliniky průběžně sleduje a vyhodnocuje stup

The course is taught each semester.

Teacher's information

Průběžné doplňování doporučené literatury. Konzultace mimo hodiny povinné výuky pověřenými učiteli možná.

The course is also listed under the following terms [Autumn 1999](#), [Spring 2000](#), [Autumn 2000](#), [Spring 2001](#), [Autumn 2001](#), [Spring 2002](#), [Autumn 2002](#), [Spring 2003](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

VSDV9X22p Dermatovenerology II-lecture ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

7/20/0. 2 credit(s). Type of Completion: zk (examination).

Teacher(s)

[doc. MUDr. Eliška Dastychová, CSc.](#) (lecturer), [prof. MUDr. Věra Semrádová, CSc.](#) (deputy)

[doc. MUDr. Hana Jedličková, Ph.D.](#) (lecturer)

[MUDr. Miroslav Nečas, Ph.D.](#) (lecturer), [prof. MUDr. Věra Semrádová, CSc.](#) (deputy)

[prof. MUDr. Alena Pospíšilová, CSc.](#) (lecturer)

[doc. MUDr. Jarmila Rulcová, CSc.](#) (lecturer)

[prof. MUDr. Věra Semrádová, CSc.](#) (lecturer)

[MUDr. Sabina Sellner Švestková, Ph.D.](#) (lecturer)

[prof. MUDr. Vladimír Vašků, CSc.](#) (lecturer)

[Jana Fišerová](#) (assistant)

[Bc. Dagmar Němečková](#) (assistant), [prof. MUDr. Věra Semrádová, CSc.](#) (deputy)

Supervisor

[prof. MUDr. Vladimír Vašků, CSc.](#)

[First Department of Dermatovenerology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Contact Person: [prof. MUDr. Věra Semrádová, CSc.](#)

Supplier department: [First Department of Dermatovenerology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Prerequisites

[VSDV7X21c Dermatovenerology I-c](#)

Essential knowledge of theory in modern medicine, anatomy and physiology of the skin, skin barrier and skin immunology and basic of topical therapy.

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the subject is to give an actual theoretic base and recent clinical knowledge to chosen problems in dermatovenereology. Special attendance is given to problems of protective functions of the skin realised by different skin barrier systems, skin immunology, theoretical base of light interactions with the skin, phototherapy indications and contraindications, basic allergic reaction and different types of topical treatment. Cancers of the skin, ulcers of the skin, drug eruptions, modern approaches to psoriasis treatment, steroids in topical treatment and autoimmune bullous diseases.

Learning outcomes

Student has solid knowledge of dermatovenereology, both in theoretical and practical aspects, the ability to interpret pathological skin findings, differential diagnose in skin and venereal diseases and proposal of investigation and therapy.

Syllabus

- *Ist Day: Skin Cancers. Problems in Venereology.*
- *IInd Day: Differential Diagnosis of Leg Ulcers. Drug Eruptions.*
- *IIIrd Day: Differential Diagnosis of Eczema. New Approaches of Psoriasis Treatment.*
- *IVth Day: Autoimmune Bullous Dermatoses. Corticosteroids in Topical Treatment.*
- *Vth Day: Skin Autoimmunity.*

Literature

- *BUCHVALD, J. and BUCHVALD D. Učebnica dermatovenerológie. 1. vydání. Bratislava: Slovak Academic Press, 2002. ISBN 80-89104-03-7. [info](#)*
- *DITRICHOVÁ, Dagmar, Martina JANSOVÁ and Robert OPAVSKÝ. Repetitorium dermatovenerologie. 1. vyd. Olomouc: Epava, 2002. 304 s. ISBN 808629708X. [info](#)*
- *Feit, J. a kol. Hypertextový atlas dermatopatologie. <http://atlases.muni.cz>*
- *Hunter, J.A.A. Clinical Dermatology. 3rd e., Blackwell Pub. 2002, ISBN: 0443071403*
- *VLAŠÍN, Zdeněk and Hana a kol. JEDLIČKOVÁ. Praktická dermatologie v obrazech a schématech. 1. vydání. Brno: Vladerma, 2001. 251 pp. ISBN 80-238-6966-3. [info](#)*
- *ŠTORK, Jiří. Dermatovenerologie. 1. vyd. Praha: Galén, 2008. xv, 502. ISBN 9788072623716. [info](#)*
- *VOSMÍK, F. a kol. Dermatovenerologie. 1. vydání. Praha: Karolinum, 1999. 396 pp. ISBN 80-7184-633-3. [info](#)*
- *VÁŠKŮ, Vladimír. Psoriáza. 128 stran. ISBN 9788073454302. [info](#)*

Teaching methods

Lecture, confrontation of theory and clinical dermatovenereology.

Assessment methods

Giving the course-unit credit is conditioned by 100% attendance and current examination of knowledge. Elaboration of case record. Credit. Exam.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course can also be completed outside the examination period.

The course is taught each semester.

The course is taught: in blocks.

Listed among pre-requisites of other courses

- **VLCH11XX Surgery - State Exam**
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) // [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLS7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLP1022c](#) && VYCET(3, [VLPS07X](#) // [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VRL041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) // [VSAJ0222](#) // [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- **VLPD11XX Paediatrics - State Exam**
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) // [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLS7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLP1022c](#) && VYCET(3, [VLPS07X](#) // [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VRL041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) // [VSAJ0222](#) // [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- **VLP11XX Obstetric and Gynaecology - State Exam**
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && [VLVL9X66c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLPD1033c](#) && [VLIN9X22](#) && [VLS7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLP1022c](#) && VYCET(3, [VLPS07X](#) // [VLPS071](#), [VSAT081](#), [VSNO071](#), [VLKA091](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSDL071](#), [VRL041](#), [VLIA081](#), [VLKM081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VSAJ0222](#) // [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- **VRL11XX Family Medicine and Geriatrics**
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) // [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLIN9X22](#) && [VLPL9X1](#) && [VLON091](#) && VYCET(3, [VLPS07X](#) // [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VRL041](#), [VTL081](#),

[VSDL071](#), [VSAL081](#), [VSAL082](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) // [VSAJ0222](#) // [VSNJ0222](#)) (*Do I meet enrolment requirements?*)

- [VLVL11XX Internal Medicine - State Exam](#)
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) // [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) // [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSN0071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VRL041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) // [VSAJ0222](#) // [VSNJ0222](#)) && [VSSP03X](#) (*Do I meet enrolment requirements?*)
- [VLZP11XX Public Health - State Exam](#)
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) // [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) // [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSN0071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VRL041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) // [VSAJ0222](#) // [VSNJ0222](#)) && [VSSP03X](#) (*Do I meet enrolment requirements?*)

Teacher's information

Průběžné doplňování doporučené literatury, konzultace mimo hodiny povinné výuky s pověřenými učiteli možná.

The course is also listed under the following terms [Autumn 1999](#), [Spring 2000](#), [Autumn 2000](#), [Spring 2001](#), [Autumn 2001](#), [Spring 2002](#), [Autumn 2002](#), [Spring 2003](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#), [Accreditation autumn](#), [Accreditation spring](#).

VSEI7X1 Epidemiology of Infectious Diseases ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2/0. 1 credit(s). Type of Completion: k (colloquium).

Teacher(s)

[MUDr. Marie Kolářová, CSc.](#) (lecturer)

[MUDr. Miroslava Zavřelová](#) (lecturer)

[MUDr. Bohdana Rezková, Ph.D. \(lecturer\)](#)

[MUDr. Kräuff Rainer Schwanhaeuser Wulff, MBA, Ph.D. et Ph.D., M.A. \(lecturer\)](#)

[Marie Sekaninová \(seminar tutor\)](#)

Supervisor

[MUDr. Marie Kolářová, CSc.](#)

[Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [MUDr. Marie Kolářová, CSc.](#)

Supplier department: [Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Prerequisites

[VSSL051p Social Medicine - lecture](#) && ([STLM0522p Medical Microbiology II-lect.](#) // [VLLM0522p Medical Microbiology II - lect](#)) && [VSIP0622c Introduction to internal II-pr](#) && [VLFA0621c Pharmacology I - p](#) && [VLCP0622c Introd. to surgery II -pr.](#)

Prerequisites according to the MU study and examination regulations.

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Students will be able at the end of course "epidemiology of infectious diseases" to understand and explain the epidemic process and factors affecting the transmission of infections.

They will be capable to use the information about the current events and epidemiologic situation.

Students should be able to create repressive anti-epidemic measures in outbreaks.

They should master the basic theoretic and practical knowledge of infectious and non-communicable diseases epidemiology in order to implement preventive measures.

Finishing the course, students will be able to give a reasoned decision in relation to the cumulative incidence of known infectious diseases and on the basis of acquired knowledge to derive anti-epidemic measures, even for those unusual situations, such as mutated viruses, and high contagious diseases, etc.

Students will be able to interpret laboratory and clinical examinations in relation to the transmission of infections.

Syllabus

-
- 1. *Goals of the epidemiology.*
- 2. *The basic knowledge of epidemiology - understanding the epidemiological methodology (descriptive, analytic, experimental epidemiology).*
- 3. *Epidemic process; aetiology and risk factors of epidemic diseases.*
- 4. *Form of sources of infection.*
- 5. *Contagiosity in particular stage of the disease.*
- 6. *Carriership of pathogenic microorganisms. Animals as source of infection.*
- 7. *Transmission of infectious diseases, phases of transmission.*
- 8. *Susceptibility of the population to the infection.*
- 9. *Active and passive vaccination.*
- 10. *Natural, social-economic factors.*
- 11. *Global epidemiology, epidemiologic surveillance.*
- 12. *Programme of eradication and elimination of infectious diseases.*
- 13. *Principles of control of infectious diseases - elimination of the source, interruption of transmission of infectious agents, measures in a focus of infection.*
- 14. *Surveillance of nosocomial infections (NI), aetiology NI, risk factors of acquiring NI, sources and localization NI, the principles of control NI.*
- 15. *Decontamination, disinfection and sterilization.*
- *Special epidemiology.*
- 16. *Epidemiological characteristics of the intestinal infections and prevention of their spreading.*
- 17. *Epidemiological characteristics of the airborne infections and prevention of their spreading.*
- 18. *Epidemiological characteristics of blood infections and prevention of their spreading.*
- 19. *Animals as sources of infection.*
- 20. *Infections of the skin and superficial mucous membrane - epidemiological characteristics and preventing their transmission.*
- 21. *Infections as occupational diseases and their prevention.*
- 22. *Infections in travelling and their prevention.*
- 23. *Epidemiological inspection in hospitals; the monitoring of the microbiological quality of the hospital environment.*
- 24. *The control of the disinfection and sterilization. Interpretation of the results.*

Literature

recommended literature

- 1. *Stone DB, Armstrong WR, Macrina DM, Pankau JW: Introduction to epidemiology. Dubuque, IA - USA: Brown & Benchmark Publishers; 1996. pp 22-63, 115-150.*
- 2. *Farmer R, Lawrenson R, Miller D: Epidemiology and public health medicine. 5th edition. Oxford - U.K.: Blackwell Publishing; 2004. pp 7-13, 91-126.*
- 3. *Bakoss P, Baška T, Bazovská S, Kmety E, Maďar R et al: Compendium of epidemiology. Edited by Pavol Bakoss. Bratislava - Slovak Republic: Comenius University Bratislava; 1999. pp 3-138.*

- 4. Bonita R, Beaglehole R, Kjellström: *Basic epidemiology*. 2nd edition. Geneva - Switzerland: World Health Organization; 2006. pp 117-131.
- GÖPFERTO VÁ, Dana, Petr PAZDIORA and Jana DÁŇOVÁ. *Epidemiologie : obecná a speciální epidemiologie infekčních nemocí*. 2., přepr. vyd. Praha: Karolinum, 2013. 223 s. ISBN 9788024622231. [info](#)
- JINDRÁK, Vlastimil, Dana HEDLOVÁ and Pavla URBAŠKOVÁ. *Antibiotická politika a prevence infekcí v nemocnici*. První vydání. Praha: Mladá fronta, 2014. 709 stran. ISBN 9788020428158. [info](#)
- ŠMERHOVSKÝ, Zdeněk, Dana GÖPFERTO VÁ and Jitka FEBEROVÁ. *Medicína založená na důkazech z pohledu klinické epidemiologie*. 1. vydání. Praha: Karolinum, 2007. 245 stran. ISBN 9788024613147. [info](#)
- ŠRÁMOVÁ, Helena. *Nozokomiální nákazy*. 3. vyd. Praha: Maxdorf, 2013. 400 s. ISBN 9788073452865. [info](#)
- *Manuál prevence v lékařské praxi 4 :základy prevence infekčních onemocnění*. Edited by Kamil Provazník. 1. vyd. Praha: Státní zdravotní ústav, 1996. 126 s. ISBN 80-7168-400-7. [info](#)
- *Manuál prevence v lékařské praxi*. Edited by Kamil Provazník - Lumír Komárek. 1. vyd. Praha: Státní zdravotní ústav, 2001. 63 s. ISBN 8070711949. [info](#)
- 5. www.who.int (information not found in the books).
- 6. www.cdc.gov (information not found in the books).
- 7. <http://ecdc.europa.eu/en/Pages/home.aspx> (information not found in the books).

Teaching methods

Lectures.

For those who will have to write research projects and seminar papers during third, fourth and fifth year, it is strongly recommended to enrol the following courses:

VSIL021 - Information literacy - (3 credits) - e-learning.

VSKP041 - A course of working with information sources and tools (4 credits).

Assessment methods

COLLOQUIUM INFORMATION:

1. *To sit for colloquium, it will be required to successfully complete the prerequisite subjects and to have obtained the subject's credit - VSEI7X1a.*
2. *Each student must register in the Information System (IS) in one of the offered colloquium / examination terms. The colloquium has fixed colloquium / examination terms / dates - (Only during the examination period, except the examination pre-term). No extra-terms will be given.*
3. *Students registered to a colloquium term will fail the term if:*
 - a-) *arrive late to the colloquium day.*

b-) they are not present and previously did not cancel the term in the stipulated periods (see IS).

4. In case of failure, EACH STUDENT CAN RETAKE THE COLLOQUIUM TWO MORE TIMES, only in given terms (according to Masaryk University study rules).

5. In case of failure during the third term (second resit), the student must repeat the course in the following school year.

6. All colloquium questions are based on ALL REQUIRED LITERATURE, seminars and lectures.

Colloquium → Oral examination → 1 question on general epidemiology and 1 question on special epidemiology.

SCORE:

Passed → Successfully answering both questions.

Failed → Failing one or both questions.

***** This subject is part of the Public Health State Examination *****

See VLZP11XX - Public Health State Examination.

ACADEMIC MISCONDUCT, PLAGIARISM DETECTION AND ETHICAL ISSUES:

1. Any attempts of ACADEMIC MISCONDUCT, such as cheating or assisting someone else to cheat during the colloquium, will result in disciplinary actions, such as:

a-) You will be required to hand over your examination paper and asked to leave the examination room. This means, you failed the examination (examination term), with the respective score F / 4, on your academic records in the information system.

b-) Opening disciplinary proceedings.

c-) Failing the subject / course.

d-) Expulsion from university.

2. During the colloquium, it is forbidden to use items such as:

a-) Smart phones / Tablets.

b-) Laptops.

c-) To wear earphones or headphones (if not medical prescribed).

d-) To talk.

**In such cases, disciplinary actions will be taken (See above numeral 1).*

Language of instruction

Czech

Further Comments

Study Materials

The course can also be completed outside the examination period.

The course is taught each semester.

The course is taught: in blocks.

Listed among pre-requisites of other courses

- **VLCHI1XX Surgery - State Exam**
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) // [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && [VYCET\(3, VLPS07X // VLPS071, VSAT081, VLKA091, VSNO071, VSPM071, VLKB091, VLKF091, BMBS051, VLPM071, VLEP041, VLIA081, VLKM081, VLRL041, VLTL081, VSDL071, VSAL081, VSFP071\)](#) && [VLCH9X33c](#) && ([VLAJ0222](#) // [VSAJ0222](#) // [VSNJ0222](#)) && [VSSP03X](#) (*Do I meet enrolment requirements?*)
- **VLIN9X22 Infectious Diseases II - lecture**
[VLIN7X21](#) && [VSIP0622c](#) && [VSEI7X1](#) (*Do I meet enrolment requirements?*)
- **VLIN9X22a Infectious Diseases II - practice**
[VLIN7X21](#) && [VSIP0622c](#) && [VSEI7X1](#) (*Do I meet enrolment requirements?*)
- **VLPDI1XX Paediatrics - State Exam**
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) // [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && [VYCET\(3, VLPS07X // VLPS071, VSAT081, VLKA091, VSNO071, VSPM071, VLKB091, VLKF091, BMBS051, VLPM071, VLEP041, VLIA081, VLKM081, VLRL041, VLTL081, VSDL071, VSAL081, VSFP071\)](#) && [VLCH9X33c](#) && ([VLAJ0222](#) // [VSAJ0222](#) // [VSNJ0222](#)) && [VSSP03X](#) (*Do I meet enrolment requirements?*)
- **VLPGI1XX Obstetric and Gynaecology - State Exam**
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && [VLVL9X66c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && [VYCET\(3, VLPS07X // VLPS071, VSAT081, VSNO071, VLKA091, VSPM071, VLKB091, VLKF091, BMBS051, VLPM071, VLEP041, VLTL081, VSDL071, VSAL081, VSAL082, VSDL071, VLRL041, VLIA081, VLKM081, VSFP071\)](#) && [VLCH9X33c](#) && ([VSAJ0222](#) // [VSNJ0222](#)) && [VSSP03X](#) (*Do I meet enrolment requirements?*)
- **VLPL9X1 Preventive Medicine - lecture**
[VSIP0622c](#) && [VLCPO622c](#) && [VLLM0522p](#) && [VLIM051p](#) && [VLDM7X1c](#) && [VSEI7X1](#) (*Do I meet enrolment requirements?*)

- [VLPL9X1a Preventive Medicine - practice](#)
[VSIP0622c](#) && [VLCP0622c](#) && [VLLM0522p](#) && [VLIM051p](#) && [VLDM7X1c](#)
&& [VSEI7X1](#) (*Do I meet enrolment requirements?*)
- [VLVLI1XX Internal Medicine - State Exam](#)
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) &&
[VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) // [VLVL9X61c](#)) && [VLVL9X62c](#)
&& [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) &&
[VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) &&
[VL0L7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) &&
[VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && [VYCET\(3, VLPS07X // VLPS071,](#)
[VSAT081, VLKA091, VSNO071, VSPM071, VLKB091, VLKF091, BMBS051,](#)
[VLPM071, VLEP041, VLIA081, VLKM081, VLRL041, VLTL081, VSDL071,](#)
[VSAL081, VSFP071\)](#) && [VLCH9X33c](#) && ([VLAJ0222](#) // [VSAJ0222](#) // [VSNJ0222](#))
&& [VSSP03X](#) (*Do I meet enrolment requirements?*)
- [VLZP11XX Public Health - State Exam](#)
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) &&
[VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) // [VLVL9X61c](#)) && [VLVL9X62c](#)
&& [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) &&
[VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) &&
[VL0L7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) &&
[VSLE7X1p](#) && [VLPG1022c](#) && [VYCET\(3, VLPS07X // VLPS071, VSAT081,](#)
[VLKA091, VSNO071, VSPM071, VLKB091, VLKF091, BMBS051, VLPM071,](#)
[VLEP041, VLIA081, VLKM081, VLRL041, VLTL081, VSDL071, VSAL081,](#)
[VSFP071\)](#) && [VLCH9X33c](#) && ([VLAJ0222](#) // [VSAJ0222](#) // [VSNJ0222](#)) &&
[VSSP03X](#) (*Do I meet enrolment requirements?*)

Teacher's information

<http://is.muni.cz/do/1411/epidemiologie>

The course is also listed under the following terms [Autumn 1999](#), [Spring 2000](#), [Autumn 2000](#),
[Spring 2001](#), [Autumn 2001](#), [Spring 2002](#), [Autumn 2002](#), [Spring 2003](#), [Autumn 2003](#), [Spring 2004](#),
[Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn](#)
[2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring](#)
[2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#),
[Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#),
[Accreditation autumn](#), [Accreditation spring](#).

VSEI7X1a Epidemiology of Infectious Diseases ✱

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2/0. 1 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Marie Kolářová, CSc.](#) (lecturer)

[MUDr. Miroslava Zavřelová](#) (lecturer)

[MUDr. Bohdana Rezková, Ph.D. \(lecturer\)](#)

[MUDr. Kräuff Rainer Schwanhaeuser Wulff, MBA, Ph.D. et Ph.D., M.A. \(lecturer\)](#)

[Marie Sekaninová \(seminar tutor\)](#)

Supervisor

[MUDr. Marie Kolářová, CSc.](#)

[Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [MUDr. Marie Kolářová, CSc.](#)

Supplier department: [Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Timetable of Seminar Groups

VSEI7X1a/01: Mon 18. 9. to Fri 22. 9. each working day 7:30–12:20 [A21/111](#)

VSEI7X1a/02: Mon 1. 1. to Fri 5. 1. each working day 7:30–12:20 [A21/111](#)

VSEI7X1a/04: Mon 27. 11. to Fri 1. 12. each working day 7:30–12:20 [A21/111](#)

VSEI7X1a/05: Mon 6. 11. to Fri 10. 11. each working day 7:30–12:20 [A21/111](#)

VSEI7X1a/06: Mon 30. 10. to Fri 3. 11. each working day 7:30–12:20 [A21/111](#)

VSEI7X1a/07: Mon 23. 10. to Fri 27. 10. each working day 7:30–12:20 [A21/111](#)

VSEI7X1a/08: Mon 2. 10. to Fri 6. 10. each working day 7:30–12:20 [A21/111](#)

VSEI7X1a/31: Mon 16. 10. to Thu 19. 10. each working day 7:30–12:20 [A21/107](#)

VSEI7X1a/32: Mon 4. 12. to Fri 8. 12. each working day 7:30–12:20 [A21/107](#)

VSEI7X1a/34: Mon 11. 12. to Fri 15. 12. each working day 7:30–12:20 [A21/107](#)

VSEI7X1a/35: No timetable has been entered into IS.

Prerequisites

[VSSL051p Social Medicine - lecture](#) && ([STLM0522p Medical Microbiology II-lect.](#) // [VLLM0522p Medical Microbiology II - lect](#)) && [VSIP0622c Introduction to internal II-pr](#) && [VLFA0621c Pharmacology I - p](#) && [VLCP0622c Introduc. to surgery II -pr.](#)

Prerequisites according to the MU study and examination regulations.

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Students will be able at the end of course "epidemiology of infectious diseases" to understand and explain the epidemic process and factors affecting the transmission of infections.

They will be capable to use the information about the current events and epidemiologic situation.

Students should be able to create repressive anti-epidemic measures in outbreaks.

They should master the basic theoretic and practical knowledge of infectious and non-communicable diseases epidemiology in order to implement preventive measures.

Finishing the course, students will be able to give a reasoned decision in relation to the cumulative incidence of known infectious diseases and on the basis of acquired knowledge to derive anti-epidemic measures, even for those unusual situations, such as mutated viruses, and high contagious diseases, etc.

Students will be able to interpret laboratory and clinical examinations in relation to the transmission of infections.

Syllabus

- 1. General information about the course Epidemiology of infectious diseases. Goals of the epidemiology.
 - 2. The basic knowledge of epidemiology - understanding the epidemiological methodology (descriptive, analytic, experimental epidemiology).
 - 3. Epidemic process; aetiology and risk factors of epidemic diseases.
 - 4. Form of sources of infection.
 - 5. Contagiosity in particular stage of the disease.
 - 6. Carriership of pathogenic microorganisms. Animals as source of infection.
 - 7. Transmission of infectious diseases, phases of transmission.
 - 8. Susceptibility of the population to the infection.
 - 9. Active and passive vaccination.
 - 10. Natural, social-economic factors.
 - 11. Global epidemiology, epidemiologic surveillance.
 - 12. Programme of eradication and elimination of infectious diseases.
 - 13. Principles of control of infectious diseases - elimination of the source, interruption of transmission of infectious agents, measures in a focus of infection.
 - 14. Surveillance of nosocomial infections (NI), aetiology NI, risk factors of acquiring NI, sources and localization NI, the principles of control NI.
 - 15. Decontamination, disinfection and sterilization.
 - Special epidemiology.
 - 16. Epidemiological characteristics of the intestinal infections and prevention of their spreading.
 - 17. Epidemiological characteristics of the airborne infections and prevention of their spreading.
 - 18. Epidemiological characteristics of blood infections and prevention of their spreading.
 - 19. Animals as sources of infection.
 - 20. Infections of the skin and superficial mucous membrane - epidemiological characteristics and preventing their transmission.
 - 21. Infections as occupational diseases and their prevention.
 - 22. Infections in travelling and their prevention.
 - 23. Epidemiological inspection in hospitals; the monitoring of the microbiological quality of the hospital environment.

- 24. *The control of the disinfection and sterilization. Interpretation of the results.*

Literature

required literature

- **REQUIRED LITERATURE**
- 1. Stone DB, Armstrong WR, Macrina DM, Pankau JW: *Introduction to epidemiology*. Dubuque, IA - USA: Brown & Benchmark Publishers; 1996. pp 22-63, 115-150.
- 2. Farmer R, Lawrenson R, Miller D: *Epidemiology and public health medicine*. 5th edition. Oxford - U.K.: Blackwell Publishing; 2004. pp 7-13, 91-126.
- 3. Bakoss P, Baška T, Bazovská S, Kmety E, Maďar R et al: *Compendium of epidemiology*. Edited by Pavol Bakoss. Bratislava - Slovak Republic: Comenius University Bratislava; 1999. pp 3-138.
- 4. Bonita R, Beaglehole R, Kjellström: *Basic epidemiology*. 2nd edition. Geneva - Switzerland: World Health Organization; 2006. pp 117-131.
- 5. www.who.int (information not found in the books).
- 6. www.cdc.gov (information not found in the books).
- 7. <http://ecdc.europa.eu/en/Pages/home.aspx> (information not found in the books).
- *
- *

recommended literature

- **DOPORUČENÁ LITERATURA**
- ŠMERHOVSKÝ, Zdeněk, Dana GÖPFERTOVÁ and Jitka FEBEROVÁ. *Medicína založená na důkazech z pohledu klinické epidemiologie*. 1. vydání. Praha: Karolinum, 2007. 245 stran. ISBN 9788024613147. [info](#)
- *Manuál prevence v lékařské praxi 4 :základy prevence infekčních onemocnění*. Edited by Kamil Provazník. 1. vyd. Praha: Státní zdravotní ústav, 1996. 126 s. ISBN 80-7168-400-7. [info](#)
- *Nozokomiální nákazy*. Edited by Helena Šrámová. [1. vyd.]. Praha: MAXDORF-JESSENIUS, 1995. 224 s. ISBN 80-85912-00-7.
- *Manuál prevence v lékařské praxi*. Edited by Kamil Provazník - Lumír Komárek. 1. vyd. Praha: Státní zdravotní ústav, 2001. 63 s. ISBN 8070711949. [info](#)
- ŠRÁMOVÁ, Helena. *Nozokomiální nákazy*. 1. vyd. Praha: MAXDORF-JESSENIUS, 2001. 303 s. ISBN 8085912252. [info](#)

not specified

- *

Teaching methods

Seminars / practices and class discussion.

Reading and studying ALL REQUIRED LITERATURE.

For those who will have to write research projects and seminar papers during third, fourth and fifth year, it is strongly recommended to enrol the following courses:

VSIL021 - Information literacy - (3 credits) - e-learning.

VSKP041 - A course of working with information sources and tools (4 credits).

Assessment methods

REQUIREMENTS TO OBTAIN THE CREDIT:

1. *100 % attendance to seminars / practices and class discussion (Monday to Friday).*
2. *It will be required to successfully complete the prerequisite subjects.*
3. *Absences will be tolerated just due to medical reasons - Students must provide appropriate documentation or medical excuse.*
 - + Students must be aware that even with justified absences (medical excuse), a minimum of 80% attendance is required to obtain the credit. In case a student will have more than 20 % justified / unjustified absences, he / she will have to repeat the course in the following school year.*
4. *Fulfilment of given tasks:*
 - + In case of unjustified absence (per each one), a 1,500-2,000 word seminar paper and a 5-8 minutes power point presentation on the seminar paper topic will be given. If the seminar paper is rejected due to deficiencies and it is not corrected and submitted again, the student will not fulfil with the subject's requirements, and he / she will not get the credit (See Absence and latecomer policy, Academic misconduct, plagiarism detection and unethical issues).*
5. *Active participation during the seminars / practices / lectures.*
6. *Pass the credit test. Students will be allowed to take the credit test only if they have fulfilled numeral 4 (requirements to obtain the credit).*

CREDIT TEST INFORMATION:

1. *Get at least 70 % (14 out of 20 questions) in the credit test, which is a requisite to sit for examination.*
2. *Each student must register in the Information System (IS) in one of the offered credit test terms. The credit test has fixed examination terms / dates - (Only during the examination period, except the examination pre-term). No extra-terms will be given.*
3. *Students registered to a credit test term will fail the term if:*
 - a-) arrive late to the test. No late arrival will be allowed after the start of the credit test.*

b-) they are not present and previously do not cancel the term in the stipulated periods (see IS).

4. In case of failure, EACH STUDENT CAN RETAKE THE CREDIT TEST TWO MORE TIMES, only in given terms (according to Masaryk University study and examination regulations).

5. In case of failure during the third term (second resit), the student must repeat the course in the following school year.

6. All credit test questions are based on ALL REQUIRED LITERATURE, seminars and lectures.

The credit test is a written examination → 20 multiple choice question test, with only one correct answer - (to pass the test, it is required a minimum of 14 correct answers / points).

SCORE:

Passed → 14 and more correct answers / points.

Failed → 13,5 or less correct answers / points.

In order to omit / avoid guessing while answering the MCQ test / examination, the following system will be used:

Correct answer = 1 point.

No answer = 0 point.

Wrong answer = -0,5 point.

Test scoring will be according to the next formula:

Final score = Number of correct answers - (Number of wrong answers / two).

For example:

15 correct answers (17 x 1 point = 15 points) - Passed.

5 wrong answers (5 x -0,5 = -2,5 points).

15 - 2,5 = 12,5. The final score of the test will be 12,5 answers / points.

Final result = Failed.

*** For that reason, only answer the question when you are sure of the answer.*

ABSENCE AND LATECOMER POLICY:

1. *Justified, unjustified absences and late coming to classes:*

a-) *Justified absences → just due to medical reasons - Student must provide appropriate documentation or medical excuse in original.*

b-) *Unjustified absences → the student does not present the medical excuse (original) in the following week of the absence.*

c-) *Late coming to classes → the student arrives after attendance has been taken (3 minutes).*

2. *Measures against absenteeism or late coming to classes:*

a-) *Every unjustified absence or late coming to classes leads to a 1,500-2,000 word seminar paper plus a 5-8 minutes power point presentation on the same topic (the topics will be assigned in the same week of the absence or late coming).*

b-) *The seminar paper must be submitted on the subject's vault within the next 6 days of the incident (absence or late coming), in other case it will be rejected → They will not get the credit.*

c-) *Students will receive an email with the seminar paper instructions, and the word and power point frames.*

d) *Students take full responsibility for their seminar paper(s) and power point presentation(s). (See Academic misconduct, plagiarism detection and unethical issues).*

3. *THERE WILL BE NO EXCEPTIONS. In the following cases, students will be not get the credit / allowed to take the credit test:*

* *Not submitting the assigned seminar paper.*

* *If the seminar paper is rejected due to deficiencies and is not corrected and submitted again.*

* *If despite the fact the seminar paper is accepted but the power point presentation is not shown in class.*

* *If the seminar paper is rejected three times.*

* *If the seminar paper has plagiarism or any unethical issues.*

ACADEMIC MISCONDUCT, PLAGIARISM DETECTION AND UNETHICAL ISSUES:

1. *Any attempts of ACADEMIC MISCONDUCT, such as cheating or assisting someone else to cheat during the credit test, will result in disciplinary actions, such as:*

a-) *You will be required to hand over your examination paper and asked to leave the examination room. This means, you failed the examination (examination term), with the respective score F / 4, on your academic records in the information system.*

b-) *Opening disciplinary proceedings.*

c-) *Failing the subject / course.*

d-) *Expulsion from university.*

2. *During the examination, it is forbidden to:*

a-) *Use smart phones / Tablets.*

b-) *Use laptops.*

c-) *To wear earphones or headphones (if not medical prescribed).*

d-) To talk.

**In such cases, disciplinary actions will be taken (See above numeral 1).*

3. *Every seminar paper will be checked / scanned on university and external systems for online plagiarism detection.*

4. *Cases of suspected plagiarism will be investigated and given to the Disciplinary Committee as a motion to open disciplinary proceedings, according to the Disciplinary Code for Faculty Students.*

5. *Unethical issues will lead to seminar paper rejection → not getting the credit → repeating the course next school year or expulsion from university.*

6. *The plagiarism scan system is able to detect cut and paste from other languages with its respective translation into English. Avoid complications. Simply read the source and use your own words and the cite (quote) the source of information.*

7. *Students MUST be aware that before acceptance, all citations are controlled (compared with the original source). It will not be tolerated any attempts to create or manipulate citations (ACADEMIC MISCONDUCT). → Seminar paper rejection → not getting the credit → repeating the course next school year or expulsion from university.*

Language of instruction

Czech

Follow-Up Courses

- [VLIN7X21 Infectious diseases - practice](#)

Further Comments

The course can also be completed outside the examination period.

The course is taught each semester.

Teacher's information

<http://is.muni.cz/do/1411/epidemiologie>

The course is also listed under the following terms [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#).

VSET021 Medical Ethics I ✳

Faculty of Medicine

Spring 2016

Extent and Intensity

1.5/0/0. 1 credit(s). Type of Completion: k (colloquium).

Teacher(s)

[doc. Mgr. Josef Kuře, Dr. phil.](#) (lecturer)

Supervisor

[doc. Mgr. Josef Kuře, Dr. phil.](#)

[Department of Medical Ethics - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [Mgr. Michaela Vaňharová, Ph.D.](#)

Supplier department: [Department of Medical Ethics - Theoretical Departments - Faculty of Medicine](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

The course introduces to Medical Ethics. Since ethics is a part of practical philosophy, the course also introduces to philosophical thinking whose methods are used in Medical Ethics. The aim of the course is: - to introduce to Medical Ethics - to provide basics in Philosophy of Medicine - to acquire Medical Ethics in the historical context (from the Hippocratic tradition till Modern Times) - to develop the ability to perceive ethical aspects of medicine

Syllabus

- *History of Medical Ethics (Antiquity, Middle Ages, Modern Times) & Introduction to Medical Ethics (terminology, subject) & Methodical approaches in Medical Ethics & Patient - physician relationship & Informed consent & Patient rights & Areas of Medical Ethics (overview) & Beginning of human life & Death and dying & Medicine and its goals: historical challenges & Modification of human being & Human subject research*

Literature

- RICKEN, Friedo. *Obecná etika*. Translated by Daniela Petříčková. 1. vyd. Praha: Oikoymenh, 1995. 165 s. [info](#)
- ANZENBACHER, Arno. *Úvod do etiky*. Vyd. 2. Praha: Academia, 2001. 292 s. ISBN 8020009175. [info](#)
- MORIN, Edgar. *Věda a svědomí. Přel.* Ivana Holzbachová. Brno: Atlantis, 1995. 133 pp. ISBN 80-7108-108-6. [info](#)
- JONSEN, Albert R. *A short history of medical ethics*. 1. vyd. New York: Oxford University Press, 2000. xi, 153. ISBN 9780195134551. [info](#)
- *The Cambridge world history of medical ethics*. Edited by Robert Baker - Laurence B. McCullough. New York: Cambridge University Press, 2009. xxviii, 87. ISBN 9780521888790. [info](#)

- *BEAUCHAMP, Tom L. and James Franklin CHILDRESS. Principles of biomedical ethics. 6th ed. New York: Oxford University Press, 2009. xiii, 417. ISBN 0195335708. [info](#)*
- *The Blackwell guide to medical ethics. Edited by Rosamond Rhodes - Leslie Francis - Anita Silvers. 1st ed. Malden: Blackwell Pub., 2007. xii, 435. ISBN 9781405125840. [info](#)*
- *GLANNON, Walter. Biomedical ethics. 1st ed. Oxford: Oxford University Press, 2005. x, 176. ISBN 0195144317. [info](#)*
- *Methods in medical ethics. Edited by Jeremy Sugarman - Daniel P. Sulmasy. Washington, D.C.: Georgetown University Press, 2001. xiv, 314. ISBN 0878408738. [info](#)*
- *JONAS, Hans. Princip odpovědnosti :pokus o etiku pro technologickou civilizaci. Translated by Břetislav Horyna - Zdeněk Bigl. Vyd. 1. Praha: Oikoymenh, 1997. 318 s. ISBN 80-86005-06-2. [info](#)*
- *SCHWARTZ, Lisa, Paul. E. PREECE and Robert A. HENDRY. Medical ethics : a case-based approach. 1st ed. Edinburgh: Saunders, 2002. xxi, 204. ISBN 0702025437. [info](#)*

Teaching methods

lecture

Assessment methods

written test, oral colloquium

Language of instruction

Czech

Further Comments

Study Materials

The course is taught annually.

The course is taught: every week.

Listed among pre-requisites of other courses

- [VSLE7X1c Medical Ethics 2 - seminar](#)
[VLCP0622c](#) // [STCP0622c](#) && [VSIP0622c](#) && [VSET021](#) && [VLFA0621c](#) ([Do I meet enrolment requirements?](#))
- [VSLE7X1p Medical Ethics 2 - lecture](#)
[VLCP0622c](#) // [STCP0622c](#) && [VSIP0622c](#) && [VSET021](#) && [VLFA0621c](#) ([Do I meet enrolment requirements?](#))
- [VSPA0521c Pathology - practicals](#)
[VSFY0422p](#) && ([VSBC041p](#) // [VSBC0422p](#)) && [VSAN0333p](#) && [VSHE0322p](#)
&& ([VSLT0221s](#) // [VSLT011s](#)) && [VSET021](#) && ([VLLM0421c](#) // [STLM0421c](#))
&& [ZC041](#) ([Do I meet enrolment requirements?](#))
- [VSPA0521p Pathology I - lecture](#)
[VSFY0422p](#) && ([VSBC041p](#) // [VSBC0422p](#)) && [VSAN0333p](#) && [VSHE0322p](#)
&& ([VSLT0221s](#) // [VSLT011s](#)) && [VSET021](#) && ([VLLM0421c](#) // [STLM0421c](#))
&& [ZC041](#) ([Do I meet enrolment requirements?](#))
- [VSPF0521c Pathological physiology I - practice](#)
[VSFY0422p](#) && ([VSBC041p](#) // [VSBC0422p](#)) && [VSAN0333p](#) && [VSHE0322p](#)

&& ([VSLT0221s](#) // [VSLT011s](#)) && [VSET021](#) && [ZC041](#) (*Do I meet enrolment requirements?*)

- [VSPF0521p](#) *Pathological physiology - lectures*
[VSFY0422p](#) && ([VSBC041p](#) // [VSBC0422p](#)) && [VSAN0333p](#) && [VSHE0322p](#)
&& ([VSLT0221s](#) // [VSLT011s](#)) && [VSET021](#) && [ZC041](#) (*Do I meet enrolment requirements?*)
- [VSSL051c](#) *Social Medicine - practice*
([VSLT0221s](#) // [VSLT011s](#)) && [VSET021](#) && [VSPP3X1](#) && [ZC041](#) (*Do I meet enrolment requirements?*)
- [VSSL051p](#) *Social Medicine - lecture*
([VSLT0221s](#) // [VSLT011s](#)) && [VSET021](#) && [VSPP3X1](#) && [ZC041](#) (*Do I meet enrolment requirements?*)

The course is also listed under the following terms [Spring 2000](#), [Spring 2001](#), [Spring 2002](#), [Spring 2003](#), [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#).

VSET0311p Selected lessons of embryology and teratology ✨

Faculty of Medicine

Autumn 2015

Extent and Intensity

1/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. RNDr. Svatopluk Čech, DrSc.](#) (lecturer)

[prof. MUDr. Drahomír Horký, DrSc.](#) (lecturer)

[MUDr. Lenka Krejčířová, Ph.D.](#) (lecturer)

[MUDr. Irena Lauschová, Ph.D.](#) (lecturer)

[doc. MUDr. Miroslava Sedláčková, CSc.](#) (lecturer)

Supervisor

[prof. MUDr. Drahomír Horký, DrSc.](#)

[Department of Histology and Embryology - Theoretical Departments - Faculty of Medicine](#)

Supplier department: [Department of Histology and Embryology - Theoretical Departments - Faculty of Medicine](#)

Timetable

Mon 5. 10. to Fri 8. 1. Thu 11:30–12:20 [A22/116 aula](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [Stomatology](#) (programme LF, M-ST)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Course objectives

At the end of the course students should be able to:

1. Describe the development of individual organ systems of human body.
2. Explain the mechanism of the origin of the most frequent or most grave developmental anomalies.

Syllabus

- Development and teratology of cardiovascular and lymphatic systems. Development and teratology of digestive system and coelom. Teratology of urinary system. Teratology of reproductive system. Teratology of nervous system. Teratology of sensory organs.

Literature

recommended literature

- [ČECH, Svatopluk, Drahomír HORKÝ and Miroslava SEDLÁČKOVÁ](#). Přehled embryologie člověka. 1. vyd. Brno: Masarykova univerzita, 2011. 187 pp. ISBN 978-80-210-5414-1. [info](#)
- VACEK, Zdeněk. Embryologie : učebnice pro studenty lékařství a oborů všeobecná sestra a porodní aistentka. 1. vyd. Praha: Grada, 2006. 255 s. ISBN 9788024712673. [info](#)

not specified

- SADLER, T. W. Langmanova lékařská embryologie. 1. české vyd. Praha: Grada, 2011. xviii, 414. ISBN 9788024726403. [info](#)
- KAPELLER, Karol and Viera POSPÍŠILOVÁ. Embryológia človeka: učebnica pre lekárske fakulty. Martin: Osveta, 2001. 370 pp. ISBN 80-8063-072-0. [info](#)
- Moore Keith L. - Persaud T.V.N. Zrození člověka. 1. české vydání. ISV nakladatelství Praha 2002. 564 s. ISBN 80-85866-94-3.

Teaching methods

lectures

Assessment methods

Giving the course-unit credit is conditioned by 80% attendance in the lectures.

Language of instruction

Czech

Further Comments

[Study Materials](#)

The course is also listed under the following terms [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#).

Faculty of Medicine

Autumn 2016

Extent and Intensity

0/0/0. 23 credit(s). Type of Completion: RZk (examination).

Teacher(s)

[prof. MUDr. Marie Nováková, Ph.D.](#) (lecturer)

[doc. MUDr. Milena Šimurdová, CSc.](#) (lecturer)

[MUDr. Mohamed Al-Kubati, CSc.](#) (seminar tutor)

[prof. PharmDr. Petr Babula, Ph.D.](#) (seminar tutor)

[doc. MUDr. Markéta Bébarová, Ph.D.](#) (seminar tutor)

[MUDr. Zuzana Nováková, Ph.D.](#) (seminar tutor)

[doc. Ing. Michal Pásek, Ph.D.](#) (seminar tutor)

Supervisor

[prof. MUDr. Marie Nováková, Ph.D.](#)

[Department of Physiology - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [Mgr. Lea Neumayerová](#)

Supplier department: [Department of Physiology - Theoretical Departments - Faculty of Medicine](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [Stomatology](#) (programme LF, M-ST)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

At the end of the course, students will have sufficient theoretical background required for profession of physician. Student should be able to recall principles of human body functions in detail - from a cell level, across particular organs to a complex human organism. Students will be able to explain relationships among chemical, physical and biological factors of living processes. An essential aim is that students acquire critical scientific thinking, ability of independent text analysis and fundamental information selection.

Syllabus

- Structural and functional organisation of the body. Metabolism. Water and solutes. Cellular contacts and signalling. Cell membranes. Nervous and muscular activity. Physiology of the heart. Conduction system. Cardiac electrophysiology. Electromechanical coupling. Electrocardiography. Arrhythmias. Cardiac mechanics. Heart cycle. Physiology of blood. Blood clotting. Regulation of blood circulation, of blood pressure. Coronary circulation. Coronary heart disease. Regional circulation (pulmonary, cerebral). Regional circulation (splanchnic, skin, muscle). Regional circulation (renal, fetal). Variability of circulatory parameters. Heart failure. Internal environment (homeostasis). Examination of cardiovascular system, cardiol. examination techniques. Rheology of the blood.

Circulatory failure. Microcirculation. Regulation of blood flow. Arterial hypertension. Blood types (groups). Plasma proteins. Immune system.

Literature

required literature

- *BARRETT, Kim E. Ganong's review of medical physiology. 23rd ed. Maidenhead: McGraw-Hill, 2010. ix, 714. ISBN 9780071270663. [info](#)*
- *GANONG, William F. Přehled lékařské fyziologie. 20. vyd. Praha: Galén, 2005. xx, 890. ISBN 8072623117. [info](#)*

recommended literature

- *SILBERNAGL, Stefan and Agamemnon DESPOPOULOS. Color atlas of physiology. 6th ed., completely rev. and. New York: Thieme, 2009. xiii, 441. ISBN 9783135450063. [info](#)*
- *SILBERNAGL, Stefan and Agamemnon DESPOPOULOS. Atlas fyziologie člověka. 6. vyd., zcela přeprac. a r. Praha: Grada, 2004. xiii, 435. ISBN 802470630X. [info](#)*
- *HALL, John E. and Arthur C. GUYTON. Guyton and Hall textbook of medical physiology. 12th ed. Philadelphia, Pa.: Saunders/Elsevier, 2011. xix, 1091. ISBN 9781416045748. [info](#)*
- *BRAVENÝ, Pavel. Poznámky k přednáškám z fyziologie. 2., přeprac. vyd. Jinočany: H & H, 1992. 281 s. ISBN 80-85467-60-7. [info](#)*
- *KITTNAR, Otomar. Lékařská fyziologie. 1. vyd. Praha: Grada, 2011. 790 s. ISBN 9788024730684. [info](#)*
- *COSTANZO, Linda S. Physiology. 5th ed. Philadelphia: Wolters Kluwer Health/Lippincott Williams & Wilkins, 2011. xiii, 314. ISBN 9780781798761. [info](#)*

Teaching methods

Lessons are led in the form of lectures.

Assessment methods

Students pass to continuing education in next semester without any duty of knowledge checking in this semester.

Language of instruction

Czech

Follow-Up Courses

- [VSFY0422p Physiology II - lecture](#)

Further comments (probably available only in Czech)

Information on completion of the course: Kdo umí - umí, kdo neumí - jde na opravný termín.

The course is taught: every week.

Teacher's information

<http://www.med.muni.cz/fyziol>

Rozpis témat přednášek je vyvěšen na nástěnce Fyziologického ústavu a webových

stránkách. A list of all lecture topics is post up on notice board of Department of Physiology and on its website.

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#), [Autumn 2015](#).

VSFY0321 Physiology *

Faculty of Medicine

Autumn 2016

Extent and Intensity

3/4/0. 6 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Marie Nováková, Ph.D.](#) (lecturer)

[doc. MUDr. Milena Šimurdová, CSc.](#) (lecturer)

[MUDr. Mohamed Al-Kubati, CSc.](#) (seminar tutor)

[prof. PharmDr. Petr Babula, Ph.D.](#) (seminar tutor)

[doc. MUDr. Markéta Bébarová, Ph.D.](#) (seminar tutor)

[MUDr. Zuzana Nováková, Ph.D.](#) (seminar tutor)

[Mirka Hanousková](#) (assistant)

Supervisor

[prof. MUDr. Marie Nováková, Ph.D.](#)

[Department of Physiology - Theoretical Departments - Faculty of Medicine](#)

Supplier department: [Department of Physiology - Theoretical Departments - Faculty of Medicine](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [Stomatology](#) (programme LF, M-ST)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The goal of physiology is to explain the physical and chemical factors that are responsible for the origin, development, and progression of the life. In human physiology, we attempt to explain the specific characteristics and mechanisms of the human body that make it a living being. In the course of lectures, student gets hold of knowledge of general and systematic human physiology, learns how to analyse special text and how to find relevant and substantive information, to cover basic relationships and regulations in living systems, including basic knowledge of biocybernetics. After finishing normal physiology course, the student is acquainted with main basic experimental methods used in physiology, mainly by a form of practices. During practices, the student must get acquainted with current examination methods, used in everyday clinical physiology (e.g.

electrocardiography, electroencephalography, electromyography, spirometry), including exercise tests (ergometry). Students must make conclusions from their own measured values. The main outcome of normal physiology studies is therefore to teach the students not only the review of physiology, but also to enable them to get practical skills and support critical scientific way of thinking.

Syllabus

- *Structural and functional organisation of the body. Metabolism. Water and solutes. Cellular contacts and signalling. Cell membranes. Nervous and muscular activity. Internal environment (homeostasis). Physiology of the heart. Conduction system. Cardiac electrophysiology. Electrocardiography. Arrhythmias. Electromechanical coupling. Cardiac mechanics. Heart cycle. Heart failure. Examination of cardiovascular system, cardiol. examination techniques. Rheology of the blood. Coronary circulation. Coronary heart disease. Microcirculation. Regulation of blood flow. Regional circulation (pulmonary, cerebral). Regional circulation (splanchnic, skin, muscle). Regional circulation (renal, fetal). Regulation of blood circulation, of blood pressure. Variability of circulatory parameters. Arterial hypertension. Circulatory failure. Physiology of blood. Blood clotting. Blood types (groups). Plasma proteins. Immune system.*

Literature

required literature

- *BARRETT, Kim E. Ganong's review of medical physiology. 23rd ed. Maidenhead: McGraw-Hill, 2010. ix, 714. ISBN 9780071270663. [info](#)*
- *GANONG, William F. Přehled lékařské fyziologie. 20. vyd. Praha: Galén, 2005. xx, 890. ISBN 8072623117. [info](#)*

recommended literature

- *SILBERNAGL, Stefan and Agamemnon DESPOPOULOS. Color atlas of physiology. 6th ed., completely rev. and. New York: Thieme, 2009. xiii, 441. ISBN 9783135450063. [info](#)*
- *SILBERNAGL, Stefan and Agamemnon DESPOPOULOS. Atlas fyziologie člověka. 6. vyd., zcela přeprac. a r. Praha: Grada, 2004. xiii, 435. ISBN 802470630X. [info](#)*
- *HALL, John E. and Arthur C. GUYTON. Guyton and Hall textbook of medical physiology. 12th ed. Philadelphia, Pa.: Saunders/Elsevier, 2011. xix, 1091. ISBN 9781416045748. [info](#)*
- *BRAVENÝ, Pavel. Poznámky k přednáškám z fyziologie. 2., přeprac. vyd. Jinočany: H & H, 1992. 281 s. ISBN 80-85467-60-7. [info](#)*
- *KITTAR, Otomar. Lékařská fyziologie. 1. vyd. Praha: Grada, 2011. 790 s. ISBN 9788024730684. [info](#)*
- *COSTANZO, Linda S. Physiology. 4th ed. Philadelphia: Lippincott Williams & Wilkins, 2007. xi, 334. ISBN 9780781773119. [info](#)*

Assessment methods

lectures

Language of instruction

Czech

Further comments (probably available only in Czech)

Information on completion of the course: Zápočet je udělen po absolvování všech praktik a seminářů (absence nutno nahradit).

The course is taught annually.

The course is taught: every week.

Teacher's information

<http://www.med.muni.cz/fyziol>

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#), [Autumn 2015](#).

VSFY0321c Physiology I - practice ❄

Faculty of Medicine

Autumn 2015

Extent and Intensity

0/3/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Mohamed Al-Kubati, CSc.](#) (seminar tutor)

[prof. PharmDr. Petr Babula, Ph.D.](#) (seminar tutor)

[doc. MUDr. Markéta Bébarová, Ph.D.](#) (seminar tutor)

[Ksenia Budinskaya](#) (seminar tutor)

[MUDr. Kateřina Fialová, Ph.D.](#) (seminar tutor)

[MUDr. Zuzana Nováková, Ph.D.](#) (seminar tutor)

[doc. Ing. Michal Pásek, Ph.D.](#) (seminar tutor)

[MUDr. Tibor Stračina](#) (seminar tutor)

[Mgr. Jana Svačinová, Ph.D.](#) (seminar tutor)

[MUDr. Ivan Szadvári](#) (seminar tutor)

[MUDr. Eva Závodná, Ph.D.](#) (seminar tutor)

[MUDr. Tomáš Boušek](#) (assistant)

[David Dufek](#) (assistant)

[MUDr. Aleš Dvořák](#) (assistant)

[MUDr. Michal Hendrych](#) (assistant)

[Ing. Jana Hrušková](#) (assistant)

[Kateřina Juráková](#) (assistant)

[MUDr. Nikola Kosová](#) (assistant)

[MUDr. Zuzana Kubecová](#) (assistant)

[Mgr. Lea Neumayerová](#) (assistant)

[MUDr. Nikola Nováková](#) (assistant)

[Veronika Puchnerová](#) (assistant)

[MUDr. Michael Sekej](#) (assistant)

[MUDr. Monika Tkáčová](#) (assistant)

[MUDr. Jan Zawisza](#) (assistant)

Supervisor

[prof. MUDr. Marie Nováková, Ph.D.](#)

[Department of Physiology - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [Mgr. Lea Neumayerová](#)

Supplier department: [Department of Physiology - Theoretical Departments - Faculty of Medicine](#)

Timetable of Seminar Groups

VSFY0321c/01: Mon 10:30–13:00 [A20/114](#)

VSFY0321c/02: Mon 10:30–13:00 [A20/114](#)

VSFY0321c/03: Wed 13:30–16:00 [A20/114](#)

VSFY0321c/04: Mon 13:30–16:00 [A20/114](#)

VSFY0321c/05: Mon 13:30–16:00 [A20/114](#)

VSFY0321c/06: Mon 13:30–16:00 [A20/114](#)

VSFY0321c/07: Tue 13:30–16:00 [A20/114](#)

VSFY0321c/08: Mon 7:30–10:00 [A20/114](#)

VSFY0321c/09: Mon 10:30–13:00 [A20/114](#)

VSFY0321c/10: Mon 7:30–10:00 [A20/114](#)

VSFY0321c/11: Tue 13:30–16:00 [A20/114](#)

VSFY0321c/12: Tue 13:30–16:00 [A20/114](#)

VSFY0321c/13: Wed 10:30–13:00 [A20/114](#)

VSFY0321c/14: Wed 10:30–13:00 [A20/114](#)

VSFY0321c/15: Thu 13:30–16:00 [A20/114](#)

VSFY0321c/16: Thu 13:30–16:00 [A20/114](#)

VSFY0321c/17: Thu 13:30–16:00 [A20/114](#)

VSFY0321c/18: Wed 7:30–10:00 [A20/114](#)

VSFY0321c/30: No timetable has been entered into IS.

VSFY0321c/31: No timetable has been entered into IS.

VSFY0321c/32: No timetable has been entered into IS.

VSFY0321c/33: No timetable has been entered into IS.

VSFY0321c/34: No timetable has been entered into IS.

VSFY0321c/35: No timetable has been entered into IS.

VSFY0321c/36: No timetable has been entered into IS.

VSFY0321c/37: No timetable has been entered into IS.

