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COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KDD/J-S-VL-587/19	Adolescent Medicine

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: ,5 / ,5 **per level/semester:** 7 / 7
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 10.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
pediatrics 1

Course requirements:
90% participation in practical exercises; Examination of adolescents and elaboration of a medical record model at the last practical exercise with active discussion about patient and teacher examination
Scale of assessment (preliminary/final): monitoring student activity

Learning outcomes:
The student deepens knowledge about physiological peculiarities of adolescence and pathological states during adolescence and adolescence. They will get acquainted with the evaluation of adolescents' working ability in the choice of study and profession.

Class syllabus:
Profesiography The most common diseases of the endocrine system in adolescents Psychosocial problems in chronically ill adolescents Gynecological problems in adolescents Vaccination in adolescents The most common psychosomatic diseases and neuropsychic problems of adolescent age. GIT functional diseases in adolescents Adolescent tuberculosis Mental disorders in adolescents Gynecological problems in adolescence

Recommended literature:
Jakušová, Ľ., Buchanec,J., Bánovčin, P. a kol.
Dorastové lekárstvo. Martin: Osveta, 2014, 607 s. ISBN 978-80-8063-419-3

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 30

A	ABS0	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: doc. MUDr. Ľubica Jakušová, PhD., MUDr. Otília Petrovičová, PhD., MUDr. Marek Pršo, PhD., doc. MUDr. Peter Ďurdík, PhD., MUDr. Anna Ďurdíková, PhD., doc. MUDr. Jarmila Vojtková, PhD., MUDr. Vladimír Zoľák, PhD.

Last change: 29.03.2022

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KAIM/J-S-VL-585/19	Algesiology and Paliative Medicine

Educational activities:
Type of activities: practicals
Number of hours:
per week: ,5 **per level/semester:** 7
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 10.

Educational level: I.II.

Prerequisites:

Course requirements:
Attendance of 100 % practice workouts and successful completition of final test.

Learning outcomes:
With completition of the subject, student will obtain knowledge: anatomy, physiology and pathophysiology of pain, clinical forms of pain, characteristic of analgetics and their clinical use
Intended Learning Objectives:
Student:
1. knows the basic anatomical, physiological and pathophysiological mechanisms involved in pain
2. can recognize the basic types of pain based on the characteristics and modalities typical for a given type of pain.
3. knows and uses scales for assessing and measuring pain.
4. knows the basics of pain pharmacotherapy.
5. understands the specifics of oncological pain, neuropathic pain, musculoskeletal pain and phantom pain, knows the basic principles of treating these types of pain.
6. understands and knows the principles and goals of palliative medicine, knows the principles and differences between general and specialized palliative medicine, knows how to recognize a patient with palliative needs, knows the treatment of basic symptoms in palliative patients

Class syllabus:
History of pain management, definition of pain, anatomy, physiology, pathophysiology of pain, clinical types of pain, diagnostics of pain syndromes, assessing of pain, analgetics, clinical pain management, basics of palliative medicine

Recommended literature:
Harald Breivik, Michael Nicholas, William Campbell, Toby Newton-John: Clinical Pain Management Second Edition: Practice and Procedures
Edition, 2, revised ; Publisher, CRC Press, 2008 ; ISBN, 0340940069, 9780340940068.
Back, Ian Nicholas: Palliative Medicine Handbook, 303 pages · Language. English · Publisher. BPM Books · Publication date. 1 Nov. 2001 · ISBN-10. 0954224604 · ISBN-13. 978-0954224608.

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 217

A	ABS0	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: MUDr. Zuzana Biringerová, PhD., MUDr. Jacgueline Alvarez Ordaz, MUDr. Michal Venglarčík, PhD., MUDr. Michaela Mikolková

Last change: 17.07.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚA/J-S-VL-501/25	Anatomy (1)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 6 / 4 **per level/semester:** 84 / 56
Form of the course: on-site learning

Number of credits: 9

Recommended semester: 1.

Educational level: I.II.

Prerequisites:

Course requirements:
Requirements
• 100% attendance at practical and dissection sessions
• Successful completion of written credit tests and oral examinations – the student must achieve at least 60% success in each written credit test and at least a grade E in the oral examination.
Written Tests:
1. Axial skeleton, general osteology, general arthrology, general myology (10% weight in the final assessment)
2. Skeleton, joints, and muscles of the upper and lower limbs(15% weight in the final assessment)
3. Vessels and nerves of the upper and lower limbs (10% weight in the final assessment)
4. Cardiovascular and respiratory systems (20% weight in the final assessment)
5. Gastrointestinal system (20% weight in the final assessment)
Oral Examination:
1. Cranial spaces and vertebrae identification (10% weight in the final assessment)
2. Skeleton, muscles, vessels, and nerves of the upper and lower limbs; topographical spaces of the upper and lower limbs (15% weight in the final assessment)
Final Grading for Anatomy 1
A: 100 – 91%
B: 90 – 81%
C: 80 – 73%
D: 72 – 66%
E: 65 – 60%
Fx: less than 60%
Scale of assessment (preliminary/final): Final study result evaluation is counted from the scores of the midsemester tests and oral examinations. 100/0

Learning outcomes:
Upon successful completion of the course, the student will be able to identify and describe the principal structures of the musculoskeletal, cardiovascular, respiratory, and digestive systems,

explain their topographical relationships, and apply the acquired anatomical knowledge in a clinical context.

Class syllabus:

Lectures

• Introduction to the study of anatomy
• General osteology
• General arthrology
• Thoracic joints (Juncturae thoracis)
• Vertebral column joints (Juncturae columnae vertebralis)
• Craniovertebral joints (Articulationes craniovertebrales)
• Cranial joints (Juncturae cranii)
• Skull of the newborn
• General myology
• General anatomy of the vascular and peripheral nervous systems
• Vessels of the upper limb (Vasa membri superioris)
• Brachial plexus (Plexus brachialis)
• Vessels of the lower limb (Vasa membri inferioris)
• Lumbar and sacral plexus (Plexus lumbalis et sacralis)
• Lymphatic vessels and nodes of the lower limb
• Clinical anatomy of the upper and lower limbs
• Topographical anatomy of the limbs
• Heart (Cor)
• Major, minor, and fetal circulatory systems (Circuitus sanguinis major, minor et foetalis)
• Respiratory system (Systema respiratorium)
• Mediastinum
• Vessels of the thorax
• Gastrointestinal system (Systema gastrointestinale)
• Vessels of the abdomen

Practicals:

• Anatomical planes and directions, Ribs and sternum, Vertebral column
• Skull, Spaces of the skull
• Skeleton of the upper and lower limb
• Joints of the upper and lower limb
• Muscles of the upper and lower limb
• Topographic dissection of the limbs
• Cardiovascular system (Systema cardiovasculare)
• Respiratory system (Systema respiratorium)
• Gastrointestinal system (Systema gastrointestinale)

Recommended literature:

x Waschke, J., Bockers, T. et Paulsen, F. Sobotta Anatomy textbook. Elsevier Science, 2018. 840 pages. ISBN 978-07-0206-760-0
x Paulsen, F. et Waschke, J. Sobotta Atlas of Anatomy (3 Volume Set). Urban und Fische, 2013. 1180 s. ISBN 978-07-0205-250-7
x Paulsen, F. et Waschke, J. Sobotta Atlas of Anatomy (Package). Musculoskeletal system; Internal Organs; Head,Neck and Neuroanatomy; Muscle Tables. Elsevier Science, 2018. 1376 s. ISBN 978-07-0205-268-2
x Drake, R. L. et al. Gray's Anatomy for Students. Elsevier Science, 2023, 1168 pp. ISBN 978-03-2393-423-7

x Výbohová, D. Axial Skeleton Study Guide. Martin, 2017; 106 pages; ISBN 978-80-8187-026-2. MEFANET; Portal of Jessenius Faculty of Medicine Comenius University, Available from WWW: http://portal.jfmed.uniba.sk/articles.php?aid=362
x Hešková, G. et al. Bones, Joints And Muscles Of The Upper and Lower Limbs Study Guide. Martin, 2018; Pages 194; ISBN: 978-80-8187-049-1. MEFANET; Portal of Jessenius Faculty of Medicine Comenius University, Available from WWW: https://portal.jfmed.uniba.sk//articles.php?aid=389.
x Hešková et al. Vessels and nerves of the upper limb. Martin, 2025. 176 pages, ISBN 978-80-8187-176-4. MEFANET; Portal of Jessenius Faculty of Medicine Comenius University, Available from WWW: https://portal.jfmed.uniba.sk//clanky.php?aid=535
x Výbohová D. et al. Vessels and nerves of the lowerer limb. Martin, 2025. 152 pages, ISBN 978-80-8187-177-1. MEFANET; Portal of Jessenius Faculty of Medicine Comenius University, Available from WWW: https://portal.jfmed.uniba.sk/clanky.php?aid=534
x Výbohová D. et al. Heart And Respiratory System - Study Guide. Martin, 2019; 125 pages, ISBN 978-80-8187-065-1. MEFANET; Portal of Jessenius Faculty of Medicine Comenius University, Available from WWW: https://portal.jfmed.uniba.sk//articles.php?aid=400
x Výbohová D. et al. Anatomy of the Urogenital System. Martin, 2021. 145 pages; ISBN 978-8-8187-105-4. MEFANET; Portal of Jessenius Faculty of Medicine Comenius University, Available from WWW: https://portal.jfmed.uniba.sk//articles.php?aid=448
x Hešková et al. Anatomy of the Alimentary System. Martin, 2022. 200 pages, ISBN 978-80-8187-121-4. MEFANET; Portal of Jessenius Faculty of Medicine Comenius University, Available from WWW: https://portal.jfmed.uniba.sk/clanky.php?aid=463
Acland's Video Atlas of Human Anatomy. Wolters Kluwer Health, 2023. Available from WWW: https://aclandanatomy.com/
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Acland's Video Atlas of Human Anatomy. Wolters Kluwer Health, 2023. Available from WWW: https://aclandanatomy.com/
Loukas, M. et al. Gray's Clinical Photographic Dissector of the Human Body. Elsevier, 2018. 464 pages. ISBN 978-03-2354-417-7.
Gilroy, A. M. et al. Atlas of Anatomy. Thieme Medical Publishers 2020. 778 s. ISBN 978-16-8420-203-4.
Netter, F.H. Netter Atlas of Human Anatomy: ASystems Approach. Elsevier, 2022. 712 s. ISBN 978-03-2376-028-7
Crossman, A.R. and Nearly, D. Neuroanatomy, an illustrated colour text. Churchill Livingstone Elsevier, 2019. 185 pp. ISBN 978-07-0203-086-4.

Languages necessary to complete the course:
english

Notes:

Past grade distribution
Total number of evaluated students: 103

A	ABS0	B	C	D	E	FX
6,8	0,0	16,5	24,27	19,42	14,56	18,45

Lecturers: doc. MUDr. Yvetta Mellová, CSc., MUDr. Gabriela Hešková, PhD., doc. MUDr. Desanka Výbohová, PhD., MVDr. Dagmar Kalenská, PhD., MUDr. Lenka Kunertová, MUDr. Katarína Lešková, PhD., RNDr. Alena Mazuráková, PhD., MVDr. Sandra Hurta Csizmár, PhD.

Last change: 27.08.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚA/J-S-VL-502/25	Anatomy (2)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 6 / 4 **per level/semester:** 84 / 56
Form of the course: on-site learning

Number of credits: 11

Recommended semester: 2.

Educational level: I.II.

Prerequisites: JLF.ÚA/J-S-VL-501/25 - Anatomy (1)

Recommended prerequisites:
Anatomy 1

Course requirements:
1.100% attendance at the practicals and dissections
2. successful completion of 3 written tests (test 1 - urogenital system, test 2 - opening dissection test, test 3 - nervous system), set of minitests and oral dissection examination – the student must achieve a minimum = 60% in each written test and E in each oral test (examination) to pass
3. successful passing of the final exam consisting of 3 parts: written test, practical exam, final oral exam
Scale of assessment (preliminary/final): 10/90

Learning outcomes:
A graduate of anatomy has knowledge of the human body to the extent required in undergraduate studies. They understand the principles of the structure of the human body, its parts, and organs in sufficient detail to ensure that the acquired knowledge is lasting, providing a foundation for understanding physiological and pathological processes and changes, and later serving as a basis for studying clinical disciplines.

Class syllabus:
Urogenital system. Vessels of the abdomen and pelvis. Vessels of the thorax. Vessels of the head and neck.Cranial nerves. Cervical plexus. Topographic anatomy of the head and neck. Topographic anatomy of the thorax and abdomen. Autonomic nervous system. Dissection of the head, neck, thorax , abdomen and pelvis.
Nervous system – general neuroanatomical terms. Spinal cord.Brainstem I. – medulla oblongata, pons Varoli, mesencephalon.Telencephalon – lobi et gyri. Cortical centres. Brainstem II. Nuclei of the cranial nerves. Cerebellum.Meninges. Dural venous sinuses. Diencephalon. Blood supply of the CNS . Basal nuclei. White matter of the hemispheres. Ventricles of the CNS. Sensory nerve tracts – interoceptive, proprioceptive, exteroceptive sensibilities . Olfactory and gustatory pathways. Pyramidal and extrapyramidal motor systems. Bulbus oculi. Visual pathway. Pupillary

reflex pathway. Muscles of the eyeball and their nerve supply. Acessory organs of the eyeball. External and middle ear. Internal ear, auditory and vestibular pathway. Limbic system.