Prerequisites (in Czech)

[VSLC011p Med. Chemistry - lecture](#) && [VSBI0222p Biology II-lect.](#) && ([STBF011p Biophysics](#) // [VLBF011p Biophysics-lect.](#)) && [VSBC0221s Biochemistry I-sem.](#) && [VSAN0232s Anatomy II s](#) && [VSAN0232c Anatomy II p](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)

- [General Medicine](#) (programme LF, M-VL)

Course objectives

At the end of the course, students should be able to apply practically the methods used for examination of the functions of human organ systems. Students will be capable of interpreting the acquired records with respect to physiological processes taking place in human organisms. Next, the students will derive and calculate other parameters and indices routinely used in clinical practice. Students will be able to evaluate the results acquired both by measurement and by calculation, and to explain possible deviations.

Syllabus

- *Red blood cell count. Estimation of haemoglobin concentration and of mean corpuscular haemoglobin. Estimation of blood group by slide method. Erythrocyt sedimentation rate. Estimation of osmotic resistance of red blood cells.*
- *Examination of pulse by palpation. Blood pressure in man. Non-invasive methods of blood pressure measurements. Apex beat, heart sounds. Systolic time intervals. ECG record by means of personal computer. Ergometry. Measurement of pulse wave velocity. Sphygmography. Digital model of aortic function (a simulation program). Blood flow in veins.*
- *Spirometric examination - Kroghs respirometer, Cosmed . Recording of forced vital capacity. Pneumography. Pneumotachography and estimation of airway resistance.*

Literature

required literature

- [NOVÁKOVÁ, Zuzana](#), [Robert ROMAN](#), [Mohamed AL-KUBATI](#), [Markéta BĚBAROVÁ](#), [Pavel BRAVENÝ](#), [Alena DAMBORSKÁ](#), [Bohumil FIŠER](#), [Nataša HONZÍKOVÁ](#), [Miloslav KUKLETA](#), [Drahlava MRÁZOVÁ](#), [Jiří MOUDR](#), [Kateřina NOGOVÁ](#), [Marie NOVÁKOVÁ](#), [Zuzana NOVÁKOVÁ](#), [Michal PÁSEK](#), [Miroslav SVĚTLÁK](#), [Zdeněk WILHELM](#) and [Eva ZÁVODNÁ](#). *Praktická cvičení z fyziologie. 2. dotisk 1. vyd. Brno: Masarykova univerzita, 2011. 118 pp. ISBN 978-80-210-4391-6. [info](#)*
- [AL-KUBATI, Mohamed](#), [Markéta BĚBAROVÁ](#), [Pavel BRAVENÝ](#), [Alena DAMBORSKÁ](#), [Bohumil FIŠER](#), [Nataša HONZÍKOVÁ](#), [Miloslav KUKLETA](#), [Drahlava MRÁZOVÁ](#), [Jiří MOUDR](#), [Kateřina FIALOVÁ](#), [Marie NOVÁKOVÁ](#), [Zuzana NOVÁKOVÁ](#), [Michal PÁSEK](#), [Robert ROMAN](#), [Miroslav SVĚTLÁK](#), [Zdeněk WILHELM](#) and [Eva ZÁVODNÁ](#). *Physiology Practicals. 1. dotisk 1. vyd. Brno: Masarykova univerzita, 2010. 109 pp. ISBN 978-80-210-4409-8. [info](#)*

Teaching methods

The course is organized in the form of laboratory practices where students examine each other by given method, and they prepare the report from measured data.

Assessment methods

Credits are given on the basis of full attendance in practices and handling of all laboratory reports.

Language of instruction

Czech
Follow-Up Courses

- [VSFY0422c Physiology II - practice](#)

Further comments (probably available only in Czech)

[Study Materials](#)

Information on completion of the course: Nutno absolvovat všechna praktická cvičení, absence nahradit v nahrazovacím týdnu. Zápočtový test napsat na více jak 60%.

The course is taught annually.

Teacher's information

<http://www.med.muni.cz/fyziol>

Rozpis témat praktických cvičení je vyvěšen na nástěnce Fyziologického ústavu a webových stránkách. Konzultace je možná po osobní domluvě s vyučujícím. A list of all laboratory practice topics is post up on notice board of Department of Physiology and on its website. Consultations are possible after personal arrangement with the teacher.

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#).

VSFY0321p Physiology I - lecture ✳

Faculty of Medicine

Autumn 2015

Extent and Intensity

3/0/0. 0 credit(s). Type of Completion: -.

Teacher(s)

[prof. PharmDr. Petr Babula, Ph.D.](#) (lecturer)
[doc. MUDr. Markéta Bébarová, Ph.D.](#) (lecturer)
[prof. MUDr. Marie Nováková, Ph.D.](#) (lecturer)
[MUDr. Zuzana Nováková, Ph.D.](#) (lecturer)
[doc. Ing. Michal Pásek, Ph.D.](#) (lecturer)
[doc. MUDr. Milena Šimurdová, CSc.](#) (lecturer)
[MUDr. Eva Závodná, Ph.D.](#) (lecturer)
[Šárka Bébarová](#) (assistant)
[Peter Matejovič](#) (assistant)
[Ing. Jiří Moudr](#) (assistant)
[Mgr. Lea Neumayerová](#) (assistant)
[MUDr. Tibor Stračina](#) (assistant)
[MUDr. Ivan Szadvári](#) (assistant)
[Branislava Vyoralová](#) (assistant)

Supervisor

[prof. MUDr. Marie Nováková, Ph.D.](#)
[Department of Physiology - Theoretical Departments - Faculty of Medicine](#)
Contact Person: [Mgr. Lea Neumayerová](#)

Supplier department: [Department of Physiology - Theoretical Departments - Faculty of Medicine](#)

Timetable

Tue 10:00–11:50 [A22/116 aula](#), Thu 8:30–9:20 [A22/116 aula](#)

- *Timetable of Seminar Groups:*

VSFY0321p/VLA: Mon 11:00–12:40 [A11/234](#), Wed 11:10–12:00 [A11/234](#)

Prerequisites (in Czech)

[VSLC011p Med. Chemistry - lecture](#) && [VSBI0222p Biology II-lect.](#) && ([STBF011p Biophysics](#) // [VLBF011p Biophysics-lect.](#)) && [VSBC0221s Biochemistry I-sem.](#) && [VSAN0232s Anatomy II s](#) && [VSAN0232c Anatomy II p](#)
(*Do I meet enrolment requirements?*)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

At the end of the course, students will have sufficient theoretical background required for profession of physician. Student should be able to recall principles of human body functions in detail - from a cell level, across particular organs to a complex human organism. Students will be able to explain relationships among chemical, physical and biological factors of living processes. An essential aim is that students acquire critical scientific thinking, ability of independent text analysis and fundamental information selection.

Syllabus

- *Structural and functional organisation of the body. Metabolism. Water and solutes. Cellular contacts and signalling. Cell membranes. Nervous and muscular activity. Physiology of the heart. Conduction system. Cardiac electrophysiology. Electromechanical coupling. Electrocardiography. Arrhythmias. Cardiac mechanics. Heart cycle. Physiology of blood. Blood clotting. Regulation of blood circulation, of blood pressure. Coronary circulation. Coronary heart disease. Regional circulation (pulmonary, cerebral). Regional circulation (splanchnic, skin, muscle). Regional circulation (renal, fetal). Variability of circulatory parameters. Heart failure. Internal environment (homeostasis). Examination of cardiovascular system, cardiol. examination techniques. Rheology of the blood. Circulatory failure. Microcirculation. Regulation of blood flow. Arterial hypertension. Blood types (groups). Plasma proteins. Immune system.*

Literature

required literature

- *BARRETT, Kim E. Ganong's review of medical physiology. 24th ed. Maidenhead: McGraw-Hill, 2012. 752 s. ISBN 9780071780032. [info](#)*
- *GANONG, William F. Přehled lékařské fyziologie. 20. vyd. Praha: Galén, 2005. xx, 890. ISBN 8072623117. [info](#)*

recommended literature

- *SILBERNAGL, Stefan and Agamemnon DESPOPOULOS. Color atlas of physiology. 6th ed., completely rev. and. New York: Thieme, 2009. xiii, 441. ISBN 9783135450063. [info](#)*
- *SILBERNAGL, Stefan and Agamemnon DESPOPOULOS. Atlas fyziologie člověka. 6. vyd., zcela přeprac. a r. Praha: Grada, 2004. xiii, 435. ISBN 802470630X. [info](#)*
- *HALL, John E. and Arthur C. GUYTON. Guyton and Hall textbook of medical physiology. 12th ed. Philadelphia, Pa.: Saunders/Elsevier, 2011. xix, 1091. ISBN 9781416045748. [info](#)*
- *Berne & Levy physiology. Edited by Robert M. Berne - Matthew N. Levy - Bruce M. Koeppen - Bruce A. Stanto. 6th ed. Philadelphia, PA: Mosby/Elsevier, 2008. xii, 834. ISBN 9780323045827. [info](#)*

Teaching methods

Lessons are led in the form of lectures.

Assessment methods

Students pass to continuing education in next semester without any duty of knowledge checking in this semester.

Language of instruction

Czech

Follow-Up Courses

- [VSBY0422p Physiology II - lecture](#)

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

Teacher's information

<http://www.med.muni.cz/fyziol>

Rozpis témat přednášek je vyvěšen na nástěnce Fyziologického ústavu a webových stránkách. A list of all lecture topics is post up on notice board of Department of Physiology and on its website.

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#).

VSBY0321s Physiology I - seminar ✨

Faculty of Medicine

Autumn 2015

Extent and Intensity

0/1/0. 4 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Mohamed Al-Kubati, CSc.](#) (seminar tutor)
[prof. PharmDr. Petr Babula, Ph.D.](#) (seminar tutor)
[doc. MUDr. Markéta Běbarová, Ph.D.](#) (seminar tutor)
[MUDr. Kateřina Fialová, Ph.D.](#) (seminar tutor)
[MUDr. Jan Novák](#) (seminar tutor)
[prof. MUDr. Marie Nováková, Ph.D.](#) (seminar tutor)
[MUDr. Zuzana Nováková, Ph.D.](#) (seminar tutor)
[MVDr. Veronika Olejníčková, Ph.D.](#) (seminar tutor)
[doc. Ing. Michal Pásek, Ph.D.](#) (seminar tutor)
[MUDr. Matej Pekař](#) (seminar tutor)
[MUDr. Anna Pekařová](#) (seminar tutor)
[MUDr. Tibor Stračina](#) (seminar tutor)
[MUDr. Eva Závodná, Ph.D.](#) (seminar tutor)
[Mgr. Lea Neumayerová](#) (assistant)

Supervisor

[prof. MUDr. Marie Nováková, Ph.D.](#)
[Department of Physiology - Theoretical Departments - Faculty of Medicine](#)
Contact Person: [Mgr. Lea Neumayerová](#)
Supplier department: [Department of Physiology - Theoretical Departments - Faculty of Medicine](#)

Timetable of Seminar Groups

VSFY0321s/01: Mon 21. 9. to Fri 25. 9. Tue 13:00–14:40 [A11/234](#), Mon 5. 10. to Fri 9. 10. Tue 13:00–14:40 [A11/234](#), Mon 19. 10. to Fri 23. 10. Tue 13:00–14:40 [A11/234](#), Mon 2. 11. to Fri 6. 11. Tue 13:00–14:40 [A11/234](#), Mon 30. 11. to Fri 4. 12. Tue 13:00–14:40 [A11/234](#), Mon 14. 12. to Fri 18. 12. Tue 13:00–14:40 [A11/234](#)
VSFY0321s/02: Mon 21. 9. to Fri 25. 9. Tue 13:00–14:40 [A11/234](#), Mon 5. 10. to Fri 9. 10. Tue 13:00–14:40 [A11/234](#), Mon 19. 10. to Fri 23. 10. Tue 13:00–14:40 [A11/234](#), Mon 2. 11. to Fri 6. 11. Tue 13:00–14:40 [A11/234](#), Mon 30. 11. to Fri 4. 12. Tue 13:00–14:40 [A11/234](#), Mon 14. 12. to Fri 18. 12. Tue 13:00–14:40 [A11/234](#)
VSFY0321s/03: Mon 21. 9. to Fri 25. 9. Tue 15:00–16:40 [A11/234](#), Mon 5. 10. to Fri 9. 10. Tue 15:00–16:40 [A11/234](#), Mon 19. 10. to Fri 23. 10. Tue 15:00–16:40 [A11/234](#), Mon 2. 11. to Fri 6. 11. Tue 15:00–16:40 [A11/234](#), Mon 30. 11. to Fri 4. 12. Tue 15:00–16:40 [A11/234](#), Mon 14. 12. to Fri 18. 12. Tue 15:00–16:40 [A11/234](#)
VSFY0321s/04: Mon 21. 9. to Fri 25. 9. Tue 15:00–16:40 [A11/234](#), Mon 5. 10. to Fri 9. 10. Tue 15:00–16:40 [A11/234](#), Mon 19. 10. to Fri 23. 10. Tue 15:00–16:40 [A11/234](#), Mon 2. 11. to Fri 6. 11. Tue 15:00–16:40 [A11/234](#), Mon 30. 11. to Fri 4. 12. Tue 15:00–16:40 [A11/234](#), Mon 14. 12. to Fri 18. 12. Tue 15:00–16:40 [A11/234](#)
VSFY0321s/05: Mon 21. 9. to Fri 25. 9. Tue 15:00–16:40 [A11/234](#), Mon 5. 10. to Fri 9. 10. Tue 15:00–16:40 [A11/234](#), Mon 19. 10. to Fri 23. 10. Tue 15:00–16:40 [A11/234](#), Mon 2. 11. to Fri 6. 11. Tue 15:00–16:40 [A11/234](#), Mon 30. 11. to Fri 4. 12. Tue 15:00–16:40 [A11/234](#), Mon 14. 12. to Fri 18. 12. Tue 15:00–16:40 [A11/234](#)
VSFY0321s/06: Mon 21. 9. to Fri 25. 9. Tue 15:00–16:40 [A11/234](#), Mon 5. 10. to Fri 9.

VSFY0321s/18: Mon 28. 9. to Fri 2. 10. Tue 13:00–14:40 [A11/234](#), Mon 12. 10. to Fri 16. 10. Tue 13:00–14:40 [A11/234](#), Mon 26. 10. to Fri 30. 10. Tue 13:00–14:40 [A11/234](#), Mon 9. 11. to Fri 13. 11. Tue 13:00–14:40 [A11/234](#), Mon 23. 11. to Fri 27. 11. Tue 13:00–14:40 [A11/234](#), Mon 7. 12. to Fri 11. 12. Tue 13:00–14:40 [A11/234](#)
VSFY0321s/30: No timetable has been entered into IS.
VSFY0321s/31: No timetable has been entered into IS.
VSFY0321s/32: No timetable has been entered into IS.
VSFY0321s/33: No timetable has been entered into IS.
VSFY0321s/34: No timetable has been entered into IS.
VSFY0321s/35: No timetable has been entered into IS.
VSFY0321s/36: No timetable has been entered into IS.
VSFY0321s/37: No timetable has been entered into IS.

Prerequisites (in Czech)

[VSLC011p Med. Chemistry - lecture](#) && [VSBI0222p Biology II-lect.](#) && ([STBF011p Biophysics](#) // [VLBF011p Biophysics-lect.](#)) && [VSBC0221s Biochemistry I-sem.](#) && [VSAN0232s Anatomy II s](#) && [VSAN0232c Anatomy II p](#)
(*Do I meet enrolment requirements?*)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

After finishing the course, students will be able to understand the terms used in general and systemic physiology of man. Students will acquire knowledge necessary for analysis and subsequent interpretation of phenomena taking place on cell, tissue and organ levels as well as on the level of whole human organism.

Syllabus

- Program of tutorials:
- Intercellular contact Mechanical, electrical and humoral coupling, ligands and receptors. Second messengers.
- Resting membrane potential Na/K ATP-ase, diffusion currents, electro-chemical gradient, equilibrium potential. Physiological importance of resting membrane potential.
- Action potential Local responses, selective conductivity of membrane channels, mechanism of depolarization, transpolarization and repolarization.
- Principles of muscle contraction. Contractile proteins, troponin and tropomyosin, role of calcium, mechanism of relaxation. Differences between smooth, skeletal and heart muscle.
-
- Interpretation of the ECG curve a) Electric field of the heart as a vector (source, determinants, projection on the body surface)
- b) Limb and chest leads (bipolar, unipolar)

- c) Construction of the mean electrical axis of the heart (Eindhoven triangle, paralelogram)
- d) Diagnostic value of ECG
- Cardiac cycle
- a) Phases of cardiac cycle and their time course (polygram, intracardiac pressures, heart volume, heart sounds)
- b) Phases of cardiac cycle in pressure / volume representation (effect of changes in preload and afterload)
- Autoregulation of cardiac functions
- a) Starling principle
- b) Effect of frequency on contractility
- c) Effect of frequency on the duration of action potential (Q-T interval)
-
- Heart as a muscle
- a) Cardiac contractility and its measurement
- b) Stroke scheme, cardiac output, ejection fraction
- c) Cardiac energetics
- Coronary circulation
- a) Anatomy and functional features (specialties)
- b) Regulation of coronary flow
- c) Coronary reserve and ischaemic heart disease
- Rheology (of blood circulation)
- a) Resistance and capacitance vessels
- b) Poisseuiles law, Laplaces law
- c) Blood pressure in separate (different) parts of blood circulation
-
- Immune mechanisms
- 1) Development of the immune system. T lymphocytes, B lymphocytes, memory T and B cells, antigen presenting cells. Clones.
- 2) Cellular immunity. Major histocompatibility complex. NK cells, T4 helper cells, T8 killer cells, T8 suppressor cells.
- 3) Humoral immunity. Immunoglobulins IgG, IgA, IgM, IgE.
- 4) The complement system. C1 - C9. Properdin.
- 5) Lymphokines and cytokines. IL 1, IL 2, IL 3. Colony stimulating factors, GM - CSF. Interferons. Tumor necrosis factor.

Literature

required literature

- BARRETT, Kim E. *Ganong's review of medical physiology*. 23rd ed. Maidenhead: McGraw-Hill, 2010. ix, 714. ISBN 9780071270663. [info](#)
- GANONG, William F. *Přehled lékařské fyziologie*. 20. vyd. Praha: Galén, 2005. xx, 890. ISBN 8072623117. [info](#)

recommended literature

- SILBERNAGL, Stefan and Agamemnon DESPOPOULOS. *Color atlas of physiology*. 6th ed., completely rev. and. New York: Thieme, 2009. xiii, 441. ISBN 9783135450063. [info](#)
- SILBERNAGL, Stefan and Agamemnon DESPOPOULOS. *Atlas fyziologie člověka*. 6. vyd., zcela přeprac. a r. Praha: Grada, 2004. xiii, 435. ISBN 802470630X. [info](#)
- HALL, John E. and Arthur C. GUYTON. *Guyton and Hall textbook of medical physiology*. 12th ed. Philadelphia, Pa.: Saunders/Elsevier, 2011. xix, 1091. ISBN 9781416045748. [info](#)
- BRAVENÝ, Pavel. *Poznámky k přednáškám z fyziologie*. 2., přeprac. vyd. Jinočany: H & H, 1992. 281 s. ISBN 80-85467-60-7. [info](#)
- KITTNAR, Otomar. *Lékařská fyziologie*. 1. vyd. Praha: Grada, 2011. 790 s. ISBN 9788024730684. [info](#)
- COSTANZO, Linda S. *Physiology*. 5th ed. Philadelphia: Wolters Kluwer Health/Lippincott Williams & Wilkins, 2011. xiii, 314. ISBN 9780781798761. [info](#)
- TROJAN, Stanislav and Miloš LANGMEIER. *Slovníček lékařské fyziologie*. 2. dopl. vyd. Praha: Galén, 2006. 141 s. ISBN 8072623753. [info](#)

Teaching methods

Tuition is done in the form of seminar. Students should read the literature of particular area of physiology, and they prepare their own presentation of the topic. During the seminars, students present the topics and intensify their knowledge in discussion with the teacher.

Assessment methods

The course-unit credit is conditioned by full attendance in the seminars.

Language of instruction

Czech

Follow-Up Courses

- [VSFY0422s Physiology II - seminar](#)

Further comments (probably available only in Czech)

Study Materials

Information on completion of the course: Absolvování seminářů je podmínkou k udělení zápočtu.

The course is taught annually.

Teacher's information

<http://www.med.muni.cz/fyziol>

Rozpis témat seminářů je vyvěšen na nástěnce Fyziologického ústavu a webových stránkách. Konzultace je možná po osobní domluvě s vyučujícím. A list of all seminary topics is post up on notice board of Department of Physiology and on its website.

Consultations are possible after personal arrangement with the teacher.

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#).

VSFY0422c Physiology II - practice ✨

Faculty of Medicine

Spring 2016

Extent and Intensity

0/0/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Mohamed Al-Kubati, CSc.](#) (seminar tutor)
[prof. PharmDr. Petr Babula, Ph.D.](#) (seminar tutor)
[doc. MUDr. Markéta Bébarová, Ph.D.](#) (seminar tutor)
[Ksenia Budinskaya](#) (seminar tutor)
[MUDr. Kateřina Fialová, Ph.D.](#) (seminar tutor)
[Ing. Jana Hrušková](#) (seminar tutor)
[MUDr. Jan Novák](#) (seminar tutor)
[prof. MUDr. Marie Nováková, Ph.D.](#) (seminar tutor)
[MUDr. Zuzana Nováková, Ph.D.](#) (seminar tutor)
[doc. Ing. Michal Pásek, Ph.D.](#) (seminar tutor)
[MUDr. Tibor Stračina](#) (seminar tutor)
[Mgr. Jana Svačinová, Ph.D.](#) (seminar tutor)
[MUDr. Ivan Szadvári](#) (seminar tutor)
[Šárka Bébarová](#) (assistant)
[MUDr. Tomáš Boušek](#) (assistant)
[David Dufek](#) (assistant)
[MUDr. Aleš Dvořák](#) (assistant)
[Mirka Hanousková](#) (assistant)
[MUDr. Nikola Kosová](#) (assistant)
[MUDr. Zuzana Kubecová](#) (assistant)
[Mgr. Lea Neumayerová](#) (assistant)
[MUDr. Nikola Nováková](#) (assistant)
[MUDr. Michael Sekej](#) (assistant)
[MUDr. Filip Šustr](#) (assistant)
[MUDr. Veronika Tomášková](#) (assistant)

Supervisor

[prof. MUDr. Marie Nováková, Ph.D.](#)

[Department of Physiology - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [MUDr. Zuzana Nováková, Ph.D.](#)

Supplier department: [Department of Physiology - Theoretical Departments - Faculty of Medicine](#)

Timetable of Seminar Groups

VSFY0422c/01: Mon 22. 2. to Fri 1. 4. Mon 7:30–10:00 [A20/114](#), Fri 8:30–10:10 [A22/116 aula](#)

VSFY0422c/02: Mon 22. 2. to Fri 1. 4. Mon 7:30–10:00 [A20/114](#), Fri 8:30–10:10 [A22/116 aula](#)

VSFY0422c/03: Mon 22. 2. to Fri 1. 4. Mon 7:30–10:00 [A20/114](#), Fri 8:30–10:10 [A22/116 aula](#)

VSFY0422c/04: Mon 22. 2. to Fri 1. 4. Mon 13:30–16:00 [A20/114](#), Fri 8:30–10:10

[A22/116 aula](#)

VSFY0422c/05: Mon 22. 2. to Fri 1. 4. Mon 13:30–16:00 [A20/114](#), Fri 8:30–10:10

[A22/116 aula](#)

VSFY0422c/06: Mon 22. 2. to Fri 1. 4. Mon 13:30–16:00 [A20/114](#), Fri 8:30–10:10

[A22/116 aula](#), P. Lokaj

VSFY0422c/07: Mon 22. 2. to Fri 1. 4. Wed 13:30–16:00 [A20/114](#), Fri 8:30–10:10

[A22/116 aula](#), M. Bébarová

VSFY0422c/08: Mon 22. 2. to Fri 1. 4. Wed 10:30–13:00 [A20/114](#), Fri 8:30–10:10

[A22/116 aula](#)

VSFY0422c/09: Mon 22. 2. to Fri 1. 4. Wed 13:30–16:00 [A20/114](#), Fri 8:30–10:10

[A22/116 aula](#)

VSFY0422c/10: Mon 22. 2. to Fri 1. 4. Wed 7:30–10:00 [A20/114](#), Fri 8:30–10:10

[A22/116 aula](#)

VSFY0422c/11: Mon 22. 2. to Fri 1. 4. Wed 7:30–10:00 [A20/114](#), Fri 8:30–10:10

[A22/116 aula](#)

VSFY0422c/12: Mon 22. 2. to Fri 1. 4. Thu 13:30–16:00 [A20/114](#), Fri 8:30–10:10

[A22/116 aula](#)

VSFY0422c/13: Mon 22. 2. to Fri 1. 4. Wed 13:30–16:00 [A20/114](#), Fri 8:30–10:10

[A22/116 aula](#)

VSFY0422c/14: Mon 22. 2. to Fri 1. 4. Mon 10:30–13:00 [A20/114](#), Fri 8:30–10:10

[A22/116 aula](#)

VSFY0422c/15: Mon 22. 2. to Fri 1. 4. Mon 10:30–13:00 [A20/114](#), Fri 8:30–10:10

[A22/116 aula](#)

VSFY0422c/16: Mon 22. 2. to Fri 1. 4. Thu 13:30–16:00 [A20/114](#), Fri 8:30–10:10

[A22/116 aula](#)

VSFY0422c/17: Mon 22. 2. to Fri 1. 4. Thu 13:30–16:00 [A20/114](#), Fri 8:30–10:10

[A22/116 aula](#)

VSFY0422c/18: Mon 22. 2. to Fri 1. 4. Wed 10:30–13:00 [A20/114](#), Fri 8:30–10:10

[A22/116 aula](#)

VSFY0422c/30: Fri 11:00–12:40 [A22/116 aula](#)

VSFY0422c/31: Fri 11:00–12:40 [A22/116 aula](#)

VSFY0422c/32: Fri 11:00–12:40 [A22/116 aula](#)

VSFY0422c/33: Fri 11:00–12:40 [A22/116 aula](#)

VSFY0422c/34: Fri 11:00–12:40 [A22/116 aula](#)

VSFY0422c/35: Fri 11:00–12:40 [A22/116 aula](#)

VSFY0422c/36: Fri 11:00–12:40 [A22/116 aula](#)

VSFY0422c/37: Fri 11:00–12:40 [A22/116 aula](#)

Prerequisites (in Czech)

[VSFY0321c Physiology I - practice](#) && [VSFY0321s Physiology I - seminar](#)

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

At the end of the course, students should be able to apply practically the methods used for examination of the functions of human organ systems. Students will be capable of interpreting the acquired records with respect to physiological processes taking place in human organisms. Next, the students will derive and calculate other parameters and indices routinely used in clinical practice. Students will be able to evaluate the results acquired both by measurement and by calculation, and to explain possible deviations.

Syllabus

- *Evaluation of sensitivity of respiratory center to hypoxia and to hypercapnia.*
- *Measurement of basic metabolic rate. Energy output in change of body position. Repay of oxygen debt. Calculation of energy expenditure. Compiling daily diet. Evaluation of nutritional state.*
- *Pletysmography (blood flow in forearm).*
- *Recruitment and summation in skeletal muscle.*
- *Experimental cardiology. Modeling in physiology. Contractility in isolated heart preparations, frequency effect. Electrophysiological methods. Blood pressure – indirect measurement in a man. Electrocardiography. Spectral analysis of blood pressure fluctuations. Compliance of brachial artery. Tension – velocity of contraction relationship in skeletal muscle.*
- *Respiration during exercise. High altitude hypoxia.*
- *Regulation of blood glucose.*
- *Pediatric physiology.*
- *Sympathetic nervous activity - thermoregulation. Emotion and learning.*

Literature

required literature

- [NOVÁKOVÁ, Zuzana, Robert ROMAN, Mohamed AL-KUBATI, Markéta BĚBAROVÁ, Pavel BRAVENÝ, Alena DAMBORSKÁ, Bohumil FIŠER, Nataša HONZÍKOVÁ, Miloslav KUKLETA, Drahoslava MRÁZOVÁ, Jiří MOUDR, Kateřina NOGOVÁ, Marie NOVÁKOVÁ, Zuzana NOVÁKOVÁ, Michal PÁSEK, Miroslav SVĚTLÁK, Zdeněk WILHELM and Eva ZÁVODNÁ.](#) *Praktická cvičení z fyziologie. 2. dotisk 1. vyd. Brno: Masarykova univerzita, 2011. 118 pp. ISBN 978-80-210-4391-6. [info](#)*

recommended literature

- *NOVÁKOVÁ, Zuzana and Robert ROMAN. Praktická cvičení z fyziologie a neurovědy (Practicals in Physiology and Neuroscience). 1. vyd. Brno: Masarykova univerzita, 2013. 152 s. ISBN 9788021063723. [info](#)*

Teaching methods

The course is organized in the form of laboratory practices where students examine each other by given method, and they prepare the report from measured data.

Assessment methods

Credits are given on the basis of full attendance in practices and handling of all laboratory reports and successfully passed credit test(60% and more).

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

Listed among pre-requisites of other courses

- [VLLP0532c Clinical Introduction II](#)
[VLLP0431c](#) && ([VLAN0222p](#) // [VSAN0333p](#)) && ([VLHE0322c](#) // [VSHE0322c](#))
&& ([VLBC0422c](#) // [VSBC041c](#)) && ([VLFY0422c](#) // [VSFY0422c](#)) ([Do I meet enrolment requirements?](#))

Teacher's information

<http://www.med.muni.cz/fyziol>

Rozpis témat praktických cvičení je vyvěšen na nástěnce Fyziologického ústavu, webových stránkách nebo v IS MUNI. Konzultace je možná po osobní domluvě s vyučujícím. A list of all laboratory practice topics is post up on notice board of Department of Physiology and on its website or IS MUNI -study materials. Consultations are possible after personal arrangement with the teacher.

The course is also listed under the following terms [Spring 2000](#), [Spring 2001](#), [Spring 2002](#), [Spring 2003](#), [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#).

VSFY0422p Physiology II - lecture ❄

Faculty of Medicine

Spring 2019

Extent and Intensity

4/4.5/0. 7 credit(s). Recommended Type of Completion: zk (examination). Alternate Types of Completion: RZk (examination).

Teacher(s)

[prof. PharmDr. Petr Babula, Ph.D.](#) (lecturer)

[doc. MUDr. Markéta Bébarová, Ph.D.](#) (lecturer)

[prof. MUDr. Marie Nováková, Ph.D.](#) (lecturer)

[MUDr. Zuzana Nováková, Ph.D.](#) (lecturer)

[doc. MUDr. Milena Šimurdová, CSc.](#) (lecturer)

[Šárka Bébarová](#) (assistant)

[Mirka Hanousková](#) (assistant)

[Peter Matejovič](#) (assistant)

[Ing. Jiří Moudr](#) (assistant)

[Mgr. Jana Svačinová, Ph.D.](#) (assistant)

[Branislava Vyoralová](#) (assistant)

Supervisor

[prof. MUDr. Marie Nováková, Ph.D.](#)

[Department of Physiology - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [MUDr. Zuzana Nováková, Ph.D.](#)

Supplier department: [Department of Physiology - Theoretical Departments - Faculty of Medicine](#)

Prerequisites (in Czech)

[VSFY0321c Physiology I - practice](#) && [VSFY0321s Physiology I - seminar](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

At the end of the course, students will have sufficient theoretical background required for profession of physician. Student should be able to recall principles of human body functions in detail - from a cell level, across particular organs to a complex human organism. Students will be able to explain relationships among chemical, physical and biological factors of living processes. An essential aim is that students acquire critical scientific thinking, ability of independent text analysis and fundamental information selection.

Syllabus

- *Respiratory functions. Pulmonary mechanics. Gas transport. Regulation of respiration. Respiration under various physiological conditions. Functional morphology of the kidney. Clearance. Counter-current system. Regulation of kidney functions. Kidney in regulation of homeostasis. Thermoregulation. GIT - mechanical functions. GIT - secretory functions. Regulation of gastrointestinal functions. Vitamins, minerals, water in nutrition. Metabolism of saccharides and lipids. Metabolism of proteins. Energy metabolism. Nutrition, starvation, obesity. Physiology of exercise. General principles of endocrine functions. Hypophysis. Adenohypophysis. Thyroid gland. Regulation of calcium metabolism and endocrine pancreas. Stress and adrenal gland. Physiology of childhood and adolescence, aging. Male reproduction. Female reproduction. Pregnancy and lactation. Glandula pinealis, circadian rhythms. Skeletal, smooth and heart muscle. Physiology of adaptation.*

Literature

required literature

- BARRETT, Kim E. *Ganong's review of medical physiology*. 23rd ed. Maidenhead: McGraw-Hill, 2010. ix, 714. ISBN 9780071270663. [info](#)
- GANONG, William F. *Přehled lékařské fyziologie*. 20. vyd. Praha: Galén, 2005. xx, 890. ISBN 8072623117. [info](#)

recommended literature

- *SILBERNAGL, Stefan and Agamemnon DESPOPOULOS. Color atlas of physiology. 6th ed., completely rev. and. New York: Thieme, 2009. xiii, 441. ISBN 9783135450063. [info](#)*
- *SILBERNAGL, Stefan and Agamemnon DESPOPOULOS. Atlas fyziologie člověka. 6. vyd., zcela přeprac. a r. Praha: Grada, 2004. xiii, 435. ISBN 802470630X. [info](#)*
- *HALL, John E. and Arthur C. GUYTON. Guyton and Hall textbook of medical physiology. 12th ed. Philadelphia, Pa.: Saunders/Elsevier, 2011. xix, 1091. ISBN 9781416045748. [info](#)*
- *BRAVENÝ, Pavel. Poznámky k přednáškám z fyziologie. 2., přeprac. vyd. Jinočany: H & H, 1992. 281 s. ISBN 80-85467-60-7. [info](#)*

Teaching methods

Lessons are led in the form of lectures.

Assessment methods

Final examination in Physiology consists of three parts:

- *written multiple-choice test which consist of 20 questions evaluated by 20 points - students successfully pass the test if they reach at least 15 points;*
- *practical examination - students randomly choose one of the methods and practically demonstrate and explain the measured parameters;*
- *oral examination - students randomly choose 2 questions and answer them after 15 minutes of preparation.*

Students pass the examination at Physiology on condition that they succeed in all three abovementioned parts.

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

The course can also be completed outside the examination period.

The course is taught annually.

The course is taught: every week.

Listed among pre-requisites of other courses

- [aVLIM051c Immunology - practice](#)
([aVLBC0422p](#) // [VSBC041p](#)) && ([VSFY0422p](#) // [aVLFY0422p](#)) ([Do I meet enrolment requirements?](#))
- [aVLIM051p Immunology - lecture](#)
([aVLBC0422p](#) // [VSBC041p](#)) && ([VSFY0422p](#) // [aVLFY0422p](#)) ([Do I meet enrolment requirements?](#))
- [aVLPF0521c Pathological physiology I - practice](#)
([aVLFY0422p](#) // [VSFY0422p](#)) && ([VSBC041p](#) // [aVLBC0422p](#)) && ([VLLM0421c](#) // [aVLLM0421c](#)) ([Do I meet enrolment requirements?](#))
- [aVLPF0521p Pathological Physiology I - lecture](#)
([aVLFY0422p](#) // [VSFY0422p](#)) && ([VSBC041p](#) // [aVLBC0422p](#)) && ([VLLM0421c](#) // [aVLLM0421c](#)) ([Do I meet enrolment requirements?](#))

- [VLIM051c Immunology - practice](#)
([VLBC0422p](#) // [VSBC0221p](#)) && ([VSFY0422p](#) // [VLFY0422p](#)) (*Do I meet enrolment requirements?*)
- [VLIM051p Immunology - lecture](#)
([VLBC0422p](#) // [VSBC0221p](#)) && ([VSFY0422p](#) // [VLFY0422p](#)) (*Do I meet enrolment requirements?*)
- [VLPA0521c Pathology I - practicals](#)
([VLFY0422p](#) // [VSFY0422p](#)) && ([VSBC041p](#) // [VLBC0422p](#)) && ([VLAN0222p](#) // [VSAN0333p](#)) && ([VLHE0322p](#) // [VSHE0322p](#)) && [VLLM0421c](#) (*Do I meet enrolment requirements?*)
- [VLPA0521p Pathology I - lecture](#)
([VLFY0422p](#) // [VSFY0422p](#)) && ([VSBC041p](#) // [VLBC0422p](#)) && ([VLAN0222p](#) // [VSAN0333p](#)) && ([VLHE0322p](#) // [VSHE0322p](#)) && [VLLM0421c](#) (*Do I meet enrolment requirements?*)
- [VLPF0521c Pathological physiology I - practice](#)
([VLFY0422p](#) // [VSFY0422p](#)) && ([VSBC041p](#) // [VLBC0422p](#)) && ([VLAN0222p](#) // [VSAN0333p](#)) && ([VLHE0322p](#) // [VSHE0322p](#)) && [VLLM0421c](#) (*Do I meet enrolment requirements?*)

[Zobrazit další předměty](#)

Teacher's information

<http://www.med.muni.cz/fyziol>

Rozpis témat přednášek je vyvěšen na nástěnce Fyziologického ústavu a webových stránkách. A list of all lecture topics is post up on notice board of Department of Physiology and on its website.

The course is also listed under the following terms [Spring 2000](#), [Spring 2001](#), [Spring 2002](#), [Spring 2003](#), [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#).

VSFY0422s Physiology II - seminar ✨

Faculty of Medicine

Spring 2016

Extent and Intensity

0/1/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Mohamed Al-Kubati, CSc.](#) (seminar tutor)

[prof. PharmDr. Petr Babula, Ph.D.](#) (seminar tutor)

[doc. MUDr. Markéta Bébarová, Ph.D.](#) (seminar tutor)

[MUDr. Jan Novák](#) (seminar tutor)

[prof. MUDr. Marie Nováková, Ph.D.](#) (seminar tutor)

[MUDr. Zuzana Nováková, Ph.D.](#) (seminar tutor)

[MUDr. Matej Pekař](#) (seminar tutor)

[MUDr. Anna Pekařová](#) (seminar tutor)

MUDr. Tibor Stračina (seminar tutor)

Šárka Bébarová (assistant)

Mirka Hanousková (assistant)

Mgr. Lea Neumayerová (assistant)

Supervisor

prof. MUDr. Marie Nováková, Ph.D.

Department of Physiology - Theoretical Departments - Faculty of Medicine

Contact Person: MUDr. Zuzana Nováková, Ph.D.

Supplier department: Department of Physiology - Theoretical Departments - Faculty of Medicine

Timetable of Seminar Groups

VSFY0422s/01: Mon 7. 3. to Fri 11. 3. Tue 15:00–16:40 [A11/234](#), Mon 21. 3. to Fri 25. 3. Tue 15:00–16:40 [A11/234](#), Mon 4. 4. to Fri 8. 4. Tue 15:00–16:40 [A11/234](#), Mon 18. 4. to Fri 22. 4. Tue 15:00–16:40 [A11/234](#), Mon 2. 5. to Fri 6. 5. Tue 15:00–16:40 [A11/234](#), Mon 16. 5. to Fri 20. 5. Tue 15:00–16:40 [A11/234](#)

VSFY0422s/02: Mon 7. 3. to Fri 11. 3. Tue 15:00–16:40 [A11/234](#), Mon 21. 3. to Fri 25. 3. Tue 15:00–16:40 [A11/234](#), Mon 4. 4. to Fri 8. 4. Tue 15:00–16:40 [A11/234](#), Mon 18. 4. to Fri 22. 4. Tue 15:00–16:40 [A11/234](#), Mon 2. 5. to Fri 6. 5. Tue 15:00–16:40 [A11/234](#), Mon 16. 5. to Fri 20. 5. Tue 15:00–16:40 [A11/234](#)

VSFY0422s/03: Mon 7. 3. to Fri 11. 3. Tue 17:00–18:40 [A11/234](#), Mon 21. 3. to Fri 25. 3. Tue 17:00–18:40 [A11/234](#), Mon 4. 4. to Fri 8. 4. Tue 17:00–18:40 [A11/234](#), Mon 18. 4. to Fri 22. 4. Tue 17:00–18:40 [A11/234](#), Mon 2. 5. to Fri 6. 5. Tue 17:00–18:40 [A11/234](#), Mon 16. 5. to Fri 20. 5. Tue 17:00–18:40 [A11/234](#)

VSFY0422s/04: Mon 7. 3. to Fri 11. 3. Tue 17:00–18:40 [A11/234](#), Mon 21. 3. to Fri 25. 3. Tue 17:00–18:40 [A11/234](#), Mon 4. 4. to Fri 8. 4. Tue 17:00–18:40 [A11/234](#), Mon 18. 4. to Fri 22. 4. Tue 17:00–18:40 [A11/234](#), Mon 2. 5. to Fri 6. 5. Tue 17:00–18:40 [A11/234](#), Mon 16. 5. to Fri 20. 5. Tue 17:00–18:40 [A11/234](#)

VSFY0422s/05: Mon 7. 3. to Fri 11. 3. Tue 15:00–16:40 [A20/207](#), Mon 21. 3. to Fri 25. 3. Tue 15:00–16:40 [A20/207](#), Mon 4. 4. to Fri 8. 4. Tue 15:00–16:40 [A20/207](#), Mon 18. 4. to Fri 22. 4. Tue 15:00–16:40 [A20/207](#), Mon 2. 5. to Fri 6. 5. Tue 15:00–16:40 [A20/207](#), Mon 16. 5. to Fri 20. 5. Tue 15:00–16:40 [A20/207](#)

VSFY0422s/06: Mon 7. 3. to Fri 11. 3. Tue 15:00–16:40 [A20/207](#), Mon 21. 3. to Fri 25. 3. Tue 15:00–16:40 [A20/207](#), Mon 4. 4. to Fri 8. 4. Tue 15:00–16:40 [A20/207](#), Mon 18. 4. to Fri 22. 4. Tue 15:00–16:40 [A20/207](#), Mon 2. 5. to Fri 6. 5. Tue 15:00–16:40 [A20/207](#), Mon 16. 5. to Fri 20. 5. Tue 15:00–16:40 [A20/207](#), P. Lokaj

VSFY0422s/07: Mon 29. 2. to Fri 4. 3. Tue 17:00–18:40 [A11/234](#), Mon 14. 3. to Fri 18. 3. Tue 17:00–18:40 [A11/234](#), Tue 29. 3. to Fri 1. 4. Tue 17:00–18:40 [A11/234](#), Mon 11. 4. to Fri 15. 4. Tue 17:00–18:40 [A11/234](#), Mon 25. 4. to Fri 29. 4. Tue 17:00–18:40 [A11/234](#), Mon 9. 5. to Fri 13. 5. Tue 17:00–18:40 [A11/234](#), M. Al-Kubati

VSFY0422s/08: Mon 29. 2. to Fri 4. 3. Tue 17:00–18:40 [A11/234](#), Mon 14. 3. to Fri 18. 3. Tue 17:00–18:40 [A11/234](#), Tue 29. 3. to Fri 1. 4. Tue 17:00–18:40 [A11/234](#), Mon 11. 4. to Fri 15. 4. Tue 17:00–18:40 [A11/234](#), Mon 25. 4. to Fri 29. 4. Tue 17:00–18:40 [A11/234](#), Mon 9. 5. to Fri 13. 5. Tue 17:00–18:40 [A11/234](#)

VSFY0422s/09: Mon 29. 2. to Fri 4. 3. Tue 17:00–18:40 [A20/207](#), Mon 14. 3. to Fri 18. 3. Tue 17:00–18:40 [A20/207](#), Tue 29. 3. to Fri 1. 4. Tue 17:00–18:40 [A20/207](#), Mon 11. 4. to Fri 15. 4. Tue 17:00–18:40 [A20/207](#), Mon 25. 4. to Fri 29. 4. Tue 17:00–18:40 [A20/207](#), Mon 9. 5. to Fri 13. 5. Tue 17:00–18:40 [A20/207](#)

VSFY0422s/10: Mon 29. 2. to Fri 4. 3. Tue 17:00–18:40 [A20/207](#), Mon 14. 3. to Fri 18. 3. Tue 17:00–18:40 [A20/207](#), Tue 29. 3. to Fri 1. 4. Tue 17:00–18:40 [A20/207](#), Mon 11. 4. to Fri 15. 4. Tue 17:00–18:40 [A20/207](#), Mon 25. 4. to Fri 29. 4. Tue 17:00–18:40 [A20/207](#), Mon 9. 5. to Fri 13. 5. Tue 17:00–18:40 [A20/207](#)

VSFY0422s/11: Mon 29. 2. to Fri 4. 3. Tue 15:00–16:40 [A20/207](#), Mon 14. 3. to Fri 18. 3. Tue 15:00–16:40 [A20/207](#), Tue 29. 3. to Fri 1. 4. Tue 15:00–16:40 [A20/207](#), Mon 11. 4. to Fri 15. 4. Tue 15:00–16:40 [A20/207](#), Mon 25. 4. to Fri 29. 4. Tue 15:00–16:40 [A11/234](#), Mon 9. 5. to Fri 13. 5. Tue 15:00–16:40 [A11/234](#)

VSFY0422s/12: Mon 29. 2. to Fri 4. 3. Tue 15:00–16:40 [A11/234](#), Mon 14. 3. to Fri 18. 3. Tue 15:00–16:40 [A11/234](#), Tue 29. 3. to Fri 1. 4. Tue 15:00–16:40 [A11/234](#), Mon 11. 4. to Fri 15. 4. Tue 15:00–16:40 [A11/234](#), Mon 25. 4. to Fri 29. 4. Tue 15:00–16:40 [A11/234](#), Mon 9. 5. to Fri 13. 5. Tue 15:00–16:40 [A11/234](#), A. Damborská

VSFY0422s/13: Mon 7. 3. to Fri 11. 3. Tue 13:00–14:40 [A11/234](#), Mon 21. 3. to Fri 25. 3. Tue 13:00–14:40 [A11/234](#), Mon 4. 4. to Fri 8. 4. Tue 13:00–14:40 [A11/234](#), Mon 18. 4. to Fri 22. 4. Tue 13:00–14:40 [A11/234](#), Mon 2. 5. to Fri 6. 5. Tue 13:00–14:40 [A11/234](#), Mon 16. 5. to Fri 20. 5. Tue 13:00–14:40 [A11/234](#)

VSFY0422s/14: Mon 7. 3. to Fri 11. 3. Tue 13:00–14:40 [A11/234](#), Mon 21. 3. to Fri 25. 3. Tue 13:00–14:40 [A11/234](#), Mon 4. 4. to Fri 8. 4. Tue 13:00–14:40 [A11/234](#), Mon 18. 4. to Fri 22. 4. Tue 13:00–14:40 [A11/234](#), Mon 2. 5. to Fri 6. 5. Tue 13:00–14:40 [A11/234](#), Mon 16. 5. to Fri 20. 5. Tue 13:00–14:40 [A11/234](#)

VSFY0422s/15: Mon 29. 2. to Fri 4. 3. Tue 13:00–14:40 [A11/234](#), Mon 14. 3. to Fri 18. 3. Tue 13:00–14:40 [A11/234](#), Tue 29. 3. to Fri 1. 4. Tue 13:00–14:40 [A11/234](#), Mon 11. 4. to Fri 15. 4. Tue 13:00–14:40 [A11/234](#), Mon 25. 4. to Fri 29. 4. Tue 13:00–14:40 [A11/234](#), Mon 9. 5. to Fri 13. 5. Tue 13:00–14:40 [A11/234](#)

VSFY0422s/16: Mon 29. 2. to Fri 4. 3. Tue 13:00–14:40 [A11/234](#), Mon 14. 3. to Fri 18. 3. Tue 13:00–14:40 [A11/234](#), Tue 29. 3. to Fri 1. 4. Tue 13:00–14:40 [A11/234](#), Mon 11. 4. to Fri 15. 4. Tue 13:00–14:40 [A11/234](#), Mon 25. 4. to Fri 29. 4. Tue 13:00–14:40 [A11/234](#), Mon 9. 5. to Fri 13. 5. Tue 13:00–14:40 [A11/234](#)

VSFY0422s/17: Mon 29. 2. to Fri 4. 3. Tue 15:00–16:40 [A20/207](#), Mon 14. 3. to Fri 18. 3. Tue 15:00–16:40 [A20/207](#), Tue 29. 3. to Fri 1. 4. Tue 15:00–16:40 [A20/207](#), Mon 11. 4. to Fri 15. 4. Tue 15:00–16:40 [A20/207](#), Mon 25. 4. to Fri 29. 4. Tue 15:00–16:40 [A20/207](#), Mon 9. 5. to Fri 13. 5. Tue 15:00–16:40 [A20/207](#)

VSFY0422s/18: Mon 29. 2. to Fri 4. 3. Tue 15:00–16:40 [A20/207](#), Mon 14. 3. to Fri 18. 3. Tue 15:00–16:40 [A20/207](#), Tue 29. 3. to Fri 1. 4. Tue 15:00–16:40 [A20/207](#), Mon 11. 4. to Fri 15. 4. Tue 15:00–16:40 [A20/207](#), Mon 25. 4. to Fri 29. 4. Tue 15:00–16:40 [A20/207](#), Mon 9. 5. to Fri 13. 5. Tue 15:00–16:40 [A20/207](#)

VSFY0422s/30: No timetable has been entered into IS.

VSFY0422s/31: No timetable has been entered into IS.

VSFY0422s/32: No timetable has been entered into IS.

VSFY0422s/33: No timetable has been entered into IS.

VSFY0422s/34: No timetable has been entered into IS.

VSFY0422s/35: No timetable has been entered into IS.

VSFY0422s/36: No timetable has been entered into IS.

VSFY0422s/37: No timetable has been entered into IS.

Prerequisites (in Czech)

[VVSFY0321c Physiology I - practice](#) && [VVSFY0321s Physiology I - seminar](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

After finishing the course, students will be able to understand the terms used in general and systemic physiology of man. Students will acquire knowledge necessary for analysis and subsequent interpretation of phenomena taking place on cell, tissue and organ levels as well as on the level of whole human organism.

Syllabus

- *Program of tutorials:*
- *Respiratory system Ventilation of the lungs (mechanics of respiration, dead space, volumes, pressures, apnoea, hyperpnoea, hypopnoea) Gas transport (O₂, CO₂, ischaemia) Tissue respiration (respiratory quotient, hypoxia) Regulation of ventilation and pulmonary circulation Assessment of respiratory functions (spirometry, blood gases)*
- *Excretory system Body fluids, volumes and ionic composition of body fluids. Renal countercurrent system, ADH. Clearance. pH regulation.*
- *Endocrine physiology General principles of endocrine physiology (hierarchy of endocrine functions - examples, second messengers, hormone-receptor complex, up- and down-regulation of receptors). Humoral regulation of mineral and water metabolism (vasopressin, aldosteron, ANF, parathormone, vitamin D, calcitonin). Regulation of glycemia (insulin, glucagon, cortison, STH, adrenaline). Diabetes mellitus. Humoral regulation of energy production (thyroid gland, thyreopathies).*
- *Central system of behavioural defense (central system of emotions and stress) Basic structures, their location in brain, functional organization of the system. Inputs into the system, stress stimuli and situations. Components of defensive response in dependence on result and duration of defensive reaction: Behavioural component of defensive reaction, determinants of its formation. Vegetative component of defensive reaction, its structural basis, organ manifestations. Endocrine component of defensive reaction, its structural basis, metabolic and other impacts. Experiential component of defensive reaction, its origin and significance. Sustained response to stress and immune functions.*

Literature

required literature

- *BARRETT, Kim E. Ganong's review of medical physiology. 23rd ed. Maidenhead: McGraw-Hill, 2010. ix, 714. ISBN 9780071270663. [info](#)*
- *GANONG, William F. Přehled lékařské fyziologie. 20. vyd. Praha: Galén, 2005. xx, 890. ISBN 8072623117. [info](#)*

recommended literature

- *SILBERNAGL, Stefan and Agamemnon DESPOPOULOS. Color atlas of physiology. 6th ed., completely rev. and. New York: Thieme, 2009. xiii, 441. ISBN 9783135450063. [info](#)*
- *SILBERNAGL, Stefan and Agamemnon DESPOPOULOS. Atlas fyziologie člověka. 6. vyd., zcela přeprac. a r. Praha: Grada, 2004. xiii, 435. ISBN 802470630X. [info](#)*
- *HALL, John E. and Arthur C. GUYTON. Guyton and Hall textbook of medical physiology. 12th ed. Philadelphia, Pa.: Saunders/Elsevier, 2011. xix, 1091. ISBN 9781416045748. [info](#)*

Teaching methods

Tuition is done in the form of seminar. Students should read the literature of particular area of physiology, and they prepare their own presentation of the topic. During the seminars, students present the topics and intensify their knowledge in discussion with the teacher.

Assessment methods

The course-unit credit is conditioned by full attendance in the seminars.

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

Teacher's information

<http://www.med.muni.cz/fyziol>

Rozpis témat seminářů je vyvěšen na nástěnce Fyziologického ústavu a webových stránkách. Konzultace je možná po osobní domluvě s vyučujícím. A list of all seminary topics is post up on notice board of Department of Physiology and on its website.

Consultations are possible after personal arrangement with the teacher.

The course is also listed under the following terms [Spring 2000](#), [Spring 2001](#), [Spring 2002](#), [Spring 2003](#), [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#).

VSHE0221c Histology and Embryology I - practice ✨

Faculty of Medicine

Spring 2019

Extent and Intensity

0/3/0. 5 credit(s). Type of Completion: z (credit).

Teacher(s)

[MVDr. Martin Anger, CSc.](#) (seminar tutor)

[MUDr. Ivana Baltasová](#) (seminar tutor)

[prof. MUDr. RNDr. Svatopluk Čech, DrSc.](#) (seminar tutor)

[MUDr. Jana Dumková](#) (seminar tutor)

[doc. MUDr. Aleš Hampl, CSc.](#) (seminar tutor)
[Mgr. Hana Kotasová, Ph.D.](#) (seminar tutor)
[doc. RNDr. Irena Krontorád Koutná, Ph.D.](#) (seminar tutor)
[MUDr. Irena Lauschová, Ph.D.](#) (seminar tutor)
[MUDr. Anna Mac Gillavry Danylevska, Ph.D.](#) (seminar tutor)
[MUDr. Eva Mecová](#) (seminar tutor)
[doc. MUDr. Miroslava Sedláčková, CSc.](#) (seminar tutor)
[MUDr. Veronika Sedláková](#) (seminar tutor)
[RNDr. Petr Vaňhara, Ph.D.](#) (seminar tutor)

Supervisor

[doc. MUDr. Aleš Hampl, CSc.](#)
[Department of Histology and Embryology - Theoretical Departments - Faculty of Medicine](#)
Contact Person: [doc. MUDr. Miroslava Sedláčková, CSc.](#)
Supplier department: [Department of Histology and Embryology - Theoretical Departments - Faculty of Medicine](#)

Prerequisites (in Czech)

[VSAN0131s Anatomy I s](#) && [ZC011 Handling chemical substances](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

Course objectives

At the end of the course students should be able to:

1. Describe tissue processing for light and electron microscopy.
2. Understand and explain the structure of a cell, basic structural principles and function of connective tissues, features of epithelial tissue, structure of different types of muscle tissue, structure and function of nervous tissue.
3. Identify tissue types in histologic slides.
4. Characterize microscopic structure of some organs of human body and explain correlations of tissues within organs.
5. Describe gamete development, explain principle of meiosis and regulation of gametogenesis.
6. Define the early embryonic development as well as development of fetal membranes, placenta and umbilical cord.
7. Characterize stages of embryonic development.

Syllabus

- 1. Introduction, organization of practicals, teaching aids. **Overview of histological methods.** Tissue processing for light and electron microscopy - explanation and film. Basic histochemistry and immunocytochemistry.

- 2. **Cytology:** Ultrastructure of the cell nucleus during interphase. Ultrastructure of cell organelles I (mitochondria, the Golgi apparatus, the endoplasmic reticulum, ribosomes, lysosomes).
- 3. Ultrastructure of cell organelles II (peroxisomes, and the centriol). Cell inclusions. The arrangement of cell surfaces: apical, lateral, and basal ones. Intercellular junctions: adhering, occluding, and communicating ones.
- 4. **General histology:** Use of the light microscope, common faults in microscopy. Results of basic staining methods in histology: Hematoxylin-eosine /HE/ (hepar), hematoxylin-eosine-saffron /HES/ (esophagus), AZAN (prostate), impregnation (cerebellum). Connective tissue proper - classification and examples. Slides: Funiculus umbilicalis, Esophagus, Posterior segment of the eye, Lien, Aorta.
- 5. Supporting tissues: cartilage and bone. Histogenesis of the bone tissue (ossification). Slides: Trachea, Auricula, Elastic cartilage, Lamellar bone, Chondrogenic ossification.
- 6. Epithelial tissue: epithelial membranes (covering epithelia) and glandular epithelium. Slides: Ren, Vesica fellea, Trachea, Esophagus, Ureter, Palpebra, Skin from the finger tip. Intestinum tenue, Intestinum crassum, Glandula parotis, Glandula submandibularis.
- 7. Muscle tissue. Slides: Apex linguae, Cardiac muscle tissue Intestinum tenue. Nerve tissue. Slides: Cortex cerebri, Cerebellum, Medulla spinalis, Ganglion spinale, Peripheral nerve, Motor end plate.
- 8. Revision practical: a skill test of practical diagnosis of the connective and supporting, epithelial, muscle and nerve tissues by use of the microscope and videocamera under supervision of tutors. Videorecords.
- 9. **Microscopic anatomy.** Microscopic structure of the heart and blood vessels. Slides: Artery of the muscular type with a vein, Aorta, Vena cava, Myocardium.
- 10. Blood cells: Preparation of blood smears and their staining. Cytology of formed elements of blood. Differential white cell count (dWCC) - average values, abnormalities and terminology of dWCC. Slide: A smear of peripheral blood stained by Pappenheim's method.
- 11. Hematopoiesis: Erythropoiesis, granulopoiesis and development of thrombocytes. Development of lymphocytes and monocytes. Microscopic structure of the bone marrow. Slide: A bone marrow smear stained by Pappenheim's method.
- 12. Microscopic structure of the lymphatic system. Slides: Lymphonodus, Lien (spleen), Thymus of a young individual, Thymus of the adult (with involution changes), Palatine tonsil, Lingual tonsil.
- 13. Microscopic structure of the respiratory system. Slides: Nasal conchae, Epiglottis, Larynx, Trachea, Pulmo. Credits.

Literature

recommended literature

- [ČECH, Svatopluk](#), [Drahomír HORKÝ](#), [Irena LAUSCHOVÁ](#), [Miroslava SEDLÁČKOVÁ](#) and [Jitka ŠTASTNÁ](#). *Histologická praktika a metody vyšetřování tkání a orgánů* (Histological practicals and methods of investigation of tissues and

organs). 1. dotisk 1. vydání. Brno: Vydavatelství MU Brno-Kraví hora, 2002. 162 pp. ISBN 80-210-1774-0. [info](#)

not specified

- *MARTÍNEK, Jindřich and Zdeněk VACEK. Histologický atlas. 1. vyd. Praha: Grada, 2009. 134 s. ISBN 9788024723938. [info](#)*
- *Di Fiore's atlas of histology with functional correlations. Edited by Victor P. Eroschenko. 9th ed. Philadelphia: Lippincott Williams-Wilkins, 2000. xv, 363. ISBN 078172676X. [info](#)*

Teaching methods

Content of this course includes study of slides and electron micrographs in microscopic hall as well as class discussion on the base of materials in the text book.

Assessment methods

*Testing of knowledge: Student must prove sufficient level of knowledge by written test examination. Each student completes 5 partial tests during semester. Tests are evaluated by point for correct answer. More than half number of correct answers (points) is evaluated as "YES". All of these tests must be successful. In case of failure, only 1 resit is possible. There is condition 5 from 5 (ie. 5 YES / 5 regular tests) or 5 from 6 (ie. 4 YES / 5 regular tests + 1 YES / 1 resit). If student does not fulfill this condition, credit test follows in the relevant exam period. This test covers all topics studied during semester. In case of failure in credit test, credit will not be given and student **must enroll the course again**.*

Conditions for obtaining credit: 1. Attendance at all practical exercises (100% participation, all absences must be regularly excused (in IS) and substituted).

2. Successful completion of all tests.

3. Submission of all protocols (correctly completed forms of protocols signed by teacher).

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

The course is taught: every week.

Listed among pre-requisites of other courses

- [aVLHE0322c Histology and Embryology II - practice](#) ([aVLHE0221c](#) // [VSHE0221c](#)) && ([aVLBI0222c](#) // [VSBI0222c](#)) ([Do I meet enrolment requirements?](#))
- [aVLHE0322p Histology and Embryology II - lecture](#) ([aVLHE0221c](#) // [VSHE0221c](#)) && ([aVLBI0222c](#) // [VSBI0222c](#)) ([Do I meet enrolment requirements?](#))
- [VLHE0322c Histology and Embryology II - practice](#) ([VLHE0221c](#) // [VSHE0221c](#)) && ([VLBI0222c](#) // [VSBI0222c](#)) ([Do I meet enrolment requirements?](#))
- [VLHE0322p Histology and Embryology II - lecture](#) ([VLHE0221c](#) // [VSHE0221c](#)) && ([VLBI0222c](#) // [VSBI0222c](#)) ([Do I meet enrolment requirements?](#))

Teacher's information

Veškeré informace o výuce jsou zveřejněny na [www stránkách ústavu](#) a rovněž na vývěsce Ústavu histologie a embryologie, Kamenice 3 před mikroskopickým sálem.

Information about HE teaching is available on the Department poster in front of the Microscopic Hall and on the web site <http://www.med.muni.cz/histology/education>

The course is also listed under the following terms [Spring 2000](#), [Spring 2001](#), [Spring 2002](#), [Spring 2003](#), [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#).

VSHE0221p Histology and Embryology I - lecture ✳

Faculty of Medicine

Spring 2019

Extent and Intensity

2/0/0. 0 credit(s). Type of Completion: -.

Teacher(s)

[prof. MUDr. RNDr. Svatopluk Čech, DrSc.](#) (lecturer)

[doc. MUDr. Aleš Hampl, CSc.](#) (lecturer)

[MUDr. Irena Lauschová, Ph.D.](#) (lecturer)

[doc. MUDr. Miroslava Sedláčková, CSc.](#) (lecturer)

[RNDr. Petr Vaňhara, Ph.D.](#) (lecturer)

Supervisor

[doc. MUDr. Aleš Hampl, CSc.](#)

[Department of Histology and Embryology - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [doc. MUDr. Miroslava Sedláčková, CSc.](#)

Supplier department: [Department of Histology and Embryology - Theoretical Departments - Faculty of Medicine](#)

Prerequisites (in Czech)

[VSAN0131s Anatomy I s](#) && [ZC011 Handling chemical substances](#)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

Course objectives

At the end of the course students should be able to:

1. *Understand and explain the structure of a cell, basic structural principles and function*

of connective tissues, features of epithelial tissue, structure of different types of muscle tissue, structure and function of nervous tissue.

2. Identify tissue types in histologic slides.

3. Characterize microscopic structure of individual organs of human body and explain correlations of tissues within organs.

4. Describe gamete development, explain principle of meiosis and regulation of gametogenesis.

5. Define the early embryonic development as well as development of fetal membranes, placenta and umbilical cord.

6. Characterize stages of embryonic development, describe the development of individual organ systems of human body.

7. Explain the mechanism of the origin of some developmental anomalies.

Syllabus

- *1. Introduction. The object and significance of histology. Relevance of histology to other biomedical disciplines. History, current state, and future of histology. Methodologies to study a structure of cells and tissues. **Cytology:** The cell - definition, characteristics, compartmentalization. Cell nucleus - ultrastructure and function, chromosomes, nucleolus. Introduction*
- *2. Organelles - structure, localization, and function. Cell inclusions and pigments. Cytoskeleton - microfilaments, intermediate filaments and microtubules. Cell surface structures and intercellular bonds. Cell division cycle. Cell differentiation, cell migration, organization of cells into tissues and organs - general aspects.*
- *3. **General histology.** Tissues - definition, their origin, and classification. Connective and supporting tissue - general characteristics, their components and classification. The connective tissue proper - types, main distribution, and function. Supporting tissues - cartilage and bone - types, main distribution, and function. Histogenesis and regeneration of connective tissues.*
- *4. Epithelial tissue - definition, classification, and histogenesis. Epithelial membranes and glandular epithelium - an overview. Characteristics of glandular cells. Absorptive, respiratory, and sensory epithelia.*
- *5. Muscle tissue - general characteristics and classification. Smooth muscle tissue. Skeletal muscle tissue. Ultrastructure of the myofibrils. Mechanism of the muscle contraction. Cardiac muscle tissue. Inervation and vascularization of the muscle. Muscle histogenesis and regeneration.*
- *6. Neural tissue - general characteristics and classification. Neurons – structure and function. Synapse. Neuroglial cells - types and function. Sheaths of nerve fibres. Conduction of nerve impulses. Histogenesis and regeneration of the neural tissue.*
- *7. **Embryology.** Definition. The object and significance of embryology. Overview of the early human development: The phases of the human ontogeny. Human gametes - their structure, physiology and origin (gametogenesis). Differences between spermatogenesis and oogenesis. Transport of gametes. Sperm capacitation. Fertilization and cleavage. Activation of the embryonal genome. Nuclear transfer. Morula and blastocyst. Embryonic stem cells. Outline of the implantation. Abnormal sites of implantation (extrauterine pregnancies).*

- 8. *The development of the germ disc: origin of the intraembryonic mesoderm and notogenesis (development of the chorda dorsalis). Somites and their derivatives. Outline of the development of fetal membranes: amniotic sac, chorion, and placenta. Function of the placenta. The umbilical cord. Anomalies of the placenta and umbilical cord. Development of external shape of the embryo and fetus. The rule of Hasse. Uterine growth during pregnancy. Parturition. Marks of the mature and full-term fetus. Position, posture and presentation of the fetus. Multiple pregnancy: mono- and dizygotic twins; arrangement of fetal membranes in twins.*
- 9. **Microscopic anatomy and embryology.** *Cardiovascular system. Microscopic structure of the heart, excitomotoric system - its structural peculiarities. Blood vessels - arteries and veins - structural differences. Capillary bed. Lymph vessels and capillaries. Blood. Morphology of the blood cells.*
- 10. *Primitive blood circulation in the embryo. Fetal blood circulation. Development of the heart. Hematopoiesis - hematopoietic stem and progenitor cells. Hematopoietic tissues.*
- 11. *Lymphatic (immune) system – general structure and function of the lymphatic organs. Thymus, lymph nodes and the spleen. Tonsils. Classification and distribution of B- and T-lymphocytes in the human body. Mononuclear phagocyte system. Composition of the lymph.*
- 12. *Respiratory system - nasal cavity, larynx, and trachea. Histology of the lung and blood-air barrier. Outline of development of respiratory passages and the lung.*
- 13. *Digestive system - general structure of the alimentary canal. Microscopic structure of the oral cavity: lip and cheek, tongue, palate, tooth, and salivary glands.*

Literature

recommended literature

- ČECH, Svatopluk and Drahomír HORKÝ. *Přehled obecné histologie. 1. vyd. Brno: Masarykova univerzita, 2005. 140 s. ISBN 8021038543. [info](#)*
- HORKÝ, Drahomír and Svatopluk ČECH. *Mikroskopická anatomie. 2. nezm. vyd. Brno: Masarykova univerzita, 2005. 353 s. ISBN 802103775X. [info](#)*
- ČECH, Svatopluk, Drahomír HORKÝ and Miroslava SEDLÁČKOVÁ. *Přehled embryologie člověka. 1. vyd. Brno: Masarykova univerzita, 2011. 187 pp. ISBN 978-80-210-5414-1. [info](#)*

not specified

- MESCHER, Anthony L. *Junqueira's basic histology : text and atlas. 13th ed. New York: McGraw-Hill Medical, 2013. xi, 544. ISBN 9781259072321. [info](#)*
- LÜLLMANN-RAUCH, Renate. *Histologie. Translated by Radomír Čihák. 1. české vyd. Praha: Grada, 2012. xx, 556. ISBN 9788024737294. [info](#)*
- SADLER, T. W. *Langmanova lékařská embryologie. 1. české vyd. Praha: Grada, 2011. xviii, 414. ISBN 9788024726403. [info](#)*

- VACEK, Zdeněk. *Embryologie : učebnice pro studenty lékařství a oborů všeobecná sestra a porodní aistentka*. 1. vyd. Praha: Grada, 2006. 255 s. ISBN 9788024712673. [info](#)
- KAPELLER, Karol and Viera POSPÍŠILOVÁ. *Embryológia človeka: učebnica pre lekárske fakulty*. Martin: Osveta, 2001. 370 pp. ISBN 80-8063-072-0. [info](#)

Teaching methods

lecture

Assessment methods

Students will pass examination after finishing Histology and embryology II - lecture.

Language of instruction

Czech

Further comments (probably available only in Czech)

Study Materials

The course is taught annually.

The course is taught: every week.

Information on course enrolment limitations: Mimo studenty LF jen se souhlasem garanta oboru.

Teacher's information

Veškeré informace o výuce včetně sylabu požadavků a průběhu zkoušky jsou zveřejněny na [www stránkách ústavu](#) a rovněž na vývěsce Ústavu histologie a embryologie, Kamenice 3 před mikroskopickým sálem.

Information about HE teaching and exam is available on the web site

<http://www.med.muni.cz/histology/education> and also on Department board in the front of Microscopic Hall.

The course is also listed under the following terms [Spring 2000](#), [Spring 2001](#), [Spring 2002](#), [Spring 2003](#), [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#).

VSHE0322c Histology and Embryology II - practice ✿

Faculty of Medicine

Autumn 2015

Extent and Intensity

0/3/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[MVDr. Martin Anger, CSc.](#) (seminar tutor)

[MUDr. Ivana Baltasová](#) (seminar tutor)

[prof. MUDr. RNDr. Svatopluk Čech, DrSc.](#) (seminar tutor)

[MUDr. Jana Dumková](#) (seminar tutor)

[doc. MVDr. Aleš Hampl, CSc.](#) (seminar tutor)

[prof. MUDr. Drahomír Horký, DrSc.](#) (seminar tutor)

[Mgr. Hana Kotasová, Ph.D.](#) (seminar tutor)

[doc. RNDr. Irena Krontorád Koutná, Ph.D.](#) (seminar tutor)

[MUDr. Irena Lauschová, Ph.D.](#) (seminar tutor)

[MUDr. Eva Mecová](#) (seminar tutor)

[doc. MUDr. Miroslava Sedláčková, CSc.](#) (seminar tutor)

[MUDr. Veronika Sedláčková](#) (seminar tutor)

[RNDr. Petr Vaňhara, Ph.D.](#) (seminar tutor)

[Mgr. Zuzana Koledová, Ph.D.](#) (assistant)

Supervisor

[doc. MUDr. Aleš Hampl, CSc.](#)

[Department of Histology and Embryology - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [doc. MUDr. Miroslava Sedláčková, CSc.](#)

Supplier department: [Department of Histology and Embryology - Theoretical Departments - Faculty of Medicine](#)

Timetable of Seminar Groups

VSHE0322c/01: Fri 7:30–10:00 [N01026/26](#)

VSHE0322c/02: Fri 7:30–10:00 [N01026/26](#)

VSHE0322c/03: Fri 7:30–10:00 [N01026/26](#)

VSHE0322c/04: Wed 13:30–16:00 [N01026/26](#)

VSHE0322c/05: Wed 7:30–10:00 [N01026/26](#)

VSHE0322c/06: Wed 13:30–16:00 [N01026/26](#)

VSHE0322c/07: Wed 13:30–16:00 [N01026/26](#)

VSHE0322c/08: Mon 13:30–16:00 [N01026/26](#)

VSHE0322c/09: Mon 13:30–16:00 [N01026/26](#)

VSHE0322c/10: Mon 13:30–16:00 [N01026/26](#)

VSHE0322c/11: Mon 7:30–10:00 [N01026/26](#)

VSHE0322c/12: Mon 10:15–12:45 [N01026/26](#)

VSHE0322c/13: Mon 10:15–12:45 [N01026/26](#)

VSHE0322c/14: Mon 10:15–12:45 [N01026/26](#)

VSHE0322c/15: Wed 7:30–10:00 [N01026/26](#)

VSHE0322c/16: Wed 7:30–10:00 [N01026/26](#)

VSHE0322c/17: Mon 7:30–10:00 [N01026/26](#)

VSHE0322c/18: Mon 7:30–10:00 [N01026/26](#)

VSHE0322c/30: No timetable has been entered into IS.

VSHE0322c/31: No timetable has been entered into IS.

VSHE0322c/32: No timetable has been entered into IS.

VSHE0322c/33: No timetable has been entered into IS.

VSHE0322c/34: No timetable has been entered into IS.

VSHE0322c/35: No timetable has been entered into IS.

VSHE0322c/36: No timetable has been entered into IS.

VSHE0322c/37: No timetable has been entered into IS.

Prerequisites (in Czech)

[VSHE0221c Histology and Embryology I -p](#) && [VSBI0222c Biology II-pract.](#) &&

[VSLT0221s Bas. Med. Terminol. II -s](#)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Course objectives

At the end of the course students should be able to:

- 1. Understand and explain the structure of a cell, basic structural principles and function of connective tissues, features of epithelial tissue, structure of different types of muscle tissue, structure and function of nervous tissue.*
- 2. Identify tissue types in histologic slides.*
- 3. Characterize microscopic structure of individual organs of human body and explain correlations of tissues within organs.*
- 4. Describe gamete development, explain principle of meiosis and regulation of gametogenesis.*
- 5. Define the early embryonic development as well as development of fetal membranes, placenta and umbilical cord.*
- 6. Characterize stages of embryonic development, describe the development of individual organ systems of human body.*
- 7. Explain the mechanism of the origin of some developmental anomalies.*

Syllabus

- *1. Microscopic structure of the digestive system I. Slides: labium oris, apex linguae, papilla vallata, palatum molle, glandula parotis, gl. submandibularis, gl. sublingualis.*
- *2. Microscopic structure of the digestive system II. Slides: tooth, oesophagus, cardia, fundus ventriculi, pylorus, duodenum, intestinum tenue.*
- *3. Microscopic structure of the digestive system III. Slides: intestinum crassum, appendix, anus, hepar, vesica fellea, pancreas.*
- *4. Microscopic structure of the urinary system. Slides: ren, calyx renalis, ureter, vesica urinialis, urethra feminina, pars cavernosa urethrae masculinae.*
- *5. Microscopic structure of the male reproductive system. Slides: testis, epididymis, funiculus spermaticus, gl. vesiculosa, prostata, penis.*
- *6. Microscopic structure of the female reproductive system. Slides: ovarium, corpus luteum, tuba uterina - ampulla, tuba uterina - isthmus, uterus - proliferative and secretory phases.*
- *7. Microscopic structure of the female reproductive system. Slides: vagina, labium minus, placenta, funiculus umbilicalis.*
- *8. Microscopic structure of endocrine glands. Slides: hypophysis cerebri, epiphysis, gl. thyreoidea, gl. parathyreoidea, gl. suprarenalis, islets of Langerhans.*
- *9. Microscopic structure of the central and peripheral nervous system. Slides: cortex cerebri, cerebellum, medulla spinalis, ganglion spinale, ganglion vegetativum, peripheral nerves.*

- 10. Microscopic structure of the organ of vision. Slides: anterior eye segment, posterior eye segment, fasciculus opticus, palpebra, gl. lacrimalis.
- 11. Microscopic structure of the ear (vestibulocochlear organ). Slides: cochlea, auricula.
- 12. Microscopic structure of the skin and skin derivatives. Slides: skin from the tips of the finger, skin from the axilla, skin with hairs, nail, mamma non lactans, mamma lactans.

Literature

recommended literature

- [ČECH, Svatopluk, Drahomír HORKÝ, Irena LAUSCHOVÁ, Miroslava SEDLÁČKOVÁ and Jitka ŠTASTNÁ](#). *Histologická praktika a metody vyšetřování tkání a orgánů (Histological practicals and methods of investigation of tissues and organs)*. 1. dotisk 1. vydání. Brno: Vydavatelství MU Brno-Kraví hora, 2002. 162 pp. ISBN 80-210-1774-0. [info](#)

Teaching methods

Content of this course includes study of slides and electron micrographs in microscopic hall as well as class discussion on the base of materials in the text book.

Assessment methods

Testing of knowledge: Student must prove sufficient level of knowledge by written test examination. Each student completes 5 partial tests during semester. Tests are evaluated by point for correct answer. More than half number of correct answers (points) is evaluated as "YES". All of these tests must be successful. In case of failure, only 1 resit is possible. There is condition 5 from 5 (ie. 5 YES / 5 regular tests) or 5 from 6 (ie. 4 YES / 5 regular tests + 1 YES / 1 resit). If student does not fulfill this condition, credit test follows in the relevant exam period. This test covers all topics studied during semester. In case of failure in credit test, credit will not be given and student **must enroll the course again**.

Conditions for obtaining credit: 1. Attendance at all practical exercises (100% participation, all absences must be regularly excused (in IS) and substituted).

2. Successful completion of all tests.

3. Submission of all protocols (correctly completed forms of protocols signed by teacher).

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

General note: Mimo studenty LF jen po dohodě s vedoucím ústavu.

Listed among pre-requisites of other courses

- [aVLLP0532c Clinical Introduction II - practice](#)
[aVLLP0431c](#) && ([aVLAN0222p](#) // [VSAN0333p](#)) && ([aVLHE0322c](#) // [VSHE0322c](#))&& ([aVLBC0422c](#) // [VSBC041c](#))&& [aVLFY0422c](#) ([Do I meet enrolment requirements?](#))
- [VLLP0532c Clinical Introduction II](#)
[VLLP0431c](#) && ([VLAN0222p](#) // [VSAN0333p](#)) && ([VLHE0322c](#) // [VSHE0322c](#))

&& ([VLBC0422c](#) // [VSBC041c](#)) && ([VLFY0422c](#) // [VSFY0422c](#)) ([Do I meet enrolment requirements?](#))

Teacher's information

<http://www.med.muni.cz/histology/education>

Veškeré informace o výuce včetně zkušebních termínů jsou zveřejněny na vývěsce Ústavu histologie a embryologie, Kamenice 3 před mikroskopickým sálem a rovněž na [www stránkách ústavu](#).

Information about HE teaching is available on the Department poster in front of the Microscopic Hall and on the web site <http://www.med.muni.cz/histology/education>

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#).

VSHE0322p Histology and Embryology II - lecture ✨

Faculty of Medicine

Autumn 2016

Extent and Intensity

2/0/0. 5 credit(s). Recommended Type of Completion: zk (examination). Alternate Types of Completion: RZk (examination).

Teacher(s)

[prof. MUDr. RNDr. Svatopluk Čech, DrSc.](#) (lecturer)

[doc. MUDr. Aleš Hampl, CSc.](#) (lecturer)

[MUDr. Irena Lauschová, Ph.D.](#) (lecturer)

[doc. MUDr. Miroslava Sedláčková, CSc.](#) (lecturer)

[RNDr. Petr Vaňhara, Ph.D.](#) (lecturer)

[MUDr. Ivana Baltasová](#) (assistant)

[MUDr. Jana Dumková](#) (assistant)

[Mgr. Hana Kotasová, Ph.D.](#) (assistant)

[MUDr. Eva Mecová](#) (assistant)

[MUDr. Veronika Sedláčková](#) (assistant)

Supervisor

[doc. MUDr. Aleš Hampl, CSc.](#)

[Department of Histology and Embryology - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [doc. MUDr. Miroslava Sedláčková, CSc.](#)

Supplier department: [Department of Histology and Embryology - Theoretical Departments - Faculty of Medicine](#)

Prerequisites (in Czech)

[VSHE0221c Histology and Embryology I -p](#) && [VSBI0222c Biology II-pract.](#) &&

[VSLT0221s Bas. Med. Terminol. II -s](#)

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [Stomatology](#) (programme LF, M-ST)
- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Course objectives.

At the end of the course students should be able to:

1. Understand and explain the structure of a cell, basic structural principles and function of connective tissues, features of epithelial tissue, structure of different types of muscle tissue, structure and function of nervous tissue.
2. Identify tissue types in histologic slides.
3. Characterize microscopic structure of individual organs of human body and explain correlations of tissues within organs.
4. Describe gamete development, explain principle of meiosis and regulation of gametogenesis.
5. Define the early embryonic development as well as development of fetal membranes, placenta and umbilical cord.
6. Characterize stages of embryonic development, describe the development of individual organ systems of human body.
7. Explain the mechanism of the origin of some developmental anomalies.

Syllabus

- 1. Microscopic structure of the oesophagus, stomach, and small and large intestine. Histophysiology of the intestine and blood circulation.
- 2. Microscopic structure of the liver, gallbladder, gall ducts, and pancreas. Overview of development of the gut.
- 3. Microscopic structure and development of the urinary system: Nephron - its structure, histotopography, and function. Blood circulation of kidneys. Urinary passages. Stages in development of kidneys (pro-, meso-, and metanephros).
- 4. Microscopic structure of the male reproductive system: Testis, excretory genital ducts, accessory genital glands, and penis. Spermato- and spermiogenesis. Composition of the sperm (ejaculate).
- 5. Microscopic structure of the female reproductive system: Ovary, oviduct, uterus, vagina, and external genitalia. Ovarian cycle, ovulation, and atresia. Oogenesis. Menstrual cycle. Relations between the menstrual and ovarian cycle.
- 6. Development of internal and external sexual organs. General characteristics of the indifferent stage.
- 7. Microscopic structure, histophysiology and development of endocrine glands: Hypophysis, epiphysis, thyroid gland, parathyroid glands, adrenal gland, islets of Langerhans. Principles of humoral regulation.
- 8. Microscopic structure and development of the central and peripheral nervous system. Structure of gray matter in the CNS: Iso- and allocortex, cerebellar

cortex, spinal cord. Meninges. Ganglia and peripheral nerves. Overview of development of the brain and spinal cord including histogenesis of the neural tube.

- *9. Microscopic structure of the organ of vision: The eye and its refractive (dioptric) media. Accessory structures of the eye. Microscopic structure of the ear (vestibulocochlear organ). Major structural differences between the statokinetic and acoustic compartments. Overview of development of the eye and vestibulocochlear organ.*
- *10. Microscopic structure and development of the skin and skin derivatives. Mammary gland.*
- *11. Development of body cavities and mesenteries. Development of the diaphragm. Development of the spleen.*
- *12. Development of the skull and vertebrate column. Congenital malformations of genital organs. Congenital malformations of the CNS.*
- *Consultations.*

Literature

recommended literature

- *ČECH, Svatopluk and Drahomír HORKÝ. Přehled obecné histologie. 1. vyd. Brno: Masarykova univerzita, 2005. 140 s. ISBN 8021038543. [info](#)*
- *HORKÝ, Drahomír and Svatopluk ČECH. Mikroskopická anatomie. 2. nezm. vyd. Brno: Masarykova univerzita, 2005. 353 s. ISBN 802103775X. [info](#)*
- *ČECH, Svatopluk, Drahomír HORKÝ and Miroslava SEDLÁČKOVÁ. Přehled embryologie člověka. 1. vyd. Brno: Masarykova univerzita, 2011. 187 pp. ISBN 978-80-210-5414-1. [info](#)*
- *MESCHER, Anthony L. Junqueira's basic histology : text and atlas. 13th ed. New York: McGraw-Hill Medical, 2013. xi, 544. ISBN 9781259072321. [info](#)*
- *MOORE, Keith L., T. V. N. PERSAUD and Mark G. TORCHIA. The developing human : clinically oriented embryology. 9th ed. Philadelphia, PA: Saunders/Elsevier, 2013. xix, 540. ISBN 9781437720020. [info](#)*

not specified

- *VACEK, Zdeněk. Embryologie : učebnice pro studenty lékařství a oborů všeobecná sestra a porodní aistentka. 1. vyd. Praha: Grada, 2006. 255 s. ISBN 9788024712673. [info](#)*
- *SADLER, T. W. Langmanova lékařská embryologie. 1. české vyd. Praha: Grada, 2011. xviii, 414. ISBN 9788024726403. [info](#)*
- *KAPELLER, Karol and Viera POSPÍŠILOVÁ. Embryológia človeka: učebnica pre lekárske fakulty. Martin: Osveta, 2001. 370 pp. ISBN 80-8063-072-0. [info](#)*
- *LÜLLMANN-RAUCH, Renate. Histologie. Translated by Radomír Čihák. 1. české vyd. Praha: Grada, 2012. xx, 556. ISBN 9788024737294. [info](#)*
- *OVALLE, William K., Patrick C. NAHIRNEY and Frank H. NETTER. Netter's essential histology. 2nd ed. Philadelphia, PA: Elsevier/Saunders, 2013. xv, 517. ISBN 9781455706310. [info](#)*

- YOUNG, Barbara. *Wheater's functional histology : a text and colour atlas*. 5th ed. [Oxford]: Churchill Livingstone, 2006. x, 437. ISBN 044306850X. [info](#)
- SADLER, T. W. and Jan LANGMAN. *Langman's medical embryology*. Illustrated by Jill Leland. 11th ed. Baltimore, Md.: Lippincott William & Wilkins, 2010. ix, 385. ISBN 9781605476568. [info](#)
- LOWE, James S. and Peter G. ANDERSON. *Stevens and Lowe's Human Histology*. 4th. : Elsevier, 2015. ISBN 978-0-7234-3502-0. [info](#)

Teaching methods

lectures

Assessment methods

Final examination is composed of the practical part (slide test) and the theoretical part that includes written test and oral exam. In practical part, student should identify minimally 7 out of 10 slides. Oral exam includes 2 questions (1 histology, 1 embryology). Rules and conditions applicable for practical training and for examining in Histology and Embryology can be found on the website of Department of Histology and Embryology (<http://www.med.muni.cz/histology/education>).

A necessary condition for admission to exam is to obtain credit from the Histology and Embryology II-practice.

Language of instruction

Czech

Further comments (probably available only in Czech)

Study Materials

The course is taught annually.

The course is taught: every week.

Listed among pre-requisites of other courses

- [aVLPA0521c Pathology I - practice](#)
([aVLAN0222p](#) // [VSAN0333p](#)) && ([aVLHE0322p](#) // [VSHE0322p](#)) && ([aVLLM0421c](#) // [VLLM0421c](#)) ([Do I meet enrolment requirements?](#))
- [aVLPA0521p Pathology I - lecture](#)
([aVLAN0222p](#) // [VSAN0333p](#)) && ([aVLHE0322p](#) // [VSHE0322p](#)) && ([aVLLM0421c](#) // [VLLM0421c](#)) ([Do I meet enrolment requirements?](#))
- [VLPA0521c Pathology I - practicals](#)
([VLFY0422p](#) // [VSFY0422p](#)) && ([VSBC041p](#) // [VLBC0422p](#)) && ([VLAN0222p](#) // [VSAN0333p](#)) && ([VLHE0322p](#) // [VSHE0322p](#)) && [VLLM0421c](#) ([Do I meet enrolment requirements?](#))
- [VLPA0521p Pathology I - lecture](#)
([VLFY0422p](#) // [VSFY0422p](#)) && ([VSBC041p](#) // [VLBC0422p](#)) && ([VLAN0222p](#) // [VSAN0333p](#)) && ([VLHE0322p](#) // [VSHE0322p](#)) && [VLLM0421c](#) ([Do I meet enrolment requirements?](#))
- [VLPF0521c Pathological physiology I - practice](#)
([VLFY0422p](#) // [VSFY0422p](#)) && ([VSBC041p](#) // [VLBC0422p](#)) && ([VLAN0222p](#) // [VSAN0333p](#)) && ([VLHE0322p](#) // [VSHE0322p](#)) && [VLLM0421c](#) ([Do I meet enrolment requirements?](#))
- [VLPF0521p Pathological Physiology I - lecture](#)
([VLFY0422p](#) // [VSFY0422p](#)) && ([VSBC041p](#) // [VLBC0422p](#)) && ([VLAN0222p](#) //

[VSAN0333p](#) && ([VLHE0322p](#) // [VSHE0322p](#)) && [VLLM0421c](#) (*Do I meet enrolment requirements?*)

- [VSIPA0521c Pathology - practicals](#)
[VSFY0422p](#) && ([VSBC041p](#) // [VSBC0422p](#)) && [VSAN0333p](#) && [VSHE0322p](#)
&& ([VSLT0221s](#) // [VSLT011s](#)) && [VSET021](#) && ([VLLM0421c](#) // [STLM0421c](#))
&& [ZC041](#) (*Do I meet enrolment requirements?*)
- [VSIPA0521p Pathology I - lecture](#)
[VSFY0422p](#) && ([VSBC041p](#) // [VSBC0422p](#)) && [VSAN0333p](#) && [VSHE0322p](#)
&& ([VSLT0221s](#) // [VSLT011s](#)) && [VSET021](#) && ([VLLM0421c](#) // [STLM0421c](#))
&& [ZC041](#) (*Do I meet enrolment requirements?*)
- [VSPF0521c Pathological physiology I - practice](#)
[VSFY0422p](#) && ([VSBC041p](#) // [VSBC0422p](#)) && [VSAN0333p](#) && [VSHE0322p](#)
&& ([VSLT0221s](#) // [VSLT011s](#)) && [VSET021](#) && [ZC041](#) (*Do I meet enrolment requirements?*)

[Zobrazit další předměty](#)

Teacher's information

<http://www.med.muni.cz/histology/education>

Veškeré informace o výuce včetně zkušebních termínů jsou zveřejněny na vývěsce Ústavu histologie a embryologie, Kamenice 3 před mikroskopickým sálem a rovněž na [www.stránkách ústavu](#). Studenti mohou pro přípravu ke zkoušce využívat elektronické atlasy na adrese <http://www.med.muni.cz/histology/atlas.htm>

Zkoušku může student skládat až po získání zápočtu z~předmětu Histologie a embryologie II - cvičení.

Information about HE teaching is available on the Department poster in front of the Microscopic Hall and on the web site <http://www.med.muni.cz/histology/education>.

A necessary condition for admission to exam is to obtain credit from the Histology and Embryology II-practice.

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#), [Autumn 2015](#).

VSIP0521c Clinical Introduction to Internal Medicine - practice ✨

Faculty of Medicine

Autumn 2016

Extent and Intensity

0/2/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Zdeněk Adam, CSc.](#) (seminar tutor)
[MUDr. Irena Andršová, Ph.D.](#) (seminar tutor)
[MUDr. Otakar Bednařík](#) (seminar tutor)
[doc. MUDr. Mojmír Blaha, CSc.](#) (seminar tutor)
[MUDr. Dagmar Brančíková, Ph.D.](#) (seminar tutor)
[MUDr. Lucie Brázdilová](#) (seminar tutor)
[Mgr. Petra Bučková](#) (seminar tutor)
[MUDr. Alena Buliková, Ph.D.](#) (seminar tutor)
[MUDr. Libor Červínek, Ph.D.](#) (seminar tutor)
[prof. MUDr. Michael Doubek, Ph.D.](#) (seminar tutor)
[Ing. Dana Dvořáková, CSc.](#) (seminar tutor)
[MUDr. Michal Eid](#) (seminar tutor)
[MUDr. Blanka Fischerová, Ph.D.](#) (seminar tutor)
[MUDr. Zdeněk Fojtík, Ph.D.](#) (seminar tutor)
[MUDr. František Folber, Ph.D.](#) (seminar tutor)
[MUDr. Markéta Hadrabová](#) (seminar tutor)
[prof. MUDr. Aleš Hep, CSc.](#) (seminar tutor)
[MUDr. Miluše Hertlová, CSc.](#) (seminar tutor)
[MUDr. Štěpán Hrabovský](#) (seminar tutor)
[doc. MUDr. Andrea Janíková, Ph.D.](#) (seminar tutor)
[MUDr. Ladislav Kabelka, Ph.D.](#) (seminar tutor)
[doc. MUDr. Igor Kiss, Ph.D.](#) (seminar tutor)
[MUDr. Lada Klvačová](#) (seminar tutor)
[doc. MUDr. Milan Kozák, Ph.D.](#) (seminar tutor)
[MUDr. Zdeněk Král, CSc.](#) (seminar tutor)
[prof. MUDr. Marta Krejčí, Ph.D.](#) (seminar tutor)
[MUDr. Radek Kroupa, Ph.D.](#) (seminar tutor)
[MUDr. Darja Krusová, Ph.D.](#) (seminar tutor)
[doc. MUDr. Lubomír Křivan, Ph.D.](#) (seminar tutor)
[MUDr. Andrea Křivanová, Ph.D.](#) (seminar tutor)
[prof. MUDr. Jan Lata, CSc.](#) (seminar tutor)
[prof. MUDr. Hana Matějovská Kubešová, CSc.](#) (seminar tutor)
[prof. MUDr. Jiří Mayer, CSc.](#) (seminar tutor)
[prof. MUDr. Jaroslav Meluzín, CSc.](#) (seminar tutor)
[MUDr. Eva Mičulková](#) (seminar tutor)
[MUDr. Jozef Michalka](#) (seminar tutor)
[MUDr. Marta Nedbálková, Ph.D.](#) (seminar tutor)
[doc. MUDr. Helena Němcová, CSc.](#) (seminar tutor)
[doc. MUDr. Miroslav Novák, CSc.](#) (seminar tutor)
[MUDr. Ivo Novotný, CSc.](#) (seminar tutor)
[MUDr. Lenka Ostrůžková](#) (seminar tutor)
[MUDr. Martina Palacková](#) (seminar tutor)
[MUDr. Ivo Palásek](#) (seminar tutor)
[MUDr. Anna Panovská, Ph.D.](#) (seminar tutor)
[prof. MUDr. Miroslav Penka, CSc.](#) (seminar tutor)
[prof. RNDr. Šárka Pospíšilová, Ph.D.](#) (seminar tutor)

[MUDr. Yvona Pospíšilová](#) (seminar tutor)
[doc. MUDr. Luděk Pour, Ph.D.](#) (seminar tutor)
[MUDr. Markéta Protivánková](#) (seminar tutor)
[prof. MUDr. Zdeněk Ráčil, Ph.D.](#) (seminar tutor)
[MUDr. Ivan Řiháček, Ph.D.](#) (seminar tutor)
[MUDr. Lukáš Semerád](#) (seminar tutor)
[prof. MUDr. Miroslav Souček, CSc.](#) (seminar tutor)
[MUDr. Jan Svojanovský, Ph.D.](#) (seminar tutor)
[doc. MUDr. Petr Szturz, Ph.D.](#) (seminar tutor)
[MUDr. David Šálek](#) (seminar tutor)
[MUDr. Mgr. Ing. Petra Šedová](#) (seminar tutor)
[doc. MUDr. Kamil Ševela, CSc.](#) (seminar tutor)
[MUDr. Lenka Šmardová](#) (seminar tutor)
[doc. MUDr. Jiří Špác, CSc.](#) (seminar tutor)
[prof. MUDr. Jindřich Špinar, CSc.](#) (seminar tutor)
[prof. MUDr. Lenka Špinarová, Ph.D., FESC](#) (seminar tutor)
[prof. MUDr. Jaroslav Štěrba, Ph.D.](#) (seminar tutor)
[MUDr. Martin Štork](#) (seminar tutor)
[doc. MUDr. Josef Šumbera, CSc.](#) (seminar tutor)
[MUDr. Zuzana Šustková](#) (seminar tutor)
[MUDr. Jiří Tomášek, Ph.D.](#) (seminar tutor)
[doc. MUDr. Miroslav Tomiška, CSc.](#) (seminar tutor)
[doc. Mgr. Martin Trbušek, Dr.](#) (seminar tutor)
[MUDr. Jakub Trizuljak](#) (seminar tutor)
[prof. MUDr. Jiří Vítovec, CSc.](#) (seminar tutor)
[MUDr. Jitka Vlašínová, Ph.D.](#) (seminar tutor)
[prof. MUDr. Jiří Vorlíček, CSc.](#) (seminar tutor)
[MUDr. Barbora Weinbergerová](#) (seminar tutor)
[MUDr. Libor Zdražil](#) (seminar tutor)
[MUDr. Daniela Žáčková, Ph.D.](#) (seminar tutor)
[Lenka Bartlová](#) (assistant)
[Zdeňka Dvořáková](#) (assistant)
[Lenka Hochmanová](#) (assistant)
[Eva Kašpárková](#) (assistant)
[Lenka Kovářová](#) (assistant)
[Jitka Macháčková](#) (assistant)
[Alena Stodůlková](#) (assistant)
[David Tomášek](#) (assistant)
[Hana Zemanová](#) (assistant)
[Klára Zouharová](#) (assistant)

Supervisor

[prof. MUDr. Miroslav Souček, CSc.](#)
[Second Department of Internal Medicine - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)
Contact Person: [Eva Kašpárková](#)
Supplier department: [Second Department of Internal Medicine - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Timetable of Seminar Groups

VSIP0521c/01: Mon 24. 10. to Fri 6. 1. Mon 10:30–13:00 [C-6.034](#)
VSIP0521c/02: Mon 24. 10. to Fri 6. 1. Tue 10:30–13:00 [N04001](#)
VSIP0521c/03: Mon 24. 10. to Fri 6. 1. Tue 10:30–13:00 [C-6.034](#)
VSIP0521c/04: Mon 24. 10. to Fri 6. 1. Tue 9:30–12:00 [N14190](#)
VSIP0521c/05: Mon 24. 10. to Fri 6. 1. Thu 9:30–12:00 [N14190](#)
VSIP0521c/06: Mon 24. 10. to Fri 6. 1. Thu 10:30–13:00 [C-6.034](#)
VSIP0521c/07: Mon 24. 10. to Fri 6. 1. Thu 10:30–13:00 [N04001](#)
VSIP0521c/08: Mon 24. 10. to Fri 6. 1. Thu 9:30–12:00 [N14190](#)
VSIP0521c/09: Mon 24. 10. to Fri 6. 1. Wed 9:30–12:00 [N14190](#)
VSIP0521c/10: Mon 24. 10. to Fri 6. 1. Wed 10:30–13:00 [C-6.034](#)
VSIP0521c/11: Mon 24. 10. to Fri 6. 1. Wed 10:30–13:00 [N04001](#)
VSIP0521c/12: Mon 24. 10. to Fri 6. 1. Wed 9:30–12:00 [N14190](#)
VSIP0521c/13: Mon 24. 10. to Fri 6. 1. Fri 9:30–12:00 [N14190](#)
VSIP0521c/14: Mon 24. 10. to Fri 6. 1. Fri 10:30–13:00 [C-6.034](#)
VSIP0521c/15: Mon 24. 10. to Fri 6. 1. Fri 10:30–13:00 [N04001](#)
VSIP0521c/16: Mon 24. 10. to Fri 6. 1. Mon 10:30–13:00 [N04001](#)
VSIP0521c/17: Mon 24. 10. to Fri 6. 1. Mon 9:30–12:00 [N14190](#)
VSIP0521c/18: Mon 24. 10. to Fri 6. 1. Mon 9:30–12:00 [N14190](#)
VSIP0521c/30: No timetable has been entered into IS.
VSIP0521c/31: No timetable has been entered into IS.
VSIP0521c/32: No timetable has been entered into IS.
VSIP0521c/33: No timetable has been entered into IS.
VSIP0521c/34: No timetable has been entered into IS.
VSIP0521c/35: No timetable has been entered into IS.

Prerequisites

[VSFY0422p Physiology II - lecture](#) && ([VSBC041p Biochemistry II -I](#) // [VSBC0422p Biochemistry II -I](#)) && ([VSLT0221s Bas. Med. Terminol. II -s](#) // [VSLT011s Bas. Med. Terminology -I](#)) && [VSET021 Medical Ethics I](#) && [VSPP3XI Nursing](#) && [ZC041 Handling chemical substances](#)
Fulfil the prerequisites, examination of anatomy, physiology, and biochemistry.
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

After the completion of practicals the student will be able to take a complete history of patients perform a general objektive physical examination of patients perform and evaluace ecg curve and discern basic patohological ecg findings describe physiological findings on X ray picture known laboratory and othe diagnostic tests in individual diseases

Syllabus

- 6. - 15. week: The study will be organized in classes in the Medical Clinics. The program will be consisted from 2 hours bedside medical practice focused on clinical examination from 1. - 5. week and different special topic according the schedule. Special topics: focused on clinical examination from 1. - 5. week and different special topic according the schedule.
- 6th week - General history
- 7th week - Special history according to lung diseases
- 8th week - Special history according to heart diseases
- 9th week - Special history according to renal diseases
- 10th week - Special history according to gastrointestinal and hepatic diseases
- 11th week - Special history according to endocrine diseases
- 12th week - Special history according to hematological diseases
- 13th week - Special history according to peripheral arteries and veins diseases
- 14th week - Special history according to rheumatic and immunological diseases
- 15th week - Review of special histories, credit

Literature

- Chrobák, Ladislav. *Propedeutika vnitřního lékařství a. Illustrated by Josef Bavor.* 1. vyd. Praha : Grada Publishing, 1997. 195 s. ISBN 80-7169-274-3
- Zelenková, Jana. *Příručka interní propedeutiky.* 1.vydání. : Triton, 2002. 173 s. ISBN 80-7254-227-3.
- Davidson s *Principles and Practise of Medicine.* 20th Edition. N.A. Boon, N.R.Colledge, B.R.Walker

Teaching methods

The practicals are taking place in various clinical departments, the attendance is obligatory. In first 5 weeks are lectures, since 6th week are lessons in clinical departments. The education is aimed at practical exercise of skills at patients bed. The knowledge of theory acquired during the lectures in first 5 weeks are requested. Audiovisual techniques are used for easier orientation in more complicated diagnostic situations.

Assessment methods

The credit is given for an aktive approach to the discussed problème and on the basis of proved ability to examene the patient

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

Listed among pre-requisites of other courses

- [VSIP0622c Clinical Introduction to Internal Medicine II - practice VSIP0521c \(Do I meet enrolment requirements?\)](#)
- [VSIP0622p Clinical Introduction to Internal Medicine II - lecture VSIP0521c \(Do I meet enrolment requirements?\)](#)

Teacher's information

V den zahájení stáže na II. interní klinice, FN Pekařská - v pondělí si studenti přinesou zámeček k uzamčení šatní skříňky. Po ukončení stáže jsou povinni opět šatní skříňku uvolnit!!!!!!!!!!!! Děkuji za pochopení. Studenti potřebují bílý plášť, přezůvky, fonendoskop a zájem o problematiku! Studijní skupina je rozdělena na poloviny, výuka probíhá na jednotlivých lůžkových oddělení kliniky.

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#), [Autumn 2015](#).

VSIP0521p Clinical Introduction to Internal Medicine I - lecture ✨

Faculty of Medicine

Autumn 2016

Extent and Intensity

1/0/0. 0 credit(s). Type of Completion: -.

Teacher(s)

[prof. MUDr. Zdeněk Adam, CSc.](#) (lecturer)
[MUDr. Otakar Bednařík](#) (lecturer)
[doc. MUDr. Mojmír Blaha, CSc.](#) (lecturer)
[MUDr. Dagmar Brančíková, Ph.D.](#) (lecturer)
[MUDr. Alena Buliková, Ph.D.](#) (lecturer)
[prof. MUDr. Petr Cetkovský, Ph.D.](#) (lecturer)
[MUDr. Libor Červínek, Ph.D.](#) (lecturer)
[prof. MUDr. Petr Dítě, DrSc.](#) (lecturer)
[prof. MUDr. Michael Doubek, Ph.D.](#) (lecturer)
[Ing. Dana Dvořáková, CSc.](#) (lecturer)
[prof. MUDr. Lubomír Elbl, CSc.](#) (lecturer)
[doc. MUDr. David Feltl, Ph.D.](#) (lecturer)
[MUDr. Zdeněk Fojtík, Ph.D.](#) (lecturer)
[MUDr. František Folber, Ph.D.](#) (lecturer)
[prof. MUDr. Roman Hájek, CSc.](#) (lecturer)
[prof. MUDr. Aleš Hep, CSc.](#) (lecturer)
[doc. MUDr. Andrea Janíková, Ph.D.](#) (lecturer)
[doc. MUDr. Stanislav Janoušek, CSc.](#) (lecturer)
[MUDr. Ladislav Kabelka, Ph.D.](#) (lecturer)
[MUDr. Jarmila Kissová, Ph.D.](#) (lecturer)
[MUDr. Zdeněk Král, CSc.](#) (lecturer)
[prof. MUDr. Marta Krejčí, Ph.D.](#) (lecturer)
[MUDr. Andrea Křivanová, Ph.D.](#) (lecturer)
[prof. MUDr. Jiří Mayer, CSc.](#) (lecturer)
[MUDr. Jozef Michalka](#) (lecturer)
[MUDr. Lenka Ostrážková](#) (lecturer)

[MUDr. Martina Palacková](#) (lecturer)
[MUDr. Ivo Palásek](#) (lecturer)
[MUDr. Anna Panovská, Ph.D.](#) (lecturer)
[prof. MUDr. Miroslav Penka, CSc.](#) (lecturer)
[MUDr. Yvona Pospíšilová](#) (lecturer)
[doc. MUDr. Luděk Pour, Ph.D.](#) (lecturer)
[MUDr. Markéta Protivánková](#) (lecturer)
[prof. MUDr. Zdeněk Ráčil, Ph.D.](#) (lecturer)
[prof. MUDr. Miroslav Souček, CSc.](#) (lecturer)
[doc. MUDr. Petr Szturz, Ph.D.](#) (lecturer)
[MUDr. Lenka Šmardová](#) (lecturer)
[doc. MUDr. Jiří Špác, CSc.](#) (lecturer)
[prof. MUDr. Jindřich Špinar, CSc.](#) (lecturer)
[doc. Mgr. Martin Trbušek, Dr.](#) (lecturer)
[prof. MUDr. Jiří Vítovec, CSc.](#) (lecturer)
[prof. MUDr. Jiří Vorlíček, CSc.](#) (lecturer)
[MUDr. Markéta Vyskočilová](#) (lecturer)
[MUDr. Daniela Žáčková, Ph.D.](#) (lecturer)
[MUDr. Jiří Dolina, Ph.D.](#) (seminar tutor)
[MUDr. Blanka Fischerová, Ph.D.](#) (seminar tutor)
[MUDr. Ota Hlinomaz, CSc.](#) (seminar tutor)
[MUDr. Ivo Hofírek](#) (seminar tutor)
[MUDr. Petr Hude, Ph.D.](#) (seminar tutor)
[MUDr. Libuše Husová, Ph.D.](#) (seminar tutor)
[doc. MUDr. Václav Chaloupka, CSc.](#) (seminar tutor)
[MUDr. Petr Kala, Ph.D.](#) (seminar tutor), [doc. MUDr. Lubomír Křivan, Ph.D.](#) (deputy)
[doc. MUDr. Milan Kozák, Ph.D.](#) (seminar tutor)
[MUDr. Jan Krejčí, Ph.D.](#) (seminar tutor)
[MUDr. Darja Krusová, Ph.D.](#) (seminar tutor)
[doc. MUDr. Růžena Lábrová, Ph.D.](#) (seminar tutor)
[doc. MUDr. Ondřej Ludka, Ph.D.](#) (seminar tutor)
[prof. MUDr. Jaroslav Meluzín, CSc.](#) (seminar tutor)
[doc. MUDr. Helena Němcová, CSc.](#) (seminar tutor)
[doc. MUDr. Miroslav Novák, CSc.](#) (seminar tutor)
[MUDr. Ivo Novotný, CSc.](#) (seminar tutor)
[doc. MUDr. Mgr. Jiří Pařenica, Ph.D.](#) (seminar tutor)
[MUDr. Yvona Pospíšilová](#) (seminar tutor)
[MUDr. Ivan Řiháček, Ph.D.](#) (seminar tutor)
[MUDr. Milan Sepši, Ph.D.](#) (seminar tutor)
[doc. MUDr. Kamil Ševela, CSc.](#) (seminar tutor)
[prof. MUDr. Lenka Špinarová, Ph.D., FESC](#) (seminar tutor)
[doc. MUDr. Miroslav Tomiška, CSc.](#) (seminar tutor)
[MUDr. Jitka Vlašínová, Ph.D.](#) (seminar tutor)
[Lenka Hochmanová](#) (assistant)
[Eva Kašpárková](#) (assistant)

Supervisor

prof. MUDr. Miroslav Souček, CSc.

Second Department of Internal Medicine - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine

Supplier department: Second Department of Internal Medicine - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine

Timetable

Mon 19. 9. to Fri 21. 10. Mon 15:30–17:10 [014](#)

- Timetable of Seminar Groups:

VSIP0521p/VLA: Mon 26. 9. to Fri 28. 10. Tue 11:20–13:00 [A11/114](#)

Prerequisites

[VSFY0422p Physiology II - lecture](#) &&([VSBC041p Biochemistry II -I](#) || [VSBC0422p Biochemistry II -I](#)) && ([VSLT0221s Bas. Med. Terminol. II -s](#) || [VSLT011s Bas. Med. Terminology -I](#)) && [VSET021 Medical Ethics I](#) && [VSPP3XI Nursing](#) && [ZC041 Handling chemical substances](#)

Fulfil the prerequisites, examination of anatomy, physiology, and biochemistry. ([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

After the completion of practicals the student will be able to take a complete history of patients perform a general objective physical examination of patients perform and evaluate ECG curve and discern basic pathological ECG findings describe physiological findings on X-ray picture known laboratory and other diagnostic tests in individual diseases

Syllabus

- 1st week: History, subjective and objective symptoms
- 2nd week: Examination of head and neck
- 3rd week: Examination of and lungs
- 4th week: Examination of heart
- 5th week: Examination of abdomen

Literature

required literature

- Špinar J. a kol. *Propedeutika a vyšetřovací metody vnitřních nemocí*. Praha. Grada 2008, ISBN: 978-80-247-1749-4

not specified

- *Davidson s Principles and Practise of Medicine. 20th Edition. N.A. Boon, N.R.Colledge, B.R.Walker*
- *ZELENKOVÁ, Jana. Příručka interní propedeutiky. 1.vydání. : Triton, 2002. 173 pp. ISBN 80-7254-227-3. [info](#)*
- *Propedeutika vnitřního lékařství. Edited by Ladislav Chrobák, Illustrated by Josef Bavor. 1. vyd. Praha: Grada, 1997. 195 s. ISBN 80-7169-274-3. [info](#)*

Teaching methods

lecture

Assessment methods

Oral examination, choice of 24 questions.

Language of instruction

Czech

Further comments (probably available only in Czech)

Study Materials

The course is taught annually.

Teacher's information

Prvních 5 týdnů výuky probíhají přednášky v posluchárně I. chirurgické kliniky FN Pekařská. Teoreticky je vysvětleno kompletně fyzikální vyšetření nemocného. Tyto teoretické znalosti studenta jsou předpokládány v klinické stáži, kde již probíhá praktická výuka.

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#), [Autumn 2015](#).