Recommended literature:

povinná literatúra:

x Waschke, J., Bockers, T. et Paulsen, F. Sobotta Anatomy textbook. Elsevier Science, 2018. 840 pages. ISBN 978-07-0206-760-0

x Paulsen, F. et Waschke, J. Sobotta Atlas of Anatomy (3 Volume Set). Urban und Fische, 2013. 1180 s. ISBN 978-07-0205-250-7

x Paulsen, F. et Waschke, J. Sobotta Atlas of Anatomy (Package). Musculoskeletal system; Internal Organs; Head,Neck and Neuroanatomy; Muscle Tables. Elsevier Science, 2018. 1376 s. ISBN 978-07-0205-268-2

x Drake, R. L. et al. Gray's Anatomy for Students. Elsevier Science, 2023, 1168 pp. ISBN 978-03-2393-423-7

x Výbohová, D. Axial Skeleton Study Guide. Martin, 2017; 106 pages; ISBN 978-80-8187-026-2. MEFANET; Portal of Jessenius Faculty of Medicine Comenius University, Available from WWW: http://portal.jfmed.uniba.sk/articles.php?aid=362

x Hešková, G. et al. Bones, Joints And Muscles Of The Upper and Lower Limbs Study Guide. Martin, 2018; Pages 194; ISBN: 978-80-8187-049-1. MEFANET; Portal of Jessenius Faculty of Medicine Comenius University, Available from WWW: https://portal.jfmed.uniba.sk// articles.php?aid=389.

x Hešková et al. Vessels and nerves of the upper limb. Martin, 2025. 176 pages, ISBN 978-80-8187-176-4. MEFANET; Portal of Jessenius Faculty of Medicine Comenius University, Available from WWW: https://portal.jfmed.uniba.sk//clanky.php?aid=535

x Výbohová D. et al. Vessels and nerves of the lowerer limb. Martin, 2025. 152 pages, ISBN 978-80-8187-177-1. MEFANET; Portal of Jessenius Faculty of Medicine Comenius University, Available from WWW: https://portal.jfmed.uniba.sk/clanky.php?aid=534

x Výbohová D. et al. Heart And Respiratory System - Study Guide. Martin, 2019; 125 pages, ISBN 978-80-8187-065-1. MEFANET; Portal of Jessenius Faculty of Medicine Comenius University, Available from WWW: https://portal.jfmed.uniba.sk//articles.php?aid=400

x Výbohová D. et al. Anatomy of the Urogenital System. Martin, 2021. 145 pages; ISBN 978-8-8187-105-4. MEFANET; Portal of Jessenius Faculty of Medicine Comenius University, Available from WWW: https://portal.jfmed.uniba.sk//articles.php?aid=448

x Hešková et al. Anatomy of the Alimentary System. Martin, 2022. 200 pages, ISBN 978-80-8187-121-4. MEFANET; Portal of Jessenius Faculty of Medicine Comenius University, Available from WWW: https://portal.jfmed.uniba.sk/clanky.php?aid=463

Acland's Video Atlas of Human Anatomy. Wolters Kluwer Health, 2023. Available from WWW: https://aclandanatomy.com/

odporúčaná literatúra:

Acland's Video Atlas of Human Anatomy. Wolters Kluwer Health, 2023. Available from WWW: https://aclandanatomy.com/

Loukas, M. et al. Gray's Clinical Photographic Dissector of the Human Body. Elsevier, 2018. 464 pages. ISBN 978-03-2354-417-7.

Gilroy, A. M. et al. Atlas of Anatomy. Thieme Medical Publishers 2020. 778 s. ISBN 978-16-8420-203-4.

Netter, F.H. Netter Atlas of Human Anatomy: ASystems Approach. Elsevier, 2022. 712 s. ISBN 978-03-2376-028-7

Crossman, A.R. and Nearly, D. Neuroanatomy, an illustrated colour text. Churchill Livingstone Elsevier, 2019. 185 pp. ISBN 978-07-0203-086-4.

Languages necessary to complete the course:
english

Notes:

Past grade distribution
Total number of evaluated students: 98

A	ABS0	B	C	D	E	FX
16,33	0,0	10,2	11,22	9,18	19,39	33,67

Lecturers: doc. MUDr. Yvetta Mellová, CSc., MVDr. Sandra Hurta Csizmár, PhD., MUDr. Lenka Kunertová, MUDr. Katarína Lešková, PhD., RNDr. Alena Mazuráková, PhD., MUDr. Gabriela Hešková, PhD., MVDr. Dagmar Kalenská, PhD., doc. MUDr. Desanka Výbohová, PhD.

Last change: 27.08.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KAIM/J-S-VL-558/26	Anesthesiology and Intensive Medicine

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 2 / 2 **per level/semester:** 28 / 28
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 10.

Educational level: I.II.

Prerequisites: JLF.KAIM/J-S-VL-606/19 - Emergency Medicine and JLF.ÚFa/J-S-VL-530/21 - Pharmacology (2)

Course requirements:
Attendance of 100 % practice workouts and successful completiton of final examination.

Learning outcomes:
With completition of the subject students will obtain following theoretical knowledge and practical experience: history of anesthesia, the role of anesthesia in surgical and diagnostic disciplines, types of anesthesia, practical application of general and regional anesthesia, anesthesia induction and termination, side effects of anesthetic agents, management of critically ill patients, diagnostic procedures, monitoring in intensive care, mechanical ventilation.

Class syllabus:
History of anesthesia, definitions, characteristics, types of anesthesia, pain, clinical pharmacology, management of airways, i.v. access, intravenous anesthetics, inhalational anesthetics, analgetics, muscle relaxants, anesthesia equipments, general anesthesia, regional anesthesia, specific problems of anesthesia in surgical disciplines, one day surgery. History of intensive care and mechanical ventilation, addmision of patients to intensive care unit, single and multiple organ failure, monitoring in intensive care, mechanical ventilation, extracorporal life support systems, paliative medicine, brain death diagnostics.

Recommended literature:
Stoelting RK, Miller RD Basics of anesthesia, fifth edition, Churchill Livingstone Elsevier, Philadelphia, 2007, 697 pp Barash, P.G. et al. Clinical anesthesia. 7th ed., Philadelphia: Lippincott Williams & Wilkins, 2013. Allmann, K.G. Oxford Handbook of Anaesthesia. Oxford: Oxford University Press, 2011. 1309 s. ISBN 978-0-19-958404-8 Marini JJ, Wheeler AP Critical Care Medicine. The Essentials. Lippincott Williams & Wilkins; 4 edition (1 Nov 2009) Bersten AD, Handy JM Oh's Intensive Care Manual, Elsevier; 8 edition, 2018

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 0

A	ABS0	B	C	D	E	FX
0,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: MUDr. Zuzana Biringerová, PhD., prof. MUDr. Beata Drobná Sániová, PhD., MUDr. Jacgueline Alvarez Ordaz, MUDr. Alena Škutchanová, MUDr. Martina Žáčková, MUDr. Andrea Ráheľ Kubisová, MUDr. Zuzana Benić, MUDr. Zuzana Čiljaková, MUDr. Tomáš Fecko, MUDr. Jana Sendreyová, MUDr. Michal Venglarčík, PhD.

Last change: 30.06.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚCJ/J-S-VL-507-Z/15	Basic of Medical Terminology (1)

Educational activities:
Type of activities: practicals
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 1.

Educational level: I.II.

Prerequisites:

Course requirements:
2 written tests, minimum percentage to pass each test is 60%
Evaluation: A: 91-100%, B: 90-81%, C: 80-73%, D: 72-66%, E: 65-60%, FX: less than 60%
Scale of assessment (preliminary/final): 50%/50%

Learning outcomes:
The main teaching output is to enable the graduates to get competence in exact and correct use of Latin medical terminology. Graduates in nursing should meet the following requirements: a) to master Latin pronunciation and spelling b) to master selected Latin morphological structures fragment in norm and verb terms/expressions c) to master basic Lexis especially in anatomical terminology, but also in clinical subjects and pharmacology d) to master basic syntactical structure of medical terms (complex terms, close/loose attribud´tes, word-order) e) to master word-building (derivation in one-word terms) affixes different meanings of prefixes/suffixes) and relations of word-building elements (synonym, antonym, homonym).

Class syllabus:
1. Brief Survey into the History of Medical Terminology. Introduction to Latin Grammar – Pronunciation of Latin Sounds. Word, Noun and Verb Categories. Noun Declension. Structure of Terms.
2. 1st A-Declension, Latin and Greek Nouns, 1st Declension Adjectives.
3. 2nd O-Declension: Latin Nouns – Masculines, Neuters.
4. 2nd O-Declension: Greek Nouns – Masculines, Neuters; 2nd Declension Adjectives.
5. 3rd Latin Consonant-Declension – Masculine, Feminine Nouns.
6. 3rd Latin Consonant-Declension – Neuter Nouns; Nouns of the 3rd Consonant-Declension + Adjectives of the 1st and the 2nd Declensions.
7. TEST I
8. 3rd Latin Vowel-Declension – Masculine and Feminine Nouns.
9. 3rd Latin Vowel-Declension – Neuter Nouns, Special Declension; Nouns of the 3rd Vowel-Declension + Adjectives of the 1st and the 2nd Declensions.
10. 4th Declension – Masculine, Neuter Nouns; Nouns of the 4th Declension + Adjectives of the 1st and the 2nd Declensions.

11. 5th Declension – Feminine Nouns; Nouns of the 5th Declension + Adjectives of the 1st and the 2nd Declensions.
12. 3rd Declension – Greek Nouns. Consonant-Declension – Masculines, Feminines, Neuters.
13. 3rd Declension – Greek Nouns. Vowel-Declension. Terms formed by the suffixes -itis, -oma, -osis.
14. TEST II

Recommended literature:
BUJALKOVÁ, M., JUREČKOVÁ, A.: Greco-Latin Medical Terminology. Textbook for Students of Medicine. 2nd revised edition. Martin: Vydavateľstvo Osveta 2020. 190 s. ISBN 978-80-8063-490-2

Languages necessary to complete the course:
English language, Latin language

Notes:

Past grade distribution
Total number of evaluated students: 1418

A	ABS0	B	C	D	E	FX
18,9	0,49	32,16	23,06	16,29	8,67	0,42

Lecturers: Mgr. Miroslav Čovan, PhD., Mgr. Samuel Javornický, PhD., Mgr. Desana Kiselová, doc. Mgr. Erika Juríková, PhD.

Last change: 17.03.2022

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027	
University: Comenius University Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.ÚCJ/J-S-VL-507/25	**Course title:** Basic of Medical Terminology (2)
Educational activities: **Type of activities:** practicals **Number of hours:** **per week:** 2 **per level/semester:** 28 **Form of the course:** on-site learning	
Number of credits: 3	
Recommended semester: 2.	
Educational level: I.II.	
Prerequisites: JLF.ÚCJ/J-S-VL-507-Z/15 - Basic of Medical Terminology (1)	
Course requirements: 2 written credit tests, minimum percentage to pass each is 60% Evaluation: A: 91-100%, B: 90-81%, C: 80-73%, D: 72-66%, E: 65-60%, FX: less than 60% Scale of assessment (preliminary/final): 40% for credit tests / 60% for written exam	
Learning outcomes: The main teaching output is to enable the graduates to get competence in exact and correct use of Latin medical terminology. Graduates in nursing should meet the following requirements: a) to master Latin pronunciation and spelling b) to master selected Latin morphological structures fragment in norm and verb terms/expressions c) to master basic Lexis especially in anatomical terminology, but also in clinical subjects and pharmacology d) to master basic syntactical structure of medical terms (complex terms, close/loose attribud´tes, word-order) e) to master word-building (derivation in one-word terms) affixes different meanings of prefixes/suffixes) and relations of word-building elements (synonym, antonym, homonym).	
Class syllabus: 1. 3rd Declension Adjectives – One Termination Adjectives, Two Termination Adjectives, Three Termination Adjectives. 2. 3rd Declension Adjectives – Declension; Greek Adjectives of 3rd Declension 3. Comparison of Adjectives – Regular, Irregular, Incomplete Comparison. 4. Comparison of Adjectives – Declension of Comparative and Superlative. 5. Numerals – Cardinal, Ordinal, Multiple Numerals. Declension of Numerals. 6. Medical Prescription – Verb. Decimal Point Metric Prefixes. 7. TEST III 8. Medical Prescription – Grammatical Structure. Extemporaneous MP, Non-Extemporaneous MP (for Brand-Name Drugs). Abbreviations Used in MP. 9. Prefixes – Prefixes Related to Direction, Place and Time. Prefixes Denoting Quality and Negation. 10. Suffixes – Noun Suffixes, Adjective Suffixes. 11. Compound Words – Most Common Roots: Nouns Denoting State/Process, Disease, Branch of Medicine. Nouns Denoting Surgical or Diagnostic Procedure. Nouns Denoting	

Human Body, its Parts and Organs.
12. Compound Words – Most Common Roots: Nouns Denoting Body Fluids, Secretions, Substances. Adjectives/Numerals Denoting State, Quality, Quantity, Colour.
13. Repetition in Exercises.
14. TEST IV

Recommended literature:
BUJALKOVÁ, M., JUREČKOVÁ, A.: Greco-Latin Medical Terminology. Textbook for Students of Medicine. 2nd revised edition. Martin: Vydavateľstvo Osveta 2020. 190 s. ISBN 978-80-8063-490-2

Languages necessary to complete the course:
English language, Latin language

Notes:

Past grade distribution
Total number of evaluated students: 94

A	ABS0	B	C	D	E	FX
20,21	0,0	37,23	22,34	9,57	7,45	3,19

Lecturers: Mgr. Miroslav Čovan, PhD., Mgr. Samuel Javornický, PhD., Mgr. Desana Kiselová, doc. Mgr. Erika Juríková, PhD.

Last change: 10.07.2025

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.CPMV/J-S-VL-633/19	Basics in Medical Education

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: ,5 / 1 **per level/semester:** 7 / 14
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 10.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
not applicable

Course requirements:
100% attendance
Assessment of students takes the form of research of original scientific papers concerning innovations and trends in medical education. Rating: A: 100-91%, B: 90-82%, C: 81-73%, D: 73-68%, E: 67-60%, FX 59% and less
Scale of assessment (preliminary/final): final evaluation

Learning outcomes:
Graduates understand the latest principles of medical education, understand its goals, outcomes, know the role of teachers in medical education, know different forms of curriculum formation, new active forms of education at medical faculties in theoretical, preclinical and clinical disciplines. It is anticipated that in the future graduates of the subject will consider the career of university teachers at the Faculty of Medicine.