VSIP0622c Clinical Introduction to Internal Medicine II - practice ✳

Faculty of Medicine

Spring 2018

Extent and Intensity

0/2/0. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Zdeněk Adam, CSc.](#) (seminar tutor)

[MUDr. Irena Andršová, Ph.D.](#) (seminar tutor)

[MUDr. Otakar Bednařík](#) (seminar tutor)

[doc. MUDr. Mojmír Blaha, CSc.](#) (seminar tutor)

[MUDr. Dagmar Brančíková, Ph.D.](#) (seminar tutor)

[MUDr. Lucie Brázdilová](#) (seminar tutor)

[Mgr. Petra Bučková](#) (seminar tutor)

[MUDr. Alena Buliková, Ph.D.](#) (seminar tutor)

[MUDr. Libor Červínek, Ph.D.](#) (seminar tutor)

[prof. MUDr. Michael Doubek, Ph.D.](#) (seminar tutor)

[Ing. Dana Dvořáková, CSc.](#) (seminar tutor)

MUDr. Michal Eid (seminar tutor)
MUDr. Blanka Fischerová, Ph.D. (seminar tutor)
MUDr. Zdeněk Fojtík, Ph.D. (seminar tutor)
MUDr. František Folber, Ph.D. (seminar tutor)
MUDr. Markéta Hadrabová (seminar tutor)
prof. MUDr. Aleš Hep, CSc. (seminar tutor)
MUDr. Miluše Hertlová, CSc. (seminar tutor)
MUDr. Tomáš Horňák (seminar tutor)
MUDr. Štěpán Hrabovský (seminar tutor)
doc. MUDr. Andrea Janíková, Ph.D. (seminar tutor)
doc. MUDr. Igor Kiss, Ph.D. (seminar tutor)
MUDr. Jarmila Kissová, Ph.D. (seminar tutor)
doc. MUDr. Milan Kozák, Ph.D. (seminar tutor)
MUDr. Zdeněk Král, CSc. (seminar tutor)
prof. MUDr. Marta Krejčí, Ph.D. (seminar tutor)
MUDr. Darja Krusová, Ph.D. (seminar tutor)
doc. MUDr. Lubomír Křivan, Ph.D. (seminar tutor)
MUDr. Jana Křivánková (seminar tutor)
MUDr. Andrea Křivanová, Ph.D. (seminar tutor)
prof. MUDr. Hana Matějovská Kubešová, CSc. (seminar tutor)
prof. MUDr. Jiří Mayer, CSc. (seminar tutor)
MUDr. Róbert Mazúr (seminar tutor)
prof. MUDr. Jaroslav Meluzín, CSc. (seminar tutor)
MUDr. Eva Mičulková (seminar tutor)
MUDr. Jozef Michalka (seminar tutor)
MUDr. Marta Nedbálková, Ph.D. (seminar tutor)
doc. MUDr. Helena Němcová, CSc. (seminar tutor)
doc. MUDr. Miroslav Novák, CSc. (seminar tutor)
MUDr. Monika Ondráčková (seminar tutor)
MUDr. Lenka Ostrážková (seminar tutor)
MUDr. Martina Palacková (seminar tutor)
MUDr. Ivo Palásek (seminar tutor)
MUDr. Anna Panovská, Ph.D. (seminar tutor)
prof. MUDr. Miroslav Penka, CSc. (seminar tutor)
MUDr. Yvona Pospíšilová (seminar tutor)
doc. MUDr. Luděk Pour, Ph.D. (seminar tutor)
MUDr. Markéta Protivánková (seminar tutor)
prof. MUDr. Zdeněk Ráčil, Ph.D. (seminar tutor)
MUDr. Ivan Řiháček, Ph.D. (seminar tutor)
prof. MUDr. Miroslav Souček, CSc. (seminar tutor)
MUDr. Jan Svojanovský, Ph.D. (seminar tutor)
doc. MUDr. Petr Szturz, Ph.D. (seminar tutor)
MUDr. David Šálek (seminar tutor)
doc. MUDr. Kamil Ševela, CSc. (seminar tutor)
MUDr. Lenka Šmardová (seminar tutor)
doc. MUDr. Jiří Špác, CSc. (seminar tutor)
prof. MUDr. Jindřich Špinar, CSc. (seminar tutor)

[prof. MUDr. Lenka Špinarová, Ph.D., FESC](#) (seminar tutor)

[MUDr. Martin Štork](#) (seminar tutor)

[doc. MUDr. Josef Šumbera, CSc.](#) (seminar tutor)

[MUDr. Zuzana Šustková](#) (seminar tutor)

[MUDr. Jiří Tomášek, Ph.D.](#) (seminar tutor)

[doc. MUDr. Miroslav Tomáška, CSc.](#) (seminar tutor)

[MUDr. Jakub Trizuljak](#) (seminar tutor)

[Mgr. Eva Vetešnicková](#) (seminar tutor)

[prof. MUDr. Jiří Vítovec, CSc.](#) (seminar tutor)

[MUDr. Jitka Vlašínová, Ph.D.](#) (seminar tutor)

[prof. MUDr. Jiří Vorlíček, CSc.](#) (seminar tutor)

[MUDr. Barbora Weinbergerová](#) (seminar tutor)

[MUDr. Libor Zdražil](#) (seminar tutor)

[MUDr. Daniela Žáčková, Ph.D.](#) (seminar tutor)

[Lenka Bartlová](#) (assistant)

[Zdeňka Dvořáková](#) (assistant)

[Jitka Firešová](#) (assistant)

[Eva Kašpárková](#) (assistant)

[Lenka Kovářová](#) (assistant)

[Jitka Macháčková](#) (assistant)

[Jarmila Mouková](#) (assistant)

[Alena Stodůlková](#) (assistant)

[Libuše Šimečková](#) (assistant)

[Hana Zemanová](#) (assistant)

[Klára Zouharová](#) (assistant)

Supervisor

[prof. MUDr. Miroslav Souček, CSc.](#)

[Second Department of Internal Medicine - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Contact Person: [Eva Kašpárková](#)

Supplier department: [Second Department of Internal Medicine - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Prerequisites

[VSIP0521c Introduc. to internal I-pr.](#)

Fulfil the prerequisites, examination of anatomy, physiology, and biochemistry.
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

After the completion of practicals the student will be able to take a complete history of patients perform a general objective physical examination of patients perform and

evaluate ecg curve and discern basic pathological ecg findings describe physiological findings on X ray picture known laboratory and othe diagnostic tests in individual diseases

Syllabus

- *1st week*
- *Laboratoty diagnostic test and clinical examination of the cardiovascular diseases.*
- *2nd week*
- *Laboratoty diagnostic test and clinical examination of the respiratory diaseases.*
- *3rd week.*
- *Laboratoty diagnostic test and clinical examination of the kidney and urinary tract diseases*
- *4th week*
- *Laboratoty diagnostic test and clinical examination of the gastrointestinal tract diseases*
- *5th week*
- *Laboratoty diagnostic test and clinical examination of the pancreatic, liver and biliary tract diseases.*
- *6th week*
- *Laboratoty diagnostic test and clinical examination of the endocrine diseases.*
- *7th week*
- *Laboratoty diagnostic test and clinical examination of the blood disorders*
- *8th week*
- *Laboratoty diagnostic test and clinical examination of the peripheral vascular diseases.*
- *9th week*
- *Laboratoty diagnostic test and clinical examination of the inflamatory joint diseases.*
- *10th week*
- *Laboratoty diagnostic test and clinical examination of the immunology alterations. 11th week*
- *Normal ECG and chest X-ray 12th week*
- *The ECG in acute myocardial infarction*
- *13th week*
- *The ECG in tachy-, bradyarrhythmia*
- *14th week*
- *The ECG in ventricular hypertrophy, bundle branch block, electrolyte dysbalance.*
- *15th week*
- *Review,credit*

Literature

required literature

- *Špinar J. a kol. Propedeeutika a vyšetřovací metody vnitřních nemocí. Praha, Grada. 2008, 336p, ISBN 978-80-247-1749-4*

- *Graham Douglas et al: Macleod's Clinical Examination, Churchill Livingstone 2013, 472p, ISBN: 9780702047299*

recommended literature

- *Chrobák L., Gral L. et al. Physical Examination in Internal Medicine. Praha. Grada. 2003, 240s, ISBN 978-80-247-0617-7*
- *Interní propeudeutika.cz 2.0 www.propedeutika.cz*

Teaching methods

The practicals are taking place in various clinical departments, the attendance is obligatory. The education in 5-6 person group is under way at bed-side.

Assessment methods

The education is aimed at practical exercise of skills at patient's bed. The knowledge of theory acquired during the lectures in first 5 weeks are requested. Audiovisual techniques are used for easier orientation in more complicated diagnostic situations. The credit is given for an active approach to the discussed problems and on the basis of proved ability to examine the patient. The final evaluation has 2 parts: oral and practical

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

Listed among pre-requisites of other courses

- [BMBS051 Biostatistics - basic course](#)
[VLLM0522p](#) && [VLIM051p](#) && ([VSBC041p](#) // [VSBC0422p](#)) && [VSIP0622c](#) ([Do I meet enrolment requirements?](#))
- [VLAM9X1p Intensive Care Medicine - lectures](#)
([VLFA0822c](#) // [VLFA0722c](#)) && [VLCH0832c](#) && [VLCH0731c](#) && [VSPF0622p](#)
&& [VSIP0622c](#) && [VLCP0622p](#) && [VLDM7X1c](#) && [VSOT7X1c](#) &&
[VLIN7X21](#) ([Do I meet enrolment requirements?](#))
- [VLDM7X1c Diagnostic Imaging Methods - practice](#)
[VLCP0622c](#) && [VSIP0622c](#) && [VSPF0622c](#) && [VSPA0622c](#) && [VSNV041p](#)
&& [VLFA0621c](#) ([Do I meet enrolment requirements?](#))
- [VLDM7X1p Diagnostic Imaging Methods - lecture](#)
[VLCP0622c](#) && [VSIP0622c](#) && [VSPF0622c](#) && [VSPA0622c](#) && [VSNV041p](#)
&& [VLFA0621c](#) ([Do I meet enrolment requirements?](#))
- [VLCH0731c Surgery I - practicals](#)
[VSPF0622p](#) && [VSPA0622p](#) && [VLCP0622c](#) && [VSIP0622c](#) &&
[VLFA0621c](#) ([Do I meet enrolment requirements?](#))
- [VLCH0731p Surgery I - lectures](#)
[VSPF0622p](#) && [VSPA0622p](#) && [VLCP0622c](#) && [VSIP0622c](#) &&
[VLFA0621c](#) ([Do I meet enrolment requirements?](#))
- [VLIN7X21 Infectious Diseases I - practice](#)
[VSPF0622p](#) && [VSPA0622p](#) && [VLCP0622c](#) && [VSIP0622c](#) && [VLLM0522p](#)
&& [VLIM051p](#) && [VLFA0621c](#) ([Do I meet enrolment requirements?](#))

- [VLIN9X22 Infectious Diseases II - lecture](#)
[VLIN7X21](#) && [VSIP0622c](#) && [VSEI7X1](#) ([Do I meet enrolment requirements?](#))
- [VLIN9X22a Infectious Diseases II - practice](#)
[VLIN7X21](#) && [VSIP0622c](#) && [VSEI7X1](#) ([Do I meet enrolment requirements?](#))

[Zobrazit další předměty](#)

Teacher's information

V den zahájení stáže na II. interní klinice, FN Pekařská - v pondělí si studenti přinesou zámeček k uzamčení šatní skříňky. Po ukončení stáže jsou povinni opět šatní skříňku uvolnit!!!!!!!!!!!! Děkuji za pochopení. Studenti potřebují bílý plášť, přezůvky, fonendoskop a zájem o problematiku! Studijní skupina je rozdělena na poloviny, výuka probíhá na jednotlivých lůžkových oddělení kliniky. Výuka v 2.semestru je zakončena zápočtem a poté zkouškou. Zkouška má část praktickou, kdy student vyšetří nemocného, v teoretické části si student vytáhne 1 složenou otázku.

The course is also listed under the following terms [Spring 2000](#), [Spring 2001](#), [Spring 2002](#), [Spring 2003](#), [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VSIP0622p Clinical Introduction to Internal Medicine II - lecture ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

1/0/0. 3 credit(s). Type of Completion: zk (examination).

Teacher(s)

[prof. MUDr. Zdeněk Adam, CSc.](#) (lecturer)

[doc. MUDr. Mojmír Blaha, CSc.](#) (lecturer)

[prof. MUDr. Petr Dítě, DrSc.](#) (lecturer)

[prof. MUDr. Aleš Hep, CSc.](#) (lecturer)

[MUDr. Andrea Křivanová, Ph.D.](#) (lecturer)

[MUDr. Jozef Michalka](#) (lecturer)

[doc. MUDr. Helena Němcová, CSc.](#) (lecturer)

[MUDr. Yvona Pospíšilová](#) (lecturer)

[doc. MUDr. Josef Šumbera, CSc.](#) (lecturer)

[prof. MUDr. Jiří Vorlíček, CSc.](#) (lecturer)

[doc. MUDr. Jiří Zicha, CSc.](#) (lecturer)

[MUDr. Darja Krusová, Ph.D.](#) (seminar tutor)

[doc. MUDr. Miroslav Tomáška, CSc.](#) (seminar tutor)

[Lenka Bartlová](#) (assistant)

[Zdeňka Dvořáková](#) (assistant)

[Lenka Hochmanová](#) (assistant)

[Eva Kašpárková](#) (assistant)

[Alena Kolářová](#) (assistant)
[Lenka Kovářová](#) (assistant)
[Jitka Macháčková](#) (assistant)
[Alena Stodůlková](#) (assistant)
[Hana Zemanová](#) (assistant)

Supervisor

[prof. MUDr. Miroslav Souček, CSc.](#)
[Second Department of Internal Medicine - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)
Supplier department: [Second Department of Internal Medicine - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Prerequisites (in Czech)

[VSIP0521c Introd. to internal I-pr.](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

After the completion of practicals the student will be able to take a complete history of patients perform a general objective physical examination of patients perform and evaluate ecg curve and discern basic pathological ecg findings describe physiological findings on X ray picture known laboratory and other diagnostic tests in individual diseases

Syllabus

- 1st week: History, subjective and objective symptoms
- 2nd week: Examination of head and neck
- 3rd week: Examination of and lungs
- 4th week: Examination of heart
- 5th week: Examination of abdomen

Literature

- Davidson's Principles and Practise of Medicine. 20th Edition. N.A. Boon, N.R. Colledge, B.R. Walker
- ZELENKOVÁ, Jana. Příručka interní propedeutiky. 1.vydání. : Triton, 2002. 173 pp. ISBN 80-7254-227-3. [info](#)
- Propedeutika vnitřního lékařství. Edited by Ladislav Chrobák, Illustrated by Josef Bavor. 1. vyd. Praha: Grada, 1997. 195 s. ISBN 80-7169-274-3. [info](#)

Teaching methods

lecture

Assessment methods

The oral and practical exam in the end of the course.

Language of instruction

Czech

Further Comments

The course is taught annually.

The course is taught: every week.

Listed among pre-requisites of other courses

- [VLAM9X1c Intensive Care Medicine - practice](#)
([VLFA0822c](#) // [VLFA0722c](#)) && [VLCH0832c](#) && [VSIP0622p](#) && [VLCP0622p](#)
&& [VLDM7X1c](#) && [VSOT7X1c](#) && [VLIN7X21](#) ([Do I meet enrolment requirements?](#))
- [VLON091 Clinical Oncology - lecture](#)
([VLFA0822c](#) // [VLFA0722c](#)) && [VSIP0622p](#) && [VLCP0622p](#) && [VLCH0832c](#)
&& [VSOT7X1c](#) ([Do I meet enrolment requirements?](#))
- [VLON091c Clinical Oncology - practice](#)
([VLFA0822c](#) // [VLFA0722c](#)) && [VSIP0622p](#) && [VLCP0622p](#) && [VLCH0832c](#)
&& [VSOT7X1c](#) ([Do I meet enrolment requirements?](#))
- [VLDP0932c Pediatrics II - practice](#)
[VLFA0722p](#) && [VLDP7X31c](#) && [VSOT7X1c](#) && [VLDM7X1c](#) && [VSIP0622p](#)
&& [VLCP0622p](#) && [VLKG7X1c](#) ([Do I meet enrolment requirements?](#))
- [VLDP0932p Pediatrics II - lectures](#)
([VLFA0822p](#) // [VLFA0722p](#)) && [VLDP7X31c](#) && [VSOT7X1c](#) && [VLDM7X1c](#)
&& [VSIP0622p](#) && [VLCP0622p](#) && [VLKG7X1c](#) ([Do I meet enrolment requirements?](#))
- [VLPG0921c Gynecology and obstetrics - practicals](#)
([VLFA0822p](#) // [VLFA0722p](#)) && [VLCH0832c](#) && [VLDM7X1c](#) && [VSIP0622p](#)
&& [VLCP0622p](#) ([Do I meet enrolment requirements?](#))
- [VLPG0921p Gynecology and obstetrics I - lecture](#)
([VLFA0822p](#) // [VLFA0722p](#)) && [VLCH0832c](#) && [VLDM7X1c](#) && [VSIP0622p](#)
&& [VLCP0622p](#) ([Do I meet enrolment requirements?](#))
- [VLVL101p Internal medicine - lecture](#)
([VLFA0822p](#) // [VLFA0722p](#)) && [VSIP0622p](#) && [VLDM7X1p](#) && ([VLVL7X65c](#) // [VLVL9X65c](#))
&& [VSOT7X1c](#) && [VLIN7X21](#) ([Do I meet enrolment requirements?](#))

The course is also listed under the following terms [Spring 2000](#), [Spring 2001](#), [Spring 2002](#), [Spring 2003](#), [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VSIV021 Information Literacy *

Faculty of Medicine

Spring 2015

Extent and Intensity

0/0. 4 credit(s). Type of Completion: z (credit).

Teacher(s)

[Mgr. Jiří Kratochvíl, Ph.D.](#) (lecturer)

[Mgr. Petr Sejk](#) (alternate examiner)

Supervisor

[Mgr. Jiří Kratochvíl, Ph.D.](#)

[Central Library - Specialized Units - Faculty of Medicine](#)

Contact Person: [Mgr. Jiří Kratochvíl, Ph.D.](#)

Supplier department: [Central Library - Specialized Units - Faculty of Medicine](#)

Prerequisites (in Czech)

! [vsiv021 Information literacy](#)

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

The capacity limit for the course is 100 student(s).

Current registration and enrolment status: enrolled: 35/100, only registered: 0/100

Fields of study the course is directly associated with

there are 55 fields of study the course is directly associated with, [display](#)

Course objectives

At the end of this E-learning course, student should be able to: - effectively search the fulltexts of scientific papers and books on the specific topics in the library catalogues and online resources (internet, databases tec.) - evaluate the scientific quality of found information - acquire information to his/her research and academic writing - apply the basic rules of publication ethics - correct quotation and making the bibliographic references according to recommended citation styles

Syllabus

- 1. Choosing a topic and checking current student's knowledge 2. Evaluating a website's quality, types of libraries and their services, searching in a catalogue 3. Efficient searching in online databases 4. Medical and multidisciplinary online databases. 5. Basic rules of scientific writing. Publication and citation ethics. 6. Creating citations and bibliographic references 7. Reference managers Zotero and EndNote Basic 8. Journal citation reports. Impact factor. H-index.

Literature

required literature

- [KRATOCHVÍL, Jiří](#) and [Petr SEJK](#). Získávání a zpracování vědeckých informací : pracovní sešit. 1. vydání. Brno: Masarykova univerzita, 2011. 81 pp. ISBN 978-80-210-5535-3. [info](#)

- [KRATOCHVÍL, Jiří](#), [Petr SEJK](#), [Věra ELIÁŠOVÁ](#) and [Marek STEHLÍK](#). *Metodika tvorby bibliografických citací*. 2. vydání. Brno: Masarykova univerzita, 2011. Elportál. ISSN 1802-128X. [PURL url info](#)
- [WILHELMOVÁ, Radka](#). *Jak napsat bakalářskou práci*. 2008. [URL info](#)

recommended literature

- [PLACHETA, Zdeněk](#), [Zuzana DERFLEROVÁ BRÁZDOVÁ](#), [Miroslava KYASOVÁ](#), [Ivan MÜLLER](#), [Libor PÁČ](#), [Jarmila SIEGELOVÁ](#), [Svatopluk SYNEK](#) and [František ZAJÍČEK](#). *Pokyny pro vypracování magisterské diplomové práce (Instruction for elaboration of diploma thesis)*. 2. vyd. Brno: Muni Pressd, 2010. 41 pp. ISBN 978-80-210-5172-0. [info](#)
- [PLACHETA, Zdeněk](#). *Pokyny pro vypracování magisterské diplomové práce*. 2. vyd. Brno: Masarykova univerzita, 2010. 39 s. ISBN 9788021051720. [info](#)
- [BOOTH, Wayne C.](#), [Gregory G. COLOMB](#) and [Joseph M. WILLIAMS](#). *The craft of research*. 3rd ed. Chicago: University of Chicago Press, 2008. xvii, 317. ISBN 9780226065663. [info](#)
- [HOCK, Randolph](#). *The extreme searcher's Internet handbook : a guide for the serious searcher*. 2nd ed. Medford, N.J.: CyberAge Books, 2007. xxvii, 326. ISBN 9780910965767. [info](#)
- [LIŠKA, Václav](#). *Doctorandus : (průvodce budoucích Ph.D.)*. Vyd. 1. Praha: Professional Publishing, 2004. 149 s. ISBN 8086419606. [info](#)
- [FILKA, Jaroslav](#). *Metodika tvorby diplomové práce :praktická pomůcka pro studenty vysokých škol*. 1. vyd. Brno: Vydavatelství Knihař, 2002. 223 s. ISBN 80-86292-05-3. [info](#)
- *The researcher's toolkit : the complete guide to practitioner research*. Edited by David Wilkinson. 1st pub. New York: Routledge, 2000. xvi, 135. ISBN 0415215668. [info](#)
- [VYMĚTAL, Jan](#) and [Miriam VÁCHOVÁ](#). *Úvod do studia odborné literatury*. Vyd. 1. Praha: Orac, 2000. 287 s. ISBN 80-86199-19-3. [info](#)
- [ČMEJRKOVÁ, Světa](#), [František DANEŠ](#) and [Jindra SVĚTLÁ](#). *Jak napsat odborný text*. Vydání první. Praha: Leda, 1999. 255 stran. ISBN 8085927691. [info](#)
- [ŠESTÁK, Zdeněk](#). *Jak psát a přednášet o vědě*. Illustrated by Hana Kymrová. Vyd. 1. Praha: Academia, 1999. 204 s. ISBN 8020007555. [info](#)
- [KATUŠČÁK, Dušan](#). *Ako písať vysokoškolské a kvalifikačné práce :ako písať seminárne práce, ročníkové práce, práce študentskej vedeckej a odbornej činnosti, diplomové práce, záverečné a atestačné práce, dizertácie*. 2. dop. vyd. Bratislava: Stimul, 1998. 117 s. ISBN 80-85697-82-3. [info](#)
- [ECO, Umberto](#) and [Ivan SEIDL](#). *Jak napsat diplomovou práci*. Olomouc: Votobia, 1997. 271 s. ISBN 80-7198-173-7. [info](#)

not specified

- [JURÍČKOVÁ, Lubica](#). *Písemné práce na vysokých školách se zdravotnickým zaměřením*. Edited by Kateřina Ivanová. 2. vyd. Olomouc: Univerzita Palackého, 2007. 99 s. ISBN 9788024418322. [info](#)

Teaching methods

e-learning, theoretical preparation, training, working with text, generating skills

Assessment methods

The course conditions are: doing homeworks successfully in deadlines during the term.

Language of instruction

Czech

Further comments (probably available only in Czech)[Study Materials](#)

The course is taught each semester.

The course is taught: every week.

Information on the extent and intensity of the course: e-learning.

Listed among pre-requisites of other courses

- [aVLIL021 Information Literacy](#)
[!vsil021](#) && [!vsiv021](#) (*Do I meet enrolment requirements?!*)
- [VLLL021 Searching medical literature and basics of scientific writing](#)
[!vlll021](#) && [!vsil021](#) && [!vsiv021](#) && [!BAIV041](#) && [!BPBP041p](#) && [!BPIV041](#)
&& [!BZIV041c](#) && [!BZPB0431](#) && [!BZPB0431](#) (*Do I meet enrolment requirements?!*)

Teacher's information

<https://kuk.muni.cz/vyuka/aktivita/predmety/vsiv021/>

The course is also listed under the following terms [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#).

VSKP041 A course of working with information sources and tools ✨

Faculty of Medicine

Spring 2015

Extent and Intensity

0/0. 4 credit(s). Type of Completion: z (credit).

Teacher(s)

[Mgr. Jiří Kratochvíl, Ph.D.](#) (seminar tutor)

[Mgr. Petr Sejk](#) (alternate examiner)

Supervisor

[Mgr. Jiří Kratochvíl, Ph.D.](#)

Contact Person: [Mgr. Jiří Kratochvíl, Ph.D.](#)

Prerequisites (in Czech)

[VSIV021 Information literacy](#) // [BAIV031 Information literacy course](#) //

[BPIV031 Information literacy course](#) // [BZIV031c Information Education - pr.](#)

(*Do I meet enrolment requirements?!*)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

The capacity limit for the course is 10 student(s).

Current registration and enrolment status: enrolled: 3/10, only registered: 1/10

Fields of study the course is directly associated with

there are 56 fields of study the course is directly associated with, [display](#)

Course objectives

At the end of this course, students should be able to:

- use selected techniques of learning,*
- avoid information overload,*
- use the Internet and computer technologies safely,*
- use arguments when working with information and facts,*
- prepare simple survey using free software,*
- know free tools for creating texts, pictures, presentation, etc.*

Syllabus

- *1. Learning techniques*
- *2. Survey tools*
- *3. How to avoid information overload. Safe behavior on the Internet*
- *4. Basic rules of argumentation*
- *5. Deep (Invisible) Web*
- *6. GNU licences and software*
- *7. Open Access*

Literature

required literature

- *GAVORA, Peter. Úvod do pedagogického výzkumu. Translated by Vladimír Jiřina - Vendula Hlavatá. 2., rozš. české vyd. Brno: Paido, 2010. 261 s. ISBN 9788073151850. [info](#)*
- *Velká kniha technik učení, tréninku paměti a koncentrace. Translated by Zuzana Veselá. První vydání. Praha: Grada, 2009. 226 stran. ISBN 9788024730233. [info](#)*
- *KLAPETEK, Milan. Komunikace, argumentace, rétorika. 1. vyd. Praha: Grada, 2008. 247 s. ISBN 9788024726526. [info](#)*
- *JIROVSKÝ, Václav. Kybernetická kriminalita : nejen o hackingu, crackingu, virech a trojských koních bez tajemství. 1. vyd. Praha: Grada, 2007. 284 s. ISBN 9788024715612. [info](#)*
- *ČANDÍK, Marek. Základy informační bezpečnosti. Vyd. 1. Zlín: Univerzita Tomáše Bati ve Zlíně, 2004. 107 s. ISBN 8073182181. [info](#)*
- *WESTON, Anthony. Argumenty : rukověť pravidel. Translated by Blažena Švandová. 1. vyd. Brno: Masarykova univerzita v Brně, 2001. 70 s. ISBN 8021026561. [info](#)*
- *DISMAN, Miroslav. Jak se vyrábí sociologická znalost : příručka pro uživatele. 3. vyd. Praha: Karolinum, 2000. 374 s. ISBN 9788024601397. [info](#)*

recommended literature

- *Kyberkriminalita a právo. Edited by Tomáš Gřivna - Radim Polčák. Vyd. 1. Praha: Auditorium, 2008. 220 s. ISBN 9788090378674. [info](#)*
- *GRUBER, David. Rychločtení, rychlostudium, info management. 7., upr. vyd. Praha: Management Press, 2008. 326 s. ISBN 9788072611843. [info](#)*
- *SZYMANEK, Krzysztof, Krzysztof A. WIECZOREK and Andrzej S. WÓJCIK. Umění argumentace : úlohy na zkoumání argumentů. Translated by Jan Štěpán. 1. vyd. Olomouc: Univerzita Palackého, 2004. 148 s. ISBN 8024408341. [info](#)*
- *JELÍNEK, Milan and Blažena ŠVANDOVÁ. Argumentace a umění komunikovat. Vyd. 1. Brno: Masarykova univerzita, 1999. 327 s. ISBN 8021021861. [info](#)*
- *SHEA, Virginia. Netiquette. Edited by Guy Kawasaki. Ed. 1.0. San Francisco: Albion Books, 1994. 154 p. ISBN 0963702513. [info](#)*
- *Umění lehce se učit : nové metody, které vám ulehčí učení. Edited by Kurt Tepperwein, Translated by Blanka Kubisková. [1. vyd.]. Pelhřimov: STANOVUM, 1993. 157 s. ISBN 80-900784-4-3. [info](#)*

Teaching methods

e-learning, theoretical preparation, training, working with text, generating skills

Assessment methods (in Czech)

Podmínkou získání zápočtu je splnění všech úkolů v zadaném termínu v průběhu semestr.

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught each semester.

Note related to how often the course is taught: e-learning.

Information on the extent and intensity of the course: e-learning.

Information on course enrolment limitations: VSIV021 || BAIV031 || BPIV031 || BZIV031c

Teacher's information

<https://kuk.muni.cz/vyuka/aktivita/predmety/vskp041/>

The course is also listed under the following terms [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#).

VSKP061 Selected Chapters from Pathological Physiology ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

0/2/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Anna Vašků, CSc.](#) (seminar tutor)

[Věra Ježková](#) (assistant)

Supervisor

[prof. MUDr. Anna Vašků, CSc.](#)

[Department of Pathological Physiology - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [prof. MUDr. Anna Vašků, CSc.](#)

Supplier department: [Department of Pathological Physiology - Theoretical Departments - Faculty of Medicine](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

News in profile pathophysiological questions will be discussed.

Syllabus

- Seminars-program
- Place: seminary room 114, A11, University Campus Bohunice, Kamenice 5
- Time: 13:30-15:00 always
- 10. 3. 2019
- 17. 3. 2019
- 31. 3. 2019
- 28. 4. 2019
- 5. 5. 2019
- 12. 5. 2019
- 19. 5. 2019

Literature

recommended literature

- DAMJANOV, Ivan. *Pathophysiology. Illustrated by Matt Chansky. 1st ed.* Philadelphia: Saunders/Elsevier, 2009. vii, 464. ISBN 9781416002291. [info](#)
- NEČAS, Emanuel. *Obecná patologická fyziologie. 1. dotisk 2. vyd.* Praha: Karolinum, 2007. 377 s. ISBN 9788024612911. [info](#)
- NEČAS, Emanuel. *Patologická fyziologie orgánových systémů. 1. vyd.* Praha: Karolinum, 2003. 379 s. ISBN 9788024606750. [info](#)

not specified

- [PÁVKOVÁ GOLDBERGOVÁ, Monika, Kamil ĎURIŠ, Jaromír GUMULEC, Jaromír GUMULEC, Adam PAŽOUREK and Anna VAŠKŮ. Patofyziologie v obrazech. 1. vyd. Brno: muniPRESS, 2016. ISBN 978-80-210-8323-3. info](#)

Teaching methods

Lectures with large discussion

Assessment methods

Credits will be given to the students with at least 5 lessons attendance.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

Teacher's information

Výuka bude probíhat vždy v pátek ve 13:30-15:00 v přednáškové místnosti 234/A11, UKB, A18, Kamenice 5. Termíny viz výše.

The course is also listed under the following terms [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VSLB071 Laboratory Bacteriology *

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Lenka Černohorská, Ph.D.](#) (lecturer)

[MUDr. Ondřej Zahradníček](#) (seminar tutor)

Supervisor

[doc. MUDr. Filip Růžička, Ph.D.](#)

[Department of Microbiology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Contact Person: [MUDr. Lenka Černohorská, Ph.D.](#)

Supplier department: [Department of Microbiology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Prerequisites

The necessary condition (prerequisite) for the enrollment is absolved examination of Medical Microbiology

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

The capacity limit for the course is 10 student(s).

Current registration and enrolment status: enrolled: 5/10, only registered: 0/10, only registered with preference (fields directly associated with the programme): 0/10

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)
- [Dentistry](#) (programme LF, M-ZL)

Course objectives

At the end of the subject, students will better understand the course of all steps of bacterial diagnostic and interpretation of laboratory results. So they will be able to better understand the timing of the process and interpretation of the results.

Syllabus

- *Students will follow the whole process of bacteriology diagnostics of individual specimens, namely: throat swab, nasal swab, skin swab, urine samples, stool samples etc. (real composition of the pool of specimens will be dependent on actual situation in the laboratory!) For each of them, the student will participate on following actions:*
- *Material admission in the laboratory, its elaboration according to operation standards, especially inoculation on cultivation media*
- *Evaluation of the results of cultivation, identification of (especially pathogenic) microorganisms*
- *Performing in vitro susceptibility testing for antimicrobial agents + its reading, including 1) eventual decision about testing susceptibility against more agents (in case of resistant strains) and 2) decision about performing tests and reading of the tests for epidemiologically important antibiotic resistance patterns (ESBL, MRSA, VRE etc.)*
- *Interpretation of results, including discussion about eventual antibiotic therapy (getting acquainted with the work of antibiotic centre)*
- *For all steps: inputting the corresponding data into the Laboratory Information System.*

Literature

recommended literature

- [VOTAVA, Miroslav, Filip RŮŽIČKA, Vladana WOZNICOVÁ, Lenka ČERNOHORSKÁ, Milada DVOŘÁČKOVÁ, Monika DVOŘÁKOVÁ HEROLDOVÁ, Veronika HOLÁ and Ondřej ZAHRADNÍČEK. Lékařská mikrobiologie: Vyšetřovací metody \(Medical Microbiology: Laboratory Procedures\). 1. vyd. Brno: Neptun, 2010. 495 pp. ISBN 978-80-86850-04-7. \[info\]\(#\)](#)

Teaching methods

Practical training, 5 x 3 hours. Supervisor: specialist. Maximum of 8 students in group.

Assessment methods

Evaluation: credit.

Prerequisite: be present at practical training. Unexcused absences won't be tolerated.

Practical execution of one diagnostic test with end report. The report will be archived at Microbiology Institute.

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

Information on the extent and intensity of the course: 5 x 3 hod stáže.

Teacher's information

V podzimním semestru 2019 bude předmět pravděpodobně vyučován před započítím tohoto semestru (pro zamezení rozvrhovým kolizím). V případě nenaplnění bude případně termín posunut jinam.

In autumn semester 2019 the subject will be probably educated before the start of that semester (to avoid timetable clashes). Only in case of low interest the subject will be moved to another time.

E-mail:

lenka.cernohorska@fnusa.cz;

ondrej.zahradnicek@fnusa.cz

The course is also listed under the following terms [Autumn 2016](#), [Accreditation autumn](#).

VSLC011c Medical chemistry practice ✨

Faculty of Medicine

Autumn 2015

Extent and Intensity

0/1/0. 1 credit(s). Type of Completion: z (credit).

Teacher(s)

[PharmDr. Lenka Adámková, Ph.D.](#) (seminar tutor)

[RNDr. Hana Bochořáková](#) (seminar tutor)

[Ing. Martina Čarnecká, Ph.D.](#) (seminar tutor)

[doc. RNDr. Jiří Dostál, CSc.](#) (seminar tutor)

[Mgr. Jana Gregorová, Ph.D.](#) (seminar tutor)

[MUDr. Miroslava Hlaváčová](#) (seminar tutor)

[Mgr. Jana Kantorová](#) (seminar tutor)

[MUDr. Michaela Králíková, Ph.D.](#) (seminar tutor)

[Mgr. Milena Matejovičová, Ph.D.](#) (seminar tutor)

[Ing. Jitka Melounová, Ph.D.](#) (seminar tutor)

[RNDr. Hana Paulová, CSc.](#) (seminar tutor)

[Mgr. Ondřej Peš, Ph.D.](#) (seminar tutor)

[Ing. Jana Simonová, Ph.D.](#) (seminar tutor)

[Mgr. Jiří Slanina, Ph.D.](#) (seminar tutor)

[PharmDr. Kristýna Šebrlová, Ph.D.](#) (seminar tutor)

[doc. RNDr. Josef Tomandl, Ph.D.](#) (seminar tutor)

[Mgr. Marie Tomandlová, Ph.D.](#) (seminar tutor)

[Lenka Nerudová](#) (assistant)

Supervisor

[prof. RNDr. Eva Táborská, CSc.](#)

[Department of Biochemistry - Theoretical Departments - Faculty of Medicine](#)

Supplier department: [Department of Biochemistry - Theoretical Departments - Faculty of Medicine](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [Dietitian](#) (programme LF, B-SZ)
- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

Subject is complementary to Medical chemistry lecture (VSLC011p). Students become familiar with the background and equipments of chemical laboratory. They will learn to perform simple laboratory operations. During experiments students verify some findings discussed in theoretical lessons.

Syllabus

- Safety measures in chemical laboratory. Volumetric ware. Preparation of solutions.
- Measuring pH of solutions (acids, bases, salts). The construction of titration curves.
- Preparation of phosphate buffers. Titration of acetate buffer, buffer capacity.
- Ions in tap water. Reactions of phosphate and carbonate ions.
- Adsorption chromatography of azodyes (TLC). Column chromatography of carotenoids on aluminum oxide. HPLC (demonstration).
- Oxidation of alcohols. Determination of alcohol in blood. Detection reactions for aldehydes and ketones. Molecular models of saccharides. Reducing properties of sugars and L-ascorbic acid.
- Ionization of aminoacids. Colour reactions of aminoacids and proteins. Isoelectric point of casein. Solubility of proteins, precipitation of proteins.

Literature

- [TOMANDL, Josef, Eva TÁBORSKÁ, Hana BOCHOŘÁKOVÁ, Jiří DOSTÁL, Vladimír PALYZA, Hana PAULOVÁ, Jaromír SLÁMA, Jiří SLANINA and Jaroslava TALLOVÁ](#). *Lékařská chemie. Praktická cvičení. (Medical Chemistry. Practical Exercises.)*. 1. vyd. Brno: Masarykova univerzita v Brně, 2003. 40 pp. ISBN 80-210-3176-X. [info](#)
- [TOMANDL, Josef, Hana BOCHOŘÁKOVÁ, Jiří DOSTÁL, Vladimír PALYZA, Hana PAULOVÁ, Jaromír SLÁMA, Jiří SLANINA, Eva TÁBORSKÁ and Jaroslava TALLOVÁ](#). *Medical Chemistry - Practicals*. 1. vyd. Brno: Masarykova univerzita, 2007. 50 pp. skripta. ISBN 978-80-210-4379-4. [info](#)

Teaching methods

laboratory practicals

Assessment methods

Full attendance in all lessons (making up all missing and justified lessons), completion of all lab reports is the condition for the course-unit credit. Obtaining of course-unit credits of practicals is the pre-requisite for registration to the examination of Medical chemistry and for enrollment of Biochemistry in the Spring semester.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

Information on course enrolment limitations: mimo studenty LF, max 5 posluchačů z MU, po dohodě s vedoucím ústavu

Teacher's information

Účast v praktických cvičeních je povinná. Student musí mít laboratorní plášť. Absence v praktickém cvičení musí být omluvena cestou studijního oddělení a nahrazena podle pokynů vyučujícího. Neomluvené absence nelze nahradit. Student je povinen se na cvičení připravit. Nepřipravenost je důvodem k vyloučení z praktik. Laboratory coat is necessary. Attendance in practicals is obligatory. All absences must be justified through the Department of study affairs. Illness or some other serious reason are usually the only acceptable excuse for absence from lesson and must be officially confirmed. After being absent the student must make up for the lesson. Absences that are not apologized are not allowed to make up. Student is obliged to prepare himself for each lesson. Students that are not sufficiently prepared will not be admitted in participating in the lesson.

The course is also listed under the following terms [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#).

VSLC011p Medical Chemistry - lecture ✨

Faculty of Medicine

Autumn 2015

Extent and Intensity

2/0. 4 credit(s). Type of Completion: zk (examination).

Teacher(s)

[doc. RNDr. Jiří Dostál, CSc.](#) (lecturer)

[prof. MUDr. Vladimír Palyza, CSc.](#) (lecturer)

[prof. RNDr. Eva Tábořská, CSc.](#) (lecturer)

[PharmDr. Lenka Adámková, Ph.D.](#) (assistant)

[RNDr. Hana Bochořáková](#) (assistant)

[Ing. Martina Čarnecká, Ph.D.](#) (assistant)

[Mgr. Jana Gregorová, Ph.D.](#) (assistant)

[MUDr. Miroslava Hlaváčová](#) (assistant)

[Mgr. Jana Kantorová](#) (assistant)

[MUDr. Michaela Králíková, Ph.D.](#) (assistant)

[Mgr. Milena Matejovičová, Ph.D.](#) (assistant)

[Ing. Jitka Melounová, Ph.D.](#) (assistant)

[Lenka Nerudová](#) (assistant)

[RNDr. Hana Paulová, CSc.](#) (assistant)

[Mgr. Ondřej Peš, Ph.D.](#) (assistant)

[Ing. Jana Simonová, Ph.D.](#) (assistant)

[Mgr. Jiří Slanina, Ph.D.](#) (assistant)

[PharmDr. Kristýna Šebrlová, Ph.D.](#) (assistant)

[doc. RNDr. Josef Tomandl, Ph.D.](#) (assistant)

[Mgr. Marie Tomandlová, Ph.D.](#) (assistant)

Supervisor

[prof. RNDr. Eva Tábořská, CSc.](#)

[Department of Biochemistry - Theoretical Departments - Faculty of Medicine](#)

Supplier department: [Department of Biochemistry - Theoretical Departments - Faculty of Medicine](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [Dietitian](#) (programme LF, B-SZ)
- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

Graduate in chemistry has knowledge that is necessary for understanding of chemical principles applied in further study subjects, especially in biochemistry. He/she understands solution properties and basic physico-chemical laws. He/she is able to describe the properties of elements and inorganic compounds important for medicine, nutrition and toxicology. He/she discuss the structure of compounds and reactions taking part in metabolism and organic compounds that have importance in toxicology.

Syllabus

- Information concerning medical chemistry. The basic chemical terms: substances, particles, amount of substance, some properties of a single particle and molar quantities. Electron configurations in atoms. Types of bonds, electronegativity. Non-covalent bonds and attraction forces.
- Chemical reactions, kinetics, chemical equilibrium. The driving force of chemical reactions, free Gibbs energy.
- Solutions of substances. Dissociation of electrolytes, the equilibria in electrolyte solutions. Precipitation reactions.
- Protolytic reactions: acids and bases, pH values, hydrolysis of salts, buffers.
- Oxidation-reduction reactions, redox potentials, the e.m. force of a voltaic cell and the relation to the reaction free energy change.
- Essential macroelements important for living matter, general properties of them and of some of their compounds.
- Carbon compounds: their constitution, configuration, isomerism, and conformation. Types of organic compounds, the principals of nomenclature. Hydrocarbons, major types, structures, reactivity.
- Derivatives of hydrocarbons: alcohols, thioalcohols, phenols, carbonyl compounds, and carboxylic acids.
- Substituted carboxylic acids and derivatives of the acids (esters, amides, anhydrides, halides).
- Amines and the other derivatives of hydrocarbons.

- *Heterocyclic compounds and biochemically important derivatives. Alkaloids.*
- *Structures and properties of monosaccharides. Simple sugar derivatives. Oligosaccharides, polysaccharides.*
- *Heteroglycosides. Nucleosides, nucleotides, structures of nucleic acids.*
- *Fatty acids and alcohols in lipids. Triacylglycerols and waxes. Phospholipids and glycolipids.*
- *Icosanoids. Isoprenoids. Steroids, structures of representative compounds.*
- *Standard and other alpha-amino acids, structures and common properties, polarity. Peptides, some groups of peptides exhibiting biological activity.*
- *Proteins, main features of the structure of globular, fibrous, and membrane proteins. Glycoproteins. Haemoproteins, haem and other tetrapyrrools.*

Literature

required literature

- [TOMANDL, Josef, Jiří DOSTÁL, Hana PAULOVÁ and Eva TÁBORSKÁ](#). *Základy lékařské chemie a biochemie*. 1. vyd. Brno: Masarykova Univerzita, 2014. 212 pp. ISBN 978-80-210-6973-2. [info](#)
- *Dostál J. (Ed.): Essentials of Medical Chemistry and Biochemistry*
<http://portal.med.muni.cz/article-623-essentials-of-medical-chemistry-and-biochemistry.html>

Teaching methods

Teaching form are lectures. Supplementary subjects are seminars and practicals (VSLC011c and VSLC011c).

Assessment methods

Student must have course-unit credit of seminar and practicals in the day of exam. Examination from Medical chemistry is only written. The test consists from two parts. The first part is solved on computers in the computer room of Department of Biochemistry: calculations (concentration, pH, buffers, osmotic pressure) – see seminars simple questions (multiple choice or free answer) structural formulas (essential organic and inorganic compounds).

The second part is written and is focused on the active knowledge of structural formulas of the most important compounds, expression of important biochemical reactions by chemical equations and the ability to formulate the basic physico-chemical relationships or to draw graphs. For detailed instructions see Study materials - Information about exam.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

Information on the extent and intensity of the course: celkem 30 hodin.

The course is also listed under the following terms [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#).

VSLC011s Medical Chemistry - seminar *

Faculty of Medicine

Autumn 2015

Extent and Intensity

0/2. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[PharmDr. Lenka Adámková, Ph.D.](#) (seminar tutor)

[RNDr. Hana Bochořáková](#) (seminar tutor)

[Ing. Martina Čarnecká, Ph.D.](#) (seminar tutor)

[doc. RNDr. Jiří Dostál, CSc.](#) (seminar tutor)

[Mgr. Jana Gregorová, Ph.D.](#) (seminar tutor)

[MUDr. Miroslava Hlaváčová](#) (seminar tutor)

[Mgr. Jana Kantorová](#) (seminar tutor)

[MUDr. Michaela Králíková, Ph.D.](#) (seminar tutor)

[Mgr. Milena Matejovičová, Ph.D.](#) (seminar tutor)

[Ing. Jitka Melounová, Ph.D.](#) (seminar tutor)

[prof. MUDr. Vladimír Palyza, CSc.](#) (seminar tutor)

[RNDr. Hana Paulová, CSc.](#) (seminar tutor)

[Mgr. Ondřej Peš, Ph.D.](#) (seminar tutor)

[Ing. Jana Simonová, Ph.D.](#) (seminar tutor)

[Mgr. Jiří Slanina, Ph.D.](#) (seminar tutor)

[PharmDr. Kristýna Šebrlová, Ph.D.](#) (seminar tutor)

[prof. RNDr. Eva Táborská, CSc.](#) (seminar tutor)

[doc. RNDr. Josef Tomandl, Ph.D.](#) (seminar tutor)

[Mgr. Marie Tomandlová, Ph.D.](#) (seminar tutor)

[Lenka Nerudová](#) (assistant)

Supervisor

[prof. RNDr. Eva Táborská, CSc.](#)

[Department of Biochemistry - Theoretical Departments - Faculty of Medicine](#)

Supplier department: [Department of Biochemistry - Theoretical Departments - Faculty of Medicine](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [Dietitian](#) (programme LF, B-SZ)
- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

Seminars are complementary to Medical chemistry lecture (VSLC011p). The knowledge of general, inorganic, and (bio)organic chemistry, required in the end of VCLC011p, is thoroughly practiced during Medical chemistry seminars.

Syllabus

- Mole and molar quantities; concentration of solutions, basic laboratory calculations.
- 1st test (10 Q- Basic laboratory calculations.) Dissociation of electrolytes, activity of ions, ionic strength; osmotic pressure, osmolality.
- Acid-base reactions – pH of acid, base, and salt solutions, buffers, calculations.
- Intermolecular forces and adsorption. Tensides.
- 2nd test (12 Q- Electrolytes, calculations of pH, hydrolysis of salts, buffers, osmotic pressure, intermolecular forces, tensides) Reaction kinetics, the law of chemical equilibrium.
- Gibbs energy. Oxidation-reduction reactions, electrode potentials, electrochemical cell potentials and the Gibbs energy change.
- 3rd test (12 Q- Reaction kinetics, equilibrium, Gibbs energy, oxidation-reduction) Organic compounds – Part I.
- Organic compounds – Part II.
- Organic compounds – Part III. Latine nomenclature.
- 4th test (18 Q, organic compounds, nomenclature, structures, reactions, Latine nomenclature) Biochemically important heterocyclic compounds and their derivatives.
- Chemistry of saccharides.
- 5th test (12 Q-Heterocycles, saccharides.) Chemistry of lipids and steroids.
- Properties of amino acids. Proteins – secondary and tertiary structures.

Literature

required literature

- [DOSTÁL, Jiří](#). *Lékařská chemie - Semináře. 4. přepracované*. Brno: Masarykova univerzita Brno, 2012. 60 pp. skripta. ISBN 978-80-210-5900-9. [info](#)
- [DOSTÁL, Jiří](#). *Medical Chemistry - Seminars. 2nd, revised.* : Masarykova univerzita, 2012. 60 pp. textbook. ISBN 978-80-210-5899-6. [info](#)

Teaching methods

Class discussions based of materials in the seminar textbook.

Assessment methods

First condition is full attendance in all lessons (or making up all missing and justified lessons). Five short tests are written during the semester. The total number of questions in all tests is 64, each correct answer is counted as one point. Students that will obtain 49 points or more during the semester are not obliged to write the credit test. The other students will write the credit test with the 30 questions in the last week of the semester. The limit for passing the credit test is 14 points. Students that will not fulfill this limit will be allowed to repeat the test once. Remedial dates for writing the credit test will be scheduled. Students that will not fulfill this requirement will not be given the course-unit credit. Obtaining of course-unit credits of practices and seminars is the pre-requisite for registration to the examination of Medical chemistry and for enrollment of Biochemistry in the Spring semester.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.
The course is taught: every week.

Teacher's information

Účast v seminářích je povinná. Absence musí být omluveny cestou studijního oddělení. Zaměškané semináře musí být nahrazeny, způsob náhrady upřesní učitel. neomluvené semináře nelze nahradit. Attendance in seminars is obligatory. All absences must be justified through the Department of study affairs. Illness or other serious reason are usually the only acceptable excuse for absence from class and must be officially confirmed. After being absent the student must make up for the study materials from the given seminar according to the teachers instructions. Absences that are not officially apologized will be not allowed to make up!!!

The course is also listed under the following terms [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#).

VSLE7X1c Medical Ethics 2 - Seminar ❁

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Jana Halámková, Ph.D.](#) (seminar tutor)

[Mgr. Kateřina Kintrová](#) (seminar tutor)

[doc. Mgr. Josef Kuře, Dr. phil.](#) (seminar tutor)

[MUDr. Martina Novotná](#) (seminar tutor)

[MUDr. Martin Pavlík, Ph.D., DESA, EDIC](#) (seminar tutor)

[MUDr. Petra Vysočanová](#) (seminar tutor)

[MUDr. Václav Zvoniček, Ph.D.](#) (seminar tutor)

[Mgr. Michaela Vaňharová, Ph.D.](#) (assistant)

Supervisor

[doc. Mgr. Josef Kuře, Dr. phil.](#)

[Department of Medical Ethics - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [doc. Mgr. Josef Kuře, Dr. phil.](#)

Supplier department: [Department of Medical Ethics - Theoretical Departments - Faculty of Medicine](#)

Timetable of Seminar Groups

VSLE7X1c/09: Mon 11. 12. to Fri 15. 12. each working day 7:30–12:20 [A19/118](#)

VSLE7X1c/10: Mon 27. 11. to Fri 1. 12. each working day 7:30–12:20 [A19/118](#)

VSLE7X1c/11: Mon 13. 11. to Fri 17. 11. each working day 7:30–12:20 [A19/118](#)

VSLE7X1c/12: Mon 30. 10. to Fri 3. 11. each working day 7:30–12:20 [A19/118](#)

VSLE7X1c/15: Mon 18. 9. to Fri 22. 9. each working day 7:30–12:20 [A19/118](#)

VSLE7X1c/16: Mon 1. 1. to Fri 5. 1. each working day 7:30–12:20 [A19/118](#)

VSLE7X1c/30: Mon 4. 12. to Fri 8. 12. each working day 7:30–12:20 [A19/118](#)

VSLE7X1c/33: Mon 20. 11. to Fri 24. 11. each working day 7:30–12:20 [A19/118](#)

VSLE7X1c/35: No timetable has been entered into IS.

Prerequisites (in Czech)

([VLCP0622c Introduc. to surgery II-pr.](#) // [STCP0622c Clin.exam. in surgery II](#)) &&
[VSIP0622c Introduction to internal II-pr](#) && [VSET021 Medical Ethics I](#) &&
[VLFA0621c Pharmacology I - p](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Interactive seminar offers an introduction to clinical ethics. The aim is: - to understand ethical dilemmas in individual fields of medicine - to develop ability to perceive ethical questions within health care - to listen to different ethical arguments and express own opinions - to learn ability to solve ethical dilemmas in medicine

Syllabus

- Introduction to medical ethics (terminology, subject, methodology) & Primary care (physician - patient relationship, informed consent) & Assisted reproduction & Genetic testing (ethics and genetics, PND, PGD, screening) & Patient rights & Transplantation ethics & Ethics in oncology (truth about diagnosis, palliative care) & Ethical problems in intensive care & Death and dying & Ethics of biomedical research

Literature

- *Od narození do smrti : etické problémy v lékařství.* Edited by David C. Thomasma - Thomasine Kimbrough Kushner, Translated by Lucie M. Vyd. 1. Praha: Mladá fronta, 2000. 389 s. ISBN 8020408835. [info](#)
- *HÁŠKOVCOVÁ, Helena. Lékařská etika. třetí rozšířené vydání.* Praha: Galén, 2002. 272 pp. ISBN 80-7262-132-7. [info](#)
- CAMPBELL, Alastair V., Grant R. GILLET and D. Gareth JONES. *Medical ethics.* 4th ed. South Melbourne: Oxford University Press, 2005. xiii, 312. ISBN 0195584872. [info](#)
- *Casebook of medical ethics.* Edited by Terrence F. Ackerman - Carson Strong. [1st ed.]. Oxford: Oxford University Press, 1989. xvii, 240. ISBN 0-19-503917-3. [info](#)
- *Bioethics.* Edited by John Harris. 1st pub. Oxford: Oxford University Press, 2001. vi, 557. ISBN 0198752571. [info](#)
- *Beyond therapy : biotechnology and the pursuit of happiness : a report of the President's Council on Bioethics.* Edited by Leon Kass - William Safire. 1st ed. New York: DANA Press, 2005. xxxiii, 37. ISBN 1932594051. [info](#)

- *Medical ethics today : the BMA's handbook of ethics and law. Edited by Veronica English - Romano Romano-Critchley. 2nd ed. London: BMJ Publishing, 2008. xxv, 822. ISBN 9780727917447. [info](#)*

Teaching methods

seminar

Assessment methods

Condition for giving course-unit credit is full attendance in all seminars and activity during the course.

Language of instruction

Czech

Further comments (probably available only in Czech)

Study Materials

The course is taught each semester.

Information on the extent and intensity of the course: blokové semináře - 30 hodin v jednom týdnu.

The course is also listed under the following terms [Autumn 1999](#), [Spring 2000](#), [Autumn 2000](#), [Spring 2001](#), [Autumn 2001](#), [Spring 2002](#), [Autumn 2002](#), [Spring 2003](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#).

VSLE7X1p Medical Ethics 2 - lecture *

Faculty of Medicine

Autumn 2019

Extent and Intensity

0.5/0/0. 2 credit(s) (plus 2 credits for an exam). Recommended Type of Completion: k (colloquium). Alternate Types of Completion: zk (examination).

Teacher(s)

[MUDr. Jana Hořínková, Ph.D.](#) (lecturer)

[doc. Mgr. Josef Kuře, Dr. phil.](#) (lecturer)

[MUDr. Petra Vysočanová](#) (lecturer)

[Mgr. Michaela Vaňharová, Ph.D.](#) (assistant)

Supervisor

[doc. Mgr. Josef Kuře, Dr. phil.](#)

[Department of Medical Ethics - Theoretical Departments - Faculty of Medicine](#)

Supplier department: [Department of Medical Ethics - Theoretical Departments - Faculty of Medicine](#)

Timetable

Mon 25. 9. to Fri 20. 10. Fri 13:45–15:25 [A11/334](#), except Fri 29. 9.

Prerequisites (in Czech)

([VLCP0622c Introduc. to surgery II -pr.](#) // [STCP0622c Clin.exam. in surgery II](#)) &&
[VSIP0622c Introduction to internal II-pr](#) && [VSET021 Medical Ethics I](#) &&
[VLFA0621c Pharmacology I - p](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The course is a follow-up to *Medical ethics I* with accent on clinical ethics.

Syllabus

- *Introduction (terminology, subject) & Primary care (physician - patient relationship, informed consent) & Beginning of human life (assisted reproduction) & Ethics and genetics (PND, PGD, screening) & Patient rights & Transplantation ethics & Ethics and oncology (truth about diagnosis, paliative care) & Ethical problems in intensive care & Death and dying & Ethics and biomedical research*

Literature

- *The Blackwell guide to medical ethics. Edited by Rosamond Rhodes - Leslie Francis - Anita Silvers. 1st ed. Malden: Blackwell Pub., 2007. xii, 435. ISBN 9781405125840. [info](#)*
- *The Oxford handbook of bioethics. Edited by Bonnie Steinbock. 1st pub. in pbk. Oxford: Oxford University Press, 2007. xviii, 747. ISBN 9780199562411. [info](#)*
- *A companion to bioethics. Edited by Helga Kuhse - Peter Singer. 1st ed. [S.l.]: Blackwell Publishing, 2001. xv, 512. ISBN 063123019X. [info](#)*
- *PENCE, Gregory E. Classic cases in medical ethics : accounts of cases that have shaped medical ethics, with philosophical, legal, and historical backgrounds. 4th ed. Boston: McGraw Hill, 2004. xviii, 470. ISBN 0072829354. [info](#)*
- *Bioethics : ancient themes in contemporary issues. Edited by Mark G. Kuczewski - Ronald M. Polansky. 1st ed. London: MIT Press, 2000. xiii, 304. ISBN 0262611775. [info](#)*
- *SCHWARTZ, Lisa, Paul. E. PREECE and Robert A. HENDRY. Medical ethics : a case-based approach. 1st ed. Edinburgh: Saunders, 2002. xxi, 204. ISBN 0702025437. [info](#)*
- *Práva pacientů : komentované vydání. Edited by Helena Haškovcová - Jan Petrášek. [1. vyd.]. Havířov: Nakladatelství Aleny Krtilové, 1996. 176 s. ISBN 80-902163-0-7. [info](#)*

Teaching methods

lecture

Assessment methods

The course is finished by colloquium based on case study.

Language of instruction

Czech

Further comments (probably available only in Czech)

Study Materials

Information on completion of the course: po absolvování přednášek i seminářů

Information on the per-term frequency of the course: pouze v podzimním semestru.

Information on the extent and intensity of the course: 2 hod. týdně, první 4 týdny semestru, pro celý ročník.

Listed among pre-requisites of other courses

- **VLCH11XX Surgery - State Exam**
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) // [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLS7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLP1022c](#) && VYCET(3, [VLPS07X](#) // [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLR041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) // [VSAJ0222](#) // [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- **VLPI11XX Paediatrics - State Exam**
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) // [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLS7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLP1022c](#) && VYCET(3, [VLPS07X](#) // [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLR041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) // [VSAJ0222](#) // [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- **VLPG11XX Obstetric and Gynaecology - State Exam**
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && [VLVL9X66c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLPD1033c](#) && [VLIN9X22](#) && [VLS7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLP1022c](#) && VYCET(3, [VLPS07X](#) // [VLPS071](#), [VSAT081](#), [VSNO071](#), [VLKA091](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSDL071](#), [VLR041](#), [VLIA081](#), [VLKM081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VSAJ0222](#) // [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- **VLVL11XX Internal Medicine - State Exam**
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) // [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) &&

[VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && [VYCET\(3, VLPS07X // VLPS071, VSAT081, VLKA091, VSNO071, VSPM071, VLKB091, VLKF091, BMBS051, VLPM071, VLEP041, VLIA081, VLKM081, VLRL041, VLTL081, VSDL071, VSAL081, VSFP071\)](#) && [VLCH9X33c](#) && ([VLAJ0222](#) // [VSAJ0222](#) // [VSNJ0222](#)) && [VSSP03X](#) (*Do I meet enrolment requirements?*)

- [VLZP11XX Public Health - State Exam](#) ([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLKY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) // [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && [VYCET\(3, VLPS07X // VLPS071, VSAT081, VLKA091, VSNO071, VSPM071, VLKB091, VLKF091, BMBS051, VLPM071, VLEP041, VLIA081, VLKM081, VLRL041, VLTL081, VSDL071, VSAL081, VSFP071\)](#) && [VLCH9X33c](#) && ([VLAJ0222](#) // [VSAJ0222](#) // [VSNJ0222](#)) && [VSSP03X](#) (*Do I meet enrolment requirements?*)

The course is also listed under the following terms [Autumn 1999](#), [Spring 2000](#), [Autumn 2000](#), [Spring 2001](#), [Autumn 2001](#), [Spring 2002](#), [Autumn 2002](#), [Spring 2003](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#).

VSLP7X1 Medical Psychology ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

2/0/0. 2 credit(s). Type of Completion: zk (examination).

Teacher(s)

[Mgr. Terézia Knejzliková](#) (lecturer)

[Mgr. Irena Komárková](#), Ph.D. (lecturer)

[PhDr. Hana Neudertová](#), Ph.D. (lecturer)

[Mgr. Ivana Rosi](#) (lecturer)

[PhDr. Jana Severová](#), CSc. (lecturer)

[Mgr. Lucie Strachotová](#) (lecturer)

[PhDr. Miroslav Světlák](#), Ph.D. (lecturer)

Supervisor

[prof. MUDr. Tomáš Kašpárek](#), Ph.D.

[Department of Psychology and Psychosomatics - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [Vlasta Břicháčková](#)

Supplier department: [Department of Psychology and Psychosomatics - Theoretical Departments - Faculty of Medicine](#)

Prerequisites

[VSPF0622c Pathophys. II - pract. train.](#) && [VSNV041p Neuroscience - lecture](#) && [VLCP0622c Introduc. to surgery II -pr.](#) && [VSIP0622c Introduction to internal II-pr](#)
age czech only. Instructional language
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The main objectives are as follows: Understanding basic problems in medical psychology, psychosomatic medicine, psychotherapy – biopsychosocial approach towards health and illness. Main psychological terminology. Doctor patient relationship, basic communication skills. Experiencing position of patient, doctor. Meanings of symptoms, approach to illness, illness perception. Understanding Burn-out syndrome, its prevention . Ego defense mechanisms, developmental stages. Psychological approaches in different medical fields. Long term ill and dying patients. Pain and anxiety.

Syllabus

- Integral concept of a disease. Relation between physical symptoms and psychic state. Psychosocial approach.
- The importance of relationship between physician and patient. Forms of communication. Variables modifying physician-patient relationship on conscious and unconscious level.
- Role of patient, experiencing disease, attitude to disease, meaning of the symptom.
- Role of therapist, adaptive and maladaptive realization and attitudes.
- Burn-out syndrome, its prevention, supervision of therapist's work (Balint's groups).
- Unconscious defensive psychic mechanisms (of patient and of therapist). Work with transference and countertransference phenomena.
- Introduction into psychotherapy, basic psychotherapeutical approaches. Principles of intervention during acute psychic crisis.
- Psychological problems of each developmental period.
- Role of psychologist in medical team, psychodiagnostic methods.
- Psychological specificity of medical care in individual branches, care of long-term patients and dying patient, work with pain, anxiety.
- Relationships and forms of communication in a team of therapists.

Literature

required literature

- AYERS, Susan and Richard DE VISSER. *Psychologie v medicíně*. Translated by Helena Hartlová. Vydání 1. Praha: Grada Publishing, 2015. xiv, 552. ISBN 9788024752303. [info](#)
- TRESS, Wolfgang, Johannes KRUSSE and Jürgen OTT. *Základní psychosomatická péče*. Translated by Lubor Špís. Vydání první. Praha: Portál, 2008. 394 stran. ISBN 9788073673093. [info](#)

recommended literature

- Danzer, G. *Psychosomatika*. Praha: Portál, 2001. 244 s.
- VYMĚTAL, Jan. *Lékařská psychologie*. 3. aktualiz. vyd. Praha: Portál, 2003. 397 s. ISBN 80-7178-740-X. [info](#)
- HONZÁK, Radkin. *Komunikační pasti v medicíně : praktický manuál komunikace lékaře s pacientem*. 2. dopl. vyd. Praha: Galén, 1999. 165 s. ISBN 8072620320. [info](#)
- BAŠTECKÝ, Jaroslav, Jiří ŠAVLÍK and Jiří ŠIMEK. *Psychosomatická medicína*. 1. vyd. Praha: Grada, Avicenum, 1993. 363 s. ISBN 8071690317. [info](#)

Teaching methods

Lessons are interactive.

Assessment methods

Full attendance is required. Exam is written and oral.

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

The course can also be completed outside the examination period.

The course is taught each semester.

The course is taught: in blocks.

Listed among pre-requisites of other courses

- [VLCH11XX Surgery - State Exam](#)
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) // [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) // [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) // [VSAJ0222](#) // [VSNJ0222](#)) && [VSSP03X](#) (*Do I meet enrolment requirements?*)
- [VLPI11XX Paediatrics - State Exam](#)
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) // [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) &&

[VLOL7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLP1022c](#) && [VYCET\(3, \[VLPS07X\]\(#\) // \[VLPS071\]\(#\), \[VSAT081\]\(#\), \[VLKA091\]\(#\), \[VSNO071\]\(#\), \[VSPM071\]\(#\), \[VLKB091\]\(#\), \[VLKF091\]\(#\), \[BMBS051\]\(#\), \[VLPM071\]\(#\), \[VLEP041\]\(#\), \[VLIA081\]\(#\), \[VLKM081\]\(#\), \[VRL041\]\(#\), \[VTL081\]\(#\), \[VSDL071\]\(#\), \[VSAL081\]\(#\), \[VSFP071\]\(#\)\)](#) && [VLCH9X33c](#) && ([VLAJ0222](#) // [VSAJ0222](#) // [VSNJ0222](#)) && [VSSP03X](#) (*Do I meet enrolment requirements?*)

- [VLVLIIXX Internal Medicine - State Exam](#) ([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) // [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLS7X1p](#) && [VSEI7X1](#) && [VLOL7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLP1022c](#) && [VYCET\(3, \[VLPS07X\]\(#\) // \[VLPS071\]\(#\), \[VSAT081\]\(#\), \[VLKA091\]\(#\), \[VSNO071\]\(#\), \[VSPM071\]\(#\), \[VLKB091\]\(#\), \[VLKF091\]\(#\), \[BMBS051\]\(#\), \[VLPM071\]\(#\), \[VLEP041\]\(#\), \[VLIA081\]\(#\), \[VLKM081\]\(#\), \[VRL041\]\(#\), \[VTL081\]\(#\), \[VSDL071\]\(#\), \[VSAL081\]\(#\), \[VSFP071\]\(#\)\)](#) && [VLCH9X33c](#) && ([VLAJ0222](#) // [VSAJ0222](#) // [VSNJ0222](#)) && [VSSP03X](#) (*Do I meet enrolment requirements?*)

Teacher's information

Další informace vyvěšujeme na nástěnce Ústavu psychologie a psychosomatiky, Campus, budova A1,4. poschodí

The course is also listed under the following terms [Autumn 1999](#), [Spring 2000](#), [Autumn 2000](#), [Spring 2001](#), [Autumn 2001](#), [Spring 2002](#), [Autumn 2002](#), [Spring 2003](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#).

VSLP7X1a Medical Psychology - practice *

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/3/0. 1 credit(s). Type of Completion: z (credit).

Teacher(s)

[Mgr. Terézia Knejzliková](#) (seminar tutor)

[Mgr. Irena Komárková, Ph.D.](#) (seminar tutor)

[PhDr. Hana Neudertová, Ph.D.](#) (seminar tutor)

[Mgr. Ivana Rosi](#) (seminar tutor)

[PhDr. Jana Severová, CSc.](#) (seminar tutor)

[Mgr. Lucie Strachotová](#) (seminar tutor)

[PhDr. Miroslav Světlák, Ph.D.](#) (seminar tutor)

Supervisor

[prof. MUDr. Tomáš Kašpárek, Ph.D.](#)

[Faculty of Medicine](#)

Contact Person: [Vlasta Břicháčková](#)
Supplier department: [Faculty of Medicine](#)

Timetable of Seminar Groups

VSLP7X1a/01: Mon 13. 11. to Fri 17. 11. each working day 7:30–12:20 [409](#)
VSLP7X1a/02: Mon 30. 10. to Fri 3. 11. each working day 7:30–12:20 [409](#)
VSLP7X1a/04: Mon 2. 10. to Fri 6. 10. each working day 7:30–12:20 [409](#)
VSLP7X1a/05: Mon 18. 9. to Fri 22. 9. each working day 7:30–12:20 [409](#)
VSLP7X1a/06: Mon 1. 1. to Fri 5. 1. each working day 7:30–12:20 [409](#)
VSLP7X1a/07: Mon 11. 12. to Fri 15. 12. each working day 7:30–12:20 [409](#)
VSLP7X1a/08: Mon 27. 11. to Fri 1. 12. each working day 7:30–12:20 [409](#)
VSLP7X1a/34: No timetable has been entered into IS.

Prerequisites

[VSPF0622c Pathophys. II - pract. train.](#) && [VSNV041p Neuroscience - lecture](#) &&
[VLCP0622c Introduc. to surgery II -pr.](#) && [VSIP0622c Introduction to internal II-pr](#)
Lectures in czech only.

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The main objectives are as follows: Understanding basic problems in medical psychology, psychosomatic medicine, psychotherapy – biopsychosocial approach towards health and illness. Main psychological terminology. Doctor patient relationship, basic communication skills. Experiencing position of patient, doctor. Meanings of symptoms, approach to illness, illness perception. Understanding Burn-out syndrome, its prevention . Ego defense mechanisms, developmental stages. Psychological approaches in different medical fields. Long term ill and dying patients. Pain and anxiety.

Syllabus

- Integral concept of a disease. Relation between physical symptoms and psychic state. Psychosocial approach.
- The importance of relationship between physician and patient. Forms of communication. Variables modifying physician-patient relationship on conscious and unconscious level.
- Role of patient, experiencing disease, attitude to disease, meaning of the symptom.
- Role of therapist, adaptive and maladaptive realization and attitudes.
- Burn-out syndrome, its prevention, supervision of therapist's work (Balint's groups).
- Unconscious defensive psychic mechanisms (of patient and of therapist). Work with transference and countertransference phenomena.
- Introduction into psychotherapy, basic psychotherapeutical approaches. Principles of intervention during acute psychic crisis.

- *Psychological problems of each developmental period.*
- *Role of psychologist in medical team, psychodiagnostic methods.*
- *Psychological specificity of medical care in individual branches, care of long-term patients and dying patient, work with pain, anxiety.*
- *Relationships and forms of communication in a team of therapists.*

Literature

required literature

- *AYERS, Susan and Richard DE VISSER. Psychologie v medicíně. Translated by Helena Hartlová. Vydání 1. Praha: Grada Publishing, 2015. xiv, 552. ISBN 9788024752303. [info](#)*
- *TRESS, Wolfgang, Johannes KRUSSE and Jürgen OTT. Základní psychosomatická péče. Translated by Lubor Špís. Vydání první. Praha: Portál, 2008. 394 stran. ISBN 9788073673093. [info](#)*

recommended literature

- *BOUČEK, Jaroslav. Lékařská psychologie. 1. vyd. Olomouc: Univerzita Palackého, 2006. 141 s. ISBN 8024415011. [info](#)*
- *VYMĚTAL, Jan. Lékařská psychologie. 3. aktualiz. vyd. Praha: Portál, 2003. 397 s. ISBN 80-7178-740-X. [info](#)*
- *HONZÁK, Radkin. Komunikační pasti v medicíně : praktický manuál komunikace lékaře s pacientem. 2. dopl. vyd. Praha: Galén, 1999. 165 s. ISBN 8072620320. [info](#)*
- *BAŠTECKÝ, Jaroslav, Jiří ŠAVLÍK and Jiří ŠIMEK. Psychosomatická medicína. 1. vyd. Praha: Grada, Avicenum, 1993. 363 s. ISBN 8071690317. [info](#)*

Teaching methods

Lessons are interactive.

Assessment methods

Full attendance is required for credit. Final exam is written and oral.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course can also be completed outside the examination period.

The course is taught each semester.

Teacher's information

Změny a informace uveřejňujeme na nástěnce Ústavu psychologie a psychosomatiky, Campus, budova A1/4. patro

The course is also listed under the following terms [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#).

VSLT0121c Basic Medical Terminology - practice ✱

Faculty of Medicine

Autumn 2015

Extent and Intensity

0/1. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[Mgr. Jozefa Artimová, Ph.D.](#) (seminar tutor)

[Mgr. Natália Gachallová](#) (seminar tutor)

[Mgr. Soňa Hudíková, Ph.D.](#) (seminar tutor), [Mgr. Libor Švanda, Ph.D.](#) (deputy)

[Mgr. Lucie Mazalová, Ph.D.](#) (seminar tutor)

[Mgr. Kamila Novotná](#) (seminar tutor)

[Mgr. Tereza Ševčíková](#) (seminar tutor)

[Mgr. Libor Švanda, Ph.D.](#) (seminar tutor)

[Mgr. Robert Helán, Ph.D.](#) (assistant)

[Mgr. Kateřina Pořízková, Ph.D.](#) (assistant)

[PhDr. Jana Vyoralčková](#) (assistant)

Supervisor

[Mgr. Libor Švanda, Ph.D.](#)

[Language Centre, Faculty of Medicine Division - Faculty Branches of University](#)

[Departments - Faculty of Medicine](#)

Contact Person: [Mgr. Libor Švanda, Ph.D.](#)

Supplier department: [Language Centre, Faculty of Medicine Division - Language Centre](#)

Prerequisites

Basic knowledge of Latin will facilitate the study of the subject and may be regarded as a useful component of the educational outfit of students when entering the faculty, though it is no obligatory prerequisite for the acquisition of the university subject matter in the introductory phase.

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

General characteristics of the subject: Greek-Latin medical terminology is one of the relevant means for acquisition of the target knowledge of medical students. The tuition is of both theoretic and practical character, conceived as a preparatory course sui generis, introducing the students into the study of medicine by means of its language.

The content of tuition is, like the set of knowledge postulated in the examination, exclusively determined by the needs of the discipline and medical practice. In the first place it provides such knowledge of Latin and/or Greek as enables the student to master quickly and purposefully the semantic aspect of terms, their grammatical form, and word-forming structure. Simultaneously it provides systematic instruction to independent

solution of current terminological problems consisting in understanding of the technical content of the terms and in the formation of medical terms. Besides this it opens a view of the wider historical and linguistic fundamentals of medical terminology as well as its general theoretical contexts.

Learning outcomes

At the end of the course students should be able to:

use Latin and Greek-Latin medical terminology and expressions correctly and understand them;

recognize and explain grammatical devices and rules relevant for acquisition of Greek-Latin medical terminology;

explain syntactic structure of complex terms;

recognize the semantic structure of selected anatomical and clinical one-word terms;

form compound words applying the most used word-formation principles;

translate selected expressions from anatomy and pre-clinical and clinical fields of study.

Syllabus

- **BASIC MEDICAL TERMINOLOGY - practice.** Syllabus.
- An obligatory part of each class is practising and testing of knowledge acquired during the seminars.
-
- 1st week: Checking the level of initial knowledge.
- 2nd week: The language of medicine with its functions and characteristics. Medical terms, their etymology and definition. Renowned personalities of medicine in ancient history, historical aspects of medical terminology against the background of the history of medicine.
- 3rd week: History of anatomical nomenclature : BNA, JNA, PNA.
- 4th week: General terms and terms denoting parts and regions of the human body.
- 5th week: Names of bones and terms describing the skeletal system.
- 6th week: Latin in medical documentation. The history of medical record, its characteristics and present form.
- 7th week: Terms denoting simple types of fractures.
- 8th week: Terms denoting number in anatomy and clinical terminology. Fractures of fingers, ribs and vertebrae.
- 9th week: Internal organs, main terms from splanchnology.
- 10th week: Introduction to word-formation, basic principles of derivation, the most productive Latin suffixes. Terms denoting inflammatory and non-inflammatory diseases using systematic suffixes -itis and -osis.
- 11th week: Terms denoting the oncogenic diseases. Diagnoses containing expressions *suspicio a suspectus, a, um*.
- 12th week: Diminutives in anatomical terminology. Derivation of adjectives using suffix *-ideus, a, um* and expression of the forms and shapes similarities.
- 13th week: Revision.
- 14th week: Credit test.

Literature

required literature

- MAREČKOVÁ, Elena a Hana REICHOVÁ. *Úvod do lékařské terminologie. Základy latiny s přihlédnutím k řečtině*. Brno: Masarykova univerzita, 2013. 187 s. ISBN 978-80-210-5576-6.
- PRUCKLOVÁ, Renata - SEVEROVÁ, Marta. *Introduction to Latin and Greek Terminology in Medicine*. Prague: Koniasch Latin Press, 2012. ISBN 978-80-86791-24-1. **Only for the English programme!**

recommended literature

- VEJRAŽKA, Martin and Dana SVOBODOVÁ. *Terminologiae medicae IANUA*. 2. vyd. Praha: Academia, 2006. 440 pp. ISBN 80-200-1459-4. [info](#)
- KÁBRT, Jan and Jan KÁBRT JR. *Lexicon medicum*. Druhé, dopl. a přeprac. vyd. Praha: Galén, 2004. 1136 pp. ISBN 80-7262-235-8. [info](#)
- DAUBER, Wolfgang. *Feneisův obrazový slovník anatomie : obsahuje na 8000 odborných anatomických pojmů a na 800 vyobrazení*. Vyd. 3. české. Praha: Grada, 2007. xii, 536. ISBN 9788024714561. [info](#)

Bookmarks

<https://is.muni.cz/auth/ln/tag/LF:VSLT0121c/>

Teaching methods

- Lectures, translation and grammar exercises, drills.
- Links to the parallel anatomy classes.
- Switching from frontal instruction to group work and self-study. Group discussion.
- Homework and self-preparation for the class work is required.
- Class test in the middle of the semester.

Assessment methods

Requirements for gaining the credit: regular class attendance, active participation in class, preparation for classes, sitting class tests (twice per semester) and a credit test. The basic limit for passing all tests is 70%. Passing each of the class test, which is obligatory for all students, reduces the basic limit in the credit test by 5%. Only one unexcused absence will be tolerated; further absences must be properly excused (i.e. via the Study Department of the Faculty of Medicine).

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

The course is taught: every week.

Information on the extent and intensity of the course: cvičení.

Teacher's information

Aktuální informace o~předmětu, konzultačních hodinách atd. jsou zveřejňovány prostřednictvím IS MU.

Kontakt s vyučujícími zajišťuje sekretariát pracoviště: UKB, Kamenice 5, pavilon A15, tel. 549498170; úřední hodiny: pondělí 10.00-12.00, středa 10.00-12.00, pátek 9.00-11.00. Možná je také e-mailová komunikace.

Updated information on the course, office hours, etc. is available in IS MU.

Contact person: secretary of the Language Centre (UKB, Kamenice 5, Pavilion A15),
phone: 549498170; office hours: Monday 10.00-12.00, Wednesday 10.00-12.00, Friday
9.00-11.00. Individual lecturers can also be contacted via e-mail.

The course is also listed under the following terms [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#),
[Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn
2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#).

VSLT0121s Basic Medical Terminology I - seminar ✳

Faculty of Medicine

Autumn 2015

Extent and Intensity

0/0/1. Type of Completion: -.

Teacher(s)

[Mgr. Jozefa Artimová, Ph.D.](#) (seminar tutor)

[Mgr. Natália Gachallová](#) (seminar tutor)

[Mgr. Soňa Hudíková, Ph.D.](#) (seminar tutor), [Mgr. Libor Švanda, Ph.D.](#) (deputy)

[Mgr. Lucie Mazalová, Ph.D.](#) (seminar tutor)

[Mgr. Kamila Novotná](#) (seminar tutor)

[Mgr. Tereza Ševčíková](#) (seminar tutor)

[Mgr. Libor Švanda, Ph.D.](#) (seminar tutor)

[Mgr. Robert Helán, Ph.D.](#) (assistant)

[Mgr. Kateřina Pořízková, Ph.D.](#) (assistant)

[PhDr. Jana Vyorálková](#) (assistant)

Supervisor

[Mgr. Libor Švanda, Ph.D.](#)

[Language Centre, Faculty of Medicine Division - Faculty Branches of University
Departments - Faculty of Medicine](#)

Contact Person: [Mgr. Libor Švanda, Ph.D.](#)

Supplier department: [Language Centre, Faculty of Medicine Division - Language Centre](#)

Prerequisites

Basic knowledge of Latin will facilitate the study of the subject and may be regarded as a useful component of the educational outfit of students when entering the faculty, though it is no obligatory prerequisite for the acquisition of the university subject matter in the introductory phase.

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

General characteristics of the subject: *Greek-Latin medical terminology is one of the relevant means for acquisition of the target knowledge of medical students. The tuition is of both theoretic and practical character, conceived as a preparatory course sui generis, introducing the students into the study of medicine by means of its language. The content of tuition is, like the set of knowledge postulated in the examination, exclusively determined by the needs of the discipline and medical practice. In the first place it provides such knowledge of Latin and/or Greek as enables the student to master quickly and purposefully the semantic aspect of terms, their grammatical form, and word-forming structure. Simultaneously it provides systematic instruction to independent solution of current terminological problems consisting in understanding of the technical content of the terms and in the formation of medical terms. Besides this it opens a view of the wider historical and linguistic fundamentals of medical terminology as well as its general theoretical contexts.*

Learning outcomes

At the end of the course students should be able to:

- use Latin and Greek-Latin medical terminology and expressions correctly and understand them;*
- recognize and explain grammatical devices and rules relevant for acquisition of Greek-Latin medical terminology;*
- explain syntactic structure of complex terms;*
- recognize the semantic structure of selected anatomical and clinical one-word terms;*
- form compound words applying the most used word-formation principles;*
- translate selected expressions from anatomy and pre-clinical and clinical fields of study.*

Syllabus

- **BASIC MEDICAL TERMINOLOGY - seminar.** *Syllabus.*
-
- *1st week: Introduction to the study of the subject: introduction to the anatomical, clinical and pharmacology Latin terminology (significance and contents of the course, methodological instructions, study literature). Characteristics of the graphical and acoustic form of Latin. Selected Greek sounds, transcription into Latin. Dictionary entry, how to read it and how to master Latin lexicon.*
- *2nd week: The system of Latin and Greek declensions. Organisation of the declension chart. Basic nominal categories and their specific features in medical terminology. Latin nouns of 1st declension (a-stems). Syntactic relations among constituents of multiple terms : non-agreed attribute and prepositional phrase.*
- *3rd week: Greek nouns of 1st declension (a-stems). Adjectives of 1st declension. Ordinal numerals. Syntactic relations among constituents of multiple terms : agreed attribute. Word order in anatomical and clinical medical terminology.*
- *4th week: Latin and Greek nouns of 2nd declension (o-stems), Adjectives of 2nd declension. Introduction to pharmacology terminology, scientific name in Botany.*
- *5th week: Adjectives of 1st and 2nd declensions. Specifics of their usage in medical terminology. Latin in medical reports, authentic sample I. Supplementing of the subject matter.*

- 6th week: **Progress test I.** Characteristics of Latin 3rd declension. Latin nouns of 3rd declension : consonant stems. Agreed attribute of Latin nouns of 3rd declension and Adjectives of 1st and 2nd declensions. Latin in medical reports, authentic sample II.
- 7th week: Latin nouns of 3rd declension : i-stems. Agreed attribute of Latin nouns of 3rd declension and Adjectives of 1st and 2nd declensions. Latin in medical reports, authentic sample III.
- 8th week: Greek nouns of 3rd declension (consonant stems and i-stems). Agreed attribute of Latin and Greek nouns of 3rd declension and Adjectives of 1st and 2nd declensions. Latin in medical reports, authentic sample IV. Supplementing of the subject matter.
- 9th week: **Progress test I.** Latin nouns of 4th declension (u-stems). Agreed attribute of nouns of 1st- 4th declensions and Adjectives of 1st and 2nd declensions. Latin in medical reports, authentic sample V.
- 10th week: Latin nouns of 5th declension (e-stems). Agreed attribute of nouns of 1st- 5th declensions and Adjectives of 1st and 2nd declensions. Latin in medical reports, authentic sample VI.
- 11th week: Introduction to adjectives of 3rd declension, their characteristics and inflection, three-termination, two-termination, one-termination types. Agreed attribute of Latin and Greek nouns of 1st- 5th declensions and Adjectives of 1st and 2nd declensions and Adjectives of 3rd declension.
- 12th week: Adjectives of 3rd declension II. Derivation of adjectives using suffixes -alis, e; -aris, e; -icus, a, um; eus, a, um. Terms denoting position and orientation of the body parts. Terms denoting extremities. Latin in medical reports, authentic sample VII.
- 13th week: Prepositions and selected conjunctions. Latin in medical reports, authentic sample VIII.
- 14th week: Final summary and supplementing of the subject matter. **Credit test.**

Literature

required literature

- MAREČKOVÁ, Elena a Hana REICHOVÁ. Úvod do lékařské terminologie. Základy latiny s přihlédnutím k řečtině. Brno: Masarykova univerzita, 2013. 187 s. ISBN 978-80-210-5576-6.
- PRUCKLOVÁ, Renata - SEVEROVÁ, Marta. Introduction to Latin and Greek Terminology in Medicine. Prague: Koniasch Latin Press, 2012. ISBN 978-80-86791-24-1. **Only for the English programme!**

recommended literature

- VEJRAŽKA, Martin and Dana SVOBODOVÁ. Terminologiae medicae IANUA. 2. vyd. Praha: Academia, 2006. 440 pp. ISBN 80-200-1459-4. [info](#)
- KÁBRT, Jan and Jan KÁBRT JR. Lexicon medicum. Druhé, dopl. a přeprac. vyd. Praha: Galén, 2004. 1136 pp. ISBN 80-7262-235-8. [info](#)
- [MAREČKOVÁ, Elena](#), [Hana REICHOVÁ](#), [Marta SEVEROVÁ](#), Dana SVOBODOVÁ and František ŠIMON. Latinitas medica. Lexikon nejen lékařských

sentenci, citátů a rčení (Medical Latinity. A lexicon of not only medical sentences, quotations and phrases). 1. vyd. Brno: Masarykova univerzita, 2009. 909 pp. ISBN 978-80-210-4758-7. [info](#)

Teaching methods

lectures, translation and grammar exercises, drills, homework

Assessment methods

There is not any form of final testing for this module. The seminar (VSLT0121s) is directly followed by the practice (VSLT0121c). Requirements: obligatory attendance, active participation and preparation for classes.

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

The course is taught: every week.

Information on the extent and intensity of the course: seminář.

Teacher's information

Aktuální informace o předmětu, konzultačních hodinách atd. jsou zveřejňovány prostřednictvím IS MU.

Kontakt s vyučujícími zajišťuje sekretariát pracoviště: UKB, Kamenice 5, pavilon A15, tel. 549498170; úřední hodiny: pondělí 10.00-12.00, středa 10.00-12.00, pátek 9.00-11.00. Možná je také e-mailová komunikace.

Updated information on the course, office hours, etc. is available in IS MU.

Contact person: secretary of the Language Centre (UKB, Kamenice 5, Pavilion A15), phone: 549498170; office hours: Monday 10.00-12.00, Wednesday 10.00-12.00, Friday 9.00-11.00. Individual lecturers can also be contacted via e-mail.

The course is also listed under the following terms [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#).

VSLT0221c Basic Medical Terminology II - practice ✨

Faculty of Medicine

Spring 2019

Extent and Intensity

0/1. 1 credit(s). Type of Completion: z (credit).

Teacher(s)

[Mgr. Jozefa Artimová, Ph.D.](#) (seminar tutor)

[Mgr. Juraj Franek, Ph.D.](#) (seminar tutor), [Mgr. Kateřina Pořízková, Ph.D.](#) (deputy)

[Mgr. Natália Gachallová](#) (seminar tutor), [Mgr. Kateřina Pořízková, Ph.D.](#) (deputy)

[Mgr. Soňa Hudíková, Ph.D.](#) (seminar tutor), [Mgr. Libor Švanda, Ph.D.](#) (deputy)
[Mgr. Kamila Novotná](#) (seminar tutor), [Mgr. Libor Švanda, Ph.D.](#) (deputy)
[Mgr. Kateřina Pořízková, Ph.D.](#) (seminar tutor)
[Mgr. Tereza Ševčíková](#) (seminar tutor), [Mgr. Kateřina Pořízková, Ph.D.](#) (deputy)
[Mgr. Libor Švanda, Ph.D.](#) (seminar tutor)
[Mgr. Marie Žáková](#) (seminar tutor), [Mgr. Kateřina Pořízková, Ph.D.](#) (deputy)
[Mgr. Robert Helán, Ph.D.](#) (assistant)
[PhDr. Jana Vyoralíková](#) (assistant)

Supervisor

[Mgr. Kateřina Pořízková, Ph.D.](#)

[Language Centre, Faculty of Medicine Division - Language Centre](#)

Contact Person: [Mgr. Kateřina Pořízková, Ph.D.](#)

Supplier department: [Language Centre, Faculty of Medicine Division - Language Centre](#)

Prerequisites (in Czech)

[VSLT0121c Basic Med. Terminology -p](#) && [ZC011 Handling chemical substances](#)
(Do I meet enrolment requirements?)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

General characteristics of the subject: Greek-Latin medical terminology is one of the relevant means for acquisition of the target knowledge of medical students. The tuition is of both theoretic and practical character, conceived as a preparatory course sui generis, introducing the students into the study of medicine by means of its language.

The content of tuition is, like the set of knowledge postulated in the examination, exclusively determined by the needs of the discipline and medical practice. In the first place it provides such knowledge of Latin and/or Greek as enables the student to master quickly and purposefully the semantic aspect of terms, their grammatical form, and word-forming structure. Simultaneously it provides systematic instruction to independent solution of current terminological problems consisting in understanding of the technical content of the terms and in the formation of medical terms. Besides this it opens a view of the wider historical and linguistic fundamentals of medical terminology as well as its general theoretical contexts.

Learning outcomes

At the end of the course students should be able to:

use Latin and Greek-Latin medical terminology and expressions correctly and understand them;

explain and apply grammatical devices and rules relevant for acquisition of Greek-Latin medical terminology;

recognize the syntactic structure of complex terms;

describe the semantic structure of one-word terms;

form compound words applying the most used word-formation principles;

translate selected expressions from anatomy, pre-clinical and clinical fields of study, medical prescriptions, and pharmacology;
guess the meanings of unknown terms on the basis of semantic, grammatical and logical relations.

Syllabus

- **BASIC MEDICAL LATIN - practice.** Syllabus. An obligatory part of each class is practising and testing of knowledge.
- 1st week: Specimens of case histories, examples.
- 2nd week: Borrowed verbs of Latin and Greek origin.
- 3rd week: Basic vocabulary of the pharmacopoeia: subscription, forms of pharmaceutical preparations, groups of medicaments, pharmaceutical substances.
- 4th week: Revision I. Restored pronunciation - examples.
- 5th week: Phrases relating to death.
- 6th week: Terms expressing place.
- 7th week: Terms for various types of heartbeat.
- 8th week: Terms denoting inflammations and tumours.
- 9th week: Revision II.
- 10th week: Terms for various types of diagnoses and prognoses.
- 11th week: Terms for various types of therapies.
- 12th week: Specimens of post mortem examinations, examples.
- 13th week: Preparation for final test.
- 14th week: Final written test.
- 15th week: Credit acknowledgement.

Literature

required literature

- MAREČKOVÁ, Elena and Hana REICHOVÁ. Úvod do lékařské terminologie : základy latiny s přihlédnutím k řečtině. 6. vyd. Brno: Masarykova univerzita, 2011. 186 s. ISBN 9788021055766. [info](#)
- PRUCKLOVÁ, Renata and Marta SEVEROVÁ. Introduction to Latin and Greek terminology in medicine. 2. přeprac. a rev. vyd. Brno: Masarykova univerzita, 2006. 153 s. ISBN 8021040513. [info](#)

recommended literature

- KÁBRT, Jan and Jan KÁBRT JR. Lexicon medicum. Druhé, dopl. a přeprac. vyd. Praha: Galén, 2004. 1136 pp. ISBN 80-7262-235-8. [info](#)
- VEJRAŽKA, Martin and Dana SVOBODOVÁ. Terminologiae medicae IANUA. 2. vyd. Praha: Academia, 2006. 440 pp. ISBN 80-200-1459-4. [info](#)
- [PÁČ, Libor](#). Slovník anatomických eponym (Vocabulary of anatomical eponyms). druhé doplněné vydání. Praha: Galén, 2010. 182 pp. ISBN 978-80-7262-652-6. [info](#)

not specified

- První dva tituly jsou základní (český/anglický program), ostatní doplňkové. - The first two titles are basic (Czech/English programme), the others supplementary.

Bookmarks

<https://is.muni.cz/auth/in/tag/LF:VSLT0221c/>

Teaching methods

lectures, translation and grammar exercises, drills, homework, presentation, group work

Assessment methods

Requirements for gaining the credit: regular class attendance, active participation in class, preparation for classes, sitting class tests and a credit test which is focused on word-formation, nominal inflexion being involved only marginally. The basic limit for passing all tests is 75% (70% in case of two class tests). Passing the class test, which is obligatory for all students, reduces the basic limit in the credit test by 5%. Only one unexcused absence will be tolerated; further absences must be properly excused (i.e. via the Study Department of the Faculty of Medicine).

Language of instruction

Czech

Further comments (probably available only in Czech)

The course can also be completed outside the examination period.

The course is taught annually.

The course is taught: every week.

Information on the extent and intensity of the course: cvičení.

Teacher's information

Aktuální informace o~předmětu, konzultačních hodinách atd. jsou zveřejňovány na nástěnkách Centra jazykového vzdělávání MU, oddělení na LF.

Kontakt s vyučujícími zajišťuje sekretariát pracoviště (Komenského nám. 2), tel. 549498170; možná je také komunikace prostřednictvím internetu.

For up-to-date information on the course, office hours, etc., see the notice boards of the Language Centre, Faculty of Medicine, Masaryk University.

Contact person: secretary of the Language Centre (Komenského Square) – phone: 549498170. All lecturers can also be contacted via e-mail.

The course is also listed under the following terms [Spring 2002](#), [Spring 2003](#), [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#).

VSLT0221s Basic Medical Terminology II - seminar ✨

Faculty of Medicine

Spring 2019

Extent and Intensity

0/1. 2 credit(s). Type of Completion: zk (examination).

Teacher(s)

[Mgr. Jozefa Artimová, Ph.D.](#) (seminar tutor)
[Mgr. Juraj Franek, Ph.D.](#) (seminar tutor), [Mgr. Kateřina Pořízková, Ph.D.](#) (deputy)
[Mgr. Natálie Gachallová](#) (seminar tutor), [Mgr. Kateřina Pořízková, Ph.D.](#) (deputy)
[Mgr. Soňa Hudíková, Ph.D.](#) (seminar tutor), [Mgr. Libor Švanda, Ph.D.](#) (deputy)
[Mgr. Kamila Novotná](#) (seminar tutor), [Mgr. Libor Švanda, Ph.D.](#) (deputy)
[Mgr. Kateřina Pořízková, Ph.D.](#) (seminar tutor)
[Mgr. Tereza Ševčíková](#) (seminar tutor), [Mgr. Kateřina Pořízková, Ph.D.](#) (deputy)
[Mgr. Libor Švanda, Ph.D.](#) (seminar tutor)
[Mgr. Marie Žáková](#) (seminar tutor), [Mgr. Kateřina Pořízková, Ph.D.](#) (deputy)
[Mgr. Robert Helán, Ph.D.](#) (assistant)
[PhDr. Jana Vyorálková](#) (assistant)

Supervisor

[Mgr. Kateřina Pořízková, Ph.D.](#)
[Language Centre, Faculty of Medicine Division - Language Centre](#)
Contact Person: [Mgr. Kateřina Pořízková, Ph.D.](#)
Supplier department: [Language Centre, Faculty of Medicine Division - Language Centre](#)

Prerequisites (in Czech)

[VSLT0121c Basic Med. Terminology -p && ZC011 Handling chemical substances](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

General characteristics of the subject: Greek-Latin medical terminology is one of the relevant means for acquisition of the target knowledge of medical students. The tuition is of both theoretic and practical character, conceived as a preparatory course sui generis, introducing the students into the study of medicine by means of its language. The content of tuition is, like the set of knowledge postulated in the examination, exclusively determined by the needs of the discipline and medical practice. In the first place it provides such knowledge of Latin and/or Greek as enables the student to master quickly and purposefully the semantic aspect of terms, their grammatical form, and word-forming structure. Simultaneously it provides systematic instruction to independent solution of current terminological problems consisting in understanding of the technical content of the terms and in the formation of medical terms. Besides this it opens a view of the wider historical and linguistic fundamentals of medical terminology as well as its general theoretical contexts.

Learning outcomes

At the end of the course students should be able to:
use Latin and Greek-Latin medical terminology and expressions correctly and understand them;
explain and apply grammatical devices and rules relevant for acquisition of Greek-Latin

medical terminology;
recognize the syntactic structure of complex terms;
describe the semantic structure of one-word terms;
form compound words applying the most used word-formation principles;
translate selected expressions from anatomy, pre-clinical and clinical fields of study,
medical prescriptions, and pharmacology;
guess the meanings of unknown terms on the basis of semantic, grammatical and logical relations.

Syllabus

- **BASIC MEDICAL TERMINOLOGY - seminar.** Syllabus. 1st week: Summary of the subject matter. Numerals (2): objects next to numerals. The components of a case history.
- 2nd week: Verbs (1): infinitive, imperative, present passive subjunctive. Definition prerequisites of professional communication between a doctor and a pharmacist.
- 3rd week: Verbs (2): present active and perfect passive participles, gerundive, gerund. Factual and formal grammatical structure of medical prescription.
- 4th week: Supplementing of the subject matter I. Restored pronunciation of classical Latin.
- 5th week: Formation of words (1): basic rules of derivation. Latin prefixes, their meanings and mutual relations.
- 6th week: Latin suffixes (substantival, adjectival).
- 7th week: Greek prefixes, their meanings and mutual relations. Synonymy, antonymy, polysemy, and homonymy of prefixes.
- 8th week: Greek suffixes, polysemy of suffixes.
- 9th week: Supplementing of the subject matter II.
- 10th week: Formation of words (2): basic rules of composition, combining morphemes. Latin compound words, hybrid words.
- 11th week: Greek compound words, productive word-forming components.
- 12th week: Latin and Greek equivalents of basic medical terms. Post mortem diagnosis as an example of authentic application of Latin in medical practice.
- 13th week: Borrowed words of Latin and Greek origin: sound adaptation and orthography. Final summary of the subject matter.
- 14th week: Final written test.
- 15th week: Evaluation of final test. Requirements for the examination.

Literature

required literature

- MAREČKOVÁ, Elena and Hana REICHOVÁ. Úvod do lékařské terminologie : základy latiny s přihlédnutím k řečtině. 6. vyd. Brno: Masarykova univerzita, 2011. 186 s. ISBN 9788021055766. [info](#)
- [PRUCKLOVÁ, Renata](#) and [Marta SEVEROVÁ](#). Introduction to Latin and Greek Terminology in Medicine. 2., přeprac. a rev. vydání. Brno: Masarykova univerzita, 2006. 153 pp. ISBN 80-210-4051-3. [info](#)

recommended literature

- *KÁBRT, Jan and Jan KÁBRT JR. Lexicon medicum. Druhé, dopl. a přeprac. vyd. Praha: Galén, 2004. 1136 pp. ISBN 80-7262-235-8. [info](#)*
- *VEJRAŽKA, Martin and Dana SVOBODOVÁ. Terminologiae medicae IANUA. 2. vyd. Praha: Academia, 2006. 440 pp. ISBN 80-200-1459-4. [info](#)*
- *[PÁČ, Libor](#). Slovník anatomických eponym (Vocabulary of anatomical eponyms). druhé doplněné vydání. Praha: Galén, 2010. 182 pp. ISBN 978-80-7262-652-6. [info](#)*

not specified

- *První dva tituly jsou základní (český/anglický program), ostatní doplňkové. - The first two titles are basic (Czech/English programme), the others supplementary.*

Teaching methods

lectures, translation and grammar exercises, drills, homework, presentation, group work

Assessment methods

Examination (zk) mainly proceeds in the oral form but also includes a shorter written part in the form of a translation of clinical and prescription terms from Czech into Latin. The oral part contains grammatical analysis of selected Latin anatomical and clinical terms, determination and variation of basic grammatical categories, explanation of a technically relevant grammatical phenomenon, and tasks which check knowledge of word formation. The exam may be supplemented with questions from the theory of terminology (historical aspects, contemporary state of development, characteristic features, etc.). A prerequisite for admission to the examination is successful completion of the final written test focused especially on word-formation.

Only one unexcused absence will be tolerated; further absences must be properly excused (i.e. via the Study Department of the Faculty of Medicine).

Language of instruction

Czech

Further comments (probably available only in Czech)

The course can also be completed outside the examination period.

The course is taught annually.

The course is taught: every week.

Information on the extent and intensity of the course: seminář.

Listed among pre-requisites of other courses

- [aVLPX042t](#) *Vacational Training in Nursing* ([VLBF011p](#) // [aVLBF011p](#)) && ([VSPO011p](#) // [aVLPO011p](#)) && ([VSLT0221s](#) // [aVLLT0222s](#)) (*Do I meet enrolment requirements?*)
- [VSPA0521c](#) *Pathology - practicals* ([VSFY0422p](#) && ([VSBC041p](#) // [VSBC0422p](#)) && [VSAN0333p](#) && [VSHE0322p](#) && ([VSLT0221s](#) // [VSLT011s](#)) && [VSET021](#) && ([VLLM0421c](#) // [STLM0421c](#)) && [ZC041](#) (*Do I meet enrolment requirements?*)
- [VSPA0521p](#) *Pathology I - lecture* ([VSFY0422p](#) && ([VSBC041p](#) // [VSBC0422p](#)) && [VSAN0333p](#) && [VSHE0322p](#)

&& ([VSLT0221s](#) // [VSLT011s](#)) && [VSET021](#) && ([VLLM0421c](#) // [STLM0421c](#))
&& [ZC041](#) (*Do I meet enrolment requirements?*)

- [VSPF0521c](#) *Pathological physiology I - practice*
[VSFY0422p](#) && ([VSBC041p](#) // [VSBC0422p](#)) && [VSAN0333p](#) && [VSHE0322p](#)
&& ([VSLT0221s](#) // [VSLT011s](#)) && [VSET021](#) && [ZC041](#) (*Do I meet enrolment requirements?*)
- [VSPF0521p](#) *Pathological physiology - lectures*
[VSFY0422p](#) && ([VSBC041p](#) // [VSBC0422p](#)) && [VSAN0333p](#) && [VSHE0322p](#)
&& ([VSLT0221s](#) // [VSLT011s](#)) && [VSET021](#) && [ZC041](#) (*Do I meet enrolment requirements?*)
- [VSSL051c](#) *Social Medicine - practice*
([VSLT0221s](#) // [VSLT011s](#)) && [VSET021](#) && [VSPP3X1](#) && [ZC041](#) (*Do I meet enrolment requirements?*)
- [VSSL051p](#) *Social Medicine - lecture*
([VSLT0221s](#) // [VSLT011s](#)) && [VSET021](#) && [VSPP3X1](#) && [ZC041](#) (*Do I meet enrolment requirements?*)

Teacher's information

Aktuální informace o předmětu, konzultačních hodinách atd. jsou zveřejňovány na nástěnkách Centra jazykového vzdělávání MU, oddělení na LF.

Kontakt s vyučujícími zajišťuje sekretariát pracoviště (Komenského nám. 2), tel. 549498170; možná je také komunikace prostřednictvím internetu.

For up-to-date information on the course, office hours, etc., see the notice boards of the Language Centre, Faculty of Medicine, Masaryk University.

Contact person: secretary of the Language Centre (Komenského Square) – phone: 549498170. All lecturers can also be contacted via e-mail.

The course is also listed under the following terms [Spring 2002](#), [Spring 2003](#), [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#).

VSMB011 Introduction to theoretical biology ✨

Faculty of Medicine

Autumn 2015

Extent and Intensity

0/0/2. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. Ing. Petr Dvořák, CSc.](#) (lecturer)

[Mgr. Hana Hříbková](#) (lecturer)

[Mgr. Pavel Němec, Ph.D.](#) (lecturer)

[doc. MUDr. Iva Slaninová, Ph.D.](#) (lecturer)

[Mgr. Michal Strouhal, Ph.D.](#) (lecturer)
[Mgr. Miroslav Vařecha, Ph.D.](#) (lecturer)
[Mgr. Kateřina Cetkovská, Ph.D.](#) (assistant)
[Mgr. Kateřina Vopěnková, Ph.D.](#) (assistant)
[Mgr. Martina Vrábliková](#) (assistant)

Supervisor

[prof. Ing. Petr Dvořák, CSc.](#)
[Department of Biology - Theoretical Departments - Faculty of Medicine](#)
Contact Person: [Mgr. Kateřina Vopěnková, Ph.D.](#)
Supplier department: [Department of Biology - Theoretical Departments - Faculty of Medicine](#)

Prerequisites

[VSBI0222p Biology II-lect.](#) // [ZLBI0222p Biology II - lect.](#) // [PřF:Bi1700 Cell Biology](#)
Students need to have cell biology knowledge at the level of 1st year of university, proven with an exam (VLBI0222p, VSBI0222p, ZLBI0222p or Bi1700).
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

The capacity limit for the course is 15 student(s).

Current registration and enrolment status: enrolled: 12/15, only registered: 0/15

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)
- [Dentistry](#) (programme LF, M-ZL)

Course objectives

After completion of the course student: gets an overview of currently used methods of molecular and cell imaging and analysis; and will see some of their applications in practice. Student will see following laboratories and devices in operation: imaging of biomolecules in cells and tissues (cell-imaging); electron microscopy; flow-cytometry; whole genome sequencing; and DNA microarray analysis. Student will understand the principle and possibilities of application of these methods; will be more familiar with the modern study of biological material and their use in biomedical research and modern medicine, and will be capable of basic interpretation of results obtained from these methods.

Syllabus

- Visualization of biomolecules at the cellular level
- Cell ultrastructure analysis using electron microscopy
- Flow-cytometry: analysis of cell populations
- Analysis and annotation of whole genome DNA sequencing
- DNA microarrays in gene expression analysis

Teaching methods

seminar, lab demonstration

Assessment methods

Course completion requires full attendance in the seminars and passing a final written test (5 questions on understanding the principle and use of illustrated methods - student answer in their own words, credit is awarded in case of answering at least 4 questions out of 5).

Attendance at all seminars is mandatory

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

The course is taught: in blocks.

Information on the extent and intensity of the course: celkem 12 hodin.

Information on course enrolment limitations: Pokud nemá student zkoušku z Biologie II, musí mít absolvovaný předmět Bunečná biologie Bi1700 na PřF.

Teacher's information

<https://is.muni.cz/auth/el/1411/podzim2015/V SMB011/index.qwarp>

Výuka probíhá blokově ve dnech 6. a 20. 11. 2015 ve výše uvedených časech v univerzitním kampusu, budova A3, zasedací místnost v přízemí. Studenti jsou povinni přijít do výuky včas.

The course is also listed under the following terms [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#).

VSMB081 Molecular Biology Methods in Microbiology ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

0/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[doc. MUDr. Filip Růžička, Ph.D.](#) (lecturer)

[prof. MUDr. Miroslav Votava, CSc.](#) (lecturer)

[MUDr. Lenka Černohorská, Ph.D.](#) (seminar tutor)

[Mgr. Monika Dvořáková Heroldová, Ph.D.](#) (seminar tutor)

[Ing. Veronika Holá, Ph.D.](#) (seminar tutor)

[Mgr. Martina Sittová](#) (seminar tutor)

[doc. MUDr. Vladana Woznicová, Ph.D.](#) (seminar tutor)

[MUDr. Ondřej Zahradníček](#) (seminar tutor)

Supervisor

[doc. MUDr. Filip Růžička, Ph.D.](#)

[Department of Microbiology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Contact Person: [MUDr. Ondřej Zahradníček](#)

Supplier department: [Department of Microbiology - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Prerequisites (in Czech)

[VLLM0522p Medical Microbiology II - lect](#) && [VLIM051p Immunology - lecture](#)

Student by měl mít základní znalosti z lékařské mikrobiologie

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

The capacity limit for the course is 11 student(s).

Current registration and enrolment status: enrolled: 0/11, only registered: 0/11

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives (in Czech)

Student absolvovavší předmět by měl mít přehled o molekulárních metodách v klinické mikrobiologii

Literature

recommended literature

- HARALD, H Kessler. *Molecular diagnostics of infectious diseases, 2nd revised edition*. Berlin, 2012. ISBN 978-3-11-027883-5. [info](#)
- SLABÝ, ET AL., Ondřej. *Molekulární medicína*. 2015. ISBN 978-80-7492-121-6. [info](#)

Assessment methods (in Czech)

Podmínkou udělení zápočtu je úspěšné absolvování závěrečného testu.

Language of instruction

Czech

Further comments (probably available only in Czech)

Information on completion of the course: Podmínkou udělení zápočtu je úspěšné absolvování závěrečného testu.

The course can also be completed outside the examination period.

The course is taught annually.

Note related to how often the course is taught: 3x dvě hodiny týdně.

Information on the extent and intensity of the course: 3x dvě hodiny týdně.

Teacher's information

S dotazy na rozvrh apod. se obračejte na mgr. Martinu Sittovou

<269283@mail.muni.cz>.

The course is also listed under the following terms [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VSNO071 News in ophthalmology ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

2/0/0. 3 credit(s). Type of Completion: k (colloquium).

Teacher(s)

[MUDr. Karolína Skorkovská, Ph.D.](#) (lecturer)

[doc. MUDr. Šárka Skorkovská, CSc.](#) (lecturer)

[doc. MUDr. Svatopluk Synek, CSc.](#) (alternate examiner)

Supervisor

[doc. MUDr. Svatopluk Synek, CSc.](#)

[Department of Ophthalmology and Optometry - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Supplier department: [Department of Ophthalmology and Optometry - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Timetable

Mon 11. 12. 13:00–14:40 [KOM 200](#)

Prerequisites (in Czech)

[VL0L7X1a Ophthalmology - practice](#)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Course objectives

Annotation: survey of new moderne diagnostic and therapeutic methods in ophthalmology

Syllabus

- survey of new moderne diagnostic and therapeutic methods in ophthalmology

Literature

- ROZSÍVAL, Pavel. Oční lékařství. Vyd. 1. Praha: Karolinum, 2006. 373 s. ISBN 8024612135. [info](#)
- KRAUS, Hanuš. Kompendium očního lékařství. Vyd. 1. Praha: Grada, 1997. 341 s. ISBN 8071690791. [info](#)

Teaching methods

lecture

Assessment methods

Prerequisite is credit of ophthalmology lesson. The credit is given for attendance in the lesson.