Class syllabus:
Specifics of education in adulthood, the principle of university didactics.
Goals and outcomes of undergraduate medical education.
Blooms taxonomy, ILOS, constructive alingnment
Creation of modern medical education curriculum
Teacher in medical education
Traditional and active forms of medical education (lectures, teaching in small groups, team-based learning, project-based learning, problem-based learning, case-based learning)
Technology-based education (simulation, e-learning, virtual patients). Peer to-peer-teaching - mutual learning in practice.
Assessment methods in medical education, objective evaluation of OSCE clinical skills
Specific bedside teaching, clinical reasoning in teaching, the role of reflection in learning
Research in medical education

Recommended literature:

Hanáček, Mokrý a spol. Trendy v medicínskom vzdelávaní a hodnotenie jeho výsledkov, Osveta, 2018, 255 s.
Dent JA, Harden RM. A Practical Guide for Medical Teachers. 5th ed. Churchill Livingstone Elsevier, 2013. 424 s.
Harden RM, Laidlaw JM. Essential Skills for a medical teacher 2e. An introduction to teaching and learning medicine. Churchill Livingstone Elsevier. 2016. 304 s.
AMEE and BEME Educational Guides

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 0

A	ABS0	B	C	D	E	FX
0,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: prof. MUDr. Jana Plevková, PhD., MUDr. Tomáš Buday, PhD., MBA, MSc., Ing. Lukáš Martvoň, PhD.

Last change: 24.08.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚLBch/J-S-VL-647/25	Basics of Chemistry

Educational activities:
Type of activities: practicals
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 1.

Educational level: I.II.

Prerequisites:

Course requirements:
Evaluation of students is in written form, the minimum passing score is 60%.
Evaluation: A (91-100%), B (81-90%), C (73-80%), D (66-72%), E (60-65%), Fx (59% and less).

Learning outcomes:
By completing the course, the student acquires basic information in General and Organic chemistry necessary for teaching Medical Chemistry.
It unifies knowledge and familiarizes students with biologically significant elements, compounds, and their mutual interactions. It provides an understanding of the basic principles of bioenergetics, enzyme kinetics, and mechanisms of chemical reactions in aqueous solutions.
Completing the course contributes to understanding the relationship between the structure and function of biologically significant substances and is also applicable to the study of biological oxidations, metabolism, and the acid-base balance of body fluids.

Class syllabus:
•Periodic table of the elements, chemical properties in individual groups, naming simple compounds.
•Chemical bonding, e.g. ionic, covalent, or multiple bonds. Molecular shape and polarity.
•Properties of solutions. Concentration expressions. Calculations of solution concentrations, dilution.
•Acids and Bases - general properties, conjugated pairs. The Arrhenius, Brønsted-Lowry definition. Neutralization reactions. Autoionization of water, calculation of pH.
•Redox reactions - oxidation numbers. Oxidation and reduction reactions.
•Hydrocarbons - Alkanes, alkenes, alkynes. Cyclic and aromatic hydrocarbons. Structural formulas, nomenclature, and isomerism of hydrocarbons. Types of organic reactions.
•Nomenclature, physical properties, and reactions of alcohols and phenols, aldehydes, and ketones.
•Nomenclature, physical properties, and reactions of carboxylic fatty acids. Salt formation.
•Nomenclature, structure, and reactions of hydroxy acids, keto acids, and amino acids.
•Nomenclature, classification, and biological importance of O-, N-, and S- containing heterocycles.

Recommended literature:

P. Kaplán: Medical Chemistry, P+M Turany, 2012. 127 pp.
P. Račay: Medical chemistry and biochemistry III. Comenius University Bratislava, 2012. 68 pp.
Z. Tatarková: General and Inorganic Chemistry, P+M Turany, 2024. 85 pp.

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 69

A	ABS0	B	C	D	E	FX
81,16	0,0	1,45	1,45	4,35	2,9	8,7

Lecturers: prof. Ing. Zuzana Tatarková, PhD., Mgr. Radovan Murín, PhD.

Last change: 05.08.2025

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.CPMV/J-S-VL-630/25	Basics of First Aid

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 1 / ,5 **per level/semester:** 14 / 7
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 1.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Not applicable

Course requirements:
100% participation in practical exercises is a prerequisite for passing and assessment of the course. The criterion for successful completion of the course is a test exam and practical mastery of basic CPR
and improvised first aid for the most common injuries and sudden illnesses, with a minimum pass mark: 60%.
Grade: A: 95%-100%, B: 88%-94%, C: 77%-87%, D: 66%-76%, E: 60%-65%,Fx: 60% and below.
The assessment consists of a test score and a percentage of CPR passes. It will take place at the end of the semester in the last scheduled practicals. The test will be administered online to all students at the same time in a Moodle environment and will consist of 30 computer-generated questions from a set of existing questions that will be covered in lectures and practicals. To pass the test, students must answer at least 65% of the questions correctly.
Scale of assessment (preliminary/final): final evaluation

Learning outcomes:
Aims and Objectives: Intended learning outcomes
The student reproduces and explains the theory needed to deal with acute conditions in BLS.
The student demonstrates the technique of approaching an unconscious person.
The student opens the airways and assesses breathing in an unconscious patient.
The student demonstrates the CPR technique for adults.
The student demonstrates the technique of approaching an unconscious child.
The student opens the airways and assesses breathing in an unconscious child.
The student demonstrates the CPR technique for a child.
The student provides first aid for airway obstruction.
The student explains the management of massive bleeding.
The student demonstrates how to apply pressure to the wound to stop bleeding.
The student demonstrates the application of a tourniquet.
The student explains and demonstrates the Rautek maneuver.

The student can turn an unconscious person from the abdomen to the back.
The student recognizes the symptoms of an allergic reaction and anaphylaxis and demonstrates how to use an autoinjector.
The student describes the signs of shock and explains the management of the patient
The student describes the symptoms of a stroke and explains the management of the patient
The student describes the symptoms of acute coronary syndrome and explains the management of the patient
The student summarizes the rules at the scene of a traffic accident and describes his/her safety measures at the scene

Class syllabus:
Syllabus/Indicative Content:
1. Unconsciousness. Basic life-saving procedures, ABCDE approach to the patient. Chain of survival
2. Fundamentals of the pathophysiology of cardiac arrest. BLS - Basic Life Support – resuscitation of an adult, AED. Shockable/non-shockable cardiac rhythms.
3. Approach to the unconscious child, CPR of the child - algorithm including resuscitation of the newborn. Airway obstruction, laryngitis, and epiglottitis in children
4. First aid for traumatic life-threatening conditions (head, chest, abdominal, spinal injuries, bleeding, shock, principles of first aid in car accidents)
5. First aid for non-traumatic life-threatening conditions (allergic reactions, anaphylaxis, stroke, convulsions, epilepsy, syncope, chest pain, drowning, electric shock, hanging, life-threatening conditions in diabetics)

Recommended literature:

Languages necessary to complete the course:
English Language

Notes:

Past grade distribution
Total number of evaluated students: 105

A	ABS0	B	C	D	E	FX
59,05	0,0	29,52	11,43	0,0	0,0	0,0

Lecturers: prof. MUDr. Jana Plevková, PhD., MUDr. Tomáš Buday, PhD., MBA, MSc., Ing. Lukáš Martvoň, PhD.

Last change: 06.08.2025

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚKIaLG/J-S-VL-646/25	Basics of Medical Genetics and Dysmorphology

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: ,5 / ,5 **per level/semester:** 7 / 7
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 8.

Educational level: I.II.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 5

A	ABS0	B	C	D	E	FX
0,0	100,0	0,0	0,0	0,0	0,0	0,0

Lecturers: MUDr. Adam Markocsy, PhD., RNDr. Martina Schniederová, PhD., MUDr. Nina Lenhartová, PhD.

Last change: 10.08.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚO/J-S-VL-634/22	Basics of Nursing Techniques

Educational activities:
Type of activities: practicals
Number of hours:
per week: 1 **per level/semester:** 14
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 3.

Educational level: I.II.

Prerequisites:

Course requirements:
The evaluation of the subject takes place in the form of a written test.
Overall evaluation: A: 100 – 91 %, B: 90 – 81 %, C: 80 – 73 %, D: 72 – 66 %, E: 65 – 60 %, FX # 60 %.
Scale of assessment (preliminary/final): 0/100

Learning outcomes:
By completing the course the student will demonstrate basic knowledge related to clinically correct and safe practice with respect to the principles of evidence - based practice (EBP). Can describe the basic principles of providing nursing care and standard procedures of selected nursing services and techniques.
After completion of this subject while performing nursing procedures student will be able to:
- argue for and justify the method / technique of the procedure chosen,
- prepare equipment and supplies necessary to carry out the procedure,
- assess the patient and provide instructions and support the patient prior to the procedure, prepare the patient for the procedure from the physical perspective,
- carry out the procedure independently while following clinical standards and guidelines, respecting the ethical principles and principles of asepsis including,
- communicate with the patient during the procedure, provide patient education / instruction after the procedure,
- record and document the procedure and values assessed,
- process all the equipment and items used.

Class syllabus:
Hand hygiene - hand wash, antiseptic hand washing, donning and removing gloves (sterile, non-sterile).
Dressing technique – types of dressing material, principles and principles of dressing technique, basic dressing techniques, training of selected types of bandages (bandage of the hand, forearm, elbow, foot, high compression bandage of the lower limb).

Collection of biological material – blood collection – types of examinations, principles and principles of collection, prevention of puncture injuries with a used needle, training in venous blood collection (open and closed), capillary blood collection (ABR and blood glucose testing).
Parenteral drug administration – general principles of drug preparation and application, preparation of drugs from ampoule and vial, preparation and training application of intradermal, subcutaneous (LMWH, heparin, insulins), intramuscular and intravenous injection.
Gastric tube insertion and enteral nutrition - general principles of insertion and removal
gastric tube and administration of enteral nutrition and drugs, training in the introduction and removal of gastric tube.
Vital functions – training in measuring and monitoring vital functions (blood pressure, pulse, breath, body temperature, measuring oxygen saturation with a pulse oximeter).
Bladder catheterization – Indications, types of urinary catheters, general principles
catheterization of men and women, urine sampling, physical examination of urine, infection prevention
urinary tract, practice of direct catheter urine sampling in women, introduction and removal of permanent urinary catheter in women.
Nursing techniques and procedures in surgery – principles of surgical asepsis, preparation of a sterile table, care of aseptic and septic wounds, types of dressing material, general principles of treatment and wound dressing; training in handling sterile aids, surgical instruments and packaging materials – dressing table, dressing of aseptic and septic wounds, treatment of the drain area, training in donning and undressing gloves (non-sterile, sterile).

Recommended literature:

Dingová, M., Lepiešová, M., Rosenberg, A. et al.: Basics of Nursing. Textbook for Medical and Nursing Students. Martin: Comenius University in Bratislava, Jessenius Faculty of Medicine in Martin, 2011.
Lepiešová, M., Dingová, M., Nemcová, J., Ovšonková, A., Miertová, M., Tabaková, M., Tomagová, M.: Basics of nursing presentations. Martin: JLFUK – portal MEFANET, 2012, 419 p. [online] ISBN 1337-7396ISSN 1337-7396. Available at: http://portal.jfmed.uniba.sk/articles.php?aid=187https://stella.uniba.sk/epc/JL/2012/vtls000257495.pdf
Kozier, B., Berman, A., Erb, G., Snyder, S. J.: Fundamentals of Nursing: Concepts, Process and Practice. 7th ed. Pearson Prentice Hall, 2004.
Perry, A. G., Potter, P. A., Ostendorf W.: Clinical Nursing Skills & Techniques. 8th ed. St. Louis, Missouri: Mosby/Elsevier, 2013.

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 403

A	ABS0	B	C	D	E	FX
12,66	0,25	44,91	30,27	8,68	3,23	0,0

Lecturers: Mgr. Michaela Miertová, PhD., PhDr. Jana Nemcová, PhD., Mgr. Anna Ovšonková, PhD., doc. Mgr. Martina Tomagová, PhD., Mgr. Lucia Podolinská, PhD.

Last change: 27.08.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.CPMV/J-S-VL-557/18	Breathing Disorders During Sleep

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: ,5 / ,5 **per level/semester:** 7 / 7
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 8.

Educational level: I.II.

Prerequisites:

Course requirements:

Learning outcomes:
Cognitive Domain (Knowledge) – Student
1. Lists the differences in the regulation of breathing during wakefulness, NREM, and REM sleep.
2. Describes the etiopathogenesis of obstructive and central sleep apnea.
3. Explains the mechanisms of Cheyne-Stokes respiration and its relationship to central apnea.
4. Differentiates types of sleep-related breathing disorders (OSA, CSA, mixed form).
5. Analyzes the impact of sleep-related breathing disorders on the cardiovascular, neurological, endocrine, hematological, and psychological systems.
6. Interprets basic parameters of polysomnography (AHI, desaturations, REM/NREM ratio, apnea/hypopnea index).
Psychomotor Domain (Skills) – Student
1. Performs basic setup of polysomnographic examination in pediatric and adult sleep laboratories.
2. Records and evaluates basic polysomnographic findings under the supervision of a qualified professional.
3. Identifies apneic episodes and desaturation events in PSG recordings.
4. Applies knowledge of breathing regulation in the interpretation of clinical symptoms of sleep disorders.
5. Collaborates with the team during patient examination in the sleep laboratory.
Affective Domain (Attitudes) – Student
1. Demonstrates interest in a multidisciplinary approach to patients with sleep disorders.
2. Respects the need for a sensitive approach to patients with chronic sleep disorders.
3. Reflects on the significance of sleep-related breathing disorders in the context of public health and quality of life.
4. Participates in discussions about treatment options (e.g., CPAP, BiPAP, behavioral interventions).