Language of instruction

Czech

Further comments (probably available only in Czech)

Study Materials

The course is taught annually.

Listed among pre-requisites of other courses

- **VLCH11XX Surgery - State Exam**
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) // [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) // [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) // [VSAJ0222](#) // [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- **VLPD11XX Paediatrics - State Exam**
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) // [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) // [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) // [VSAJ0222](#) // [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- **VLPG11XX Obstetric and Gynaecology - State Exam**
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && [VLVL9X66c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) // [VLPS071](#), [VSAT081](#), [VSNO071](#), [VLKA091](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSDL071](#), [VLRL041](#), [VLIA081](#), [VLKM081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VSAJ0222](#) // [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- **VLRL11XX Family Medicine and Geriatrics**
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) // [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLIN9X22](#) && [VLPL9X1](#) && [VLON091](#) && VYCET(3, [VLPS07X](#) // [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) // [VSAJ0222](#) // [VSNJ0222](#)) (Do I meet enrolment requirements?)
- **VLVL11XX Internal Medicine - State Exam**
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) &&

[VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) // [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) // [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VRL041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) // [VSAJ0222](#) // [VSNJ0222](#)) && [VSSP03X](#) (*Do I meet enrolment requirements?*)

- [VLZPI1XX Public Health - State Exam](#)
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) // [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) // [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VRL041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) // [VSAJ0222](#) // [VSNJ0222](#)) && [VSSP03X](#) (*Do I meet enrolment requirements?*)

Teacher's information

Podmínkou pro účast je absolvování stáží z-očního lékařství. Předmět je ukončen zápočtem za absolvování přednášky. Prerequisite is credit of ophthalmology lesson. The credit is given for attendance in the lesson.

The course is also listed under the following terms [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#), [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VS NV041c Neuroscience - practice ✨

Faculty of Medicine

Spring 2016

Extent and Intensity

0/1.5/0. 1 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Mohamed Al-Kubati, CSc.](#) (seminar tutor)

[prof. PharmDr. Petr Babula, Ph.D.](#) (seminar tutor)

[doc. MUDr. Markéta Bébarová, Ph.D.](#) (seminar tutor)

[Ksenia Budinskaya](#) (seminar tutor)

[MUDr. Kateřina Fialová, Ph.D.](#) (seminar tutor)

[Ing. Jana Hrušková](#) (seminar tutor)

[MUDr. Jan Novák](#) (seminar tutor)

[prof. MUDr. Marie Nováková, Ph.D.](#) (seminar tutor)

[MUDr. Zuzana Nováková, Ph.D.](#) (seminar tutor)

[doc. Ing. Michal Pásek, Ph.D.](#) (seminar tutor)

[MUDr. Tibor Stračina](#) (seminar tutor)

[Mgr. Jana Svačinová, Ph.D.](#) (seminar tutor)

[Šárka Bébarová](#) (assistant)

[MUDr. Tomáš Boušek](#) (assistant)

[David Dufek](#) (assistant)

[MUDr. Aleš Dvořák](#) (assistant)

[Mirka Hanousková](#) (assistant)

[MUDr. Nikola Kosová](#) (assistant)

[MUDr. Zuzana Kubecová](#) (assistant)

[Mgr. Lea Neumayerová](#) (assistant)

[MUDr. Nikola Nováková](#) (assistant)

[MUDr. Michael Sekej](#) (assistant)

[MUDr. Filip Šustr](#) (assistant)

[MUDr. Veronika Tomášková](#) (assistant)

Supervisor

[prof. RNDr. Petr Dubový, CSc.](#)

[Department of Physiology - Theoretical Departments - Faculty of Medicine](#)

Supplier department: [Department of Physiology - Theoretical Departments - Faculty of Medicine](#)

Timetable of Seminar Groups

VSNV041c/01: Mon 4. 4. to Fri 13. 5. Mon 7:30–10:00 [A20/114](#)

VSNV041c/02: Mon 4. 4. to Fri 13. 5. Mon 7:30–10:00 [A20/114](#)

VSNV041c/03: Mon 4. 4. to Fri 13. 5. Mon 7:30–10:00 [A20/114](#)

VSNV041c/04: Mon 4. 4. to Fri 13. 5. Mon 13:30–16:00 [A20/114](#), K. Fialová

VSNV041c/05: Mon 4. 4. to Fri 13. 5. Mon 13:30–16:00 [A20/114](#)

VSNV041c/06: Mon 4. 4. to Fri 13. 5. Mon 13:30–16:00 [A20/114](#)

VSNV041c/07: Mon 4. 4. to Fri 13. 5. Wed 13:30–16:00 [A20/114](#)

VSNV041c/08: Mon 4. 4. to Fri 13. 5. Wed 10:30–13:00 [A20/114](#)

VSNV041c/09: Mon 4. 4. to Fri 13. 5. Wed 13:30–16:00 [A20/114](#)

VSNV041c/10: Mon 4. 4. to Fri 13. 5. Wed 7:30–10:00 [A20/114](#)

VSNV041c/11: Mon 4. 4. to Fri 13. 5. Wed 7:30–10:00 [A20/114](#), M. Al-Kubati

VSNV041c/12: Mon 4. 4. to Fri 13. 5. Thu 13:30–16:00 [A20/114](#)

VSNV041c/13: Mon 4. 4. to Fri 13. 5. Wed 13:30–16:00 [A20/114](#)

VSNV041c/14: Mon 4. 4. to Fri 13. 5. Mon 10:30–13:00 [A20/114](#)

VSNV041c/15: Mon 4. 4. to Fri 13. 5. Mon 10:30–13:00 [A20/114](#), K. Fialová

VSNV041c/16: Mon 4. 4. to Fri 13. 5. Thu 13:30–16:00 [A20/114](#)

VSNV041c/17: Mon 4. 4. to Fri 13. 5. Thu 13:30–16:00 [A20/114](#)

VSNV041c/18: Mon 4. 4. to Fri 13. 5. Wed 10:30–13:00 [A20/114](#)

VSNV041c/30: No timetable has been entered into IS.

VSNV041c/31: No timetable has been entered into IS.

VSNV041c/32: No timetable has been entered into IS.

VSNV041c/33: No timetable has been entered into IS.

VSNV041c/34: No timetable has been entered into IS.

VSNV041c/35: No timetable has been entered into IS.

VSNV041c/36: No timetable has been entered into IS.

VSNV041c/37: No timetable has been entered into IS.

Prerequisites (in Czech)

[VSFY0321c Physiology I - practice](#) && [VSFY0321s Physiology I - seminar](#) &&
[VSAN0333s Anatomy III -sem.](#) && [VSAN0333c Anatomy III - p](#)
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

At the end of the course, students should be able to apply practically some methods used for examination of the functions of human nervous system. Students will be capable of interpreting the acquired records with respect to physiological processes taking place in human body. Furthermore, the students will derive and calculate other parameters and indices routinely used in clinical practice. Students will be able to evaluate the results obtained both by measurement and by calculation, and to explain possible deviations.

Syllabus

- Examination of reflexes in man. Recording of Achille's tendon reflex -mechanical and electrical respons. Estimation of reaction time. Examination of muscle tone. Stabilometry. Vertigo and nystagmus. Cutaneous sense organs. Estimation of visual acuity. Accomodation, Scheiner's experiment. Visual field and blind spot. Vision in dark. Observation of ocular fundus. Purkyně's images. Astigmatism. Examination of colour blindness. Electrooculography. Electroencephalography. Event-related potentials.

Literature

recommended literature

- [NOVÁKOVÁ, Zuzana](#), [Robert ROMAN](#), [Mohamed AL-KUBATI](#), [Markéta BĚBAROVÁ](#), [Pavel BRAVENÝ](#), [Alena DAMBORSKÁ](#), [Bohumil FIŠER](#), [Nataša HONZÍKOVÁ](#), [Miloslav KUKLETA](#), [Drahlava MRÁZOVÁ](#), [Jiří MOUDR](#), [Kateřina NOGOVÁ](#), [Marie NOVÁKOVÁ](#), [Zuzana NOVÁKOVÁ](#), [Michal PÁSEK](#), [Miroslav SVĚTLÁK](#), [Zdeněk WILHELM](#) and [Eva ZÁVODNÁ](#). Praktická cvičení z fyziologie. 2. dotisk 1. vyd. Brno: Masarykova univerzita, 2011. 118 pp. ISBN 978-80-210-4391-6. [info](#)
- [AL-KUBATI, Mohamed](#), [Markéta BĚBAROVÁ](#), [Pavel BRAVENÝ](#), [Alena DAMBORSKÁ](#), [Bohumil FIŠER](#), [Nataša HONZÍKOVÁ](#), [Miloslav KUKLETA](#), [Drahlava MRÁZOVÁ](#), [Jiří MOUDR](#), [Kateřina FIALOVÁ](#), [Marie NOVÁKOVÁ](#), [Zuzana NOVÁKOVÁ](#), [Michal PÁSEK](#), [Robert ROMAN](#), [Miroslav SVĚTLÁK](#), [Zdeněk WILHELM](#) and [Eva ZÁVODNÁ](#). Physiology Practicals. 1. dotisk 1. vyd. Brno: Masarykova univerzita, 2010. 109 pp. ISBN 978-80-210-4409-8. [info](#)

Teaching methods

The course is organized in the form of laboratory practices where students examine each other by given method, and they prepare the report from measured data.

Assessment methods

Credits are given on the basis of full attendance in practices and handling of all laboratory reports.

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

Teacher's information

<http://www.med.muni.cz/fyziol>

Rozpis témat praktických cvičení je vyvěšen na nástěnce Fyziologického ústavu a webových stránkách. Konzultace je možná po osobní domluvě s vyučujícím.

A list of all laboratory practice topics is post up on notice board of Department of Physiology and on its website. Consultations are possible after personal arrangement with the teacher.

The course is also listed under the following terms [Spring 2000](#), [Spring 2001](#), [Spring 2002](#), [Spring 2003](#), [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#).

VSNV041p Neuroscience - lecture ✨

Faculty of Medicine

Spring 2019

Extent and Intensity

4/0/0. 6 credit(s). Type of Completion: zk (examination).

Teacher(s)

[prof. RNDr. Petr Dubový, CSc.](#) (lecturer), [MUDr. Ivana Hradilová Sviženská, CSc.](#) (deputy)

[prof. PharmDr. Petr Babula, Ph.D.](#) (lecturer)

[doc. MUDr. Markéta Bébarová, Ph.D.](#) (lecturer)

[MUDr. Kamil Ďuriš, Ph.D.](#) (lecturer)

[MUDr. Jaromír Gumulec, Ph.D.](#) (lecturer)

[prof. Ing. Olga Křižanová, Dr.Sc.](#) (lecturer)

[prof. MUDr. Marie Nováková, Ph.D.](#) (lecturer)

[MUDr. Zuzana Nováková, Ph.D.](#) (lecturer)

[doc. RNDr. Omar Šerý, Ph.D.](#) (lecturer)

[Šárka Bébarová](#) (assistant)

[MUDr. Ilona Klusáková, Ph.D.](#) (assistant)

[Mgr. Lea Neumayerová](#) (assistant)

[Dana Procházková](#) (assistant)

[Lumír Trenčanský](#) (assistant)

[MUDr. Vít Žampachová](#) (assistant)
[Mgr. Zdenka Žampachová](#) (assistant)

Supervisor

[prof. RNDr. Petr Dubový, CSc.](#)

[Department of Physiology - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [Mirka Hanousková](#)

Supplier department: [Department of Physiology - Theoretical Departments - Faculty of Medicine](#)

Prerequisites (in Czech)

[VSFY0321c Physiology I - practice](#) && [VSFY0321s Physiology I - seminar](#) &&

[VSAN0333s Anatomy III -sem.](#) && [VSAN0333c Anatomy III - p](#)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Neurosciences course is based on the integration of morphology and function. At the end of the course, students will recall sufficient theoretical knowledge required for physician. Students should be able to understand and explain basic principles of human central and peripheral nervous systems - neuronal communication, perception, movement, learning and memory, motivational systems and emotions. Students will understand neurophysiological mechanisms of behaviour. Knowledge obtained in this course will help students in the future to understand pathophysiology mechanisms and clinical consequences of impairments of the nervous system.

Syllabus

- Brain and behavior, environment of the neuron. Structural arrangement of the nervous system. Blood-brain barrier, nervous tissue. Neurons as the signaling units of NS. Chemical synapses. Information processing in the NS. Principles of sensation and perception. Visual pathways. Physiological optics, information processing in the retina. Perception of motion, depth, form and color. Pathways of auditory, vestibular, olfactory, and gustatory systems. Auditory and vestibular systems, chemical senses. Somatosensory and viscerosensory pathways. Central representation of the touch. Pain and stress analgesia. Somatomotor pathways. Pathways of the cerebellum and the basal ganglia. Spinal motor reflexes. Eye movements. Posture, locomotion and grasping movements. Motor control in man (clinical findings). Modulatory systems of the brain. Autonomic nervous system. Limbic forebrain and motivation. Emotions. Structure of the cerebral cortex. Arousal mechanisms, sleep. EEG. Learning and memory. Language, functional asymmetry of the hemispheres. Consciousness and attention. Prefrontal cortex. Ontogenic development of the brain, critical periods. Neuronal plasticity and regeneration.

Literature

recommended literature

- *BARRETT, Kim E. Ganong's review of medical physiology. 24th ed. Maidenhead: McGraw-Hill, 2012. 752 s. ISBN 9780071780032. [info](#)*
- *GANONG, William F. Přehled lékařské fyziologie. 20. vyd. Praha: Galén, 2005. xx, 890. ISBN 8072623117. [info](#)*

not specified

- *HALL, John E. and Arthur C. GUYTON. Guyton and Hall textbook of medical physiology. 12th ed. Philadelphia, Pa.: Saunders/Elsevier, 2011. xix, 1091. ISBN 9781416045748. [info](#)*
- *KRÁLÍČEK, Petr. Úvod do speciální neurofyziologie. 3., přeprac. a rozš. vyd. Praha: Galén, 2011. x, 235. ISBN 9788072626182. [info](#)*
- *JANČÁLEK, Radim and Petr DUBOVÝ. Základy neurověd v zubním lékařství (Basis of Neuroscience for Stomatology). 2nd. Brno: Portál Lékařské fakulty Masarykovy univerzity, 2011. 117 pp. Multimediální podpora výuky klinických a zdravotní. ISSN 1801-6103. [info](#)*
- *DUBOVÝ, Petr. Struktura a dráhy nervové soustavy člověka (Structure and Pathways of the Human Nervous System). Brno: Vydavatelství MU Brno, 1998. 176 pp. ISBN 80-210-1927-1. [info](#)*

Teaching methods

Lectures.

Assessment methods

Neuroscience-lecture course is terminated by a written test: the students write answers to 3 questions within a two hours. In the 1st question the emphasis is on neuroanatomical knowledge (grade A-F) and in the 2nd question on neurophysiological knowledge (grade A-F). The 3rd question is integrative and tests the student's ability to describe the topic from the point of view of neuroanatomy (grade A-F) and neurophysiology (grade A-F) together. To pass the exam, student must obtain at least grade E in each evaluated part of the test.

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

The course is taught: every week.

Listed among pre-requisites of other courses

- [VLDM7X1c Diagnostic Imaging Methods - practice](#)
[VLCPO622c](#) && [VSIP0622c](#) && [VSPF0622c](#) && [VSPA0622c](#) && [VSNV041p](#)
&& [VLFA0621c](#) (Do I meet enrolment requirements?)
- [VLDM7X1p Diagnostic Imaging Methods - lecture](#)
[VLCPO622c](#) && [VSIP0622c](#) && [VSPF0622c](#) && [VSPA0622c](#) && [VSNV041p](#)
&& [VLFA0621c](#) (Do I meet enrolment requirements?)

- [VSLP7X1 Medical Psychology - lecture](#)
[VSNV041p](#) && [VSPF0622c](#) && ([VLCP0622c](#) // [STCP0622c](#)) && [VSIP0622c](#) && [VLFA0621c](#) (*Do I meet enrolment requirements?*)
- [VSLP7X1a Medical Psychology - practice](#)
[VSNV041p](#) && [VSPF0622c](#) && ([VLCP0622c](#) // [STCP0622c](#)) && [VSIP0622c](#) && [VLFA0621c](#) (*Do I meet enrolment requirements?*)

Teacher's information

<http://www.med.muni.cz/fyziol>

Rozpis témat přednášek je vyvěšen na nástěnce Fyziologického ústavu a webových stránkách.

A list of all lecture topics is post up on notice board of Department of Physiology and on its website.

The course is also listed under the following terms [Spring 2000](#), [Spring 2001](#), [Spring 2002](#), [Spring 2003](#), [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#).

VSOT7X1c Otorhinolaryngology - practice ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/3. 2 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Hana Binková, Ph.D.](#) (seminar tutor)

[Jaroslava Kamenická](#) (seminar tutor)

[MUDr. Michaela Máchalová, Ph.D.](#) (seminar tutor)

[MUDr. Jan Rottenberg, Ph.D.](#) (seminar tutor)

[doc. MUDr. Pavel Smílek, Ph.D.](#) (seminar tutor)

[prof. MUDr. Ivo Šlapák, CSc.](#) (seminar tutor)

[MUDr. Pavla Urbánková, Ph.D.](#) (seminar tutor)

[Eva Podborská](#) (assistant)

[Bc. Ing. Martina Zatloukalová](#) (assistant)

Supervisor

[MUDr. Břetislav Gál, Ph.D.](#)

[Department of Otorhinolaryngology and Head and Neck Surgery - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Contact Person: [Eva Podborská](#)

Supplier department: [Department of Otorhinolaryngology and Head and Neck Surgery - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Timetable of Seminar Groups

VSOT7X1c/09: Mon 30. 10. to Wed 1. 11. each working day 7:30–12:20 [N02303](#), Thu 2.

11. to Fri 3. 11. each working day 7:30–12:20 [N04006](#); and Mon 6. 11. 7:30–12:20

[N02303](#), Tue 7. 11. 7:30–12:20 [N04006](#), Wed 8. 11. 7:30–9:45 [N02303](#)
 VSOT7X1c/10: Mon 2. 10. to Wed 4. 10. each working day 7:30–12:20 [N02303](#), Thu 5. 10. to Fri 6. 10. each working day 7:30–12:20 [N04006](#); and Mon 9. 10. 7:30–12:20 [N02303](#), Tue 10. 10. 7:30–12:20 [N04006](#), Wed 11. 10. 7:30–9:45 [N02303](#)
 VSOT7X1c/11: Mon 18. 9. to Wed 20. 9. each working day 7:30–12:20 [N02303](#), Thu 21. 9. to Fri 22. 9. each working day 7:30–12:20 [N04006](#); and Mon 25. 9. 7:30–12:20 [N02303](#), Tue 26. 9. 7:30–12:20 [N04006](#), Wed 27. 9. 7:30–9:45 [N02303](#)
 VSOT7X1c/12: Mon 1. 1. to Wed 3. 1. each working day 7:30–12:20 [N02303](#), Thu 4. 1. to Fri 5. 1. each working day 7:30–12:20 [N04006](#); and Mon 8. 1. 7:30–12:20 [N02303](#), Tue 9. 1. 7:30–12:20 [N04006](#), Wed 10. 1. 7:30–9:45 [N02303](#)
 VSOT7X1c/15: Mon 13. 11. to Wed 15. 11. each working day 7:30–12:20 [N02303](#), Thu 16. 11. to Fri 17. 11. each working day 7:30–12:20 [N04006](#); and Mon 20. 11. 7:30–12:20 [N02303](#), Tue 21. 11. 7:30–12:20 [N04006](#), Wed 22. 11. 7:30–9:45 [N02303](#)
 VSOT7X1c/16: Mon 30. 10. to Wed 1. 11. each working day 7:30–12:20 [N02303](#), Thu 2. 11. to Fri 3. 11. each working day 7:30–12:20 [N04006](#); and Mon 6. 11. 7:30–12:20 [N02303](#), Tue 7. 11. 7:30–12:20 [N04006](#), Wed 8. 11. 7:30–9:45 [N02303](#)
 VSOT7X1c/30: Mon 13. 11. to Fri 24. 11. each working day 7:30–12:20 [N02303](#)
 VSOT7X1c/31: Mon 11. 12. to Fri 22. 12. each working day 7:30–12:20 [N02303](#)
 VSOT7X1c/32: Mon 16. 10. to Fri 27. 10. each working day 7:30–12:20 [N02303](#)

Prerequisites

[VSPF0622p Pathophysiol. II - lect.](#) && [VSPA0622p Pathology II - lecture](#) && [VSIP0622c Introduction to internal II-pr](#) && ([VLCP0622c Introduc. to surgery II -pr.](#) // [STCP0622c Clin.exam. in surgery II](#)) && ([STLM0522p Medical Microbiology II-lect.](#) // [VLLM0522p Medical Microbiology II - lect](#)) && ([VLIM051p Immunology - lecture](#) // [STIM051p Immunology-lecture](#))&& [VLFA0621c Pharmacology I - p](#)
 Knowledge of theoretical discipline, especially anatomy and physiology.
 ([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Otorhinolaryngology and head and neck surgery deals with region of head, neck and partially thorax. Technical development of recent years allowed impressive development both as regards diagnosis and treatment. In basic evaluation methods Otorhinolaryngology remains very demanding as for time and technical skillfulness. Very deeply placed spaces of ear, nose, epipharynx, larynx, trachea, oesophagus and region of skull base demand by evaluation and surgery extraordinary ability of orientation, skillfulness, patients and fineness. ENT organs are also very sensitive for perception of pain and abundant reflexes. It all is necessary to respect in training evaluating skill in scholarship. Otorhinolaryngology was one of the first disciplines which use in surgery microscope. Disease of ENT organs is very frequent and ENT used to be placed on third place (behind internal medicine and surgery) as for number of patients. For general

practitioner is ENT region very important, because it creates about 30 % of his patients in out patient room. In pediatric out patient room is this percentage even higher. In Otorhinolaryngology there is also a big amount of emergency and first aid diagnosis which are a threat do death (Bleeding, dyspnea, foreign bodies, corrosions and scalds, sudden hearing loss, acute vertigo etc). Every physician should to be informed about their urgent treatment.

Syllabus

- *1st day (Monday, FNUSA) The hearing and balance system, applied anatomy and physiology, methods of investigation, inspection, palpation, otoscopy - practical training. The basic pathological finding on the ear drum I. - slides, demonstrations of patients. Video - function of hearing system, otoacoustic emissions (OAE). 2nd day (Tuesday, FNUSA) Radiography of the temporal bone (Schueller's view, Stenvers' view, CT), surgical treatment of acute and chronic Otitis Media, reconstructive surgery. Practical course and operating theatre. Stapedotomy - video demonstration. Video: FESS, slides: Ear II, Nose. Nose and paranasal sinuses, applied anatomy and physiology, external inspection and palpation, anterior rhinoscopy - practical course, radiology of the sinuses, classical radical treatment and functional endoscopic sinus surgery (FESS) - video demonstration. Patologic findings - slides. 3rd day (Wednesday, FNUSA) Nasopharynx and oropharynx - applied anatomy and physiology, posterior rhinoscopy - practical training, investigation of the oral cavity and salivary glands, Waldayer's lymphoepithelial ring, functional assessment of the Eustachian tube. Patologic findings - slides. The correction of saddle nose - videodemonstration 4th day (Thursday, FDN) Congenital anomalies of the ear, types of disorder, possibilities of treatment, slides. Otitis media acuta – etiology, otoscopy, diagnosis, therapy – slides, pathologic findings, video demonstration – paracentesis. Complications of middle ear inflammation, therapy, video demonstration – antromastoidectomy. Chronic inflammation of the middle ear – focused on children's age – etiology, diagnosis, therapy, video demonstration – implantation of pressure equalizing tube, myringoplasty. Practical training – otoscopy, presence in evaluation of children patient in outpatient room, presence in operating theatre. 5th day (Friday, FDN) Nasopharynx and oropharynx - applied anatomy and physiology, posterior rhinoscopy - practical training, Waldayer's lymphoepithelial ring, - focused on children's age. Acute and chronic inflammations in tonsil's region, obstructive sleep apnoe syndrome, evaluation, therapy. Video demonstration – tonsilotomy. Practical training – evaluation of nasopharynx and oropharynx. 6th day (Monday, FNUSA) Hypopharynx and Larynx - applied anatomy and physiology, methods of investigation - indirect laryngoscopy and hypopharyngoscopy – practical training, functional disorders of the larynx. Dyspnoe, tracheotomy – video demonstration. 7th day (Tuesday, FDN) Functional endoscopic sinus surgery (FESS) focused on children's age, surgery of choanal atresia, dacryocystorhinostomy. Development of paranasal sinuses, acute and chronic inflammations, complications and their resolution - video demonstrations. Patologic findings - slides. Foreign bodies in otorhinolaryngology – evaluation, methods of extraction, bronchoscopy. Practical training – evaluation of larynx, hypopharynx, rhinoscopy, external neck. 8th day*

(Wednesday, FNUSA) Cervical lymphatic system - applied anatomy and physiology, methods of investigation - practical training. Differential diagnosis of tumors of neck. Head and neck cancer - strategy of treatment. Endoscopy (Microlaryngoscopy and bronchoscopy) - in Otolaryngology. Video demonstration - Restoration of the voice by endolaryngeal surgery.

Literature

required literature

- KLOZAR, Jan. *Speciální otorinolaryngologie*. 1. vyd. Praha: Karolinum, 2005. 224 s. ISBN 8024611252. [info](#)
- UCHYTIL, Bořivoj, [Pavel SMILEK](#), [Rom KOSTŘICA](#) and [Miroslav NOVOTNÝ](#). *Vyšetřovací metody a základní diagnostika v otorinolaryngologii (Methods of investigation and basic diagnosis in otorhinolaryngology)*. 1. vyd. Praha: Triton, 2002. 254 pp. Edice Levou zadní. ISBN 80-7254-190-0. [info](#)

recommended literature

- ČADA, Karel. *Základy otorinolaryngologie*. 2. podstatně přeprac. vyd. Brno: Masarykova univerzita, 1996. 250 s. ISBN 80-210-1342-7. [info](#)
- [SMILEK, Pavel](#), [Rom KOSTŘICA](#), Zdenek MECHL and [Vladimír SPURNÝ](#). *Maligní nádory hlavy a krku (Head and neck malignant tumors)*. In *Diagnostické a léčebné postupy u maligních chorob*. 1. vyd. Praha: Grada Publishing, spol. s r.o., 2002. p. 21-31. ISBN 80-7169-792-3. [info](#)
- Hybášek Ivan. *Ušní, nosní a krční lékařství*
- ŠLAPÁK, Ivo. *Dětská otorinolaryngologie*. 1. vyd. Praha: Mladá fronta, 2013. 333 s. ISBN 9788020429001. [info](#)
- UCHYTIL, Bořivoj. *Vyšetřovací metody a základní diagnostika v otorinolaryngologii*. 1. vyd. Praha: Triton, 2002. 254 s. ISBN 8072541900. [info](#)
- ČADA, Karel. *Základy otorinolaryngologie*. 2. podstatně přeprac. vyd. Brno: Masarykova univerzita, 1996. 250 s. ISBN 80-210-1342-7. [info](#)
- *Colour atlas of otorhinolaryngology :slide collection : The ear*. Edited by Bruce Benjamin. 1st ed. London: Martin Dunitz, 1995. 200 diapoz. ISBN 1-85317-278-2. [info](#)
- *Manual of middle ear surgery :mastoid surgery and reconstructive procedures*. Edited by Mirko Tos. [1st ed.]. Stuttgart: Georg Thieme Verlag, 1995. xii, 432 p. ISBN 3-13-114901-9. [info](#)
- BECKER, Walter, Hans Heinz NAUMANN, Carl Rudolf PFALTZ and Richard A. BUCKINGHAM. *Ear, nose and throat diseases : a pocket reference*. 2nd rev. ed. Stuttgart: Thieme, 1994. xiv, 583. ISBN 3136712021. [info](#)

Teaching methods

Lectures, practical training of basic ENT evaluation, video sessions, presentations by professionals in the inpatient ward and operating theatre.

Assessment methods

Attendance in practices and seminars is compulsory; the presence of students is recorded. Teaching methods: lectures, discussion, practical training in ENT evaluation,

presentation of individual cases – videos, pictures, watching surgery in operating theatre.
Final appreciation- student will prove his ability to provide ENT examination and recognize normal ENT finding.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course can also be completed outside the examination period.

The course is taught each semester.

Listed among pre-requisites of other courses

- [VLAM9X1c Intensive Care Medicine - practice](#)
([VLFA0822c](#) // [VLFA0722c](#)) && [VLCH0832c](#) && [VSIP0622p](#) && [VLCP0622p](#)
&& [VLDM7X1c](#) && [VSOT7X1c](#) && [VLIN7X21](#) ([Do I meet enrolment requirements?](#))
- [VLAM9X1p Intensive Care Medicine - lectures](#)
([VLFA0822c](#) // [VLFA0722c](#)) && [VLCH0832c](#) && [VLCH0731c](#) && [VSPF0622p](#)
&& [VSIP0622c](#) && [VLCP0622p](#) && [VLDM7X1c](#) && [VSOT7X1c](#) &&
[VLIN7X21](#) ([Do I meet enrolment requirements?](#))
- [VLON091 Clinical Oncology - lecture](#)
([VLFA0822c](#) // [VLFA0722c](#)) && [VSIP0622p](#) && [VLCP0622p](#) && [VLCH0832c](#)
&& [VSOT7X1c](#) ([Do I meet enrolment requirements?](#))
- [VLON091c Clinical Oncology - practice](#)
([VLFA0822c](#) // [VLFA0722c](#)) && [VSIP0622p](#) && [VLCP0622p](#) && [VLCH0832c](#)
&& [VSOT7X1c](#) ([Do I meet enrolment requirements?](#))
- [VLPD0932c Pediatrics II - practice](#)
[VLFA0722p](#) && [VLPD7X31c](#) && [VSOT7X1c](#) && [VLDM7X1c](#) && [VSIP0622p](#)
&& [VLCP0622p](#) && [VLKG7X1c](#) ([Do I meet enrolment requirements?](#))
- [VLPD0932p Pediatrics II - lectures](#)
([VLFA0822p](#) // [VLFA0722p](#)) && [VLPD7X31c](#) && [VSOT7X1c](#) && [VLDM7X1c](#)
&& [VSIP0622p](#) && [VLCP0622p](#) && [VLKG7X1c](#) ([Do I meet enrolment requirements?](#))
- [VLVL101p Internal medicine - lecture](#)
([VLFA0822p](#) // [VLFA0722p](#)) && [VSIP0622p](#) && [VLDM7X1p](#) && ([VLVL7X65c](#) // [VLVL9X65c](#)) && [VSOT7X1c](#) && [VLIN7X21](#) ([Do I meet enrolment requirements?](#))

Teacher's information

K výuce je zapotřebí plášť, prezůvky. Výuka probíhá v posluchárně v budově A - hlavní budova z Pekařské ulice, ve 2. patře. Začátek stáží ve FNUSA je vždy v 7:30hod. V případě absence se nahrazuje stáž po domluvě s vyučujícím.

The course is also listed under the following terms [Autumn 1999](#), [Spring 2000](#), [Autumn 2000](#), [Spring 2001](#), [Autumn 2001](#), [Spring 2002](#), [Autumn 2002](#), [Spring 2003](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#).

VSOT7X1p Otorhinolaryngology - lecture *

Faculty of Medicine

Autumn 2019

Extent and Intensity

1/0/0. 3 credit(s). Recommended Type of Completion: zk (examination). Alternate Types of Completion: RZk (examination).

Teacher(s)

[MUDr. Hana Binková, Ph.D.](#) (lecturer)
[prof. MUDr. Rom Kostřica, CSc.](#) (lecturer)
[MUDr. Michaela Máchalová, Ph.D.](#) (lecturer)
[MUDr. Jan Rottenberg, Ph.D.](#) (lecturer)
[doc. MUDr. Pavel Smilek, Ph.D.](#) (lecturer)
[prof. MUDr. Ivo Šlapák, CSc.](#) (lecturer)
[MUDr. Pavla Urbánková, Ph.D.](#) (lecturer)
[Jaroslava Kamenická](#) (assistant)
[Eva Podborská](#) (assistant)
[Bc. Ing. Martina Zatloukalová](#) (assistant)

Supervisor

[MUDr. Břetislav Gál, Ph.D.](#)
[Department of Otorhinolaryngology and Head and Neck Surgery - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)
Contact Person: [Eva Podborská](#)
Supplier department: [Department of Otorhinolaryngology and Head and Neck Surgery - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Timetable

Mon 9. 10. to Fri 1. 12. Thu 13:20–15:00 [N02303](#)

- Timetable of Seminar Groups:

VSOT7X1p/VLA: Mon 9. 10. to Fri 1. 12. Tue 13:20–15:00 [N02303](#)

Prerequisites (in Czech)

[VSPF0622p Pathophysiol. II - lect.](#) && [VSPA0622p Pathology II - lecture](#) && [VSIP0622c Introduction to internal II-pr](#) && ([VLCP0622c Introduc. to surgery II -pr.](#) // [STCP0622c Clin.exam. in surgery II](#)) && ([STLM0522p Medical Microbiology II-lect.](#) // [VLLM0522p Medical Microbiology II - lect](#)) && ([VLIM051p Immunology - lecture](#) // [STIM051p Immunology-lecture](#))&& [VLFA0621c Pharmacology I - p](#)
(Do I meet enrolment requirements?)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Main objectives of otorhinolaryngologic course are to give information about applied anatomy and physiology of head and neck and to teach students basic principles of diagnosis and treatment of head and neck diseases.

Syllabus

- *AS.MUDr. Jan Rottenberg, Phd.: Basic principles of Audiology Hearing disorder; audiometry – fundamental physical and acoustic concepts; Pure-Tone Audiometry, Speech audiometry, Electric response audiometry, Otoacoustic emissions; hearing aids; cochlear implant. As. MUDr. Rottenberg Jan, PhD.: Basics of neurootology*
- *The lecture summarizes basic methods of investigation in neurootology. It is divided into the four basic themes:*
 - *1. Olfactometry - investigation of smell, diferential diagnosis of smell disorders*
 - *2. Gustometry - investigation of taste, hypogeusia and ageusia as a symptom, diagnostic consequences*
 - *3. Audiometry - summary of methods (this theme is a subject of other lecture)*
 - *4. Equilibriometry - investigation of vestibular organs, diferential diagnosis of vestibular disorders.*
- *The lecturer supposes a basic knowledge from anatomy and physiology of sensory organs and basic knowledge of neurology (vestibular disorders)*
- *As. MUDr. Rottenberg Jan, PhD.: Clinical anatomy of anterior and lateral skull base*
- *The lecture summarizes important data of topographical anatomy of the skull base from clinical point of view and its practical consequences to clinical symptomatology of skull base diseases, operation techniques and approaches and its complications:*
 - *1. Anatomy, development and variability of paranasal sinuses, functional endoscopic sinus surgery and its complications*
 - *2. Neural syndroms of the anterior skull base*
 - *3. Neural syndrom of the lateral skull base*
 - *4. The most frequent tumours of the lateral skull base and its clinical symptomatology*
 - *5. Types of facial nerve palsy and their topodiagnosics*
 - *6. The subject of skull base surgery*
- *The lecturer supposes a basic anatomical knowledge and basic orientation in otolaryngology.*
- *Ass. prof. MUDr. P. Smilek, PhD., Odb. as. MUDr. H.Binková, Ph.D.: Emergency and First Aid Procedures*
 - *1. Bleeding (nasal, form larynx, trachea, oesophagus and ear)*
 - *2. Dyspnea(diferential diagnosis, tracheotomy, intubation, care of tracheostomy)*
 - *3. Foreign bodies (in the hypopharynx, esophagus, larynx, trachea, bronchi, nose and ear)*
 - *4. Corrosion and scalds (in the mouth and oesophagus)*
- *Ass. prof. MUDr. P. Smilek, PhD.: Basics principles in ENT Oncology*
 - *1. Etiology*
 - *2. Prognosis of Head and Neck cancer*

- 3. Basic strategy of treatment
- 4. Treatment of lymphnode metastasis
- 5. Cancer of the nose and paranasal sinuses
- 6. Cancer of the epipharynx
- 7. Cancer of the Oropharynx
- 8. Cancer of the Larynx
- 9. Follow up - very important Prof. MUDr. Rom Kostřica, PhD., As. MUDr. Pavla Urbánková, PhD. Serious complications of inflammatory disease in ENT; Uniqueness of inflammatory disease in ENT; Primary sources of inflammation; Mastoiditis acuta; Otogenic infective complications; Intracranial complications of I. phase and II. phase; Primary source: Nose – Sinusitis; Nasal furuncle; Orbital sinusitis complications; Possible intracranial complications of sinusitis; Primary source: Oral cavity Base of oral cavity; Cheilitis; Primary source: pharynx; Abscessus et phlegmona peritonsillaris; Abscessus et phlegmona parapharyngealis; Sepsis tonsillogenes (angina septica, sepsis post anginam, tromboflebitis v. jug. int.); Mediastinal complications of deep neck inflammation

Literature

- [SMILEK, Pavel](#), [Rom KOSTŘICA](#), Zdenek MECHL and [Vladimír SPURNÝ](#). Maligní nádory hlavy a krku (Head and neck malignant tumors). In Diagnostické a léčebné postupy u maligních chorob. 1. vyd. Praha: Grada Publishing, spol. s r.o., 2002. p. 21-31. ISBN 80-7169-792-3. [info](#)
- UCHYTIL, Bořivoj, [Pavel SMILEK](#), [Rom KOSTŘICA](#) and [Miroslav NOVOTNÝ](#). Vyšetřovací metody a základní diagnostika v otorinolaryngologii (Methods of investigation and basic diagnosis in otorhinolaryngology). 1. vyd. Praha: Triton, 2002. 254 pp. Edice Levou zadní. ISBN 80-7254-190-0. [info](#)
- [HYBÁŠEK, Ivan](#). Ušní, nosní a krční lékařství (Ear, nose and throat medicine). 1. vyd. Praha: Galén, Karolinum, 1999. 220 pp. 1. ISBN 80-7262-017-7. [info](#)
- NOVOTNÝ, Miroslav, Alaš HAHN, [Zdeněk BOLELOUCKÝ](#) and Helena VAVERKOVÁ. Závratě, diagnostika a léčba (Dizziness, diagnostics and treatment). Stuttgart: Aesopus Verlag, 1997. p. 158. ISBN 3-7773-1744-6. [info](#)
- ČADA, Karel. Základy otorinolaryngologie. 2. podstatně přeprac. vyd. Brno: Masarykova univerzita, 1996. 250 s. ISBN 80-210-1342-7. [info](#)
- Kryoterapie v medicíně. Edited by Rom Kostřica. 1. vyd. Brno: Vydavatelství Masarykovy univerzity, 1995. 124 s. ISBN 80-210-1249-8. [info](#)
- BECKER, Walter, Hans Heinz NAUMANN, Carl Rudolf PFALTZ and Richard A. BUCKINGHAM. Ear, nose and throat diseases : a pocket reference. 2nd rev. ed. Stuttgart: Thieme, 1994. xiv, 583. ISBN 3136712021. [info](#)

Teaching methods

Lecture

Assessment methods

Attendance in practices and seminars is compulsory, the presence of students is recorded. Teaching methods: lectures, discussion, practical training in ENT evaluation, presentation of individual cases – videos, pictures. Final grade: oral examination The

students are expected to come to the Practice properly prepared, including the corresponding theoretical backgrounds.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course can also be completed outside the examination period.

The course is taught each semester.

Listed among pre-requisites of other courses

- [VLCHI1XX Surgery - State Exam](#)
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) // [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && [VYCET\(3, VLPS07X // VLPS071, VSAT081, VLKA091, VSNO071, VSPM071, VLKB091, VLKF091, BMBS051, VLPM071, VLEP041, VLIA081, VLKM081, VLRL041, VLTL081, VSDL071, VSAL081, VSFP071\)](#) && [VLCH9X33c](#) && ([VLAJ0222](#) // [VSAJ0222](#) // [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [VLPII1XX Paediatrics - State Exam](#)
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) // [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && [VYCET\(3, VLPS07X // VLPS071, VSAT081, VLKA091, VSNO071, VSPM071, VLKB091, VLKF091, BMBS051, VLPM071, VLEP041, VLIA081, VLKM081, VLRL041, VLTL081, VSDL071, VSAL081, VSFP071\)](#) && [VLCH9X33c](#) && ([VLAJ0222](#) // [VSAJ0222](#) // [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [VLPGI1XX Obstetric and Gynaecology - State Exam](#)
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && [VLVL9X66c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && [VYCET\(3, VLPS07X // VLPS071, VSAT081, VSNO071, VLKA091, VSPM071, VLKB091, VLKF091, BMBS051, VLPM071, VLEP041, VLTL081, VSDL071, VSAL081, VSAL082, VSDL071, VLRL041, VLIA081, VLKM081, VSFP071\)](#) && [VLCH9X33c](#) && ([VSAJ0222](#) // [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)
- [VLVLI1XX Internal Medicine - State Exam](#)
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) // [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) &&

[VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) // [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VRL041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) // [VSAJ0222](#) // [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

- [VLZPIIXX Public Health - State Exam](#)
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) // [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLS7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) // [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VRL041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) // [VSAJ0222](#) // [VSNJ0222](#)) && [VSSP03X](#) (Do I meet enrolment requirements?)

Teacher's information

Přednášky jsou koncipovány tak, že je přednášena látka, která není obsažena v učebnicích, a obsah přednášek bude součástí zkoušky z otolaryngologie. Vzhledem k velmi omezenému rozsahu výuky otorinolaryngologie není akceptována žádná absence. Stáže začínají v 7:30, končí v 12:20, přestávka je v době od 9:45 do 10:05 hod. Stáže probíhají dle následujícího rozpisu: 1. den (pondělí) FN u sv. Anny v Brně, Pekařská 2. den (úterý) FN u sv. Anny v Brně, Pekařská 3. den (středa) FN u sv. Anny v Brně, Pekařská 4. den (čtvrtek) FDN Černopolní 5. den (pátek) FDN Černopolní 6. den (pondělí) FN u sv. Anny v Brně, Pekařská 7. den (úterý) FDN Černopolní 8. den (středa) FN u sv. Anny v Brně, Pekařská Výjimku představuje výuka dvou studijních skupin zároveň v jednom stážovacím termínu, kdy na obou pracovištích probíhá výuka denně, studenti docházejí střídavě na obě pracoviště. Pro praktickou výuku je třeba mít s sebou preživky a pláště.

The course is also listed under the following terms [Autumn 1999](#), [Spring 2000](#), [Autumn 2000](#), [Spring 2001](#), [Autumn 2001](#), [Spring 2002](#), [Autumn 2002](#), [Spring 2003](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#).

VSPA0521c Pathology - practicals ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

3/4/0. 6 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Markéta Hermanová, Ph.D.](#) (lecturer)

[doc. MUDr. Leoš Křen, Ph.D.](#) (lecturer)

[MUDr. Zdeněk Pavlovský](#) (lecturer)
[MUDr. Iva Svobodová](#) (lecturer)
[doc. MUDr. Jiří Wotke, CSc.](#) (seminar tutor)
[MUDr. Věta Žampachová](#) (lecturer)
[MUDr. Jitka Hausnerová](#) (lecturer)
[MUDr. Jan Mazanec](#) (lecturer)
[MUDr. Katarína Múčková](#) (lecturer)
[MUDr. Václav Kubeš](#) (seminar tutor)
[MUDr. Iva Zambo, Ph.D.](#) (lecturer)
[Jarmila Jelínková](#) (assistant)
[Mgr. Iva Holušová](#) (assistant)
[MUDr. Sylva Hotárková](#) (lecturer)
[MUDr. Filip Sokol](#) (lecturer)
[MUDr. Michal Tichý](#) (lecturer)
[MUDr. Lukáš Velecký](#) (lecturer)
[MUDr. Zdeněk Bednařík](#) (seminar tutor)
[MUDr. Lukáš Frola](#) (seminar tutor)
[MUDr. Dominik Gurín](#) (seminar tutor)
[MUDr. Michal Hendrych](#) (seminar tutor)
[MUDr. Miroslava Chovancová](#) (seminar tutor)
[MUDr. Ctirad Macháček](#) (seminar tutor)
[MUDr. Šárka Pokorová](#) (seminar tutor)
[Tetiana Shatokhina](#) (seminar tutor)
[MUDr. Tatiana Stupková](#) (seminar tutor)
[MUDr. Eliška Tvrdíková](#) (seminar tutor)
[MUDr. Jakub Vlažný](#) (seminar tutor)
[Miroslava Čápová](#) (assistant)
[Kamila Kožíšková](#) (assistant)

Supervisor

[prof. MUDr. Miroslav Hirt, CSc.](#)
[Department of Forensic Medicine - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)
Contact Person: [prof. MUDr. Markéta Hermanová, Ph.D.](#)
Supplier department: [Department of Forensic Medicine - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Prerequisites (in Czech)

[VSFY0422p Physiology II - lecture](#) && ([VSBC041p Biochemistry II - I](#) // [VSBC0422p Biochemistry II - I](#)) && [VSAN0333p Anatomy III - lec.](#) && [VSHE0322p Histology and embryology II - I](#) && ([VSLT0221s Bas. Med. Terminol. II - s](#) // [VSLT011s Bas. Med. Terminology - I](#)) && [VSET021 Medical Ethics I](#) && ([VLLM0421c Med. Microbiol.](#) // [STLM0421c Medical Microbiology - practice](#)) && [ZC041 Handling chemical substances](#)
(Do I meet enrolment requirements?)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The main stress in the pathology course is given on macroscopic and microscopic correlation of diseases. After finishing the course the student should be able to: understand the basic pathologic processes (regressive changes, inflammation, oncology, immune disorders); understand and be able to apply the basic classification of oncologic processes; understand the basic classification of etiologically defined processes (esp. infectious diseases); learn the most important methods used in diagnostic process and research (tissue processing, special stainings, histochemistry, immunohistochemistry, electron microscopy, molecular pathology); understand various disorders with respect to individual organs and organ systems; get familiar with the process of autopsy (the process of the autopsy and its evaluation); get familiar with laboratory processing of the tissue samples (description, tissue sampling);

Syllabus

- *General Pathology*
- *Pathology and its role in medicine.*
- *Methodology: autopsy, clinico-pathological correlation, surgical pathology (biopsy), ways of tissue examination and fixation*
- *Cytology.*
- *The disease, its definition and course. External and internal causes of a disease. Prevention.*
- *Death (clinical and biological). Signs of death.*
- *Regressive changes, necrosis (classification, causes). Atrophy: numeric and simple. Dystrophy: metabolic disorders of proteins, glycid, fat, water, minerals and pigments.*
- *Inflammation: definition, local and general signs, microscopic and macroscopic. Inflammation: classification, nomenclature. Immunity disorders, transplantation pathology.*
- *Progressive changes. Regeneration, reparation, wound healing. Hypertrophy, hyperplasia, metaplasia, dysplasia. Pseudotumors: cysts, pseudocysts, inflammatory pseudotumor. Disorders of embryonal development.*
- *Tumors: definition, general properties, etiology, precanceroses. Biology of tumors: benign, malignant and uncertain tumors. Systematic classification of tumors: epithelial, mesenchymal, neuroectodermal and germinal tumors, choriocarcinoma, mesothelioma.*
- *Organ pathology*
- *Disorders of the heart, circulation of the blood and lymph: Congenital and acquired heart diseases, changes in size and shape of the heart. Pathological contents of the pericardium. Inflammation, ischemic heart disease, myocardial infarction. Circulatory failure. Hypertension. Disorders of arteries and veins: atherosclerosis, aneurysm, inflammation, anemia, polycytemia. Local circulatory disorders: thrombosis, embolism. Bleeding. Lymphadenitis. Tumors.*
- *Respiratory disorders: Pathology of upper respiratory pathways: rhinitis, laryngitis, bronchitis. Tumors and pseudotumors. Changes in pulmonary*

ventilation and circulation (venostasis, edema, induration, infarction, embolism). Silicosis and other external pigmentations. Superficial, interstitial and chronic inflammations of the lung. Pulmonary tumors. Pathology of the pleura.

- Disorders of the gastrointestinal tract: Pathology of the oral cavity, pharynx, tonsillae and esophagus. Gastritis, peptic ulcers, gastric tumors. Pathology of the gut: disorders of circulation, inflammation. Appendicitis, malabsorption syndrome. Ileus, herniation. Intestinal tumors. Inflammation of the peritoneum, pathological contents of peritoneal cavity.

Literature

required literature

- POVÝŠIL, Ctibor and Ivo ŠTEINER. *Obecná patologie. 1. vyd. Praha: Galén, 2011. xiii, 290. ISBN 9788072627738. [info](#)*
- POVÝŠIL, Ctibor and Ivo ŠTEINER. *Speciální patologie. 2. vyd. Praha: Galén, 2007. ISBN 978-80-7262-494-2. [info](#)*

recommended literature

- MAČÁK, Jiří, Jana MAČÁKOVÁ and Jana DVOŘÁČKOVÁ. *Patologie. 2., doplněné vydání. Praha: Grada, 2012. 347 stran. ISBN 9788024735306. [info](#)*

not specified

- BUČEK, Jan. *Praktikum z patologie :pítevní cvičení. 4. přepr. vyd. Brno: Masarykova univerzita, 1993. 88 s. ISBN 80-210-0721-4. [info](#)*
- FEIT, Josef, P. MÍREJOVSKÝ and I. STEINER. *Kontrolní otázky z patologie (Test question in pathology). 1. vyd. Praha: Triton, 1998. ISBN 80-85875-89-6. [info](#)*

Teaching methods

Pathology course consists of lectures and practical classes. Teaching consists of theoretical part (lectures) and practical part (laboratory practice). Practical courses consist of histological practice (microscopical and macroscopical images of autoptical and bioptical specimens are demonstrated and discussed) and autoptical practice (presence and ev. participation in autopsies). Hypertext teaching materials for the students are available in our teaching rooms as well in the Internet. These materials contain about 3000 images of various imaging methods (macroscopic, x-ray, CT, MRI images, histological images, partially available as virtual slides, videos). Lectures and practicals are complementary. General information and new updates on classifications as well as images are presented at the lectures. Practical add further information, histopathologically and autoptical experience. Further information is provided in our web-based teaching materials. Various forms of testing is used to give the students proper feedback. Students are supposed to prepare for each practical lesson. The topic for each practical lesson as well as for each lecture is available.

Assessment methods

Lectures: 3 hours/week Practical classes: 4 hours/week; microscopic and autoptic lessons. The course of pathology is closed by oral exam. Attendance is compulsory;

knowledge of the students is periodically tested during the practical classes. Testing can be either oral or written (multichoice tests, essay). Exam after two semesters of pathology has two parts: practical and theoretical. Practical part of the exam takes the form of a discussion over the microscope or over macroscopical or microscopical images. In theoretical part of the exam the students discuss after short preparation randomly selected topics. The list of these topics is available to the students in advance.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught each semester.

The course is taught: every week.

Listed among pre-requisites of other courses

- [VSPA0622p Pathology II - lecture](#)
[VSPA0521c \(Do I meet enrolment requirements?\)](#)

Teacher's information

<http://www.muni.cz/atlascs>

Podrobné informace o průběhu výuky jsou vyvěšeny na vývěškách obou ústavů patologie, na kterých probíhá výuka.

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#), [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VSPA0521p Pathology I - lecture *

Faculty of Medicine

Autumn 2019

Extent and Intensity

3/4/0. 0 credit(s). Type of Completion: -.

Teacher(s)

[prof. MUDr. Markéta Hermanová, Ph.D.](#) (lecturer)

[doc. MUDr. Leoš Křen, Ph.D.](#) (lecturer)

[prof. RNDr. Jana Šmardová, CSc.](#) (lecturer)

[doc. MUDr. Jiří Wotke, CSc.](#) (lecturer)

[MUDr. Věta Žampachová](#) (lecturer)

[Mgr. Iva Holušová](#) (assistant)

[Jarmila Jelínková](#) (assistant)

[MUDr. Pavel Fabian, Ph.D.](#) (lecturer)

[MUDr. Sylva Hotárková](#) (lecturer)

[MUDr. Marta Ježová, Ph.D.](#) (lecturer)

[MUDr. Zdeněk Pavlovský](#) (lecturer)

[MUDr. Filip Sokol](#) (lecturer)

[MUDr. Iva Svobodová](#) (lecturer)

[MUDr. Michal Tichý](#) (lecturer)
[MUDr. Lukáš Velecký](#) (lecturer)
[MUDr. Iva Zambo, Ph.D.](#) (lecturer)
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Prerequisites (in Czech)

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(Do I meet enrolment requirements?)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The main stress in the pathology course is given on macroscopic and microscopic correlation of diseases. After finishing the course the student should be able to: understand the basic pathologic processes (regressive changes, inflammation, oncology, immune disorders); understand and be able to apply the basic classification of oncologic processes; understand the basic classification of etiologically defined processes (esp. infectious diseases); learn the most important methods used in diagnostic process and research (tissue processing, special stainings, histochemistry, immunohistochemistry, electron microscopy, molecular pathology); understand various disorders with respect to individual organs and organ systems; get familiar with the process of autopsy (the process of the autopsy and its evaluation); get familiar with laboratory processing of the tissue samples (description, tissue sampling);

Syllabus

- General Pathology
- Pathology and its role in medicine.
- Methodology: autopsy, clinico-pathological correlation, surgical pathology (biopsy), ways of tissue examination and fixation
- Cytology.