Class syllabus:
Lectures and seminars: epidemiology of sleep-related breathing disorders, categories of sleep-related breathing disorders, pathomechanisms of snoring, increased upper airway resistance, obstructive and central apnoeic events and Pickwickian syndrome, cardiovascular, haematological,

neurological, mental and endocrine complications of sleep-related breathing disorders, social consequences, symptomatology, sleep-related breathing disorders in patients with primary respiratory diseases, sudden infant death syndrome, management of sleep-related breathing disorders. Laboratory training: sleep laboratory service: polysomnography – registration of respiratory and cardiovascular parameters, oximetry, sleep architecture and muscle tone during sleep period and their evaluation.

Recommended literature:
Literature resources available at web of an educator

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 76

A	ABS0	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: prof. MUDr. Jana Plevková, PhD., doc. MUDr. Peter Ďurdík, PhD., doc. MUDr. Robert Vyšehradský, PhD.

Last change: 06.08.2025

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚKB/J-S-VL-556/18	Clinical Biochemistry and Laboratory Medicine

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 1 / 1 **per level/semester:** 14 / 14
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 7.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
J-S-VL-509 Medical Chemistry 2, J-S-VL-511 Medical Biochemistry 2, J-S-VL-538 Internal Medicine Propedeutics 2

Course requirements:
At the end of semester, after attendance of lectures (optional) and practicals (90 % compulsory), a written test is given - 20 questions (20 points in total). Grade A is given when student obtains at least 18 points, grade B 17 - 16 points, grade C 15 - 14 points, grade D 13 points and grade E 12 points. Credit will not be given to a student who achieves less than 12 points.
Scale of assessment (preliminary/final): Credit test

Learning outcomes:
By completing the course, student acquires theoretical and practical knowledge about the routine clinical-biochemical laboratory practice and principles of used methods, as well as about the correct indication of biochemical tests and interpretation of the results in various clinical conditions.

Class syllabus:
Syllabus/Indicative Content:
The role of clinical-biochemistry in medicine, the rules of biological specimen collection and patient preparation, indications of clinical-biochemical tests, sources of errors in clinical-biochemical analyses, quality control, reference values, the principles of evaluation and interpretation of biochemical findings. The assessment of acid-base balance – basic and mixed disorders. The disturbances in metabolism of water and minerals – hyper- a hypo- natremia, kalemia, chloremia. Metabolism of lipoproteins, clinical-biochemical tests for examination of lipid metabolism - hyperlipidaemias, dyslipidaemias, risk factors and prevention of atherogenesis. Tumor markers – clasification according to their biological functions, use of tumor markers in screening, diagnostics and therapy of oncologic diseases. The use of molecular-biological diagnostic tests in clinical practice – basic pannels of single nucleotide polymorphisms examinations in thrombophylias, lipid metabolism, pharmacogenetics, hemochromatosis, multiple sclerosis. The analysis of cerebrospinal fluid and urine – chemical, microscopical. Wastes of minerals and metabolites, examination of kidney functions. Electrophoretic methods – serum, cerebrospinal fluid, urine.

Recommended literature:
Gaw & Murphy & Srivastava & Cowan & O'Reilly. Clinical Biochemistry, 5th Edition, An Illustrated Colour Text Imprint: Churchill Livingstone, 2013, 196 pages, ISBN 9780702051791

Languages necessary to complete the course:
English language

Notes:
teaching of this optional subject is performed in 4th year winter semester

Past grade distribution
Total number of evaluated students: 602

A	ABS0	B	C	D	E	FX
83,06	0,0	11,46	3,65	1,16	0,66	0,0

Lecturers: prof. MUDr. Dušan Dobrota, CSc., doc. MUDr. Daniel Čierny, PhD.

Last change: 24.03.2022

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.IKG/J-S-VL-632/19	Clinical Gastroenterology

Educational activities:
Type of activities: practicals
Number of hours:
per week: 1 **per level/semester:** 14
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 9.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Internal Medicine 4

Course requirements:
Minimal 80 % of practical exercises and rating of activity and of interest about gastroenterological diagnostic procedures and skilling and finesse.
Rating: A 90-100%, B 80- 90 %, C 70-80%, D 60 -70 %, E 50-60%, Fx -less 50%

Learning outcomes:
Results of education.
Ability:
1.Take of medical history and physical examination of patients with GI diseases.
2. Physical examination and indication of GI diagnostic procedures.
3.Real assistance at gastroscopy.
4. Real assistance at colonoscopy.
5. Assistance at endoscopic - ultrasonography.
6. Assistance at examination of gastric acid secretion, and ph metry and densitometry of esophagus.
7. Visit and hepatologic stage at Transpanmtation Unit in Rooswelt Hospital, Banská Bystrica.
8. Final consultation and Grading of classified credit.

Class syllabus:
Practical exercise:
1. Take of medical history and physical examination of patients with GI diseases.
2. Physical examination and indication of GI diagnostic procedures.
3.Real assistance at gastroscopy.
4. Real assistance at colonoscopy.
5. Assistance at endoscopic - ultrasonography.
6. Assistance at examination of gastric acic secretion, and ph metry and densitometry of esophagus.
7. Visit and hepatologic stage at Transpanmtation Unit in Rooswelt Hospital, Banská Bystrica.
8. Final consultation and Grading of classifield credit.

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 84

A	ABS0	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: MUDr. Peter Hyrdel, PhD., prof. MUDr. Rudolf Hyrdel, CSc.

Last change: 30.03.2022

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KDD/J-S-VL-582/19	Clinical Immunology

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: ,5 / ,5 **per level/semester:** 7 / 7
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 10.

Educational level: I.II.

Prerequisites:

Course requirements:
Passing a theoretical part and practical training during the lectures from clinical immunology

Learning outcomes:
Student will acquire the information about the content of clinical immunology and allergology, overview about the principal objects of clinical immunology, acquire the overview of the specificities of laboratory diagnostics of immune-mediated diseases, get know the specificities of management of selected immune-mediated diseases (especially inborn and acquired immunodeficiencies, autoinflammatory diseases and periodic fever syndromes, angioedemas, selected forms of allergic diseases), get the overview about the vaccination in special situations. The content of the lectures will reflect also the actual situation in the medicine and society and the students will be informed about the most actual hot topics from the field of clinical immunology.

Class syllabus:
Clinical immunology and allergology – content of subject, objects of interests
Anaphylaxis – principles of management with practical training of rescue medication application
Functional respiratory diagnosis, inflammometry in the management of immune-mediated respiratory diseases, practical example of spirometric examination
Diagnostic algorithms of allergic diseases – laboratory testing, skin tests, exposure test, sensitivity and specificity of particular tests, limitations and indications for testing, practical example of skin testing
Biologic therapy and its use in the management of immune-mediated diseases
Periodic fever syndromes and autoinflammatory diseases – classification, pathophysiology, diagnostic approach, management, case reports analysis
Primary and secondary immunodeficiencies – classification, diagnostic, clinical picture, management strategies, treatment options, case reports analysis
Vaccination in special situations
Actualities in the field of clinical immunology in the context of actual situation in the medicine and society

Recommended literature:

Abbas A. et al. Basic Immunology, 6th Edition, 2019.
Buc M. et al. Basic and Clinical Immunology. 4th Edition, 2020.
Chapel H. et al. Essential of Clinical Immunology, 5th Edition, 2014.

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 40

A	ABS0	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: MUDr. Lenka Kapustová, PhD., MUDr. Adam Markocsy, PhD., MUDr. Otília Petrovičová, PhD., MUDr. Anna Ružinák Bobčáková, PhD., RNDr. Martina Schniederová, PhD., MUDr. Branislav Šlenker, PhD., prof. Mgr. MUDr. Miloš Jeseňák, PhD., MBA

Last change: 17.03.2022

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚMI/J-S-VL-607/19	Clinical Microbiology

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 1 / 1 **per level/semester:** 14 / 14
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 9.

Educational level: I.II.

Prerequisites: JLF.ÚMI/J-S-VL-518/17 - Microbiology (2)

Course requirements:
- it is obligatory to be present at practicals (1 absence is tolerated) - oral presentation according the schedule Evaluation - evaluation of students
Scale of assessment (preliminary/final): 0% / 100%

Learning outcomes:
The student receives information from clinical mictobiology, direct and indirect detection of infectious diseases that he is able to use during diagnostical process of different systems infections.Student is able to apply them in differential diagnosis of infection in different patients groups (fetus, newborne, infant, adult, immunocompromised, geriatric).

Class syllabus:
- Medical bacteriology - Medical virology - Medical parasitology - Medical mycology - Ethiology of infections of respiratory tract - Ethiology of infections of gastrointestinal tract - Etiology of infections of urogenital tract - Ethiology of infections of skin and soft tissue - Ethiology of infections of NS - Ethiology of infections of liver, bloodstream and other organs (eye, ear, bones ...) Pathogenesis of infections Modern diagnostical approaches and their use and interpretation

Recommended literature:
Bednář M a kol. Lékařská mikrobiologie. Praha: Marvil 1996; 558 s. Učebné texty na MEFANETe http://portal.jfmed.uniba.sk/lekarske-discipliny.php?disid=119 a web stránke Ústavu mikrobiológie a imunológie
Greenwood D, Barer M, Slack R, Irwing W. Medical Microbiology Eighteenth Edition. Edinburgh: Elsevier Saunders 2012; pp. 778.
Murray PR, Rosenthal KS, Pfaller MA. Medical Microbiology Seventh Edition. Philadelphia: Elsevier Saunders 2013; pp. 874.
Neuschlová, M., Kompaníková, J., Sadloňová, V., Nováková, E.: Immunology – basic laboratory tests. Martin : Portal JLF UK 2021; 152 s. ISBN 978-80-8187-110-8. https://portal.jfmed.uniba.sk//articles.php?aid=450.

Neuschlová, M., Nováková, E., Kompaníková, J., Sadloňová, V.: A to Z Glossary of Immunological Terms. Martin : Portal JLF UK 2021; 80 s. ISBN 978-80-8187-088-0. https://portal.jfmed.uniba.sk//articles.php?aid=435.
Carey A.R. a kol.Lékařská mikrobiologie v klinických případech Praha, Stanislav Juhaňák Triton, 2011.

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 4

A	ABS0	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: prof. MUDr. Elena Nováková, PhD., MUDr. Jana Kompaníková, PhD., doc. MUDr. Vladimíra Sadloňová, PhD.

Last change: 07.04.2022

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚPF/J-S-VL-583/19	Clinical Pathophysiology

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: ,5 / ,5 **per level/semester:** 7 / 7
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 9.

Educational level: I.II.

Prerequisites: JLF.ÚPF/J-S-VL-536/17 - Pathological Physiology (2)

Course requirements:
Presentation of case report (examination of patients at Clinic of Internal Medicine I. or Clinic of Gastroenterological Internal Medicine within the teaching of internal medicine or virtual case reports). Assessment of students is carried out in the form of case report presentation, minimum passing score is 60%. Assessment scale: A: 91–100 %, B: 81–90 %, C: 73–80 %, D: 66–72 %, E: 60–65 %, FX: 60 % and less. Active participation in practicals.
Scale of assessment (preliminary/final): Scale of assessment (preliminary/final): 100/0

Learning outcomes:
The student is able to interpret the symptoms and signs and basic laboratory tests of diseases of the cardiovascular system, respiratory system, hematological system, kidneys, gastrointestinal system and other systems of the organism.

Class syllabus:
Introduction to clinical pathophysiology. Disturbances of acid-base balance. Pathophysiology of gastrointestinal system: pathophysiology of selected diseases, laboratory findings. Pathophysiology of renal system: pathophysiology of selected diseases, laboratory findings. Pathophysiology of cardiovascular system: pathophysiology of selected diseases, ecg changes. Pathophysiology of respiratory system: pathophysiology of selected diseases, laboratory findings. Case reports.

Recommended literature:
Berkowitz A. Clinical Pathophysiology Made Ridiculously Simple. Medmaster, 2021. 222 s. ISBN 978-1935-660-44-6
Silbernagl S., Lang F. Color Atlas of Pathophysiology. Thieme, Stuttgart, 2016. 448 s. ISBN 978-3131-165-53-4

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 167

A	ABS0	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: prof. MUDr. Renata Péčová, PhD., MPH, prof. MUDr. Matej Samoš, PhD., doc. MUDr. Martin Ďuriček, PhD., MUDr. Peter Kunč, PhD., prof. MUDr. Ivana Dedinská, PhD.

Last change: 27.08.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚFa/J-S-VL-581/19	Clinical Pharmacology

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 1 / 1 **per level/semester:** 14 / 14
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 10.

Educational level: I.II.

Prerequisites: JLF.ÚFa/J-S-VL-530/21 - Pharmacology (2)

Course requirements:
Presentation of clinical study, presence at min 4 seminars, compensation in compensatory week
Scale of assessment (preliminary/final): 100/0

Learning outcomes:
The student knows basic principles of clinical pharmacology and use of drugs in clinical conditions, respecting the rules of evidence-based medicine (the most recent guidelines and recommendations).

Class syllabus:
Antibiotics in clinical practice. Hypertension and its treatment. Atherosclerosis and its treatment. Osteoporosis and its treatment. New trends in the treatment of bronchial asthma vs. COPD. Current aspects to pharmacoeconomics. Pharmacotherapy of pain. Case studies: Diabetes mellitus. Antimicrobial therapy. Antithrombotic and anticoagulant therapy. Therapy of some cardiovascular diseases. Pharmacotherapy in childhood. Clinical Phramacology of mental disroders.

Recommended literature:
Rang HP, Dale MM, Ritter JM.: Pharmacology. 9th ed., Churchill Livingstone, 2019.
Rang HP, Dale MM: Pharmacology. 8th ed., Churchill Livingstone, 2015.
Katzung, B.G.: Basic Clinical Pharmacology, 15th edition, New York : McGraw-Hill, 2015.
Katzung, B.G.: Basic Clinical Pharmacology, 19 th edition, New York : McGraw-Hill, 2021.
www.ema.europa.eu

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 280

A	ABS0	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: prof. MUDr. Mgr. Juraj Mokrý, PhD., prof. MUDr. Martina Šutovská, PhD., prof. RNDr. Soňa Fraňová, PhD., doc. MUDr. Marta Jošková, PhD.
Last change: 06.04.2022
Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.CPMV/J-S-VL-642/24	Clinical Skills

Educational activities:
Type of activities: practicals
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 6.