- *The disease, its definition and course. External and internal causes of a disease. Prevention.*
- *Death (clinical and biological). Signs of death.*
- *Regressive changes, necrosis (classification, causes). Atrophy: numeric and simple. Dystrophy: metabolic disorders of proteins, glycid, fat, water, minerals and pigments.*
- *Inflammation: definition, local and general signs, microscopic and macroscopic. Inflammation: classification, nomenclature. Immunity disorders, transplantation pathology.*
- *Progressive changes. Regeneration, reparation, wound healing. Hypertrophy, hyperplasia, metaplasia, dysplasia. Pseudotumors: cysts, pseudocysts, inflammatory pseudotumor. Disorders of embryonal development.*
- *Tumors: definition, general properties, etiology, precanceroses. Biology of tumors: benign, malignant and uncertain tumors. Systematic classification of tumors: epithelial, mesenchymal, neuroectodermal and germinal tumors, choriocarcinoma, mesothelioma.*
- *Organ pathology*
- *Disorders of the heart, circulation of the blood and lymph: Congenital and acquired heart diseases, changes in size and shape of the heart. Pathological contents of the pericardium. Inflammation, ischemic heart disease, myocardial infarction. Circulatory failure. Hypertension. Disorders of arteries and veins: atherosclerosis, aneurysm, inflammation, anemia, polycytemia. Local circulatory disorders: thrombosis, embolism. Bleeding. Lymphadenitis. Tumors.*
- *Respiratory disorders: Pathology of upper respiratory pathways: rhinitis, laryngitis, bronchitis. Tumors and pseudotumors. Changes in pulmonary ventilation and circulation (venostasis, edema, induration, infarction, embolism). Silicosis and other external pigmentations. Superficial, interstitial and chronic inflammations of the lung. Pulmonary tumors. Pathology of the pleura.*
- *Disorders of the gastrointestinal tract: Pathology of the oral cavity, pharynx, tonsillae and esophagus. Gastritis, peptic ulcers, gastric tumors. Pathology of the gut: disorders of circulation, inflammation. Appendicitis, malabsorption syndrome. Ileus, herniation. Intestinal tumors. Inflammation of the peritoneum, pathological contents of peritoneal cavity.*

Literature

required literature

- *POVÝŠIL, Ctibor and Ivo ŠTEINER. Obecná patologie. 1. vyd. Praha: Galén, 2011. xiii, 290. ISBN 9788072627738. [info](#)*
- *POVÝŠIL, Ctibor and Ivo ŠTEINER. Speciální patologie. 2. vyd. Praha: Galén, 2007. ISBN 978-80-7262-494-2. [info](#)*

recommended literature

- *MAČÁK, Jiří, Jana MAČÁKOVÁ and Jana DVOŘÁČKOVÁ. Patologie. 2., doplněné vydání. Praha: Grada, 2012. 347 stran. ISBN 9788024735306. [info](#)*

not specified

- BUČEK, Jan. *Praktikum z patologie :pítevní cvičení. 4. přepr. vyd. Brno: Masarykova univerzita, 1993. 88 s. ISBN 80-210-0721-4. [info](#)*
- FEIT, Josef, P. MĚŘEJOVSKÝ and I. STEINER. *Kontrolní otázky z patologie (Test question in pathology). 1. vyd. Praha: Triton, 1998. ISBN 80-85875-89-6. [info](#)*

Teaching methods

The course of pathology combines lectures (3 hours/week) and practical classes (4 hours/week, consisting of histological and autoptic lessons). Lectures are common for students of both pathology departments of Faculty of Medicine, Masaryk University, and are proportionally performed by lecturers of these institutions. Topics of the lectures correspond with the recommended literature and the information obtained during the lectures represents an integral part of the recommended study materials/literature and is required at the exam. The schedule of the lectures (including lecturers) is released by each pathology department before the beginning of each semester and students will be informed during the practical classes at the beginning of each term as well. Theoretical basis of each learning unit is presented during the practical classes (in a continuity with lectures) using an audio-visual technique. Histopathological findings of autoptical and bioptical samples are presented using the slides (including virtual/digitized ones). Students are expected to describe histopathological findings in a set of selected lesions. The list of required slides will be published before the beginning of a summer semester. Hypertext teaching materials are also used and are available in lecture rooms of the Department of Pathology (University Hospital Brno) and for all students for the individual work on website (www.muni.cz/atlases). During the winter semester, students will take part in at least 2 commented demonstration autopsies performed by a teacher in a demonstration autopsy room. The student will learn the basis of the autopsy technique and later during the semester actively participate in an autopsy of all organ systems. The autopsy classes are finished by macroscopic description of all organ systems and summary of autopsy findings. These classes can be replaced by a demonstration of autopsy findings from the database of the particular pathology department and by the excursion to the bioptical laboratories to obtain the information about basic principles of the laboratory work in pathology departments including the techniques of gross sampling.

Assessment methods

The subject is closed by the oral exam. 3 questions from the topics of general pathology, systemic pathology, and oncology are examined. The list of questions will be available on the information system of the university no later than at the beginning of the summer semester and is obligatory for both departments of pathology. The exam is classified in agreement with study and examinations regulations of Faculty of Medicine, Masaryk University. The credit and successful passing through practical exam represent the prerequisites for an oral theoretical exam. The credits are based on the regular participation at practical classes (2 excused absences are accepted), knowledge of autopsy technique and macroscopic description of pathological findings of organs or organ systems during the autopsy. The practical exam includes descriptive evaluation of 2 histopathological slides (real or digitized), basic differential diagnosis of the studied lesion and a theoretical minimum for the topic. Exact histopathological diagnosis is not requested for successful passing through the practical exam. In case of a failure at

practical exam, the student is not allowed to take the oral exam and is classified F.
Successfully passed practical exam is not repeated in case of a failure at subsequent oral exam.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

Teacher's information

<http://www.muni.cz/atlas>

Podrobné informace o průběhu výuky jsou vyvěšeny na vývěškách obou ústavů patologie, na kterých probíhá výuka.

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#), [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VSPA0622p Pathology II - lecture ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

3/4/0. 6 credit(s). Recommended Type of Completion: zk (examination). Alternate Types of Completion: RZk (examination).

Teacher(s)

[prof. MUDr. Markéta Hermanová, Ph.D.](#) (lecturer)

[MUDr. Sylva Hotárková](#) (lecturer)

[MUDr. Marta Ježová, Ph.D.](#) (lecturer)

[doc. MUDr. Leoš Křen, Ph.D.](#) (lecturer)

[MUDr. Filip Sokol](#) (lecturer)

[MUDr. Iva Svobodová](#) (lecturer)

[prof. RNDr. Jana Šmardová, CSc.](#) (lecturer)

[MUDr. Michal Tichý](#) (lecturer)

[MUDr. Lukáš Velecký](#) (lecturer)

[doc. MUDr. Jiří Wotke, CSc.](#) (lecturer)

[MUDr. Iva Zambo, Ph.D.](#) (lecturer)

[MUDr. Věta Žampachová](#) (lecturer)

[Miroslava Čápková](#) (assistant)

[Mgr. Iva Holušová](#) (assistant)

[Jarmila Jelínková](#) (assistant)

[Kamila Kožíšková](#) (assistant)

Supervisor

[prof. MUDr. Miroslav Hirt, CSc.](#)

[Department of Forensic Medicine - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Contact Person: [doc. MUDr. Leoš Křen, Ph.D.](#)

Supplier department: [Department of Forensic Medicine - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Prerequisites (in Czech)

[VSPA0521c Pathology - practicals](#)

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The main stress in the pathology course is given on macroscopic and microscopic correlation of diseases. After finishing the course the student should be able to: understand the basic pathologic processes (regressive changes, inflammation, oncology, immune disorders); understand and be able to apply the basic classification of oncologic processes; understand the basic classification of etiologically defined processes (esp. infectious diseases); learn the most important methods used in diagnostic process and research (tissue processing, special stainings, histochemistry, immunohistochemistry, electron microscopy, molecular pathology); understand various disorders with respect to individual organs and organ systems; get familiar with the process of autopsy (the process of the autopsy and its evaluation); get familiar with laboratory processing of the tissue samples (description, tissue sampling);

Syllabus

- Inflammation of the liver (hepatitis), cirrhosis, tumors. Pathology of the gall bladder and biliary duct (stones, inflammations, tumors). Icterus. Pancreas: pancreatitis, diabetes, tumors.
- Pathology of the urinary system: Kidney stones, inflammation (glomerulonephritis, pyelonephritis), nephrosis. Uremia. Tumors of the kidney, ureter and urinary bladder. Pathology of the male genital system (inflammation, tumors). Pathology of the female genital system (developmental disorders, inflammation, tumors). Pathology of pregnancy. Pathology of the breast.
- Pathology of the central and peripheral nervous system: trauma, bleeding, vascular disorders. Leptomeningitis, hydrocephalus, brain edema. Tumors of the central and peripheral nervous system. Pathology of the eye: trauma, inflammation, tumors.
- Pathology of the endocrine system: thyroid, parathyroid, suprarenal glands, hypophysis, endocrine pancreas.
- Pathology of the skin: inflammation, tumors and pseudotumors.
- Prenatal and neonatal pathology, pathology of child's age.
- Pathology of the bone, striated muscle and soft tissues.

Literature

- *POVÝŠIL, Ctibor and Ivo ŠTEINER. Speciální patologie. 2. vyd. Praha: Galén, 2007. ISBN 978-80-7262-494-2. [info](#)*
- *MAČÁK, Jirka and Jana MAČÁKOVÁ. Patologie (Pathology). první. Praha: GRADA, 2004. 347 pp. ISBN 80-247-0785-3. [info](#)*
- *BUČEK, Jan. Praktikum z patologie :pítevní cvičení. 4. přepr. vyd. Brno: Masarykova univerzita, 1993. 88 s. ISBN 80-210-0721-4. [info](#)*
- *FEIT, Josef, P. MĚŘEJOVSKÝ and I. STEINER. Kontrolní otázky z patologie (Test question in pathology). 1. vyd. Praha: Triton, 1998. ISBN 80-85875-89-6. [info](#)*

Teaching methods

Pathology course consists of lectures and practical classes. Teaching consists of theoretical part (lectures) and practical part (laboratory practice). Practical courses consist of histological practice (microscopical and macroscopical images of autoptical and bioptical specimens are demonstrated and discussed) and autoptical practice (presence and ev. participation in autopsies). Hypertext teaching materials for the students are available in our teaching rooms as well in the Internet. These materials contain about 3000 images of various imaging methods (macroscopic, x-ray, CT, MRI images, histological images, partially available as virtual slides, videos). Lectures and practicals are complementary. General information and new updates on classifications as well as images are presented at the lectures. Practical add further information, histopathologically and autoptical experience. Further information is provided in our web-based teaching materials. Various forms of testing is used to give the students proper feedback. Students are supposed to prepare for each practical lesson. The topic for each practical lesson as well as for each lecture is available.

Assessment methods

Lectures: 3 hours/week Practical classes: 4 hours/week; microscopic and autoptic lessons. The course of pathology is closed by oral exam. Attendance is compulsory; knowledge of the students is periodically tested during the practical classes. Testing can be either oral or written (multichoice tests, essay). Exam after two semesters of pathology has two parts: practical and theoretical. Practical part of the exam takes the form of a discussion over the microscope or over macroscopical or microscopical images. In theoretical part of the exam the students discuss after short preparation randomly selected topics. The list of these topics is available to the students in advance.

Language of instruction

Czech

Further comments (probably available only in Czech)

Information on completion of the course: Přihlášení ke zkoušce je podmíněno vykonáním zkoušky z neurověd.

The course is taught each semester.

The course is taught: every week.

Listed among pre-requisites of other courses

- [VLCH0731c Surgery I -practicals](#)
[VSPF0622p](#) && [VSPA0622p](#) && [VLCPO622c](#) && [VSIP0622c](#) && [VLFA0621c](#) ([Do I meet enrolment requirements?](#))

- [VLCH0731p Surgery I - lectures](#)
[VSPF0622p](#) && [VSPA0622p](#) && [VLCP0622c](#) && [VSIP0622c](#) && [VLFA0621c](#) (*Do I meet enrolment requirements?*)
- [VLIN7X21 Infectious Diseases I -practice](#)
[VSPF0622p](#) && [VSPA0622p](#) && [VLCP0622c](#) && [VSIP0622c](#) && [VLLM0522p](#) && [VLIM051p](#) && [VLFA0621c](#) (*Do I meet enrolment requirements?*)
- [VL0L7X1 Ophthalmology - lecture](#)
[VSPF0622p](#) && [VSPA0622p](#) && [VSIP0622c](#) && [VLCP0622c](#) && [VLLM0522p](#) && [VLIM051p](#) && [VLFA0621c](#) (*Do I meet enrolment requirements?*)
- [VL0L7X1a Ophthalmology - practice](#)
[VSPF0622p](#) && [VSPA0622p](#) && [VSIP0622c](#) && [VLCP0622c](#) && [VLLM0522p](#) && [VLIM051p](#) && [VLFA0621c](#) (*Do I meet enrolment requirements?*)
- [VLOR7X1 Orthopaedics - practice](#)
[VSPF0622p](#) && [VSPA0622p](#) && [VLCP0622c](#) && [VSIP0622c](#) && [VLFA0621c](#) (*Do I meet enrolment requirements?*)
- [VLPD7X31c Pediatrics I - practice](#)
[VSPF0622p](#) && [VSPA0622p](#) && [VLCP0622c](#) && [VSIP0622c](#) && [VLLM0522p](#) && [VLIM051p](#) && [VLFA0621c](#) (*Do I meet enrolment requirements?*)
- [VLPS071 Medical Assessment Service in the Czech Republic](#)
[VSPF0622p](#) && [VSPA0622p](#) && [VSIP0622c](#) && [VLCP0622c](#) (*Do I meet enrolment requirements?*)
- [VLPX084t Vacation Training in Surgery and Internal Medicine](#)
[VSPF0622p](#) && [VSPA0622p](#) && [VSIP0622c](#) && [VLCP0622c](#) && [VLPX061t](#) && [VLFA0621c](#) (*Do I meet enrolment requirements?*)

[Zobrazit další předměty](#)

Teacher's information

<http://www.muni.cz/atlases>

Podrobné informace o průběhu výuky jsou vyvěšeny na vývěškách obou ústavů patologie, na kterých probíhá výuka.

The course is also listed under the following terms [Spring 2000](#), [Spring 2001](#), [Spring 2002](#), [Spring 2003](#), [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VSPF0521c Pathological physiology I - practice ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/3/0. 4 credit(s). Type of Completion: z (credit).

Teacher(s)

[doc. MUDr. Julie Bienertová Vašků, Ph.D.](#) (seminar tutor)

[MUDr. Kamil Ďuriš, Ph.D.](#) (seminar tutor)

[MUDr. Michal Jurajda, Ph.D.](#) (seminar tutor)
[prof. MUDr. Kateřina Kaňková, Ph.D.](#) (seminar tutor)
[Mgr. Andrea Knight, Ph.D.](#) (seminar tutor)
[MUDr. Jan Máchal, Ph.D.](#) (seminar tutor)
[RNDr. Michal Masařík, Ph.D.](#) (seminar tutor)
[Mgr. Lukáš Pácal, Ph.D.](#) (seminar tutor)
[doc. RNDr. Monika Pávková Goldbergová, Ph.D.](#) (seminar tutor)
[Dipl. Ing. Martin Piskáček, Dr. rer. nat.](#) (seminar tutor)
[prof. MUDr. Anna Vašků, CSc.](#) (seminar tutor)
[MUDr. Jaromír Gumulec, Ph.D.](#) (assistant)
[Věra Ježková](#) (assistant)

Supervisor

[prof. MUDr. Anna Vašků, CSc.](#)
[Department of Pathological Physiology - Theoretical Departments - Faculty of Medicine](#)
Supplier department: [Department of Pathological Physiology - Theoretical Departments - Faculty of Medicine](#)

Prerequisites

[VSFY0422p Physiology II - lecture](#) && ([VSBC041p Biochemistry II - I](#) || [VSBC0422p Biochemistry II - I](#)) && [VSAN0333p Anatomy III - lec.](#) && [VSHE0322p Histology and embryology II - I](#) && ([VSLT0221s Bas. Med. Terminol. II - s](#) || [VSLT011s Bas. Med. Terminology - I](#)) && [VSET021 Medical Ethics I](#) && [ZC041 Handling chemical substances](#)
Physiology, biochemistry
([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The student will be trained for assuming these knowledge and skills:
Principles and ethics of experimental use of laboratory animals, basic surgical skills, general principles of work with lab. animals - explorative laparotomy
Pathophysiology of blood and bone marrow disorders, haematological findings in selected blood disorders
Statistical analysis of experiments (introduction)
Exp. induced acute radiation syndrome in lab. animal – haematological consequences
Essential hypertension, resting and ambulatory blood pressure (and heart rate) measurements, postural changes, effect of isometric and aerobic exercise
Pathophysiology of ventilation disorders and pulmonary gas exchange – spirometry and hyperoxic test
Secondary hypertension, exp. induced renal ischemia – quantification of renal rennin expression
Conductive disorders, demonstration of selected types of arrhythmias

ECG monitoring of exp. induced arrhythmias in lab. animal

Exp. induced acute renal insufficiency in lab. animal – measurement of GFR based on kinetics of renal inulin excretion

Exp. induced renal failure - peritoneal dialysis in lab. animal

Learning outcomes

Student applies the basic knowledge of biostatistics to explain the structure of reference intervals ;

Student will describe the influence of ionizing radiation on the body at the level of molecular, cellular, tissue, and they justify the time dynamics of the system;

Student will describe changes in blood cell counts dynamics in the acute radiation disease ;

Student makes a distinction between deterministic and stochastic effects of ionizing radiation and their practical implications ;

Student will explain the principle of ultrasound and dopplerometric examination of the blood vessels, the underlying pathology of peripheral vasculature (venous valvular insufficiency, ischemia, short circuits, and steal syndromes);

Student interprets the continuous ECG monitoring in experimental animals for several pathological conditions ;

Student distinguishes ECG records most commonly occurring arrhythmias (sinus arrhythmia, SVES, atrial fibrillation, atrial flutter, AVRT, AV blockade blockade, ventricular tachycardia, torsades de pointes, ventricular fibrillation) ;

Student demonstrates the basic static and dynamic parameters surveyed during the spirometric examination and their relationship to pulmonary diseased;

Student will describe the development of renal ischemia in experimental animal model;

Student will explain the determination of the glomerular filtration rate, depending on the curve of concentration of inulin excretion by the kidneys, while discussing the use of clearance of other substances (creatinine, PAH) ;

Student demonstrates the emergence of renovascular hypertension in the Goldblatt's model, renal artery stenosis, the difference between unilateral and bilateral stenosis, the role of the RAAS and the expansion of the volume due to hypertension diagnosis;

Syllabus

- *1. Introduction, health & safety in the lab, principles and ethics of experimental use of laboratory animals, basic surgical skills, general principles of work with lab. animals & explorative laparotomy 2. Statistical analysis of experiments (introduction) 3. Principles of ECG analysis, demonstration of selected pathological ECG patterns 4. Conductive disorders (seminar), ECG monitoring of exp. induced arrhythmias in lab. animal 5. Principles and demonstration of peripheral blood flow examination using ultrasonography 6. Cell cycle, oncogenes and suppressor genes, cancer development. (seminar) [ing. Martin Piskáček, PhD., Mgr. Sabina Ševčíková, PhD.] 7. Exp. induced acute radiation syndrome in lab. animal – haematological consequences 8. Secondary hypertension (seminar), exp. induced renal ischemia (part 1) 9. Pathophysiology of ventilation disorders and pulmonary gas exchange – spirometry. 10. Essential hypertension (seminar), resting and ambulatory blood pressure (and heart rate) measurements, postural changes, effect of isometric and aerobic exercise 11. Exp. induced renal ischemia – detection of renal renin expression (part 2) 12. Exp. induced acute renal*

insufficiency in lab. animal – measurement of GFR based on kinetics of renal inulin excretion
13. *Exp. induced renal failure - peritoneal dialysis in lab. animal*
14. *Acidbase balance (seminar), tests, credits*
Teachers: Mon – As. MUDr. Michal Jurajda PhD.

- Tue – doc. RNDr. Monika Goldbergová-Pávková, PhD.; As. MUDr. Kamil Ďuriš, PhD.
- Wed – As. MUDr. Jaromír Gumulec, PhD., as. RNDr. Michal Masařík, PhD.
- Thu – As. MUDr. Michal Jurajda PhD.; As. MUDr. Jan Máchal, PhD.

Literature

required literature

- [KAŇKOVÁ, Kateřina](#), [Julie BIENERTO VÁ VAŠKŮ](#), [Lydie IZAKOVIČOVÁ HOLLÁ](#), [Michal JURA JDA](#), [Michal MASAŘÍK](#), [Lukáš PÁCAL](#) and [Anna VAŠKŮ](#). *Pathophysiology practicals for General Medicine and Dental Medicine courses. 1. vyd. Brno: Masarykova univerzita, 2008. 46 pp. Portal of MU's Faculty of Medicine [online]. ISSN 1801-6103. [URL](#) [info](#)*

recommended literature

- [BIENERTO VÁ VAŠKŮ, Julie](#), [Dana BUČKOVÁ](#), [Lydie IZAKOVIČOVÁ HOLLÁ](#), [Michal JURA JDA](#), [Kateřina KAŇKOVÁ](#), [Šárka KUČHTÍČKOVÁ](#), [Lukáš PÁCAL](#), [Anna VAŠKŮ](#) and [Vladimír ZNOJIL](#). *Praktikum z patologické fyziologie. Elportál, Brno: Masarykova univerzita, 2007. ISSN 1802-128X. [URL](#) [info](#)*
- [VAŠKŮ, Anna a kol.](#) *Praktikum z patologické fyziologie. 1. vyd. Brno: Masarykova univerzita, 2000. 59 pp. ISBN 80-210-2318-X. [info](#)*

Teaching methods

practical exercises in labs, discussion to the given topics, video with comments

Assessment methods

Practicals are compulsory. The only permitted reason for not attending is a student's sick leave. Student can - with tutor's approval - substitute the particular practical in a given week with another group in case he/she has a justifiable reason for it. Student's participation in the practicals throughout the term is certified by a credit. Students can be given written tests or individual home work by tutor's throughout the term. Students have to be wearing lab coats during the practicals.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

General note: Studenti opakující 3. ročník nemusejí znovu absolvovat praktika, budou jim uznány zápočty, ke zkoušce mohou přijít v nejbližším zkouškovém období.

Listed among pre-requisites of other courses

- [VSPF0622p Pathological Physiology II - lectures](#)
[VSPF0521c \(Do I meet enrolment requirements?\)](#)

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#), [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VSPF0521p Pathological physiology - lectures ✨

Faculty of Medicine

Autumn 2019

Extent and Intensity

2/0/0. 0 credit(s). Type of Completion: -.

Teacher(s)

[prof. MUDr. Anna Vašků, CSc.](#) (lecturer)

[doc. MUDr. Julie Bienertová Vašků, Ph.D.](#) (lecturer)

[prof. MUDr. Kateřina Kaňková, Ph.D.](#) (lecturer)

[Věra Ježková](#) (assistant)

Supervisor

[prof. MUDr. Anna Vašků, CSc.](#)

[Department of Pathological Physiology - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [prof. MUDr. Anna Vašků, CSc.](#)

Supplier department: [Department of Pathological Physiology - Theoretical Departments - Faculty of Medicine](#)

Prerequisites (in Czech)

[VSFY0422p Physiology II - lecture](#) && ([VSBC041p Biochemistry II -I](#) ||

[VSBC0422p Biochemistry II -I](#)) && [VSAN0333p Anatomy III - lec.](#) &&

[VSHE0322p Histology and embryology II -I](#) && ([VSLT0221s Bas. Med. Terminol. II -s](#)

|| [VSLT011s Bas. Med. Terminology -I](#)) && [VSET021 Medical Ethics I](#) &&

[ZC041 Handling chemical substances](#)

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the subject is to teach students to be able to answer a sufficient number of pathophysiologically asked questions "why", especially focused on these themes:
Pathological Physiology as a science. Disease, health, normality. Descriptivism contra normativism.

Physiology of genes, regulation of gene activity.

Monogenic and multigenic diseases.

Shock syndrome.

Reactive oxygen species (ROS). Ionising radiation effects on cellular level.
Ionising radiation effects on tissue and organismal level.
Cardiovascular pathophysiology - systolic and diastolic function.
Cardiac failure.
Myocardial ischemia.
Hypertension.
Pathophysiology of the gas exchange in the lungs.
Pathophysiology of respiratory mechanics.
Chronic obstructive bronchopulmonary disease.
Restriction pulmonary diseases, respiratory failure.
Physiology of membrane transports.

Syllabus

- *Pathophysiology: an integrating medical speciality. Aetiology and pathogenesis of diseases.*
- *Interaction of cells and intercellular communication, basic principles of intracellular signalling. Reaction of the cell on damage and hypoxia. Cell death. Cytokines network. Chemokines.*
- *Inflammation. Acute phase reaction. Systemic reaction of organism on damage. Regeneration and reparation. Wound healing.*
- *Hypertension. Remodelling of blood vessels. Diseases of peripheral blood vessels.*
- *Metabolism of myocardium, atherosclerosis, ischemic heart disease, myocardium infarction.*
- *Pathophysiology of malignant transformation.*
- *Stress*
- *Stress, general adaptation syndrome.*
- *Pathophysiology of gas exchange and ventilation control in the lungs.*
- *Lung diseases.*
- *Pathophysiological aspects of renal functions. Kidney diseases*
- *Acute and chronic renal failure.*
- *Pathophysiology of water and electrolytes. Tonicity and volume disturbances.*
- *Pathophysiological aspects of metabolism of calcium and phosphates, bone pathophysiology.*

Literature

required literature

- *NEČAS, Emanuel a spol. Obecná patologická fyziologie. 1. vyd. Praha: Karolinum, 2000. 377 pp. ISBN 80-246-0051-X. [info](#)*
- *NEČAS, Emanuel. Patologická fyziologie orgánových systémů. 1. vyd. Praha: Karolinum, 2003. 379 s. ISBN 9788024606750. [info](#)*
- *NEČAS, Emanuel. Patologická fyziologie orgánových systémů. 1. vyd. Praha: Karolinum, 2003. s. 381-760. ISBN 9788024606743. [info](#)*
- *Ivan Damjanov: Pathophysiology, ISBN 13: 978-1-4160-0229-1, Saunders Elsevier, 2009.*

Teaching methods

lecture

Assessment methods

The attendance of lectures and only one absence on practicals per semester are necessary for successful accomplishment of the subject. Continuous control of knowledge in practicals is fully in powers of teachers (assays, tests...). Elaborated proceedings of practicals will be put to teachers for credit.

Language of instruction

Czech

Further Comments

The course is taught annually.

The course is taught: every week.

Teacher's information

<http://www.med.muni.cz/patfyz>

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#), [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VSPF0622p Pathological Physiology II - lectures ✳

Faculty of Medicine

Spring 2018

Extent and Intensity

2/0/0. 5 credit(s). Type of Completion: zk (examination).

Teacher(s)

[prof. MUDr. Anna Vašků, CSc.](#) (lecturer)

[prof. MUDr. Kateřina Kaňková, Ph.D.](#) (lecturer)

[doc. MUDr. Julie Bienertová Vašků, Ph.D.](#) (lecturer)

[doc. RNDr. Monika Pávková Goldbergová, Ph.D.](#) (lecturer)

[Věra Ježková](#) (assistant)

Supervisor

[prof. MUDr. Anna Vašků, CSc.](#)

[Department of Pathological Physiology - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [prof. MUDr. Anna Vašků, CSc.](#)

Supplier department: [Department of Pathological Physiology - Theoretical Departments - Faculty of Medicine](#)

Prerequisites (in Czech)

[VSPF0521c Pathophysiol. I - practice.](#)

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)

- [General Medicine](#) (programme LF, M-VL)

Course objectives

The aim of the subject is to train general medicine students in dynamic thinking about etiology and pathogenesis of diseases focused on special pathophysiology as well as molecular pathophysiology themes:

Pathophysiology of cardiovascular system.

Pathophysiology of digestive system, nutrition deficits.

Pathophysiology of endocrine system, metabolic diseases.

Pathophysiology of hemopoietic system, neoplasias.

Rheumatic diseases. Immunologically conditioned diseases.

Pathophysiology of respiratory tract.

Pathophysiology of kidneys, disturbances in metabolism of water and ions.

Pathophysiology of nervous system.

Pathophysiology of muscles and sensory organs.

Syllabus

- *Syllabus of Lectures - Spring 2016*
-
- *17. 2. Pathophysiology of gastrointestinal system*
- *Prof. Kaňková*
- *24 .2. Pathophysiology of fetoplacental unit*
- *Assoc. prof. Bienertová-Vašků*
- *3. 3. Pathophysiological aspects of chosen allergic and autoimmune diseases*
- *Prof. Kaňková*
- *10. 3. Pathophysiological aspects of oncologic emergencies*
- *Prof. Vašků*
- *17. 3. General pathophysiology of endocrine system*
- *Prof. Vašků*
- *24. 3. Special pathophysiology of endocrine system*
- *Prof. Kaňková*
- *31. 3. Pathophysiology of nutrition disorders*
- *Assoc. prof. Bienertová-Vašků*
- *7. 4. Pathophysiology of lipid metabolism defects*
- *Prof. Vašků*
- *14. 4. Pathophysiological aspects of sugar metabolism defects. Diabetes mellitus*
- *Prof. Kaňková*
- *21 .4. Pathophysiology of bone and muscles*
- *Prof. Vašků*
- *28. 4. Pathophysiology of vitamins*
- *Prof. Vašků*
- *5. 5. Pathophysiology of coagulation and anticoagulation therapy*
- *Prof. Vašků*
- *12. 5. Pathophysiology of nervous system: motoric system*
- *Prof. Vašků*
- *19. 5. Pathophysiology of nervous system: degenerative disorders*
- *Prof. Vašků*

- 26. 5. *DNA diagnostics in complex diseases. Basic principles of pharmacogenomics and personalized medicine.*
- *Assoc. Prof. Bienertová-Vašků*

Literature

required literature

- [NEČAS, Emanuel](#) and A KOLEKTIV. *Obecná patologická fyziologie. 1. vyd. Praha: Karolinum, 2000. 377 pp. [info](#)*
- NEČAS, Emanuel. *Patologická fyziologie orgánových systémů. 1. vyd. Praha: Karolinum, 2003. s. 381-760. ISBN 9788024606743. [info](#)*
- DAMJANOV, Ivan. *Pathophysiology. Illustrated by Matt Chansky. 1st ed. Philadelphia: Saunders/Elsevier, 2009. vii, 464. ISBN 9781416002291. [info](#)*

Teaching methods

lecture

Assessment methods

Oral exam. The final exam is oral; student will answer 4 questions selected by lot from general, special pathophysiology, practicals and lectures. Individual evaluation from practicals (described by assistant) is taken into account.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught each semester.

The course is taught: every week.

Listed among pre-requisites of other courses

- [VLAM9X1p Intensive Care Medicine - lectures](#) ([VLFA0822c](#) // [VLFA0722c](#)) && [VLCH0832c](#) && [VLCH0731c](#) && [VSPF0622p](#) && [VSIP0622c](#) && [VLCP0622p](#) && [VLDM7X1c](#) && [VSOT7X1c](#) && [VLIN7X21](#) (*Do I meet enrolment requirements?*)
- [VLCH0731c Surgery I -practicals](#) [VSPF0622p](#) && [VSPA0622p](#) && [VLCP0622c](#) && [VSIP0622c](#) && [VLFA0621c](#) (*Do I meet enrolment requirements?*)
- [VLCH0731p Surgery I - lectures](#) [VSPF0622p](#) && [VSPA0622p](#) && [VLCP0622c](#) && [VSIP0622c](#) && [VLFA0621c](#) (*Do I meet enrolment requirements?*)
- [VLIN7X21 Infectious Diseases I -practice](#) [VSPF0622p](#) && [VSPA0622p](#) && [VLCP0622c](#) && [VSIP0622c](#) && [VLLM0522p](#) && [VLIM051p](#) && [VLFA0621c](#) (*Do I meet enrolment requirements?*)
- [VL0L7X1 Ophthalmology - lecture](#) [VSPF0622p](#) && [VSPA0622p](#) && [VSIP0622c](#) && [VLCP0622c](#) && [VLLM0522p](#) && [VLIM051p](#) && [VLFA0621c](#) (*Do I meet enrolment requirements?*)
- [VL0L7X1a Ophthalmology - practice](#) [VSPF0622p](#) && [VSPA0622p](#) && [VSIP0622c](#) && [VLCP0622c](#) && [VLLM0522p](#) && [VLIM051p](#) && [VLFA0621c](#) (*Do I meet enrolment requirements?*)

- [VLOR7X1 Orthopaedics - practice](#)
[VSPF0622p](#) && [VSPA0622p](#) && [VLCP0622c](#) && [VSIP0622c](#) && [VLFA0621c](#) (*Do I meet enrolment requirements?*)
- [VLPD7X31c Pediatrics I - practice](#)
[VSPF0622p](#) && [VSPA0622p](#) && [VLCP0622c](#) && [VSIP0622c](#) && [VLLM0522p](#) && [VLIM051p](#) && [VLFA0621c](#) (*Do I meet enrolment requirements?*)
- [VLPS071 Medical Assessment Service in the Czech Republic](#)
[VSPF0622p](#) && [VSPA0622p](#) && [VSIP0622c](#) && [VLCP0622c](#) (*Do I meet enrolment requirements?*)

[Zobrazit další předměty](#)

Teacher's information

Přednášky se konají v aule UKB (A22) vždy ve středu 13:30-15:00. Lectures are given at the Department of Pathophysiology, UCB, A18, S112 on Tuesdays, 16:30-18:00

The course is also listed under the following terms [Spring 2000](#), [Spring 2001](#), [Spring 2002](#), [Spring 2003](#), [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

VSPM071 Palliative Medicine ✨

Faculty of Medicine

Spring 2019

Extent and Intensity

2/0/0. 3 credit(s). Type of Completion: k (colloquium).

Teacher(s)

[MUDr. Ondřej Sláma, Ph.D.](#) (lecturer)

Supervisor

[MUDr. Ondřej Sláma, Ph.D.](#)

[Comprehensive Cancer Care Department - Institutions shared with the Masaryk Memorial Cancer Institute - Faculty of Medicine](#)

Supplier department: [Comprehensive Cancer Care Department - Institutions shared with the Masaryk Memorial Cancer Institute - Faculty of Medicine](#)

Timetable

Mon 13. 3. to Fri 12. 5. Thu 15:00–16:40 [N02901](#)

- Timetable of Seminar Groups:

VSPM071/Skupina_A: No timetable has been entered into IS.

VSPM071/Skupina_B: No timetable has been entered into IS.

Prerequisites (in Czech)

SOUHLAS && [VSPF0622p Pathophysiol. II - lect.](#) && [VLFA0722c Pharmacology IIp](#) && [VLNP081c Introduction to Neurology -pr](#) (*Do I meet enrolment requirements?*)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

The capacity limit for the course is 30 student(s).

Current registration and enrolment status: enrolled: 27/30, only registered: 1/30

Fields of study the course is directly associated with

- [Stomatology](#) (programme LF, M-ST)
- [General Medicine](#) (programme LF, M-VL)

Course objectives (in Czech)

Předmět Paliativní medicína nabízí možnost získat základní znalosti a dovednosti v péči o pokročile nevyлéčitelně nemocné pacienty (onkologické i neonkologické). Obsahem přednášek a seminářů bude léčba nejčastějších symptomů, pravidla podpůrné komunikace a psychosociální aspekty péče. Účastníci se seznámí s etickým a právním rámcem poskytování paliativní péče. Součástí výuky budou 2 exkurze do hospiců v brněnském regionu. Předmět je zakončen kolokviem.

Syllabus (in Czech)

- Program předmětu Paliativní medicína -jaro 2016 17.3. MUDr. Ondřej Sláma, Ph.D.: Paliativní medicína -úvod 24.3. MUDr. Ondřej Sláma, Ph.D.: Symptomy pokročilého nádorového onemocnění (bolest, dušnost, nevolnost, zvracení, úzkost, deprese) a jejich léčba 31.3. MUDr. Regina Slámová: Péče o umírajícího pacienta 7.4. MUDr. Ondřej Sláma, Ph.D.: Komunikace s pacientem v závěru života 14.4. Exkurze na pracoviště paliativní péče Skupina A: Nemocnice Milosrdných bratří Téma: paliativní péče u neonkologických onemocnění (demence, CHSS, CHOPN) Skupina B: Hospic sv. Josefa Rajhrad u Brna Téma: Sociální práce v paliativní péči 21.4. Exkurze na pracoviště paliativní péče Skupina A: Hospic sv. Josefa Rajhrad u Brna Téma: Sociální práce v paliativní péči Skupina B: Nemocnice Milosrdných bratří Téma: Paliativní péče u neonkologických onemocnění (demence, CHSS, CHOPN) 28.4. Brněnské onkologické dny Brněnské výstaviště: Edukační blok: "Podpůrná a paliativní péče v onkologii" 5.5 MUDr. Ondřej Sláma, Ph.D.: Paliativní péče v akutní nemocnici- klinické, etické a právní aspekty 12.5 MUDr. Ondřej Sláma, Ph.D. Reflexe a diskuse o paliativní medicíně. Rozbor kazuistik

Assessment methods (in Czech)

Podmínky k udělení zápočtu za předmět Paliativní medicína Účast na přednáškách 80% Písemně zpracovaná: Kazuistika nevyлéčitelně nemocného pacienta a rozvaha o možnostech paliativní péče (na základě osobní zkušenosti nebo klinické zkušenosti ze stáží) NEBO Esej na jedno z následujících témat 1. Co znamená „kvalita života“ v situaci pokročilého nevyлéčitelného onemocnění 2. Lze pacienty otevřeně a pravdivě informovat o nepříznivé prognóze a přitom jim „nebrat naději“? 3. Je otázce péče o pacienty v závěru života věnována během studia na LF MU dostatečná pozornost? Rozsah eseje: 1-2 stránky A4

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

Information on course enrolment limitations: *Předmět je určen pouze pro studenty 5. a 6. ročníku*

Listed among pre-requisites of other courses

- [VLCH11XX Surgery - State Exam](#)
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) // [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) // [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) // [VSAJ0222](#) // [VSNJ0222](#)) && [VSSP03X](#) (*Do I meet enrolment requirements?*)
- [VLPD11XX Paediatrics - State Exam](#)
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) // [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) // [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) // [VSAJ0222](#) // [VSNJ0222](#)) && [VSSP03X](#) (*Do I meet enrolment requirements?*)
- [VLPG11XX Obstetric and Gynaecology - State Exam](#)
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && [VLVL9X66c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) // [VLPS071](#), [VSAT081](#), [VSNO071](#), [VLKA091](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSAL082](#), [VSDL071](#), [VLRL041](#), [VLIA081](#), [VLKM081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VSAJ0222](#) // [VSNJ0222](#)) && [VSSP03X](#) (*Do I meet enrolment requirements?*)
- [VLRL11XX Family Medicine and Geriatrics](#)
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) // [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLIN9X22](#) && [VLPL9X1](#) && [VLON091](#) && VYCET(3, [VLPS07X](#) // [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VLTLO81](#),

[VSDL071](#), [VSAL081](#), [VSAL082](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) // [VSAJ0222](#) // [VSNJ0222](#)) (*Do I meet enrolment requirements?*)

- [VLVL11XX Internal Medicine - State Exam](#)
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) // [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) // [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSN0071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRLO41](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) // [VSAJ0222](#) // [VSNJ0222](#)) && [VSSP03X](#) (*Do I meet enrolment requirements?*)
- [VLZP11XX Public Health - State Exam](#)
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) // [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) // [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSN0071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRLO41](#), [VLTLO81](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) // [VSAJ0222](#) // [VSNJ0222](#)) && [VSSP03X](#) (*Do I meet enrolment requirements?*)

The course is also listed under the following terms [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#).

VSPM081 Palliative Medicine ✨

Faculty of Medicine

Spring 2018

Extent and Intensity

2/0/0. 3 credit(s). Type of Completion: k (colloquium).

Teacher(s)

[MUDr. Ondřej Sláma, Ph.D.](#) (lecturer)

[MUDr. Ladislav Kabelka, Ph.D.](#) (lecturer)

[MUDr. Lenka Šmardová](#) (lecturer)

[prof. MUDr. Jiří Vorlíček, CSc.](#) (lecturer)

[MUDr. Marcela Tomišková](#) (lecturer)

[prof. MUDr. Jana Skříčková, CSc.](#) (lecturer)

Supervisor

[MUDr. Ondřej Sláma, Ph.D.](#)

[Comprehensive Cancer Care Department - Institutions shared with the Masaryk](#)

Memorial Cancer Institute - Faculty of Medicine

Supplier department: Comprehensive Cancer Care Department - Institutions shared with the Masaryk Memorial Cancer Institute - Faculty of Medicine

Prerequisites (in Czech)

SOUHLAS && VLPF0622p Pathophysiol. II - lect.

VSPF0622p && VLFA0722c && VLNP081c

(Do I meet enrolment requirements?)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

The capacity limit for the course is 50 student(s).

Current registration and enrolment status: enrolled: 0/50, only registered: 0/50

Fields of study the course is directly associated with

- Stomatology (programme LF, M-ST)
- General Medicine (programme LF, M-VL)

Course objectives (in Czech)

Předmět Paliativní medicína nabízí možnost získat základní znalosti a dovednosti v péči o pokročile nevléčitelně nemocné pacienty (onkologické i neonkologické). Obsahem přednášek a seminářů bude léčba nejčastějších symptomů, pravidla podpůrné komunikace a psychosociální aspekty péče. Účastníci se seznámí s etickým a právním rámcem poskytování paliativní péče. Součástí výuky budou 2 exkurze do hospiců v brněnském regionu. Předmět je zakončen kolokviem.

Learning outcomes (in Czech)

Student bude po absolvování předmětu schopen: náležitě zhodnotit a paliativně řešit nejčastější tělesné a psychické symptomy pokročilých stádií nevléčitelných onemocnění; podpůrně komunikovat s pacienty a jejich rodinami o závažné diagnóze, prognóze a plánu paliativní péče; bude znát etické a právní souvislosti lékařského rozhodování u pacientů v závěru života; bude znát organizaci paliativní péče v ČR

Syllabus (in Czech)

- Základní pojmy: paliativní péče, nevléčitelné onemocnění, závěr života, kvalita života, hospic, limitace léčby, eutanázie
- Paliativní management nejčastějších symptomů pokročilého onemocnění: bolest, dušnost, anorexie, nevolnost, zvracení, průjem, zácpa, únava
- Paliativní management pokročilých stádií neonkologických onemocnění: CHOPN, CHSS, chronické renální selhání, neurodegenerativní onemocnění, syndrom geriatrické křehkosti
- Psychiatrické syndromy v závěru života: úzkost, deprese, delirium, poruchy spánku
- Psychologické a sociální aspekty paliativní péče
- Etické a právní aspekty paliativní péče
- Komunikace a pacientem v závěru života: diagnóza, prognóza, plán paliativní péče

- *Paliativní péče v úrzných prostředích: hospic, nemocnice, ARO/JIP, domácí prostředí, organizace paliativní péče v ČR*

Literature

recommended literature

- *Ladislav Kabelka. Geriatrická paliativní péče. Praha: Mladá fronta, a.s., 2019, 320 s. ISBN 978-80-204-4225-3*
- *SLÁMA, Ondřej, Ladislav KABELKA and Jiří VORLÍČEK. Paliativní medicína pro praxi. 2., nezměn. vyd. Praha: Galén, 2011. 363 s. ISBN 9788072628490. [info](#)*

Teaching methods (in Czech)

Přednášky;workshopy; exkurze v hospicových zařízeních

Assessment methods (in Czech)

Podmínky k udělení zápočtu za předmět Paliativní medicína Účast na přednáškách 80% Písemně zpracovaná: Případová studie nevyléčitelně nemocného pacienta a rozvaha o možnostech paliativní péče (na základě osobní zkušenosti nebo klinické zkušenosti ze stáží) NEBO Esej na jedno z následujících témat 1. Co znamená „kvalita života“ v situaci pokročilého nevyléčitelného onemocnění 2. Lze pacienty otevřeně a pravdivě informovat o nepříznivé prognóze a přitom jim „nebrat naději“? 3. Je otázce péče o pacienty v závěru života věnována během studia na LF MU dostatečná pozornost? Rozsah eseje: 1-2 stránky A4

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: every week.

Information on course enrolment limitations: Předmět je určen pouze pro studenty 5. a 6. ročníku

Teacher's information

V případě většího zájmu jsou upřednostněni studenti vyšších ročníků.

The course is also listed under the following terms [Accreditation spring](#).

VSP0011c First Aid - practice *

Faculty of Medicine

Autumn 2015

Extent and Intensity

0/1/0. 1 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Lukáš Dadák, Ph.D.](#) (seminar tutor)

[MUDr. Jan Maláška, Ph.D.](#) (lecturer)

[doc. MUDr. Petr Štourač, Ph.D.](#) (seminar tutor)

[MUDr. Roman Štoudek](#) (seminar tutor)

[MUDr. Ivan Čundrle, Ph.D.](#) (seminar tutor)

[prof. MUDr. Roman Gál, Ph.D.](#) (seminar tutor)
[MUDr. Olga Gimunová, Ph.D.](#) (seminar tutor)
[MUDr. Marek Hakl, Ph.D.](#) (seminar tutor)
[MUDr. Ondřej Hrdý](#) (seminar tutor)
[MUDr. Jan Hruďa, Ph.D.](#) (seminar tutor)
[MUDr. Kamil Hudáček](#) (seminar tutor)
[MUDr. Miloš Chobola](#) (seminar tutor)
[MUDr. Adéla Macková](#) (seminar tutor)
[MUDr. Lukáš Růžek](#) (seminar tutor)
[MUDr. Martin Slezák](#) (seminar tutor)
[MUDr. Pavel Suk, Ph.D.](#) (seminar tutor)
[MUDr. Petr Suk](#) (seminar tutor)
[prof. MUDr. Vladimír Šrámek, Ph.D.](#) (seminar tutor)
[MUDr. Katarína Zadražilová](#) (seminar tutor)
[MUDr. Jitka Zemanová](#) (seminar tutor)
[MUDr. Václav Zvoníček, Ph.D.](#) (seminar tutor)
[Lenka Dobrovolná](#) (assistant)
[Martina Matoušková](#) (assistant)
[Eva Podborská](#) (assistant)

Supervisor

[prof. MUDr. Vladimír Šrámek, Ph.D.](#)
[Department of Anesthesiology and Intensive Care - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)
Contact Person: [MUDr. Lukáš Dadák, Ph.D.](#)
Supplier department: [Department of Anesthesiology and Intensive Care - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

At the end of this course, students should be able to:
understand basic vital signs;
provide Basic Cardiac Life Support according to ERC guidelines from 2005;
provide first aid including wound dressing, transport and vital signs monitoring.

Syllabus

- Cardiopulmonary resuscitation; Examination of the casualty. Basic vital functions. Breathing disorders, apnea, airway obstruction. Airway management, artificial ventilation. Cardiac arrest, circulation failure. Chest compressions, precordial thrust, cardiopulmonary resuscitation.
- CPR in children.

- *Bleeding external, internal. Wounds. Bleeding management. Shock, treatment. Fainting, fatigue.*
- *Burns.*
- *Bandages.*
- *Fractures, injuries of joints and muscles - Treatment, immobilisation skills, splints, positioning.*

Literature

recommended literature

- *First aid : manual. 10th ed. London: Dorling Kindersley, 2014. 288 s. ISBN 9781409342007. [info](#)*

not specified

- *BYDŽOVSKÝ, Jan. První pomoc. 2., přeprac. vyd. Praha: Grada, 2004. 75 s. ISBN 8024706806. [info](#)*
- *Příručka první pomoci. Edited by I. Svobodová, Translated by I. Dvořáček. Bratislava: Príroda, 1993. 222 s. ISBN 80-07-00416-5. [info](#)*
- *DVOŘÁČEK, Ivan and Jaromír HRABOVSKÝ. První pomoc. 4. dopl. vyd. Praha: Avicenum, 1986. 221 s., il. [info](#)*

Bookmarks

<https://is.muni.cz/auth/ln/tag/LF:VSPO011c!>

Teaching methods

We use simulators / models/ for practical lessons during teaching cardiopulmonary resuscitation and primary assessment. We use bandages from practical point of view, too.

Assessment methods

Class exercises are obliged. MCQ test - student must pass well at least 75% of questions.

Language of instruction

Czech

Further Comments

[Study Materials](#)

The course is taught annually.

The course is taught: every other week.

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#).

VSPO011p First Aid - lecture ✨

Faculty of Medicine

Autumn 2015

Extent and Intensity

1/0/0. 1 credit(s). Type of Completion: k (colloquium).

Teacher(s)

[MUDr. Lukáš Dadák, Ph.D.](#) (lecturer)
[MUDr. Jan Maláska, Ph.D.](#) (lecturer)
[doc. MUDr. Petr Štourač, Ph.D.](#) (lecturer)
[MUDr. Roman Štoudek](#) (lecturer)
[MUDr. Ivan Čundrle, Ph.D.](#) (lecturer)
[prof. MUDr. Roman Gál, Ph.D.](#) (lecturer)
[MUDr. Olga Gimunová, Ph.D.](#) (lecturer)
[MUDr. Marek Hakl, Ph.D.](#) (lecturer)
[MUDr. Ondřej Hrdý](#) (lecturer)
[MUDr. Jan Hruša, Ph.D.](#) (lecturer)
[MUDr. Kamil Hudáček](#) (lecturer)
[prof. MUDr. Martin Huser, Ph.D.](#) (lecturer)
[MUDr. Lukáš Růžek](#) (lecturer)
[MUDr. Karolína Skorkovská, Ph.D.](#) (lecturer)
[doc. MUDr. Šárka Skorkovská, CSc.](#) (lecturer)
[MUDr. Martin Slezák](#) (lecturer)
[MUDr. Pavel Suk, Ph.D.](#) (lecturer)
[MUDr. Petr Suk](#) (lecturer)
[MUDr. Lenka Šrahulková](#) (lecturer)
[prof. MUDr. Vladimír Šrámek, Ph.D.](#) (lecturer)
[MUDr. Vít Weinberger, Ph.D.](#) (lecturer)
[MUDr. Katarína Zdražilová](#) (lecturer)
[MUDr. Jitka Zemanová](#) (lecturer)
[MUDr. Václav Zvoniček, Ph.D.](#) (lecturer)
[Lenka Dobrovolná](#) (assistant)
[Martina Matoušková](#) (assistant)
[Eva Podborská](#) (assistant)

Supervisor

[prof. MUDr. Vladimír Šrámek, Ph.D.](#)
[Department of Anesthesiology and Intensive Care - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)
Contact Person: [MUDr. Lukáš Dadák, Ph.D.](#)
Supplier department: [Department of Anesthesiology and Intensive Care - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

At the end of this course, students should be able to: understand basic vital signs; provide Basic Cardiac Life Support according to ERC guidelines; provide first aid including wound dressing, vital signs monitoring and transport.

Syllabus

- **Cardiopulmonary resuscitation I** Examination of the casualty. Basic vital functions. Breathing disorders, apnea, airway obstruction. Airway management, artificial ventilation.
- **Resuscitation II** Cardiac arrest, circulation failure. Chest compressions, precordial thrust, cardiopulmonary resuscitation.
- **CPR in children.**
- **Bleeding external, internal.** Wounds. Bleeding management. Shock, treatment. Fainting, fatigue.
- **Disorders of consciousness, coma. Seizures, cramps.**
- **Head injuries, face injuries, skull fractures, brain concussion, intracranial bleeding. Backbone injuries, contusions, fractures, spinal injuries. Treatment, fixation, transport.**
- **Chest injuries, rib fractures, pneumothorax. Abdominal injuries, injuries to the pelvis, lower extremities, polytrauma. Fixation, immobilisation skills, splints.**
- **Road accidents, multiple casualties situations.** Survey, assesment, evaluation of the casualties, first aid organisation. Emergency situations in diabetic patients.
- **Heat, cold injuries, electrical injuries.** Burns, scalds, heat stroke, heat exhaustion. Hypotermia, frostbites. Chemical burns.
- **Draining. Chest pain evaluation, treatment.**
- **Animal, snake, insect bites . Infection, rabies, allergic reactions.**
- **Poisoning alcohol, drugs, CO, food. Injuries to the eye.**
- **Emergency situations in gynaecology and obstetrics.**

Literature

recommended literature

- *First aid : manual. 10th ed. London: Dorling Kindersley, 2014. 288 s. ISBN 9781409342007. [info](#)*

not specified

- *BYDŽOVSKÝ, Jan. První pomoc. 2., přeprac. vyd. Praha: Grada, 2004. 75 s. ISBN 8024706806. [info](#)*
- *KELNAROVÁ, Jarmila. První pomoc : pro studenty zdravotnických oborů. Vyd. 1. Praha: Grada, 2007. 183 s. ISBN 9788024721835. [info](#)*
- *KELNAROVÁ, Jarmila. První pomoc I : pro studenty zdravotnických oborů. Vyd. 1. Praha: Grada, 2007. 109 s. ISBN 9788024721828. [info](#)*
- *SCHEINAROVÁ, Adolfa. První pomoc. 3. vyd. Olomouc: Univerzita Palackého, 2004. 83 s. ISBN 802440849X. [info](#)*
- *POKORNÝ, Jiří. Lékařská první pomoc. 1. vyd. Praha: Galén, 2003. 351 s. ISBN 8072622145. [info](#)*

Bookmarks

<https://is.muni.cz/auth/ln/tag/LF:VSPO011p!>

Teaching methods

Lectures are theoretical. Presentations of lectures are with a support of PPT and video.

Assessment methods

lectures; oral exam Attending of lectures is obliged. Oral exam is connected with a practical presentation of cardiopulmonary resuscitation on model.

Language of instruction

Czech

Further Comments

Study Materials

The course can also be completed outside the examination period.

The course is taught annually.

The course is taught: every week.

Listed among pre-requisites of other courses

- [aVLPP3X1 Nursing](#)
([aVLPO011p](#) // [VSP0011p](#)) (*Do I meet enrolment requirements?*)
- [aVLPX042t Vacation Training in Nursing](#)
([VLBF011p](#) // [aVLBF011p](#)) && ([VSP0011p](#)//[aVLPO011p](#)) && ([VSLT0221s](#)//[aVLLT0222s](#)) (*Do I meet enrolment requirements?*)
- [VLPP3X1 Nursing](#)
([VLPO011p](#) // [VSP0011p](#)) (*Do I meet enrolment requirements?*)

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#).

VSPP3X1 Nursing ✨

Faculty of Medicine

Autumn 2016

Extent and Intensity

7/8/0. 1 credit(s). Type of Completion: z (credit).

Teacher(s)

[PhDr. Simona Saibertová](#) (seminar tutor)

[Mgr. Dana Soldánová](#) (seminar tutor)

[Mgr. Jana Straková, Ph.D.](#) (seminar tutor)

[PhDr. Olga Suková](#) (seminar tutor)

[Mgr. Bc. Michal Koščík, Ph.D.](#) (assistant)

Supervisor

[Mgr. Hana Pinkavová](#)

[Department of Nursing - Departments of Non-medical Branches - Faculty of Medicine](#)

Contact Person: [doc. PhDr. Miroslava Kyasová, Ph.D.](#)

Supplier department: [Department of Nursing - Departments of Non-medical Branches - Faculty of Medicine](#)

Prerequisites

[VSP0011p First Aid - lecture](#) && [VSET021 Medical Ethics I](#) && [VSLT0221s Bas. Med. Terminol. II -s](#)

are not required

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [Stomatology](#) (programme LF, M-ST)
- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL) (2)

Course objectives

This subject is an introduction in Nursing science for medical students. Tuition is focused on the basic information how to take care of the patient (mobile - independent, immobile-dependent) in all age.

Syllabus

- The subject primary care and basic nursing skills is theoreticaly and practicaly orientated subject. The main goal of the subject is to familiarise students with nursing sciences and posible collaboraion among nurses and physicians. Students obtaine knowledge anf basic skills for delirevivering basic nursing skills and diagnostic procedures which are provide by nurses or in which nurse assist to doctor. first part - theory - 3 hod.
- nursing - characteristics, goals, features
- nursing process and nursing documentation
- communication - verbal, nonverbal
- nursing unit
- patient rights
- patients bed - positioning of the patients, making beds, imobilisation syndrome - prevention
- help with hygienic care
- help with feeding and eating
- help with excretion
- Second part- 12 hours (8 hours for english speaking students)
- demonstration and exercise of basic nursing skill in clinical environment under the supervision of nursing teacher.

Literature

required literature

- POTTER, Patricia Ann, Anne Griffin PERRY, Patricia A. STOCKERT and Amy HALL. Essentials for nursing practice. 8th edition. xxii, 1225. ISBN 9780323112024. [info](#)
- DEBNATH, Rita. PROFESSIONAL SKILLS IN NURSING. 1st. ed. 218 pp. isbn 978-1-84787-396-5

- *NANDA International, Inc. nursing diagnoses : definitions & classification 2015-2019. Edited by T. Heather Herdman - Shigemi Kamitsuru. Tenth edition. Chichester: Wiley Blackwell, 2014. xxviii, 48. ISBN 9781118914939. [info](#)*
- *Nursing older adults. Edited by Jan Reed - Charlotte L. Clarke - Ann Macfarlane. New York: Open University Press/McGraw-Hill, 2012. xvii, 297. ISBN 0335240844. [info](#)*
- *MCEWEN, Melanie and Evelyn M. WILLS. Theoretical basis for nursing. 3rd ed. Philadelphia: Wolters Kluwer/Lippincott Williams & Wilkins, 2011. xix, 508. ISBN 1605473235. [info](#)*

recommended literature

- *Nursing Interventions Classification (NIC). Edited by Gloria M. Bulechek. 6th ed. St. Louis: Elsevier, 2013. xxviii, 60. ISBN 9780323100113. [info](#)*
- *Nursing Outcomes Classification (NOC) : measurement of health outcomes. Edited by Sue Moorhead. 5th ed. St. Louis: Elsevier, 2013. xix, 751. ISBN 9780323100106. [info](#)*
- *SCHUMACHER, Lori and Cynthia C. CHERNECKY. Saunders nursing survival guide : critical care & emergency nursing. 2nd ed. St. Louis, Mo.: Elsevier Saunders, 2010. xviii, 377. ISBN 141606169X. [info](#)*

Teaching methods

lecture, practical training - obligatory

Assessment methods

Students receive credits after attendance of the all the parts of tutition (theoretical lessons, communication, practical training).