Educational level: I.II.

Prerequisites: JLF.ÚFy/J-S-VL-516/16 - Physiology (2) and JLF.ÚA/J-S-VL-502/24 - Anatomy (2) and JLF.ÚO/J-S-VL-634/22 - Basics of Nursing Techniques

Course requirements:
100% attendance, completion of a sample patient examination including medical history, completion of selected OSCE stations
Scale of assessment (preliminary/final): final assessment

Learning outcomes:
The student:
1. Demonstrates effective communication skills and a professional approach in model clinical situations, including structured history taking and standardized documentation of medical history.
2. Applies the methodology of general physical examination (status praesens generalis) and performs orientation neurological assessment to evaluate consciousness, motor function, and sensory perception using the ABCDE approach.
3. Performs examination of the head and neck, identifies physiological and pathological findings, documents results in a standardized format, and assesses cranial nerve function with a focus on stroke-related symptoms.
4. Conducts chest and lung examination, understands indications for pulmonary assessment, identifies physiological and pathological findings, and documents results using standardized methods. Demonstrates basic diagnostic capabilities using POCUS lung sonography.
5. Performs heart and vascular system examination, understands indications for cardiovascular assessment, identifies physiological and pathological findings, and documents results in a standardized format. Practices targeted POCUS sonography for selected cardiovascular conditions.
6. Performs ECG examination, understands principles of ECG interpretation, and evaluates both technical and clinical aspects of ECG recordings.
7. Interprets ECG recordings with pathological findings and participates in simulation and assessment of cardiac rhythm disorders.
8. Conducts abdominal examination, understands indications for abdominal assessment, performs rectal examination, and documents findings in a standardized format. Applies physical examination and POCUS sonography in suspected abdominal fluid accumulation.

9. Demonstrates Basic Life Support (BLS) skills in adults and children, including AED operation and repeated application of the ABCDE approach (as introduced in First Aid training).
10. Performs examination of kidneys and urinary tract, understands indications for renal and urological assessment, practices urinary catheterization in men and women, performs bimanual palpation of kidneys and percussion testing, and demonstrates selected ultrasound findings using USG Mentor.
11. Collects capillary and venous blood samples (vacutainer and classical methods), inserts intravenous (i.v.) and intraosseous (i.o.) cannulas using bone models, understands fluid administration strategies, intravenous solutions, indications, contraindications, dosage calculations, and principles of parenteral nutrition.
12. Applies clinical reasoning in selected scenarios using the VP LEONARDO simulation platform, integrating knowledge from the course to determine accurate diagnosis and patient management strategies.

Class syllabus:

Communication, history taking, approach to the patient in model situations, standardized recording of medical history.
Examination training and standardized recording of status praesens generalis, orientation neurological examination for the assessment of consciousness, motor, and sensory status, ABCDE approach to the patient.
Training in head and neck examination, physiological and pathological findings, standardized recording of examination findings, and cranial nerve examination with a focus on CMP.
Training of chest and lung examination, indications for lung examination, physiological and pathological findings, standardized recording of examination results, and Possibilities of diagnosis of lung diseases by POCUS sonography.
Training in the cardiovascular examination, indications for cardiac examination, physiological and pathological findings, standardized recording of examination results, and Training in the examination of selected cardiovascular diseases by POCUS sonography.
Execution of ECG examination, principles of ECG evaluation, technical and clinical evaluation of ECG recording.
Evaluation of ECG recordings with pathological findings, simulation, and evaluation of cardiac rhythm disorders.
Practice of physical examination of the abdomen, indications for abdominal examination, per rectum examination, standardized recording of examination results. Physical examination and POCUS sonography when fluid is suspected in the abdomen.
BLS in adults and children, BLS training, operation and use of AED, ABCDE approach to the patient (repetition from the First Aid course).
The practice of renal and urinary tract examination, indications for renal and urinary tract examination, the practice of male and female bladder catheterization, practice of bimanual renal palpation, tapotement examination, demonstration and practice of selected USG findings in renal disease USG Mentor.
Capillary, venous blood collection (vacutainer, conventional collection), and insertion of i.v. cannula, i.o. cannula on real bone, fluid administration strategy, solutions for i.v. administration, indications, contraindications, calculations, parenteral nutrition.
Clinical reasoning - clinical diagnostic reasoning - in selected VP LEONARDO scenarios, students will apply the knowledge gained in the course towards the correct diagnosis and management of the patient

Recommended literature:

Thomas J, Monaghan T: Clinical examination - modern propedeutics, Prague, Grada, 2014.

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 75

A	ABS0	B	C	D	E	FX
92,0	0,0	8,0	0,0	0,0	0,0	0,0

Lecturers: prof. MUDr. Jana Plevková, PhD., MUDr. Tomáš Buday, PhD., MBA, MSc., Ing. Lukáš Martvoň, PhD.

Last change: 24.08.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027	
University: Comenius University Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.PK/J-S-VL-625/24	**Course title:** Communication in Clinical Practice
Educational activities: **Type of activities:** practicals **Number of hours:** **per week:** 2 **per level/semester:** 28 **Form of the course:** on-site learning	
Number of credits: 2	
Recommended semester: 8.	
Educational level: I.II.	
Prerequisites: JLF.PK/J-S-VL-532/25 - Medical Psychology and Basics of Communication	
Course requirements: 1. The participation in practicals is compulsory for at least 12-times (24 hours, especially from 1st to 12th week). 2. Check in the course of practicals: - Evaluation till the end of 14th week: active participation in practicals; permanent study check (control question); examination of patients, structured case reports and analysis – "PESS" - communication problem-etiology-symptoms-solving Evaluation of the results of running controls: minimal success 65 %; rating: A/1 = 93 – 100 %; B/1,5 = 86 – 92 %; C/2 = 79 – 85 %; D/2,5 = 72 – 78 %; E/3 = 65 – 71 %, Fx = less than 65 % Scale of assessment (preliminary/final): 100/0	
Learning outcomes: A student shall understand the fundamental aspects of potentially difficult situations that may in interaction doctor – patient occur. A student shall understand the general communication abilities and with so-called problematic group of patients, e.g. aggressive, agitated and non- cooperating patients. A student will be able to understand and to use the specifics of communication with the patients with anxiety, depression, suicidal behavior and patients with somatization. A student will know the specifics of the communication with patients with cognitive disorder, delirium, psychotic and manic disorder. A student shall understand the psychological aspects of patient complaints and communication skills in the medical team. Self-experience in education develops awareness and experiencing emotions of themselves and others, self-support and support, self-reflection and decent work with defense mechanisms type of projection, rationalization, reflection and reinforcement of empathy, strengthening the ability to manage affective responses. A student shall understand the specifics of outpatient and inpatient care, the communication with long-term and chronically ill patients, with handicapped patients. A student shall handle the reporting of bad messages or messages with infaust prognosis.	

A student shall understand and handle the specifics of communication in different development stages - childhood and senium.
A student shall handle the specifics of communication with the internal medicine and polymorbid patient, surgical patients and psychological specifics of communication in obstetrics and gynecology.
A student shall understand and handle the specifics of communication with so-called problematic group of patients, for example with intoxicated and addicted patients, with personality disorder patients.
A student shall understand the psychological aspects of patient´s complaints, their relatives and communication skills in a medical team.

Class syllabus:

1. practical exercises
Communication in medicine – characteristic and meaning.
Basic communication skills of doctor: effective listening, empathy, understanding, advices.
2. practical exercises
Verbal and nonverbal communication in medicine. Criteria of effective communication in medicine. Psychotherapy and communication. Communication in interdisciplinary team of health staff. Communication with patient´s relatives.
3. practical exercises
Communication with cognitive disability and intellectual disability patient.
4. practical exercises
Communication with anxious and somatoform patient. Communication with depressive patient. Communication with suicidal patient.
5. practical exercises
Non-compliance patients. Dissatisfied and aggressive patient. Patient´s silence. Conflict in doctor ´s work and its solution. Communication with manic patient.
6. practical exercises
Communication with qualitative disturbance of consciousness. .
7. practical exercises
Communication with psychotic patient.
8. practical exercises
Communication with physical disability patient. Communication with sensory disability patient.
9. practical exercises
Specifics of communication with internal medicine patient, polymorbid patient and seniors.
10. practical exercises
Specifics of communication with surgical patient. Specifics of communication in obstetrics and gynecology.
11. practical exercises
Communication with seriously ill and dying patient. Communication with oncological patient. Reporting of negative/adverse messages. Communication with relatives.
12. practical exercises
Communication with intoxicated and addicted patient. Communication with personality disorder patient.
13. practical exercises
Specifics of communication with somatically ill patient in child age and adolescence. Communication with parents. Specifics of communication in child psychiatry.
14. practical exercises
Compensatory and repeating exercises

Recommended literature:

Communication in clinical practice 1, 2 /4th year/ x McManus, I. C., Richards, P. Psychology in Medicine. Oxford: Butterworth-Heinemann Ltd., l992. 327 s. ISBN 0-7506-0496-4 x Ayers, S., Visser R. Psychology for medicine. Sage, Los Angeles: SAGE, 2011. 530 s. ISBN 9781412946919 x Lloyd, M., Bor, R. Comunication skills for medicine. Edinburgh: Elsevier, 2009. 212 s. ISBN 978-07020-3058-1 Alder, B. et.al. Psychology and sociology applied to medicine. 3rd ed. Edinburgh: Elsevier, 2009. 182 s. Buckman, R. How to Break Bad News: A Guide for Health Care Professionals The Johns Hopkins University Press, Baltimore, 1992, 240 s. ISBN 978-0801844911 Tate, P. The doctor´s Communication Handbook. Radcliffe Publishing Ltd; 6th revised edition, 200 s. ISBN 978-1846193927 Beran, J., Sumcovová,P. Introduction to Medical Psychology – Doctor – Patient Communication. Praha: Karolinum, 1. vyd., 2005. 156 s. ISBN 80-246-0983-5 Čaplová, T., Fleischer,J. Pečeňák,J.,Vajdičková,K., Žucha, I. Clinical Problems of Medical Psychology. Bratislava: Comenius University, 1995, 83 s. ISBN 80-223-0931-1 Žucha, I. Čaplová, T., Fleischer, J. Vajdičková, K. Medical Psychology. Bratislava: Comenius University, 1994. 90 s. ISBN 80-223-0797-1

Languages necessary to complete the course:
english

Notes:

Past grade distribution
Total number of evaluated students: 163

A	ABS0	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: doc. MUDr. Igor Ondrejka, PhD., MUDr. PhDr. Igor Hrtánek, PhD., MUDr. Miloslav Oppa, PhD., MUDr. Andrea Gurová, PhD., MUDr. Zuzana Mlynčeková, PhD.

Last change: 12.02.2025

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KSMCh/J-S-VL-552/19	Dental Medicine

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: ,5 / 1 **per level/semester:** 7 / 14
Form of the course: on-site learning

Type, volume, methods and workload of the student - additional information
Lecture/Exercise, Range (in hours) - weekly: 1/0,5 E Method: Face-to-face

Number of credits: 3

Recommended semester: 7.

Educational level: I.II.

Prerequisites: JLF.ÚA/J-S-VL-503/16 - Anatomy (3) and JLF.KVVTCh/J-S-VL-522/22 - Surgical Propedeutics (1)

Course requirements:
Attendance on practical exercises 100%. Continuous assessment test form, minimum level succes 65 %. Final evaluation in the final test form, minimum level succes 65 %.
Scale of assessment (preliminary/final): Final evaluation in the final test form minimum level succes 65 %.

Learning outcomes:
After completion of the subject the student understands various severe pathological processes in oro-maxillofacial region. The student is able to analyse interrelationship between systemic disease of the body and diseases of oro-maxillofacial region. After completion of the subject the student is able to apply interdisciplinary view when analyzing diseases of oro-maxillofacial region. The student is able to apply knowledge aquired from practical exercises during the examination and diagnosis of injuries and diseases of oro-maxillofacial region. After completion of the subject the student is able to identify precancerous changes, benign, malignant tumors of maxillofacial region and understands the basic guidlines of the multimodal cancer therapy. The student understands basic guidlines in the care about pacient with orofacial trauma.

Class syllabus:
A brief outline of the history of dentistry, branches of dentistry. Anatomy, physiology and development of oro-maxillofacial region, development of the dentition, developmental disorders in oro-maxillofacial region. Dental caries, definition, classification, etiology, pathogenesis, diagnosis, prevention, prophylaxis, treatment and complications. Dental pulp diseases, classification, etiology, pathogenesis, diagnosis, prevention, treatment and complications. Apical periodontitis, classification, etiology, pathogenesis, diagnosis, prevention, treatment and complications. Periostitis of the jaws, subperiostal and submucosal odontogenic abscesses, etiology, pathogenesis, diagnosis, prevention, treatment and complications. Osteomyelitis of the jaws, classification, etiology, pathogenesis, diagnosis, prevention, treatment and complications.

Dentogenous (odontogenic) inflammations – spred through head and neck spaces, etiology, pathogenesis, diagnosis, prevention, treatment and complications. Diseases of periodontal tissues and oral mucosa, oral manifestations of systemic diseases, classification, etiology, pathogenesis, diagnosis, prevention, treatment and complications. Contents and targets of prosthodontics, fixed restorations, removable dentures, consequences or worn and incorrect designed dentures, dental implants. Soft tissue cysts and jaw cysts of oro-maxillofacial region, classification, etiology, pathogenesis, diagnosis, treatment and complications. Salivary gland diseases, classification, etiology, pathogenesis, diagnosis and treatment. Lymph node diseases in the head and neck area classification, etiology, diagnosis and treatment. Dentofacial anomalies, classification, etiology, prevention, orthodontic treatment. Fractures of facial skeleton, classification, etiology, diagnosis, treatment and complications. The first medical aid in orofacial trauma. Benign and malignant tumors of the oro-maxillofacial region, classification, etiology, diagnosis. Guidlines of the multimodal cancer therapy.

Recommended literature:

Tatjana Dostálová a kol.: Stomatologie, Praha: Grada, 2008, 196 s., ISBN 8024727004. Kolektív autoru: Stomatologie, Praha: Karolinum, 1999, 111 s., ISBN 8071848654. Ján Vaško a kol.: Stomatológia, Martin: Osveta, 1994, 138 s., ISBN 8021705515 Mitchell, D., A., Mitchell, L.: Oxford handbook of clinical dentistry, New York, Oxford university press, 2005, 4th.ed, ISBN 0-19-852920-1

Languages necessary to complete the course:

english language

Notes:

Past grade distribution

Total number of evaluated students: 667

A	ABS0	B	C	D	E	FX
70,46	0,0	23,84	4,35	1,05	0,3	0,0

Lecturers: doc. MUDr. Mária Janíčková, PhD., MPH, MUDr. Igor Malachovský, PhD., MDDr. Sarah Kalmanová, PhD., doc. MUDr. Dagmar Statelová, CSc., MDDr. Mária Michálková, MDDr. Daniel Hvizdoš, MDDr. Miroslav Jozefík, MDDr. Rastislav Juríček, MDDr. Katarína Sudzinová, MDDr. Filip Matia, MDDr. Denis Hrivnák

Last change: 08.08.2025

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.DK/J-S-VL-544/18	Dermatovenerology

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 3 / 2 **per level/semester:** 42 / 28
Form of the course: on-site learning

Number of credits: 5

Recommended semester: 7.

Educational level: I.II.

Prerequisites: JLF.ÚMI/J-S-VL-517/17 - Microbiology (1) and JLF.ÚPA/J-S-VL-533/17 - Pathological Anatomy (1)

Course requirements:
The assessment is in the form of written exam, the minimal requirement is: 65 %. Grades: A: 93–100 %, B: 86–92 %, C: 79–85 %, D: 72–78 %, E: 65–71 %, FX: 64 % and less

Learning outcomes:
The absolvent of dermatovenereology knows the basics of the diseases of skin and mucous membranes, can explain the etiopathogenesis of those diseases, knows the diagnostic methods, principles of treatment and differential diagnosis of skin diseases.

Class syllabus:
Content of Lectures
Vesicular and bullous diseases, diagnosis of bullous disorders. Pemphigus, dermatitis herpetiformis, linear bulous dermatosis, bullous pemphigoid.
Connective tissue disease, lupus erythematosus (LE), clinical classification, chronic cutaneous LE, scleroderma, dermatomyositis and polymyositis.
Hypersensitivity syndromes and vasculitis, erythema multiforme, Stevens-Johnson syndrome, toxic epidermal necrolysis, erythema nodosum, vasculitis of small and large vessels.
Bacterial infections: impetigo, ecthyma, cellulitis and erysipelas, folliculitis, sycosis barbae, furuncules and carbuncules, staphylococcal scalded skin syndrome, toxic shock syndrome, granulomatous infections: tuberculosis, leprosy.
Fungal infections: dermatophyte fungal infections, candidiasis, chronic mucocutaneous candidiasis, systemic candidiasis, tinea versicolor.
Eczema and dermatitis, atopic dermatitis.
Urticaria, drug reactions.
Sexually transmited bacterial infections, gonorrhea, syphilis. Rare STD – lymphogranuloma venereum, granuloma inguinale.
Sexually transmitted viral infections, genital warts, bowenoid papulosis, molluscum contagiosum, genital herpes simplex, acquired immunodeficiency syndrome.
Paraneoplastic syndromes, lymphomas.
Mastocytoses, histiocytoses.

Tropical dermatovenerology.
Content of Seminars and Practical Sessions
Structure and function of the skin. Principles of clinical diagnosis in dermatologic practice. History of dermatovenerological patient, demonstration by the slides.
Histopathology of the skin diseases. Description of the local skin findings.
Principles of local therapy. Diagnostic techniques for the cutaneous mycoses. Chosen fungal diseases.
Mycosis fungoides. Neurofibromatosis. Tumors of the melanocyte system.
Dermatological allergology. Allergological techniques and laboratory examinations.
Papulosquamous diseases (psoriasis, parapsoriasis, lichen planus, pityriasis rubra pilaris).
Acne and rosacea – differential diagnosis and treatment.
Venous disease of the lower extremities, thrombophlebitis and phlebothrombosis.
Leg ulcers – differential diagnosis in leg ulcers.
Premalignant and malignant epidermal tumors (basal cell carcinoma, squamous cell carcinoma).
Tumours of the melanocyte system.
Venerological diseases – syphilis, gonorrhoea – laboratory examinations.
Case reports.

Recommended literature:

Rook , Wilkinson, Ebling: Textbook of Dermatology, Blackwett Science, 2010
Minarikova, E.: Clinical Dermatovenerology, Comenius University Bratislava, Polygrafické stredisko UK , Bratislava, 2011
Orkin, M. at al. Dermatology. Norwalk, Conn: Appleton¸ Lange 1991.
Ashton, R., Leppard, B.: Differential Diagnosis in Dermatology. Philadelphia, J.B. Lippincott Comp. 1990.

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 781

A	ABS0	B	C	D	E	FX
79,51	0,0	16,65	2,82	0,9	0,13	0,0

Lecturers: prof. MUDr. Juraj Péč, CSc., doc. MUDr. Eva Minariková, PhD., MUDr. Tatiana Hurtová, PhD., MSc., MUDr. Karolína Vorčáková, PhD.

Last change: 06.04.2022

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚFy/J-S-VL-593/22	Diploma Thesis Seminar (1)

Educational activities:
Type of activities: seminar
Number of hours:
per week: 1 **per level/semester:** 14
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 8.

Educational level: I.II.

Prerequisites:

Course requirements:

Learning outcomes:
A student chooses a topic of a thesis, and together with a supervisor he/she determines a strategy of thesis preparation (schedule), prepares a working outline of a thesis, presents the main objective of work and information retrieval.

Class syllabus:
Becoming familiar with the internal regulations related to thesis preparation.
Becoming familiar with the basic stages of thesis preparation.
Choosing a thesis topic.
Strategy of thesis preparation (schedule).
Working outline of a thesis, presentation of work objective.
Information retrieval - searching documents related to the topic.
Consultations.

Recommended literature:
In each student individually according to the diploma thesis assignment.
Internal Regulation No. 12/2013 Guideline of the Rector of Comenius University in Bratislava on the Basic Essentials of Theses, Rigorous Theses and Habilitation Theses, Check of Their Originality, Their Storage and Accessing at Comenius University in Bratislava
Internal Regulation No. 43/2013 Decision of the Dean of the Jessenius Faculty of Medicine in Martin CU on Theses (bachelor's and master's) of students of JFMED CU in Martin
Hanacek J, Javorka K et al. Introduction to Scientific Work. Textbook for Medical Students. ŠEVT a.s., Bratislava, 2011. 196 p. ISBN 978-80-88866-95-4.

Languages necessary to complete the course:
English language

Notes:

Past grade distribution

Total number of evaluated students: 365

ABS0	M
99,73	0,27

Lecturers: prof. MUDr. Michal Javorka, PhD., prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Daniela Mokrá, PhD., prof. MUDr. Ingrid Tonhajzerová, PhD., prof. MUDr. Kamil Javorka, DrSc., prof. RNDr. Soňa Fraňová, PhD., prof. MUDr. Martina Šutovská, PhD., prof. MUDr. Mgr. Juraj Mokrý, PhD., doc. MUDr. Marta Jošková, PhD., doc. PharmDr. Martin Kertys, PhD., MUDr. Ladislav Šutiak, PhD., MUDr. Michal Hošala, PhD., MUDr. Ján Janík, PhD., doc. MUDr. Marek Smolár, PhD., MPH, MUDr. Marek Malík, PhD., prof. MUDr. Branislav Kolarovszki, PhD., MBA, MUDr. Romana Richterová, PhD., prof. MUDr. Lukáš Plank, CSc., prof. MUDr. Katarína Adamicová, PhD., MUDr. Tomáš Balhárek, PhD., MUDr. Jozef Mičák, PhD., MUDr. Petra Kolenčíková, PhD., MUDr. Jaroslav Fábry, PhD., prof. MUDr. Ján Staško, PhD., prof. MUDr. Peter Kubisz, DrSc., MUDr. Lenka Lisá, PhD., doc. MUDr. Juraj Sokol, PhD., MBA, MUDr. Lucia Stančiaková, PhD., doc. MUDr. Tomáš Šimurda, PhD., MPH, RNDr. Jana Žolková, PhD., prof. MUDr. Henrieta Hudečková, PhD., MPH, prof. MUDr. Tibor Baška, PhD., doc. Ing. Viera Jakušová, PhD., MPH, Ing. Stanislav Kuka, PhD., prof. MUDr. Viera Švihrová, CSc., PhDr. Marta Tkáčová, PhD., Mgr. Róbert Čecho, PhD., Mgr. Eva Malobická, PhD., PhDr. Mgr. Martin Novák, PhD., Mgr. Miroslava Sovičová, PhD., Mgr. Eliška Štefanová, PhD., Mgr. Mária Tatarková, PhD., doc. MUDr. Vladimír Čalkovský, PhD., prof. MUDr. Andrej Hajtman, PhD., prof. MUDr. Mirko Zibolen, CSc., prof. MUDr. Katarína Maťašová, PhD., doc. MUDr. Tomáš Jurko, PhD., prof. MUDr. Egon Kurča, PhD., FESO, doc. MUDr. Vladimír Nosáľ, PhD., FESO, prof. MUDr. Štefan Sivák, PhD., prof. MUDr. Ema Kantorová, PhD., MUDr. Monika Turčanová Koprušáková, PhD., prof. MUDr. Dušan Meško, PhD., prof. MUDr. Renata Péčová, PhD., MPH, prof. MUDr. Jana Plevková, PhD., MUDr. Tomáš Buday, PhD., MBA, MSc., prof. RNDr. Mariana Brozmanová, PhD., MUDr. PhDr. Igor Hrtánek, PhD., MUDr. Miloslav Oppa, PhD., RNDr. Veronika Mešťanová, PhD., MUDr. Jan Hudeček, CSc., MUDr. Anna Ružinák Bobčáková, PhD., MUDr. Ján Červeň, MPH, MUDr. Ľuboš Hamada, MUDr. Ján Lazor, prof. MUDr. Eva Rozborilová, CSc., doc. MUDr. Robert Vyšehradský, PhD., MUDr. Ivana Lipták Žiačiková, MUDr. Róbert Rosoľanka, PhD., doc. MUDr. Katarína Šimeková, PhD., doc. MUDr. Peter Bánovčin, PhD., MBA, doc. MUDr. Martin Ďuriček, PhD., MUDr. Peter Hyrdel, PhD., prof. MUDr. Rudolf Hyrdel, CSc., MUDr. Martin Schnierer, PhD., prof. MUDr. Kamil Biringer, PhD., prof. MUDr. Ján Danko, CSc., MUDr. Michaela Hrtánková, PhD., MUDr. Ivana Chmúrna, PhD., MUDr. Petra Kasajová, PhD., MUDr. Štefan Krivuš, CSc., prof. MUDr. Erik Kúdela, PhD., MUDr. Zuzana Ondák Laučeková, PhD., MUDr. Jana Siváková, PhD., MUDr. Imrich Žigo, CSc., doc. MUDr. Milan Grofik, PhD., MUDr. René Opšenák, PhD., doc. MUDr. Nikola Ferencová, PhD., RNDr. Nikoleta Mažgútová, PhD., MUDr. Miroslav Slezák, PhD., MUDr. Lukáš Spevák, doc. MUDr. Juraj Miklušica, PhD., MUDr. Peter Mikolajčík, PhD., MUDr. Mária Kyselová, MUDr. Tatiana Hurtová, PhD., MSc., prof. MUDr. Martin Péč, PhD., MPH, prof. RNDr. Erika Halašová, PhD., RNDr. Mária Franeková, PhD., RNDr. Marek Samec, PhD., Mgr. Jana Mazuchová, PhD., doc. Ing. Ján Strnádel, PhD., MUDr. Tomáš Jesenský, MUDr. Erik Kozubík, PhD., MUDr. Terézia Pribulová, PhD., MUDr. Tomáš Rokos, PhD.

Last change: 08.03.2022

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KHT/J-S-VL-595/22	Diploma Thesis Seminar (2)

Educational activities:
Type of activities: seminar
Number of hours:
per week: **per level/semester:** 80s
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 9.

Educational level: I.II.

Prerequisites:

Course requirements:
Submission of final thesis outline.
Scale of assessment (preliminary/final): continuous

Learning outcomes:
A student is able to choose relevant documents and information related to the given topic, he/she is able to work with literature and knows how to cite it correctly. He/she can gather and process research material (according to the aim of a thesis).

Class syllabus:
Becoming familiar with the content of the documents obtained in the information retrieval in details, reading, studying. Selection of relevant documents and information for further processing. Ways of citations. Method of diploma thesis elaboration (information gathering and processing) according to the aim of a thesis). Thesis elaboration – final thesis outline, layout of the material into content-related units. Independent research work of students – according to the aim of a thesis. Consultations.

Recommended literature:
In each student individually according to the diploma thesis assignment Internal Regulation No. 12/2013 Guideline of the Rector of Comenius University in Bratislava on the Basic Essentials of Theses, Rigorous Theses and Habilitation Theses, Check of Their Originality, Their Storage and Accessing at Comenius University in Bratislava Internal Regulation No. 43/2013 Decision of the Dean of the Jessenius Faculty of Medicine in Martin CU on Theses (bachelor's and master's) of students of JFMED CU in Martin Hanacek J, Javorka K et al. Introduction to Scientific Work. Textbook for Medical Students. ŠEVT a.s., Bratislava, 2011. 196 p. ISBN 978-80-88866-95-4.