Language of instruction

Czech

Further Comments

The course is taught annually.

The course is taught: in blocks.

Listed among pre-requisites of other courses

- [VSSL051c Social Medicine - practice](#) ([VSLT0221s](#) // [VSLT011s](#)) && [VSET021](#) && [VSPP3X1](#) && [ZC041](#) (*Do I meet enrolment requirements?*)
- [VSSL051p Social Medicine - lecture](#) ([VSLT0221s](#) // [VSLT011s](#)) && [VSET021](#) && [VSPP3X1](#) && [ZC041](#) (*Do I meet enrolment requirements?*)

The course is also listed under the following terms [Autumn 1999](#), [Spring 2000](#), [Autumn 2000](#), [Spring 2001](#), [Autumn 2001](#), [Spring 2002](#), [Autumn 2002](#), [Spring 2003](#), [Autumn 2003](#), [Spring 2004](#), [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#).

VSPX042t *Vacational Training in Nursing* *

Faculty of Medicine

Spring 2016

Extent and Intensity

0/0. 1 credit(s). Type of Completion: z (credit).

Supervisor

[prof. MUDr. Hana Matějovská Kubešová, CSc.](#)

[Department of Internal Medicine, Geriatrics and Practical Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Supplier department: [Department of Internal Medicine, Geriatrics and Practical Medicine - Institutions shared with the Faculty Hospital Brno - Adult Age Medicine - Faculty of Medicine](#)

Prerequisites (in Czech)

[VSLC011p Med. Chemistry - lecture](#) && [VSBI0222p Biology II-lect.](#) && ([VSBF011p Biophysics](#) // [VLBF011p Biophysics-lect.](#) // [STBF011p Biophysics](#)) && [VSP0011p First Aid - lecture](#) && [VSET021 Medical Ethics I](#) && [VSLT0221s Bas. Med. Terminol. II -s](#)

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [Stomatology](#) (programme LF, M-ST)
- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

This subject allows students the first contact with primary care on the ground of their new knowledge of theoretical and preclinical subjects and to obtain the overview of the performance of primary care.

Syllabus

- GP office, performance of primary care
- First contact with the patient at GP office
- Home visit of the patient
- Education of the patient in primary care
- Contact with relatives of the patient
- Emergencies at GP office

Literature

- SEIFERT, Bohumil. *Primární péče. Praktické lékařství : výukový text pro studenty magisterského studia lékařství*. 1. vyd. Praha: Karolinum, 2004. 156 s. ISBN 8024608839. [info](#)

Teaching methods

observation of the GPs style of work, recognition of the GPs office equipment, competencies and limitations of the primary care

Assessment methods

stage, credit

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

The course is taught: in blocks.

Note related to how often the course is taught: 2 týdny během letních prázdnin.

Information on the extent and intensity of the course: 2 týdny.

Listed among pre-requisites of other courses

- [VLPX061t](#) *Vacational Training in Primary Care* ([VSPX042t](#) // [VLPX042t](#)) (*Do I meet enrolment requirements?*)

The course is also listed under the following terms [Spring 2000](#), [Spring 2001](#), [Spring 2002](#), [Spring 2003](#), [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#), [Spring 2015](#).

VSSL051c Social Medicine - practice *

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/2/0. 1 credit(s). Type of Completion: z (credit).

Teacher(s)

[Mgr. Pavlína Kaňová, Ph.D.](#) (seminar tutor)

[MUDr. Kräuff Rainer Schwanhaeuser Wulff, MBA, Ph.D. et Ph.D., M.A.](#) (seminar tutor)

[MUDr. Lenka Dvořáková](#) (seminar tutor)

[Mgr. Bc. Tomáš Pruša](#) (seminar tutor)

[Zdeňka Jochová](#) (assistant)

Supervisor

[Mgr. Pavlína Kaňová, Ph.D.](#)

[Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [Mgr. Pavlína Kaňová, Ph.D.](#)

Supplier department: [Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Prerequisites

([VSLT0221s](#) *Bas. Med. Terminol. II -s* // [VSLT011s](#) *Bas. Med. Terminology -I*) && [VSET021](#) *Medical Ethics I* && [VSPP3X1](#) *Nursing* && [ZC041](#) *Handling chemical substances*

Prerequisites according to the MU study and examination regulations.

[\(Do I meet enrolment requirements?\)](#)

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

By the end of this course student should be able to: describe the content, mission, basic theories and methods of social medicine; use epidemiologic methods for assessing the health status of defined population; apply theoretical and methodological knowledge in health situation analysis; assess health risks and propose suitable measures to improve the health of the population; understand the basis of statistical and systemic thinking in medicine, the basis of methods of critical appraisal of population studies results and consequent organizational measures.

Syllabus

- 1. General information about the course Social medicine. Qualitative methods for health research.
 2. Health and disease. Prevalence. Incidence, risk, rate, odds. Measures of disease frequency. Issues in calculating measures of disease frequency. Analysis of routinely collected data. Value and limitations of routinely collected data. Comparing disease occurrence, population impact.
 3. Death registration. Commonly used indices derived from mortality data. Mortality statistics. Summary statistics and standardisation. Direct standardisation. Health for All database.
 4. Ratio measures. Estimating measures of effect for more than one level of exposure. Difference measures. Measures of effect versus measure of impact. Measures of population impact, population attributable risk, population attributable risk fraction.
 5. Observational and intervention studies. Ecological study. Cross-sectional study. Cohort study. Case control study. Issues in design and execution. Design strategy: when to use which study. Interpretation of epidemiological studies.
 6. Key steps in a randomised controlled trial. Size of the trial. Variants of the randomised controlled trial. Ethical issues. Analysis, interpretation and policy implications.
 7. Types of variables. Distributions. Measures of central tendency. Distributions and summary measures. Measures of variability. Normal and log normal distributions.
 8. Populations and samples. Confidence intervals. Sampling variability of proportions. Sampling variability of means. Hypothesis testing. Interpretation of p-values. Estimation and testing. Measures of association.

- 9. Correlation. Linear regression. Chi-squared test for a two-way table. Chi-squared test for trend. Validity of chi-squared tests. Epi-Info statistical package.
- 10. Bias, selection bias, measurement bias. Differential and non-differential misclassification. Confounding. Meta-analysis. Causality in medicine.
- 11. Screening. Diagnostic tests. Validity of diagnostic tests, sensitivity, specificity. Repeatability. Predictive values of a test result.
- 12. Study designs for evaluation of screening. Selection bias, lead time bias, length bias, diagnosis bias. Criteria for a successful screening programme. Scope and levels of prevention.
- 13. Need, demand and use. Efficacy, effectiveness, efficiency. QALYs.
- 14. Health care systems. Funding mechanisms. Equity. Health care system in the Czech Republic. The health reform process.
- 15. Health policy for Europe. Health for All programme.

Literature

required literature

- HOLČÍK, Jan, Adolf ŽÁČEK and Ilona KOUPILOVÁ. *Sociální lékařství. 3. nezměn. vyd. Brno: Masarykova univerzita, 2006. 137 s. ISBN 9788087192153.* [info](#)
- GERYLOVOVÁ, Anna and Jan HOLČÍK. *Úvod do základů statistiky : text pro semináře. 1. vyd. Brno: Masarykova univerzita, 2011. 50 s. ISBN 9788021056619.* [info](#)
- HOLČÍK, Jan. *Systém péče o zdraví a zdravotní gramotnost : k teoretickým základům cesty ke zdraví. 1. vydání. Brno: Masarykova univerzita, 2010. 293 stran. ISBN 9788073921293.* [info](#)
- .

recommended literature

- Bonita R, Beaglehole R, Kjellström: *Basic epidemiology. 2nd edition. Geneva - Switzerland: World Health Organization; 2006.*
- .

not specified

- .
- **REQUIRED LITERATURE**
- .
- 1. Bonita R, Beaglehole R, Kjellström: *Basic epidemiology. 2nd edition. Geneva - Switzerland: World Health Organization; 2006. pp 1-69, 83-114, 133-183.*
- 2. Stone DB, Armstrong WR, Macrina DM, Pankau JW: *Introduction to epidemiology. Dubuque, IA - USA: Brown & Benchmark Publishers; 1996. pp 63-115.*
- 3. Farmer R, Lawrenson R, Miller D: *Epidemiology and public health medicine. 5th edition. Oxford - U.K.: Blackwell Publishing; 2004. pp 51-89.*

- 4. Varkey P: *Mayo clinic preventive medicine and public health board review*. Edited by Prathibha Varkey. New York - United States: Mayo Clinic Scientific Press - Oxford University Press; 2010. pp 33-58.
- .
- **RECOMMENDED LITERATURE**
- .
- 1. Petrie A, Sabin C: *Medical statistics at a glance*. Oxford - U.K.: Blackwell Publishing; 2003.
- 2. Nordess R: *Epidemiology and biostatistics secrets*. China: Mosby Elsevier; 2006.

Teaching methods

Seminars / practices and class discussion.

Reading and studying ALL REQUIRED LITERATURE.

For those who will have to write research projects and seminar papers during third, fourth and fifth year, it is strongly recommended to enrol the following courses:

VSIL021 - Information literacy - (3 credits) - e-learning.

VSKP041 - A course of working with information sources and tools (4 credits).

Assessment methods

REQUIREMENTS TO OBTAIN THE CREDIT:

1. 100 % attendance to seminars / practices during the semester.
2. It will be required to successfully complete the prerequisite subjects.
3. Absences will be tolerated just due to medical reasons - Students must provide appropriate documentation or medical excuse.
 - + Students must be aware that even with justified absences (medical excuse), a minimum of 80% attendance is required to obtain the credit. In case a student will have more than 20 % justified / unjustified absences, he / she will have to repeat the course in the following school year.
4. Fulfilment of given tasks:
 - + In case of unjustified absence (per each one), a 1,500-2,000 word seminar paper and a 5-8 minutes power point presentation on the seminar paper topic will be given. If the seminar paper is rejected due to deficiencies and it is not corrected and submitted again, the student will not fulfil with the subject's requirements, and he / she will not get the credit (See Absence and latecomer policy, Academic misconduct, plagiarism detection and unethical issues).
5. Active participation during the seminars / practices / lectures.

6. *Pass the credit test. Students will be allowed to take the credit test only if they have fulfilled numeral 4 (requirements to obtain the credit).*

CREDIT TEST INFORMATION:

1. *Get at least 70 % (14 out of 20 questions) in the credit test, which is a requisite to sit for examination.*

2. *Each student must register in the Information System (IS) in one of the offered credit test terms. The credit test has fixed examination terms / dates - (Only during the examination period, except the examination pre-term). No extra-terms will be given.*

3. *Students registered to a credit test term will fail the term if:*
a-) *arrive late to the test. No late arrival will be allowed after the start of the credit test.*
b-) *they are not present and previously do not cancel the term in the stipulated periods (see IS).*

4. *In case of failure, EACH STUDENT CAN RETAKE THE CREDIT TEST TWO MORE TIMES, only in given terms (according to Masaryk University study and examination regulations).*

5. *In case of failure during the third term (second resit), the student must repeat the course in the following school year.*

6. *All credit test questions are based on ALL REQUIRED LITERATURE, seminars and lectures.*

The credit test is a written examination → 20 multiple choice question test, with only one correct answer - (to pass the test, it is required a minimum of 14 correct answers / points).

SCORE:

Passed → 14 and more correct answers / points.

Failed → 13,5 or less correct answers / points.

In order to omit / avoid guessing while answering the MCQ test / examination, the following system will be used:

Correct answer = 1 point.

No answer = 0 point.

Wrong answer = -0,5 point.

Test scoring will be according to the next formula:

Final score = Number of correct answers - (Number of wrong answers / two).

For example:

15 correct answers (15 x 1 point = 15 points) - Passed.

5 wrong answers (5 x -0,5 = -2,5 points).

15 - 2,5 = 12,5. The final score of the test will be 12,5 answers / points.

Final result = Failed.

*** For that reason, only answer the question when you are sure of the answer.*

ABSENCE AND LATECOMER POLICY:

1. Justified, unjustified absences and late coming to classes:

a-) Justified absences → just due to medical reasons - Student must provide appropriate documentation or medical excuse in original.

b-) Unjustified absences → the student does not present the medical excuse (original) in the following week of the absence.

c-) Late coming to classes → the student arrives after attendance has been taken (3 minutes).

2. Measures against absenteeism or late coming to classes:

a-) Every unjustified absence or late coming to classes leads to a 1,500-2,000 word seminar paper plus a 5-8 minutes power point presentation on the same topic (the topics will be assigned in the same week of the absence or late coming).

b-) The seminar paper must be submitted on the subject's vault within the next 6 days of the incident (absence or late coming), in other case it will be rejected → They will not get the credit.

c-) Students will receive an email with the seminar paper instructions, and the word and power point frames.

d) Students take full responsibility for their seminar paper(s) and power point presentation(s). (See Academic misconduct, plagiarism detection and unethical issues).

3. THERE WILL BE NO EXCEPTIONS. In the following cases, students will be not get the credit / allowed to take the credit test:

** Not submitting the assigned seminar paper.*

** If the seminar paper is rejected due to deficiencies and is not corrected and submitted again.*

** If despite the fact the seminar paper is accepted but the power point presentation is not shown in class.*

** If the seminar paper is rejected three times.*

** If the seminar paper has plagiarism or any unethical issues.*

ACADEMIC MISCONDUCT, PLAGIARISM DETECTION AND UNETHICAL ISSUES:

1. Any attempts of **ACADEMIC MISCONDUCT**, such as cheating or assisting someone else to cheat during the credit test, will result in disciplinary actions, such as:

a-) You will be required to hand over your examination paper and asked to leave the examination room. This means, you failed the examination (examination term), with the respective score F / 4, on your academic records in the information system.

b-) Opening disciplinary proceedings.

c-) Failing the subject / course.

d-) Expulsion from university.

2. During the examination, it is forbidden to:

a-) Use smart phones / Tablets.

b-) Use laptops.

c-) To wear earphones or headphones (if not medical prescribed).

d-) To talk.

**In such cases, disciplinary actions will be taken (See above numeral 1).*

3. Every seminar paper will be checked / scanned on university and external systems for online plagiarism detection.

4. Cases of suspected plagiarism will be investigated and given to the Disciplinary Committee as a motion to open disciplinary proceedings, according to the Disciplinary Code for Faculty Students.

5. Unethical issues will lead to seminar paper rejection → not getting the credit → repeating the course next school year or expulsion from university.

6. The plagiarism scan system is able to detect cut and paste from other languages with its respective translation into English. Avoid complications. Simply read the source and use your own words and the cite (quote) the source of information.

7. Students **MUST** be aware that before acceptance, all citations are controlled (compared with the original source). It will not be tolerated any attempts to create or manipulate citations (**ACADEMIC MISCONDUCT**). → Seminar paper rejection → not getting the credit → repeating the course next school year or expulsion from university.

Language of instruction

Czech

Further Comments

Study Materials

The course can also be completed outside the examination period.

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#), [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VSSL051p Social Medicine - lecture ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

1/2/0. 2 credit(s). Type of Completion: zk (examination).

Teacher(s)

[Mgr. Pavlína Kaňová, Ph.D.](#) (lecturer)

[MUDr. Kräuff Rainer Schwanhaeuser Wulff, MBA, Ph.D. et Ph.D., M.A.](#) (lecturer)

[Mgr. Bc. Michal Koščik, Ph.D.](#) (lecturer)

[Mgr. Bc. Tomáš Pruša](#) (lecturer)

Supervisor

[Mgr. Pavlína Kaňová, Ph.D.](#)

[Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [Mgr. Pavlína Kaňová, Ph.D.](#)

Supplier department: [Department of Public Health - Theoretical Departments - Faculty of Medicine](#)

Prerequisites

([VSLT0221s Bas. Med. Terminol. II -s](#) // [VSLT011s Bas. Med. Terminology -I](#)) && [VSET021 Medical Ethics I](#) && [VSPP3XI Nursing](#) && [ZC041 Handling chemical substances](#)

Prerequisites according to the MU study and examination regulations.

([Do I meet enrolment requirements?](#))

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

By the end of this course student should be able to: describe the content, mission, basic theories and methods of social medicine; use epidemiologic methods for assessing the health status of defined population; apply theoretical and methodological knowledge in health situation analysis; assess health risks and propose suitable measures to improve the health of the population; understand the basis of statistical and systemic thinking in medicine, the basis of methods of critical appraisal of population studies results and consequent organizational measures.

Syllabus

-
- 1. *Community medicine in a historical perspective.*
- 2. *History of community medicine. Community medicine in Central Europe. Methodological, educational, moral, organizational and integrative role of social medicine.*
- 3. *Basis of demography.*
- 4. *Information systems.*
- 5. *Types of healthcare systems. Social and health policy.*
- 6. *WHO. Health 2020.*
- 7. *Economical aspect of healthcare.*
- 8. *Healthcare management.*
- 9. *Ethics and healthcare.*
- 10. *Law and healthcare.*
- 11. *Health care planning and evaluation.*
- 12. *Healthcare system research.*
- 13. *Current issues in health policy.*

Literature

required literature

- *HOLČÍK, Jan, Adolf ŽÁČEK and Ilona KOUPILOVÁ. Sociální lékařství. 3. nezměn. vyd. Brno: Masarykova univerzita, 2006. 137 s. ISBN 9788087192153. [info](#)*
- *GERYLOVOVÁ, Anna and Jan HOLČÍK. Úvod do základů statistiky : text pro semináře. 1. vyd. Brno: Masarykova univerzita, 2011. 50 s. ISBN 9788021056619. [info](#)*
- *HOLČÍK, Jan. Systém péče o zdraví a zdravotní gramotnost : k teoretickým základům cesty ke zdraví. 1. vydání. Brno: Masarykova univerzita, 2010. 293 stran. ISBN 9788073921293. [info](#)*
- .

recommended literature

- *Bonita R, Beaglehole R, Kjellström: Basic epidemiology. 2nd edition. Geneva - Switzerland: World Health Organization; 2006. 212 pages. ISBN 978-92-4-154707-9.*
- .

not specified

- .
- **REQUIRED LITERATURE**
- .
- 1. *Bonita R, Beaglehole R, Kjellström: Basic epidemiology. 2nd edition. Geneva - Switzerland: World Health Organization; 2006. pp 1-69, 83-114, 133-183.*

- 2. Stone DB, Armstrong WR, Macrina DM, Pankau JW: *Introduction to epidemiology*. Dubuque, IA - USA: Brown & Benchmark Publishers; 1996. pp 63-115.
- 3. Farmer R, Lawrenson R, Miller D: *Epidemiology and public health medicine*. 5th edition. Oxford - U.K.: Blackwell Publishing; 2004. pp 51-89.
- 4. Varkey P: *Mayo clinic preventive medicine and public health board review*. Edited by Prathibha Varkey. New York - United States: Mayo Clinic Scientific Press - Oxford University Press; 2010. pp 33-58
- .
- **RECOMMENDED LITERATURE**
- .
- 1. Petrie A, Sabin C: *Medical statistics at a glance*. Oxford - U.K.: Blackwell Publishing; 2003.
- 2. Nordess R: *Epidemiology and biostatistics secrets*. China: Mosby Elsevier; 2006.

Teaching methods

Lectures.

Reading and studying ALL REQUIRED LITERATURE.

For those who will have to write research projects and seminar papers during third, fourth and fifth year, it is strongly recommended to enrol the following courses:

VSIL021 - Information literacy - (3 credits) - e-learning.

VSKP041 - A course of working with information sources and tools (4 credits).

Assessment methods

EXAMINATION INFORMATION:

1. *To sit for examination, it will be required to successfully complete the prerequisite subjects and to have obtained the subject's credit - VSSL051c.*
2. *Each student must register in the Information System (IS) in one of the offered examination terms. The examination has fixed examination terms / dates - (Only during the examination period, except the examination pre-term). No extra-terms will be given.*
3. *Students registered to an examination term will fail the term if:*
 - a-) *arrive late the examination day.*
 - b-) *they are not present and previously did not cancel the term in the stipulated periods (see IS).*
4. *In case of failure, EACH STUDENT CAN RETAKE THE EXAMINATION TWO MORE TIMES, only in given terms (according to Masaryk University study rules).*
5. *In case of failure during the third term (second resit), the student must repeat the*

course in the following school year.

6. All examination questions are based on ALL REQUIRED LITERATURE, seminars and lectures.

Written examination → 20 multiple choice question test, with only one correct answer - (to pass the test, it is required a minimum of 14 correct answers).

SCORE:

A → 19-20 correct answers / points.

B → 17-18 correct answers / points.

C → 16 correct answers / points.

D → 15 correct answers / points.

E → 14 correct answers / points.

F → 13,5 or less correct answers / points.

In order to omit / avoid guessing while answering the MCQ test / examination, the following system will be used:

Correct answer = 1 point.

No answer = 0 point.

Wrong answer = -0,5 point.

Test scoring will be according to the next formula:

Final score = Number of correct answers - (Number of wrong answers / two).

For example:

15 correct answers (15 x 1 point = 15 points) - Passed.

5 wrong answers (5 x -0,5 = -2,5 points).

15 - 2,5 = 12,5. The final score of the test will be 12,5 answers / points.

Final result = Failed.

** For that reason, only answer the question when you are sure of the answer.

*** This subject is part of the Public Health State Examination ***

See VLZP11XX - Public Health State Examination.

ACADEMIC MISCONDUCT, PLAGIARISM DETECTION AND ETHICAL ISSUES:

1. Any attempts of ACADEMIC MISCONDUCT, such as cheating or assisting someone else to cheat during the colloquium, will result in disciplinary actions, such as:

a-) You will be required to hand over your examination paper and asked to leave the

examination room. This means, you failed the examination (examination term), with the respective score F / 4, on your academic records in the information system.

- b-) Opening disciplinary proceedings.
- c-) Failing the subject / course.
- d-) Expulsion from university.

2. During the colloquium, it is forbidden to use items such as:

- a-) Smart phones / Tablets.
- b-) Laptops.
- c-) To wear earphones or headphones (if not medical prescribed).
- d-) To talk.

*In such cases, disciplinary actions will be taken (See above numeral 1).

Language of instruction

Czech

Further Comments

Study Materials

The course can also be completed outside the examination period.

Listed among pre-requisites of other courses

- [VLPM071 Legal Aspects in Medicine](#)
[VSSL051p \(Do I meet enrolment requirements?\)](#)
- [VLSD7X1c Forensic Medicine - practice](#)
[VSPF0622p](#) && [VSPA0622p](#) && [VLCP0622c](#) && [VSIP0622c](#) && [VSSL051p](#)
&& [VLFA0621c \(Do I meet enrolment requirements?\)](#)
- [VLSD7X1p Forensic medicine - lectures](#)
[VSPF0622p](#) && [VSPA0622p](#) && [VLCP0622c](#) && [VSIP0622c](#) && [VSSL051p](#)
&& [VLFA0621c \(Do I meet enrolment requirements?\)](#)
- [VLVZ9X1c Public Health - practice](#)
([VLFA0822p](#) // [VLFA0722p](#)) && [VSSL051p \(Do I meet enrolment requirements?\)](#)
- [VLVZ9X1p Public Health - lecture](#)
([VLFA0822p](#) // [VLFA0722p](#)) && [VSSL051p \(Do I meet enrolment requirements?\)](#)
- [VSEI7X1 Epidemiology of Infectious Diseases lecture](#)
[VSSL051p](#) && ([STLM0522p](#) // [VLLM0522p](#)) && [VSIP0622c](#) && [VLCP0622c](#)
&& [VLFA0621c \(Do I meet enrolment requirements?\)](#)
- [VSEI7X1a Epidemiology of Infectious Diseases - practice](#)
[VSSL051p](#) && ([STLM0522p](#) // [VLLM0522p](#)) && [VSIP0622c](#) && [VLCP0622c](#)
&& [VLFA0621c \(Do I meet enrolment requirements?\)](#)

The course is also listed under the following terms [Autumn 1999](#), [Autumn 2000](#), [Autumn 2001](#), [Autumn 2002](#), [Autumn 2003](#), [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#), [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

VSSP03X Individual project *

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/0/0. 5 credit(s). Type of Completion: z (credit).

Teacher(s)

[prof. MUDr. Miroslav Penka, CSc.](#) (lecturer)
[MUDr. Tomáš Andrašina, Ph.D.](#) (seminar tutor)
[prof. MUDr. Martin Bareš, Ph.D.](#) (seminar tutor)
[prof. MUDr. Josef Bednařík, CSc.](#) (seminar tutor)
[MUDr. Atanas-Ivan Belkov](#) (seminar tutor)
[doc. MUDr. Eva Brichtová, Ph.D.](#) (seminar tutor)
[prof. MUDr. Petr Dobšák, CSc.](#) (seminar tutor)
[prof. RNDr. Petr Dubový, CSc.](#) (seminar tutor)
[doc. MUDr. Josef Feit, CSc.](#) (seminar tutor)
[MUDr. Ivo Hanke, Ph.D.](#) (seminar tutor)
[MUDr. Markéta Hanslianová](#) (seminar tutor)
[MUDr. Lukáš Homola, Ph.D.](#) (seminar tutor)
[MUDr. Ivana Hradilová Svíženská, CSc.](#) (seminar tutor)
[prof. MUDr. Petr Husa, CSc.](#) (seminar tutor)
[MUDr. Zita Chovancová, Ph.D.](#) (seminar tutor)
[doc. MUDr. Jan Chrastina, Ph.D.](#) (seminar tutor)
[prof. MUDr. Zdeněk Kala, CSc.](#) (seminar tutor)
[MUDr. Michala Karkanová, Ph.D.](#) (seminar tutor)
[MUDr. Marie Kolářová, CSc.](#) (seminar tutor)
[Mgr. Zuzana Koledová, Ph.D.](#) (seminar tutor)
[prof. MUDr. Marta Krejčí, Ph.D.](#) (seminar tutor)
[MUDr. Břetislav Lipový, Ph.D.](#) (seminar tutor)
[prof. MUDr. Jiří Litzman, CSc.](#) (seminar tutor)
[prof. MUDr. Jindřich Lokaj, CSc.](#) (seminar tutor)
[MUDr. Jan Maláaska, Ph.D.](#) (seminar tutor)
[MUDr. Veronika Matušková, Ph.D., FEBO](#) (seminar tutor)
[MUDr. Ladislav Mitáš, Ph.D.](#) (seminar tutor)
[MUDr. Miroslav Nečas, Ph.D.](#) (seminar tutor)
[PhDr. Hana Neudertová, Ph.D.](#) (seminar tutor)
[MUDr. Marcela Nováková](#) (seminar tutor)
[prof. MUDr. Marie Nováková, Ph.D.](#) (seminar tutor)
[doc. MUDr. Mgr. Jiří Pařenica, Ph.D.](#) (seminar tutor)
[MUDr. Klára Perceová, Ph.D.](#) (seminar tutor)
[MUDr. Markéta Petrovová, Ph.D.](#) (seminar tutor)
[Dipl. Ing. Martin Piskáček, Dr. rer. nat.](#) (seminar tutor)
[JUDr. Radek Polícar](#) (seminar tutor)
[doc. MUDr. Zbyněk Rozkydal, Ph.D.](#) (seminar tutor)
[PharmDr. Jana Rudá, Ph.D.](#) (seminar tutor)
[doc. MUDr. Jarmila Rulcová, CSc.](#) (seminar tutor)
[MUDr. Kräuff Rainer Schwanhaeuser Wulff, MBA, Ph.D. et Ph.D., M.A.](#) (seminar tutor)
[doc. MUDr. Šárka Skorkovská, CSc.](#) (seminar tutor)
[doc. MUDr. Jarmila Skotáková, CSc.](#) (seminar tutor)

[prof. MUDr. Jana Skřičková, CSc.](#) (seminar tutor)
[MUDr. Libor Streit, Ph.D.](#) (seminar tutor)
[MUDr. Hana Svačinová, Ph.D.](#) (seminar tutor)
[doc. RNDr. Sabina Ševčíková, Ph.D.](#) (seminar tutor)
[MUDr. Martina Šišáková, Ph.D.](#) (seminar tutor)
[MUDr. Mgr. Karel Šlais, Ph.D.](#) (seminar tutor)
[MUDr. Taťána Šrámková, Ph.D.](#) (seminar tutor)
[prof. MUDr. Vojtěch Thon, Ph.D.](#) (seminar tutor)
[MUDr. Karel Urbášek](#) (seminar tutor)
[prof. MUDr. Vladimír Vašků, CSc.](#) (seminar tutor)
[MUDr. Jitka Vokurková, Ph.D.](#) (seminar tutor)
[Mgr. Robert Vysoký, Ph.D.](#) (seminar tutor)
[MUDr. Miroslava Zavřelová](#) (seminar tutor)
[Jana Aberlová](#) (assistant)
[Renata Blábllová](#) (assistant)
[Vlasta Břicháčková](#) (assistant)
[Miroslava Bučková](#) (assistant)
[Libuše Darmovzalová](#) (assistant)
[prof. MUDr. Bc. Zuzana Derflerová Brázdová, DrSc.](#) (assistant)
[Lenka Chrástová](#) (assistant)
[MUDr. Tomáš Křivka](#) (assistant)
[Lucie Kučerová](#) (assistant)
[Lea Müllerová](#) (assistant)
[Dana Procházková](#) (assistant)

Supervisor

[Faculty of Medicine](#)

Supplier department: [Faculty of Medicine](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

Student should become acquainted with methods of research work. In the end of the project he should be able to use specialized literature and databases to know principles of scientific report or overview preparation to evaluate experimental data using statistical methods or to plan experiments to formulate conclusions from the result be able to prepare presentation of results

Syllabus

- Individual project includes a) Summarization of literature data to the given topic and elaboration of written overview

- or b) project based on evaluation of clinical results by statistical methods, formulation of conclusions and presentation in form of a scientific paper or ppt presentation
- or c) own experimental research work to the given topic. The work includes evaluation of experiments, formulation of conclusions and presentation in form of a scientific paper or ppt presentation

Literature

- <https://is.muni.cz/auth/elearning/warp.pl?furl=%2Fauth%2Fel%2F1431%2Fjaro2009%2FXK010%2Findex.qwarp;qurl=%2Fel%2F1431%2Fjaro2009%2FXK010%2Findex.qwarp>

Assessment methods

Individual project is compulsory component of General medicine study plan. Individual project is completed by submitting results of the project in written form and presentation of results on the workshop of the given department where the results were obtained or on the Students scientific conference. The course unit credit is given after it.

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught each semester.

General note: Studenti se přihlašují k tématům ze stránky IS MU Osobní administrativa --> Student--> Rozpisy témat--> Samostatné práce VL.

Information on the extent and intensity of the course: dle zadání.

Listed among pre-requisites of other courses

- [**aVLCHIIXX Surgery - state exam**](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && [VYCET\(1,aVLAL091,aVLDO091,aVLKF101,aVLKB091,aVLFP091\)](#) && [aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) ([Do I meet enrolment requirements?](#))
- [**aVLPDIIXX Pediatrics - state exam**](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && [VYCET\(1,aVLAL091,aVLDO091,aVLKF101,aVLKB091,aVLFP091\)](#) && [aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) ([Do I meet enrolment requirements?](#))
- [**aVLPGIIXX Obstetrics and Gynaecology - State Exam**](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && [VYCET\(1,aVLAL091,aVLDO091,aVLKF101,aVLKB091,aVLFP091\)](#) &&

[aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) (*Do I meet enrolment requirements?*)

- [aVLVLI1XX Internal Medicine - State Exam](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && [VYCET\(1,aVLAL091,aVLDO091,aVLKF101,aVLKB091,aVLFP091\)](#) && [aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) (*Do I meet enrolment requirements?*)
- [aVLZPI1XX Public Health - State exam](#)
[aVLFA0822p](#) && [aVLNE9X1p](#) && [aVLPY9X1p](#) && [aVLDV7X21p](#) && [aVLAM9X1p](#) && [aVLVL7X61c](#) && [aVLVL9X62c](#) && [aVLVL9X63c](#) && [aVLVL9X64c](#) && [aVLVL9X65c](#) && [aVLIN9X22](#) && [aVLON091p](#) && [VYCET\(1,aVLAL091,aVLDO091,aVLKF101,aVLKB091,aVLFP091\)](#) && [aVLCH9X33c](#) && [aVLCJ0888](#) && [VSSP03X](#) (*Do I meet enrolment requirements?*)
- [VLCHI1XX Surgery - State Exam](#)
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) // [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && [VYCET\(3, VLPS07X // VLPS071, VSAT081, VLKA091, VSNO071, VSPM071, VLKB091, VLKF091, BMBS051, VLPM071, VLEP041, VLIA081, VLKM081, VLRL041, VLTL081, VSDL071, VSAL081, VSFP071\)](#) && [VLCH9X33c](#) && ([VLAJ0222](#) // [VSAJ0222](#) // [VSNJ0222](#)) && [VSSP03X](#) (*Do I meet enrolment requirements?*)
- [VLPDI1XX Paediatrics - State Exam](#)
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) // [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && [VYCET\(3, VLPS07X // VLPS071, VSAT081, VLKA091, VSNO071, VSPM071, VLKB091, VLKF091, BMBS051, VLPM071, VLEP041, VLIA081, VLKM081, VLRL041, VLTL081, VSDL071, VSAL081, VSFP071\)](#) && [VLCH9X33c](#) && ([VLAJ0222](#) // [VSAJ0222](#) // [VSNJ0222](#)) && [VSSP03X](#) (*Do I meet enrolment requirements?*)
- [VLPGI1XX Obstetric and Gynaecology - State Exam](#)
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && [VLVL9X66c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VLLO7X1](#) && [VSOT7X1p](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && [VYCET\(3, VLPS07X // VLPS071, VSAT081, VSNO071, VLKA091, VSPM071, VLKB091, VLKF091, BMBS051, VLPM071, VLEP041, VLTL081, VSDL071, VSAL081, VSAL082, VSDL071, VLRL041, VLIA081,](#)

[VLKM081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VSAJ0222](#) // [VSNJ0222](#)) && [VSSP03X](#) (*Do I meet enrolment requirements?*)

- [VLVLIIXX](#) *Internal Medicine - State Exam*
([VLFA0822p](#) // [VLFA0722p](#)) && [VLNE9X1p](#) && [VLPY9X1p](#) && [VLVZ9X1c](#) && [VSDV9X22p](#) && [VLAM9X1p](#) && ([VLVL7X61c](#) // [VLVL9X61c](#)) && [VLVL9X62c](#) && [VLVL9X63c](#) && [VLVL9X64c](#) && ([VLVL9X65c](#) // [VLVL7X65c](#)) && [VLVL9X66c](#) && [VLPD1033c](#) && [VLIN9X22](#) && [VLSD7X1p](#) && [VSEI7X1](#) && [VL0L7X1](#) && [VSOT7X1p](#) && [VSLP7X1](#) && [VLPL9X1](#) && [VLON091](#) && [VLST7X1p](#) && [VSLE7X1p](#) && [VLPG1022c](#) && VYCET(3, [VLPS07X](#) // [VLPS071](#), [VSAT081](#), [VLKA091](#), [VSNO071](#), [VSPM071](#), [VLKB091](#), [VLKF091](#), [BMBS051](#), [VLPM071](#), [VLEP041](#), [VLIA081](#), [VLKM081](#), [VLRL041](#), [VTL081](#), [VSDL071](#), [VSAL081](#), [VSFP071](#)) && [VLCH9X33c](#) && ([VLAJ0222](#) // [VSAJ0222](#) // [VSNJ0222](#)) && [VSSP03X](#) (*Do I meet enrolment requirements?*)

[Zobrazit další předměty](#)

The course is also listed under the following terms [Autumn 2004](#), [Spring 2005](#), [Autumn 2005](#), [Spring 2006](#), [Autumn 2006](#), [Spring 2007](#), [Autumn 2007](#), [Spring 2008](#), [Autumn 2008](#), [Spring 2009](#), [Autumn 2009](#), [Spring 2010](#), [Autumn 2010](#), [Spring 2011](#), [Autumn 2011](#), [Spring 2012](#), [Autumn 2012](#), [Spring 2013](#), [Autumn 2013](#), [Spring 2014](#), [Autumn 2014](#), [Spring 2015](#), [Autumn 2015](#), [Spring 2016](#), [Autumn 2016](#), [Spring 2019](#), [Spring 2018](#).

VSTE071 Lékařská technika v klinických oborech ✳

Faculty of Medicine

Autumn 2015

Extent and Intensity

0/0. 3 credit(s). Type of Completion: z (credit).

Teacher(s)

[Ing. Martin Skála](#) (seminar tutor)

[doc. MUDr. Kamil Ševela, CSc.](#) (seminar tutor)

[Ilona Poláčková](#) (assistant)

Supervisor

[doc. MUDr. Kamil Ševela, CSc.](#)

[Second Department of Internal Medicine - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Supplier department: [Second Department of Internal Medicine - Institutions shared with St. Anne's Faculty Hospital - Faculty of Medicine](#)

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine](#) (programme LF, M-VL)

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

Information on the extent and intensity of the course: 3x2 hod.

The course is also listed under the following terms [Autumn 2004](#), [Autumn 2005](#), [Autumn 2006](#), [Autumn 2007](#), [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#).

VSVT0211c Seminars in health informatics (advanced workshops) ✳**Faculty of Medicine**

Spring 2015

Extent and Intensity

0/2. 1 credit(s). Type of Completion: z (credit).

Teacher(s)

[MUDr. Aleš Bourek, Ph.D.](#) (lecturer)

Supervisor

[MUDr. Aleš Bourek, Ph.D.](#)

[Department of Biophysics - Theoretical Departments - Faculty of Medicine](#)

Contact Person: [Marta Vágnerová](#)

Supplier department: [Department of Biophysics - Theoretical Departments - Faculty of Medicine](#)

Prerequisites

The workshops are targeted at obtaining basic skills in information and communication technologies needed in the healthcare environment. They will be useful not only for medical students, but also for subsequent work in healthcare. Pre-requisite for this workshop are basic PC skills and of the network-environment. Workshops are not only focused at tools and technologies, but aim to bring understanding of and appropriate behavior in today's information society. Openness and willingness to share your thoughts and skills is expected. Workshop is highly interactive. Due to the need of harmonizing work schedules of students from various semesters of study and various faculties of MU, usually we must plan the timing of the seminars for two to three Saturdays in the course of the semester. When planning to register for the course, please bear this in mind.

Course Enrolment Limitations

The course is also offered to the students of the fields other than those the course is directly associated with.

The capacity limit for the course is 29 student(s).

Current registration and enrolment status: enrolled: 7/29, only registered: 0/29, only registered with preference (fields directly associated with the programme): 0/29

Fields of study the course is directly associated with

- [Stomatology](#) (programme LF, M-ST)
- [General Medicine](#) (programme LF, M-VL)

Course objectives

At the end of this course the student will be able to demonstrate basic competences in decision-making in the domain of healthcare. This is a highly interactive course focusing on exploring the "skill of thinking" and introduction of some techniques and tools facilitating this process of data, information, knowledge and concept handling.

Syllabus

- No fixed framework is specified. The seminars are customized as much as possible according to the needs of the workgroup registered for the subject in compliance with the aims of this seminar.

Literature

- [MORNSTEIN, Vojtěch](#). Healthcare informatics and overview of computer literacy for medical students. In: *Fundamentals of biophysics and medical technology*. In [BOUREK, Aleš](#). Healthcare informatics and overview of computer literacy for medical students. In: *Fundamentals of biophysics and medical technology*. 1. vyd. Brno: MU Press, 2007. p. 292-317, 27 pp. ISBN 978-80-210-4228-5. [info](#)
- [DUŠEK, Ladislav](#), [Jan MUŽÍK](#), [Jana KOPTÍKOVÁ](#), [Jan ŽALOUDÍK](#), [Daniel KLIMEŠ](#), [Aleš BOUREK](#), [Karel INDRÁK](#), [Vladimír MIHÁL](#), [Jaroslav ŠTĚRBA](#), [Rostislav VYZULA](#) and [Jitka ABRAHÁMOVÁ](#). Registrace dat tvoří nezbytnou informační základnu současné onkologie (Data registries form indispensable information base of current oncology). *Klinická onkologie*, Brno, 2007, vol. 20, Sup.1/2007, p. 53-62. ISSN 0862-495X. [info](#)
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- [BOUREK, Aleš](#) and [Ladislav DUŠEK](#). Evidence Based Strategy and everyday Healthcare Reality: Friends or Enemies? Rational information Handling for Benefit of All Stakeholders. In *Proceedings International Symposium: Evidence - Based Health Care, Priorities in Health Care*. 1. vyd. Krakow, Poland: Ceestahc, 2006. p. 139-142, 4 pp. [info](#)
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- [FORÝTKOVÁ, Lenka](#) and [Aleš BOUREK](#). Programy kvality a standardy léčebných postupů, Editorství Standardů léčebných postupů. : Verlag-Dashofer, Praha, 2006. 150 pp. 2006. ISBN 80-86229-29-7. [info](#)
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standardy léčebných postupů. 1. vyd. Praha: Verlag Dashofer, 2005. p. 1-8 (kap.3), 8 pp. ISBN 80-86229-29-7. [info](#)

- ZGODAVOVÁ, Kristina, [Aleš BOUREK](#) and Ludmil, A. GOLEMANOV. Multilingual Virtual Quality Centre Providing eLearning Facilities for Health Service Management and Vocational Managerial Education and Training. In *Proceedings of the Tenth International Symposium on Health Information Management Research ISHIMR 2005*. 1. vyd. Thessaloniky, Greece: South East European Research Centre (SEERC), 2005. p. 401-409, 9 pp. ISBN 960-87869-5-9. [info](#)
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Teaching methods

Interactive practically focused inovative and creative learning (scenarios, soft-systems, games, role-play etc.).

Assessment methods

interactive - workshop format, attendance of registered students is mandatory

Language of instruction

Czech

Further comments (probably available only in Czech)[Study Materials](#)

The course is taught annually.

The course is taught: in blocks.

Teacher's information

<http://www.med.muni.cz/~bourek/>

Prosím, zapisujte si předmět pouze v případě, že budete v průběhu semestru schopni obětovat dvě až tři soboty (ve kterých se semináře obvykle blokovým způsobem uskuteční). O navržených termínech na aktuální semestr jsou zapsaní studenti informováni na začátku semestru e-mailem (jakmile je znám počet a struktura zapsaných studentů). Výuka probíhá v počítačové učebně, Kamenice 126/3, 2.p Please enroll this subject only if you are willing (during the semester) to sacrifice two to three Saturday (when the seminar takes place normally in "block" format). About the proposed dates for each current semester the students will be informed at the beginning of the semester by e-mail (once the number and "structure" of enrolled students is known).

The course is also listed under the following terms [Spring 2003](#), [Spring 2004](#), [Spring 2005](#), [Spring 2006](#), [Spring 2007](#), [Spring 2008](#), [Spring 2009](#), [Spring 2010](#), [Spring 2011](#), [Spring 2012](#), [Spring 2013](#), [Spring 2014](#).

ZC011 Handling chemical substances ✳

Faculty of Medicine

Autumn 2019

Extent and Intensity

0/0/0. 0 credit(s). Type of Completion: z (credit).

Teacher(s)

[Ing. Martina Čarnecká, Ph.D.](#) (seminar tutor)

[doc. RNDr. Jiří Dostál, CSc.](#) (seminar tutor)

[Mgr. Jana Gregorová, Ph.D.](#) (seminar tutor)

[MUDr. Miroslava Hlaváčová](#) (seminar tutor)

[Mgr. Katarína Kostolanská](#) (seminar tutor)

[MUDr. Michaela Králiková, Ph.D.](#) (seminar tutor)

[Mgr. Jaromír Literák, Ph.D.](#) (seminar tutor)

[Mgr. Lucie Novotná](#) (seminar tutor)

[RNDr. Hana Paulová, CSc.](#) (seminar tutor)

[Mgr. Ondřej Peš, Ph.D.](#) (seminar tutor)

[Mgr. Anna Pleskačová](#) (seminar tutor)

[Mgr. Roman Sándor](#) (seminar tutor)

[prof. RNDr. Eva Tábořská, CSc.](#) (seminar tutor)

[doc. RNDr. Josef Tomandl, Ph.D.](#) (seminar tutor)

[Mgr. Marie Tomandlová, Ph.D.](#) (seminar tutor)

[Mgr. Jiří Slanina, Ph.D.](#) (assistant)

Supervisor

[doc. RNDr. Jiří Dostál, CSc.](#)

[Faculty of Medicine](#)

Supplier department: [Faculty of Medicine](#)

Prerequisites

For all students manipulating with chemical substances during their study at Faculty of Medicine, MU. The subject is necessary to pass every academic year.

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

there are 6 fields of study the course is directly associated with, [display](#)

Course objectives

The course "Handling chemical substances" is compulsory for all students who manipulate with chemicals in the practical courses during their studies at Faculty of Medicine, MU. This fact follows from study plans, responsible persons are guarantees of individual study fields. Main objectives are: to know basic chemical legislation, to master handling chemical substances including hazardous chemicals, and to know the removal of chemical wastes.

Syllabus

- basic definitions characteristics of hazardous chemicals hazard symbols, H-phrases, P-phrases safety sheet packing and labeling of hazardous chemicals storing of chemical substances responsibility of person basic rules for working in chemical laboratories removal of chemical wastes

Literature

required literature

- <http://www.rect.muni.cz/nso/>

Teaching methods

Introductory lecture at the beginning of semester in practical exercises and/or first lecture.

Assessment methods

The graduation from this course is every-year testing (valid for all registered students).

Language of instruction

Czech

Further comments (probably available only in Czech)

[Study Materials](#)

The course is taught annually.

Note related to how often the course is taught: první týden v semestru.

General note: Povinné každoroční školení bez kreditového hodnocení. Absolvování tohoto předmětu je nutnou podmínkou pro vstup do všech předmětů, ve kterých dochází k manipulaci s chemickými látkami (laboratorních cvičení, bakalářských a diplomových

práci).

Information on the extent and intensity of the course: 2 hod celkem.

Listed among pre-requisites of other courses

- [**aZLAN0232p** Anatomy II - lecture](#)
([aZLAN0131s](#)/[ZLAN0131s](#)) && ([aZC011](#)/[ZC011](#)) ([Do I meet enrolment requirements?](#))
- [**aZLAN0232s** Anatomy II - seminar](#)
([aZLAN0131s](#)/[ZLAN0131s](#)) && ([aZC011](#)/[ZC011](#)) ([Do I meet enrolment requirements?](#))
- [**aZLBC0221p** Biochemistry I - lecture](#)
([aZLLC011s](#)/[ZLLC011s](#)) && ([aZC011](#)/[ZC011](#)) ([Do I meet enrolment requirements?](#))
- [**aZLBC0221s** Biochemistry I - seminar](#)
([aZLLC011s](#)/[ZLLC011s](#)) && ([aZC011](#)/[ZC011](#)) ([Do I meet enrolment requirements?](#))
- [**aZLBI0222c** Biology II - practice](#)
([aZLBI0121c](#)/[ZLBI0121c](#)) && ([aZC011](#)/[ZC011](#)) ([Do I meet enrolment requirements?](#))
- [**aZLBI0222p** Biology II - lecture](#)
([aZLBI0121c](#)/[ZLBI0121c](#)) && ([aZC011](#)/[ZC011](#)) ([Do I meet enrolment requirements?](#))
- [**aZLET021c** Ethics in Dentistry - practice](#)
[aZC011](#) // [ZC011](#) ([Do I meet enrolment requirements?](#))
- [**aZLET021p** Ethics in Dentistry - lecture](#)
[aZC011](#) // [ZC011](#) ([Do I meet enrolment requirements?](#))
- [**aZLHE0221c** Histology and Embryology I - practice](#)
([aZLAN0131s](#)/[ZLAN0131s](#)) && ([aZC011](#)/[ZC011](#)) ([Do I meet enrolment requirements?](#))

[Zobrazit další předměty](#)

Teacher's information

<http://www.rect.muni.cz/nso/>

The course is also listed under the following terms [Autumn 2008](#), [Autumn 2009](#), [Autumn 2010](#), [Autumn 2011](#), [Autumn 2012](#), [Autumn 2013](#), [Autumn 2014](#), [Autumn 2015](#), [Autumn 2016](#), [Accreditation autumn](#).

ZC041 Handling chemical substances ✱

Faculty of Medicine

Spring 2018

Extent and Intensity

0/0/0. 0 credit(s). Type of Completion: z (credit).

Teacher(s)

[doc. RNDr. Jiří Dostál, CSc.](#) (lecturer)
[Ing. Martina Čarnecká, Ph.D.](#) (seminar tutor)
[Mgr. Jana Gregorová, Ph.D.](#) (seminar tutor)
[Mgr. Jaromír Literák, Ph.D.](#) (seminar tutor)
[RNDr. Hana Paulová, CSc.](#) (seminar tutor)
[Mgr. Ondřej Peš, Ph.D.](#) (seminar tutor)
[prof. RNDr. Eva Tábořská, CSc.](#) (seminar tutor)
[doc. RNDr. Josef Tomandl, Ph.D.](#) (seminar tutor)
[Mgr. Marie Tomandlová, Ph.D.](#) (seminar tutor)
[MUDr. Michaela Králíková, Ph.D.](#) (assistant)
[Alan Kuběna](#) (assistant)
[Mgr. Jiří Slanina, Ph.D.](#) (assistant)

Supervisor

[doc. RNDr. Jiří Dostál, CSc.](#)
[Faculty of Medicine](#)
Supplier department: [Faculty of Medicine](#)

Prerequisites

For all students manipulating with chemical substances during their study at Faculty of Medicine, MU. The subject is necessary to pass every academic year.

Course Enrolment Limitations

The course is only offered to the students of the study fields the course is directly associated with.

Fields of study the course is directly associated with

- [General Medicine \(eng.\)](#) (programme LF, M-VL)
- [General Medicine](#) (programme LF, M-VL)
- [Laboratory Assistant](#) (programme LF, B-SZ)
- [Dentistry \(eng.\)](#) (programme LF, M-ZL)
- [Dentistry](#) (programme LF, M-ZL)

Course objectives

The course "Handling chemical substances" is compulsory for all students who manipulate with chemicals in the practical courses during their studies at Faculty of Medicine, MU. This fact follows from study plans, responsible persons are guarantees of individual study fields. Main objectives are: to know basic chemical legislation, to master handling chemical substances including hazardous chemicals, and to know the removal of chemical wastes.

Syllabus

- *basic definitions characteristics of hazardous chemicals hazard symbols, H-phrases, PS-phrases safety sheet packing and labeling of hazardous chemicals storing of chemical substances responsibility of person basic rules for working in chemical laboratories removal of chemical wastes*

Literature

required literature

- <http://www.rect.muni.cz/nso/>

Teaching methods

Introductory lecture at the beginning of semester in practical exercises and/or first lecture.

Assessment methods

The graduation from this course is every-year testing (valid for all registered students).

Language of instruction

Czech

Further comments (probably available only in Czech)

The course is taught annually.

Note related to how often the course is taught: první týden v semestru.

General note: Povinné každoroční školení bez kreditového hodnocení. Absolvování tohoto předmětu je nutnou podmínkou pro vstup do všech předmětů, ve kterých dochází k manipulaci s chemickými látkami (laboratorních cvičení, bakalářských a diplomových prací).

Information on the extent and intensity of the course: 2 hod celkem.

Listed among pre-requisites of other courses

- [aZLLM0522c Medical Oral Microbiology II - practice](#)
[aZLLM0421c](#) && [aZLBC0221p](#) && [aZLET021p](#) && ([aZLLT0222s](#) // [ZLLT0222s](#)) && ([aZC041](#)//[ZC041](#)) (*Do I meet enrolment requirements?*)
- [aZLLM0522p Medical Oral Microbiology II - lecture](#)
[aZLLM0421c](#) && [aZLBC0221p](#) && [aZLET021p](#) && ([aZLLT0222s](#) // [ZLLT0222s](#)) && ([aZC041](#)//[ZC041](#)) (*Do I meet enrolment requirements?*)
- [VSPA0521c Pathology - practicals](#)
[VSFY0422p](#) && ([VSBC041p](#) // [VSBC0422p](#)) && [VSAN0333p](#) && [VSHE0322p](#) && ([VSLT0221s](#) // [VSLT011s](#)) && [VSET021](#) && ([VLLM0421c](#) // [STLM0421c](#)) && [ZC041](#) (*Do I meet enrolment requirements?*)
- [VSPA0521p Pathology I - lecture](#)
[VSFY0422p](#) && ([VSBC041p](#) // [VSBC0422p](#)) && [VSAN0333p](#) && [VSHE0322p](#) && ([VSLT0221s](#) // [VSLT011s](#)) && [VSET021](#) && ([VLLM0421c](#) // [STLM0421c](#)) && [ZC041](#) (*Do I meet enrolment requirements?*)
- [VSPF0521c Pathological physiology I - practice](#)
[VSFY0422p](#) && ([VSBC041p](#) // [VSBC0422p](#)) && [VSAN0333p](#) && [VSHE0322p](#) && ([VSLT0221s](#) // [VSLT011s](#)) && [VSET021](#) && [ZC041](#) (*Do I meet enrolment requirements?*)
- [VSPF0521p Pathological physiology - lectures](#)
[VSFY0422p](#) && ([VSBC041p](#) // [VSBC0422p](#)) && [VSAN0333p](#) && [VSHE0322p](#) && ([VSLT0221s](#) // [VSLT011s](#)) && [VSET021](#) && [ZC041](#) (*Do I meet enrolment requirements?*)
- [VSSL051c Social Medicine - practice](#)
([VSLT0221s](#) // [VSLT011s](#)) && [VSET021](#) && [VSP3X1](#) && [ZC041](#) (*Do I meet enrolment requirements?*)
- [VSSL051p Social Medicine - lecture](#)
([VSLT0221s](#) // [VSLT011s](#)) && [VSET021](#) && [VSP3X1](#) && [ZC041](#) (*Do I meet enrolment requirements?*)

- [ZLCP051c Clinical Introduction to Surgery - practice](#)
[ZLFY0422c](#) && [ZLFY0422s](#) && [ZLBC041c](#) && [ZLBC041s](#) && [ZLAN0333p](#) &&
[ZLHE0322p](#) && ([ZLLT0222s](#) // [ZLLT0222p](#)) && [ZLET021p](#) && [ZLPO011p](#) &&
[ZC041](#) (*Do I meet enrolment requirements?*)

[Zobrazit další předměty](#)

Teacher's information

<http://www.rect.muni.cz/nso/>

The course is also listed under the following terms [Spring 2010](#), [Spring 2011](#), [Spring 2012](#),
[Spring 2013](#), [Spring 2014](#), [Spring 2015](#), [Spring 2016](#), [Spring 2019](#), [Accreditation spring](#).

- [Complete information about the courses](#)
- [Enrolment Statistics \(recent\)](#)
- [List of Seminar Groups \(Autumn 2019\)](#)
- [Course Discussion Group \(Autumn 2019\)](#)