Languages necessary to complete the course:
English language

Notes:

Past grade distribution

Total number of evaluated students: 367

ABS0	M
100,0	0,0

Lecturers: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Michal Javorka, PhD., prof. MUDr. Kamil Javorka, DrSc., prof. MUDr. Daniela Mokrá, PhD., prof. MUDr. Ingrid Tonhajzerová, PhD., prof. MUDr. Henrieta Hudečková, PhD., MPH, prof. MUDr. Tibor Baška, PhD., prof. MUDr. Viera Švihrová, CSc., doc. Ing. Viera Jakušová, PhD., MPH, PhDr. Marta Tkáčová, PhD., Ing. Stanislav Kuka, PhD., Mgr. Eva Malobická, PhD., PhDr. Mgr. Martin Novák, PhD., Mgr. Miroslava Sovičová, PhD., Mgr. Róbert Čecho, PhD., Mgr. Mária Tatarková, PhD., Mgr. Eliška Štefanová, PhD., prof. RNDr. Soňa Fraňová, PhD., prof. MUDr. Martina Šutovská, PhD., prof. MUDr. Mgr. Juraj Mokrý, PhD., doc. MUDr. Marta Jošková, PhD., doc. PharmDr. Martin Kertys, PhD., prof. MUDr. Renata Péčová, PhD., MPH, prof. MUDr. Jana Plevková, PhD., prof. RNDr. Mariana Brozmanová, PhD., MUDr. Tomáš Buday, PhD., MBA, MSc., MUDr. Michal Hošala, PhD., MUDr. Ján Janík, PhD., doc. MUDr. Marek Smolár, PhD., MPH, prof. MUDr. Ján Staško, PhD., prof. MUDr. Peter Kubisz, DrSc., MUDr. Lenka Lisá, PhD., doc. MUDr. Juraj Sokol, PhD., MBA, MUDr. Lucia Stančiaková, PhD., doc. MUDr. Tomáš Šimurda, PhD., MPH, RNDr. Jana Žolková, PhD., doc. MUDr. Vladimír Čalkovský, PhD., prof. MUDr. Andrej Hajtman, PhD., prof. MUDr. Dušan Meško, PhD., prof. MUDr. Mirko Zibolen, CSc., prof. MUDr. Katarína Maťašová, PhD., doc. MUDr. Tomáš Jurko, PhD., prof. MUDr. Branislav Kolarovszki, PhD., MBA, MUDr. Romana Richterová, PhD., prof. MUDr. Egon Kurča, PhD., FESO, doc. MUDr. Vladimír Nosáľ, PhD., FESO, prof. MUDr. Štefan Sivák, PhD., prof. MUDr. Ema Kantorová, PhD., MUDr. Monika Turčanová Koprušáková, PhD., prof. MUDr. Lukáš Plank, CSc., prof. MUDr. Katarína Adamicová, PhD., MUDr. Tomáš Balhárek, PhD., MUDr. Jozef Mičák, PhD., MUDr. Petra Kolenčíková, PhD., Ing. Marcel Veterník, PhD., MUDr. Jaroslav Fábry, PhD., MUDr. PhDr. Igor Hrtánek, PhD., MUDr. Miloslav Oppa, PhD., doc. RNDr. Mária Kovalská, PhD., RNDr. Veronika Mešťanová, PhD., MUDr. Anna Ružinák Bobčáková, PhD., MUDr. Ján Červeň, MPH, MUDr. Ľuboš Hamada, doc. MUDr. Robert Vyšehradský, PhD., MUDr. Ivana Lipták Žiačiková, MUDr. Róbert Rosoľanka, PhD., doc. MUDr. Katarína Šimeková, PhD., prof. MUDr. Kamil Biringer, PhD., prof. MUDr. Ján Danko, CSc., MUDr. Michaela Hrtánková, PhD., MUDr. Ivana Chmúrna, PhD., MUDr. Petra Kasajová, PhD., MUDr. Štefan Krivuš, CSc., prof. MUDr. Erik Kúdela, PhD., MUDr. Zuzana Ondák Laučeková, PhD., MUDr. Jana Siváková, PhD., MUDr. Imrich Žigo, CSc., prof. MUDr. Anton Dzian, PhD., MUDr. Marek Malík, PhD., MUDr. Vladimír Svitek, PhD., doc. MUDr. Tomáš Bolek, PhD., prof. MUDr. Ivana Dedinská, PhD., prof. MUDr. Matej Samoš, PhD., prof. MUDr. Peter Galajda, CSc., MUDr. Karol Graňák, PhD., doc. MUDr. Matej Vnučák, PhD., doc. MUDr. Milan Grofik, PhD., MUDr. Lukáš Spevák, doc. MUDr. Juraj Miklušica, PhD., MUDr. Peter Mikolajčík, PhD., MUDr. Miloslav Mišánik, PhD., MUDr. Diana Musová, MUDr. Tomáš Jesenský, MUDr. Barbora Vasiľová, MUDr. Michaela Matejová, PhD., MUDr. René Opšenák, PhD., RNDr. Nikoleta Mažgútová, PhD., doc. MUDr. Nikola Ferencová, PhD., MUDr. Tatiana Hurtová, PhD., MSc., prof. MUDr. Martin Péč, PhD., MPH, prof. RNDr. Erika Halašová, PhD., RNDr. Mária Franeková, PhD., Mgr. Jana Mazuchová, PhD., RNDr. Marek Samec, PhD., doc. Ing. Ján Strnádel, PhD., MUDr. Terézia Gondášová, MUDr. Tomáš Rokos, PhD., MUDr. Erik Kozubík, PhD., MUDr. Terézia Pribulová, PhD.

Last change: 08.03.2022

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KHT/J-S-VL-596/22	Diploma Thesis Seminar (3)

Educational activities:
Type of activities: seminar
Number of hours:
per week: **per level/semester:** 80s
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 10.

Educational level: I.II.

Prerequisites:

Course requirements:
Fulfilment of particular parts of thesis outline in the form of material from the study and/or research (according to the aim of thesis).
Scale of assessment (preliminary/final): continuous

Learning outcomes:
A student is able to choose relevant documents and information related to the given topic, he/she is able to work with literature and knows how to cite it correctly. He/she can gather and process research material (according to the thesis topic). A student is able to create a text as far as formal requirements and content are concerned.

Class syllabus:
Becoming familiar with the content of other documents obtained in the information retrieval in details, reading, studying. Selection of relevant documents and information for further processing. Summarizing the bibliography. Thesis elaboration – filling the particular parts of a final outline of thesis with material from the study and research (according to the aim of a thesis), thesis text elaboration. Preparation of documentation related to thesis – bibliography, illustrations, tables. Independent research work of students – according to the aim of a thesis. Consultations.

Recommended literature:
In each student individually according to the diploma thesis assignment Internal Regulation No. 12/2013 Guideline of the Rector of Comenius University in Bratislava on the Basic Essentials of Theses, Rigorous Theses and Habilitation Theses, Check of Their Originality, Their Storage and Accessing at Comenius University in Bratislava Internal Regulation No. 43/2013 Decision of the Dean of the Jessenius Faculty of Medicine in Martin CU on Theses (bachelor's and master's) of students of JFMED CU in Martin Hanacek J, Javorka K et al. Introduction to Scientific Work. Textbook for Medical Students. ŠEVT a.s., Bratislava, 2011. 196 p. ISBN 978-80-88866-95-4.

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 367

ABS0	M
100,0	0,0

Lecturers: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Michal Javorka, PhD., prof. MUDr. Kamil Javorka, DrSc., prof. MUDr. Daniela Mokrá, PhD., prof. MUDr. Ingrid Tonhajzerová, PhD., prof. MUDr. Henrieta Hudečková, PhD., MPH, prof. MUDr. Tibor Baška, PhD., prof. MUDr. Viera Švihrová, CSc., doc. Ing. Viera Jakušová, PhD., MPH, PhDr. Marta Tkáčová, PhD., Ing. Stanislav Kuka, PhD., Mgr. Eva Malobická, PhD., PhDr. Mgr. Martin Novák, PhD., Mgr. Miroslava Sovičová, PhD., Mgr. Róbert Čecho, PhD., Mgr. Mária Tatarková, PhD., Mgr. Eliška Štefanová, PhD., prof. RNDr. Soňa Fraňová, PhD., prof. MUDr. Martina Šutovská, PhD., prof. MUDr. Mgr. Juraj Mokrý, PhD., doc. MUDr. Marta Jošková, PhD., doc. PharmDr. Martin Kertys, PhD., prof. MUDr. Renata Péčová, PhD., MPH, prof. MUDr. Jana Plevková, PhD., MUDr. Tomáš Buday, PhD., MBA, MSc., prof. RNDr. Mariana Brozmanová, PhD., MUDr. Michal Hošala, PhD., MUDr. Ján Janík, PhD., doc. MUDr. Marek Smolár, PhD., MPH, prof. MUDr. Ján Staško, PhD., prof. MUDr. Peter Kubisz, DrSc., MUDr. Lenka Lisá, PhD., doc. MUDr. Juraj Sokol, PhD., MBA, MUDr. Lucia Stančiaková, PhD., doc. MUDr. Tomáš Šimurda, PhD., MPH, RNDr. Jana Žolková, PhD., doc. MUDr. Vladimír Čalkovský, PhD., prof. MUDr. Andrej Hajtman, PhD., prof. MUDr. Dušan Meško, PhD., prof. MUDr. Mirko Zibolen, CSc., prof. MUDr. Katarína Maťašová, PhD., doc. MUDr. Tomáš Jurko, PhD., prof. MUDr. Branislav Kolarovszki, PhD., MBA, MUDr. Romana Richterová, PhD., prof. MUDr. Egon Kurča, PhD., FESO, doc. MUDr. Vladimír Nosáľ, PhD., FESO, prof. MUDr. Štefan Sivák, PhD., prof. MUDr. Ema Kantorová, PhD., MUDr. Monika Turčanová Koprušáková, PhD., prof. MUDr. Lukáš Plank, CSc., prof. MUDr. Katarína Adamicová, PhD., MUDr. Tomáš Balhárek, PhD., MUDr. Jozef Mičák, PhD., MUDr. Petra Kolenčíková, PhD., MUDr. Jaroslav Fábry, PhD., MUDr. PhDr. Igor Hrtánek, PhD., MUDr. Miloslav Oppa, PhD., doc. RNDr. Mária Kovalská, PhD., RNDr. Veronika Mešťanová, PhD., MUDr. Jan Hudeček, CSc., MUDr. Anna Ružinák Bobčáková, PhD., MUDr. Ján Červeň, MPH, MUDr. Ľuboš Hamada, doc. MUDr. Robert Vyšehradský, PhD., MUDr. Ivana Lipták Žiačiková, MUDr. Róbert Rosoľanka, PhD., doc. MUDr. Katarína Šimeková, PhD., prof. MUDr. Kamil Biringer, PhD., prof. MUDr. Ján Danko, CSc., MUDr. Michaela Hrtánková, PhD., MUDr. Ivana Chmúrna, PhD., MUDr. Petra Kasajová, PhD., MUDr. Štefan Krivuš, CSc., prof. MUDr. Erik Kúdela, PhD., MUDr. Zuzana Ondák Laučeková, PhD., MUDr. Jana Siváková, PhD., MUDr. Imrich Žigo, CSc., MUDr. Lukáš Spevák, doc. MUDr. Juraj Miklušica, PhD., MUDr. Peter Mikolajčík, PhD., MUDr. Miroslav Slezák, PhD., prof. MUDr. Anton Dzian, PhD., MUDr. Marek Malík, PhD., MUDr. Vladimír Svitek, PhD., doc. MUDr. Jurina Sadloňová, CSc., doc. MUDr. Tomáš Bolek, PhD., prof. MUDr. Ivana Dedinská, PhD., prof. MUDr. Peter Galajda, CSc., MUDr. Karol Graňák, PhD., MUDr. Lívia Jamrišková, PhD., doc. MUDr. Matej Vnučák, PhD., doc. MUDr. Milan Grofik, PhD., doc. MUDr. Nikola Ferencová, PhD., RNDr. Nikoleta Mažgútová, PhD., MUDr. Tatiana Hurtová, PhD., MSc., prof. MUDr. Martin Péč, PhD., MPH, prof. RNDr. Erika Halašová, PhD., RNDr. Mária Franeková, PhD., RNDr. Marek Samec, PhD., Mgr. Jana Mazuchová, PhD., doc. Ing. Ján Strnádel, PhD., MUDr. Terézia Gondášová, MUDr. Tomáš Rokos, PhD., MUDr. Erik Kozubík, PhD., MUDr. Terézia Pribulová, PhD.

Last change: 08.03.2022

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

STATE EXAM DESCRIPTION

Academic year: 2026/2027	
University: Comenius University Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF/J-SVL-SS55/26	**Course title:** Diploma Thesis and Defense of Diploma Thesis
Number of credits: 6	
Recommended semester: 11., 12..	
Educational level: I.II.	
Prerequisites: JLF.ÚFy/J-S-VL-593/22 - Diploma Thesis Seminar (1) and JLF.KHT/J-S-VL-595/22 - Diploma Thesis Seminar (2) and JLF.KHT/J-S-VL-596/22 - Diploma Thesis Seminar (3)	
Course requirements: Elaboration of final version of diploma thesis, submission of diploma thesis, presentation and diploma thesis defence in front of the committee for state examination subject Diploma Thesis Defence.	
Learning outcomes: A student is able to work creatively with literature sources and summarize basic scientific knowledge into logically organized unit which meets formal requirements of diploma thesis. He/she can clearly define the aim and methodology of diploma thesis, he/she can process the results together with practical interpretation (according to the aim of a thesis), he/she knows how to cite literature in accordance with valid regulations. He/she is able to present and defend results of his/her diploma thesis.	
Class syllabus: Elaboration of work – elaboration of text (formal structure and content) – writing a thesis, filling the particular parts of outline with material from study of literature and research (according to the aim of a thesis), specifying relationships and formulations, illustrations, tables. Preparation of documentation – bibliography and its summarization with regard to the ethics and techniques, author reading, corrections. Preparation of diploma thesis final version – in terms of content (aiming predominantly at discussion and conclusion) and formal structure, incorporating supervisor´s comments Consultations regarding particular parts of preparation of diploma thesis final version. Submission of diploma thesis. Defence – presentation of diploma thesis and its preparation.	
State exam syllabus: Content of Diploma Thesis is determined according to the aim of Thesis.	
Recommended literature: In each student individually according to the diploma thesis assignment Internal Regulation No. 12/2013 Guideline of the Rector of Comenius University in Bratislava on the Basic Essentials of Theses, Rigorous Theses and Habilitation Theses, Check of Their Originality, Their Storage and Accessing at Comenius University in Bratislava Internal Regulation No. 43/2013 Decision of the Dean of the Jessenius Faculty of Medicine in Martin CU on Theses (bachelor's and master's) of students of JFMED CU in Martin	

Hanacek J, Javorka K et al. Introduction to Scientific Work. Textbook for Medical Students. ŠEVT a.s., Bratislava, 2011. 196 p. ISBN 978-80-88866-95-4.

Languages necessary to complete the course:
English language

Last change: 04.06.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027	
University: Comenius University Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.ÚVZ/J-S-VL-594/19	**Course title:** Disaster Medicine
Educational activities: **Type of activities:** practicals / lecture **Number of hours:** **per week:** 1 / 1 **per level/semester:** 14 / 14 **Form of the course:** on-site learning	
Number of credits: 1	
Recommended semester: 10.	
Educational level: I.II.	
Prerequisites: JLF.ÚVZ/J-S-VL-617/19 - Public Health (1)	
Recommended prerequisites: Public Health 1	
Course requirements: EVALUATION OF THE COURSE Requirements to successfully complete the course: To compete the course, two basic conditions should be fulfilled: 1. active attendance: compulsory attendance – in case of absence, the student should substitute the missing through consultation with the respective teacher 14x2 (28 points) 2. two well arranged preparations from the proposed themes (as PowerPoint presentations) and their presentation during the practicals (each 36 points; 72 points in total) Final evaluation (max. 100 points): Achieved points Evaluation 100 – 91 A (excellent - 1) 90 – 81 B (very good – 1.5) 80 – 73 C (good - 2) 72 – 66 D (satisfactory – 2.5) 65 – 60 E (sufficient - 3) 59 and less Fx (fail - 4) At least 60 points in total evaluation are needed to compete the course. Scale of assessment (preliminary/final): 0/100	
Learning outcomes: After completion of the subject the student understands - kinds of injuries in natural and man-made disasters - risks of emergent situation on local, regional, national and international level - problem of preparedness and public health measures to deal with emergent situations as well as their management -international health regulations -basic characteristics of flu pandemic preparedness	

Class syllabus:
Public health and disaster medicine. Management in emergent situations. Integrated rescue system. International health regulations. Planned measures in Slovak Republic in a case of event liable to international regulations. Pandemic preparedness and international cooperation in emergent situations. Disasters with predominant chemical effect. Psychological impact of disasters, human stampede, ethical aspects of disaster medicine. War medicine and terrorism. Nuclear, industrial, natural and humanitarian disasters.

Recommended literature:
OBLIGATORY LITERATURE
moodle.uniba.sk
MacGarty, D., Nott, D.: Disaster Medicine. A Case Based Approach. London: 390 p. Springer. ISBN 978-1-4471-4423-6. https://link.springer.com/book/10.1007/978-1-4471-4423-6
RECOMMENDED LITERATURE
http://www.who.int/topics/
www.ecohealth101.org
http://www.ecdc.europa.eu

Languages necessary to complete the course:
english

Notes:

Past grade distribution
Total number of evaluated students: 46

A	ABS0	B	C	D	E	FX
95,65	0,0	4,35	0,0	0,0	0,0	0,0

Lecturers: prof. MUDr. Tibor Baška, PhD., Mgr. Mária Tatarková, PhD., prof. RNDr. Soňa Fraňová, PhD., PhDr. Mgr. Martin Novák, PhD.

Last change: 17.08.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚA/J-S-VL-634/20	Effective Learning Methods

Educational activities:
Type of activities: lecture
Number of hours:
per week: 1 **per level/semester:** 14
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 1.

Educational level: I.II.

Prerequisites:

Course requirements:
Participation in lectures. Participation and evaluation of the questionnaires: motivation for learning, learning styles, coping strategies. Time management diary for successful learning.
Scale of assessment (preliminary/final): 50/100 A:95% - 100%, B:88% - 94%, C: 77% - 87%, D: 86% - 76%, E: 60% - 65%

Learning outcomes:
The graduates acquire the information about the effective learning strategies based on the latest evidences from neuropsychology and neuropedagogy, useful information about the memory, forgetting curve, motivation and concentration. Students identify preferred learning styles by using verified questionnaires. The effect of the stress and anxiety on the academic success and learning will be discussed.

Class syllabus:
Learning processes, brain compatible learning. Motivation for learning. Concentration. Memory, repetition and Ebbinghaus forgetting curve. Multitasking and the brain. Time management for learning, procrastination. Learning styles. Sleep, memory and learning. Regime and learning. Stress, memory and learning. Exam stress. Coping strategies and autogenic training. Learning with digital technologies. Alternative learning techniques.

Recommended literature:
Boleková, Výbohová, Hešková et al. How to study and not forget - Principles of brain-compatible learning, Univerzita Pavla Jozefa Šafárika v Košiciach, ŠafárikPress, Košice 2020, ISBN 978-80-8152-897-2. https://unibook.upjs.sk/sk/lekarska-fakulta/1391-how-to-study-and-not-forget-principles-of-brain-compatible-learning
Rhodes, Cleary and DeLosh. A Guide to Effective Studying and learning: Practical strategies from the Science of Learning, Oxford University press, 2019.
Jensen. Introduction to Brain-Compatible Learning, Corwin, 2007.
Our Textbook is prepared under the project KEGA 019UPJŠ – 4 - 2018 in slovak and english language.

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 32

A	ABS0	B	C	D	E	FX
84,38	0,0	0,0	0,0	0,0	0,0	15,63

Lecturers: doc. MUDr. Desanka Výbohová, PhD., MVDr. Sandra Hurta Csizmár, PhD., RNDr. Alena Mazuráková, PhD., MUDr. Katarína Lešková, PhD.

Last change: 14.09.2024

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.CPMV/J-S-VL-645/25	Electrocardiography in simulation and clinical cases

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 1 / ,5 **per level/semester:** 14 / 7
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 8.

Educational level: I.II.

Prerequisites: JLF.ÚFy/J-S-VL-516/16 - Physiology (2) and JLF.ÚPF/J-S-VL-536/17 - Pathological Physiology (2)

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 15

A	ABS0	B	C	D	E	FX
93,33	0,0	6,67	0,0	0,0	0,0	0,0

Lecturers: prof. MUDr. Jana Plevková, PhD., MUDr. Tomáš Buday, PhD., MBA, MSc., Ing. Lukáš Martvoň, PhD.

Last change: 06.08.2025

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚHE/J-S-VL-635/20	Elements of Embryology

Educational activities:
Type of activities: practicals
Number of hours:
per week: 1 **per level/semester:** 14
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 3.

Educational level: I.II.

Prerequisites:

Course requirements:
80% participation on the seminars (at least 11 weeks), written final test
Evaluation: A - Fx
Scale of assessment (preliminary/final): 20/80

Learning outcomes:
Review of human prenatal development with emphasis on chosen organs and organ systems, considering the fundamental knowledge from cell biology and genetics in given aspects. Attention being paid especially to teratogenic agents.

Class syllabus:
1) Introduction to embryology, gametogenesis, fertilization.
2) First month of intrauterine development - Review.
3) Placenta development and clinical correlations.
4) Development of CNS and PNS with clinical correlations.
5) Development of cardiovascular system and clinical correlations.
6) Development of respiratory system and clinical correlations.
7) Development of digestive system and clinical correlations.
8) Development of endocrine system and clinical correlations.
9) Development of urogenital system and clinical correlations.
10) Multiple pregnancy and clinical correlations.
12) Final evaluation.

Recommended literature:
Obligatory literature:
Sadler T.W.: Langman's Medical Embryology. Wolters Kluwer, 2019, 432 s. ISBN 978149638907
Recommended literature:
Moore, K.L., Persaund T.V.N., Torchia M.G.: Before we are born (Essentials of Embryology and Birth Defects). Elsevier, 2019, 350 s. ISBN 9780323608497

Languages necessary to complete the course:

english

Notes:

Past grade distribution
Total number of evaluated students: 269

A	ABS0	B	C	D	E	FX
59,48	0,0	14,5	4,46	2,6	4,09	14,87

Lecturers: RNDr. Veronika Mešťanová, PhD., doc. MVDr. Soňa Bálentová, PhD., Ing. Veronika Cígerová, PhD., doc. RNDr. Mária Kovalská, PhD., Ing. Bibiana Krajňáková, PhD., RNDr. Lenka Lacková, PhD.

Last change: 13.09.2024

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KAIM/J-S-VL-606/19	Emergency Medicine

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 1 / 1 **per level/semester:** 14 / 14
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 9.

Educational level: I.II.

Prerequisites: JLF.IKG/J-S-VL-539/19 - Internal Medicine (1) and JLF.ÚFa/J-S-VL-529/21 - Pharmacology (1)

Course requirements:
Attendance of 100 % on practicals and successful completition of final test.

Learning outcomes:
By completing the course the students will gain knowledge and skills in the field of basic physical examination, modified to the conditions of emergency medicine, cardiopulmonary resuscitation and stabilization of basic vital functions. Students will acquire practical skills to proceed in individual traumatic and non- traumatic life-threatening conditions and acquire theoretical skills in the organization of work in pre-hospital care in events with mass casualty accidents.
Intended Learning Objectives
Student:
1. Performs primary and secondary assessment of critically ill patients using the ABCDE approach, applies this knowledge within clinical scenarios using the high fidelity SimMan simulator.
2. Demonstrates skills in providing basic life support (BLS) for adults and children, including operating an AED.
3. Demonstrates skills in providing advanced life support (ALS) for adults and children, including operating and using a manual defibrillator.
4. Analyzes the ECG waveform, identifies individual rhythm disorders on the ECG (tachyarrhythmias, bradyarrhythmias), understands and masters the basic treatment of the above rhythm disorders according to the latest principles and recommendations of the ERC (European Resuscitation Council) in life-threatening conditions, understands the principles of defibrillation, cardioversion and pacing, knows how to safely operate a manual defibrillator.
5. Masters the basic techniques of airway managment and ventilation, performs basic maneuvers for patency of the airway, bag mask ventilation, insertion of supraglottic devices. Demonstrates practical skills in securing airway by intubation and "front of neck" access (coniotomy, buggy assisted coniotomy) in emergency situations.
6. Masters the basic and advanced techniques of securing intravenous or intraosseous access, performs the above techniques using individual models, understands the strategy of fluid

administration, types of solutions, indications and contraindications in connection with the stabilization of critically ill patients.
7. Masters the basic clinical symptoms of shock, performs the differential diagnosis of several types of shock in connection with the traumatic mechanism or pathophysiology of non-traumatic life-threatening conditions.
8. Knows and performs techniques for stopping external bleeding, including the use of a tourniquet, loading a pelvic belt, knows and performs basic techniques for immobilizing and fixing limbs (splinting and slinging) and the spine, as well as techniques for safely removing a patient from a vehicle.
9. Knows the basic principles of triage and organizing pre-hospital care in mass casualty events.
10. Demonstrates effective communication skills and a professional approach in model clinical situations, including effective team communication and basic elements of team leadership.
11. Applies clinical diagnostic reasoning and acquired practical skills in clinical scenarios using the high fidelity simulator SimMan.

Class syllabus:
1. Primary and secondary examination of a critically ill patient using the ABCDE approach. Cardiac arrest, basic life support, AED (Automated External Defibrillator).
2. ECG waveform analysis, treatment of rhythm disorders, defibrillation, cardioversion, pacing according to the latest ERC (European Resuscitation Council) guidelines.Airway management, i.v. or i.o. access, basics of fluid therapy.
3. Advanced life support, simulations of clinical scenarios using the high fidelity simulator SimMan.
4. Trauma and shock. Techniques for stopping bleeding, immobilization of limbs and spine, simulations of clinical scenarios using the high fidelity simulator SimMan.
5. Test, practical exam.

Recommended literature:
European Resuscitation Council Guidelines 2025, https://www.erc.edu/science-research/guidelines/guidelines-2025/
WYATT, Jonathan P., Robert G. TOUQUET, Robin N. WARNERS a Jason LONG, ed. Oxford Handbook of Emergency Medicine. 5th ed. Oxford: Oxford University Press, 2020. 768 s. ISBN 978-0-19-878419-7.

Languages necessary to complete the course:
Slovak / English Language

Notes:

Past grade distribution
Total number of evaluated students: 681

A	ABS0	B	C	D	E	FX
56,53	0,0	22,91	10,13	6,75	3,67	0,0

Lecturers: MUDr. Jacgueline Alvarez Ordaz, MUDr. Zuzana Benić, MUDr. Zuzana Biringerová, PhD., MUDr. Tomáš Fecko, MUDr. Katarína Machová, MUDr. Andrea Ráheľ Kubisová, MUDr. Jana Sendreyová

Last change: 21.07.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚO/J-S-VL-531/17	Ethics in medicine

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 1 / 1 **per level/semester:** 14 / 14
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 3.

Educational level: I.II.

Prerequisites:

Course requirements:
Active participation in seminars. Two knowledge tests (continuous and final) written with min. 60% success rate. Overall evaluation of the course based on the results of the first and second test:
A / 1 = 91 - 100%; B / 1.5 = 81 - 90%; C / 2 = 73 - 80%; D / 2.5 = 66 - 72%; E / 3 = 60 - 65%; Fx = less than 60%.
Scale of assessment (preliminary/final): 50/50

Learning outcomes:
By completing the course, the student acquires knowledge of the basic problems of medical ethics and bioethics. The student understands the principles of medical ethics and their importance in education, practice, and research in the field of medicine. The student can apply knowledge to case studies, can analyse them, identify problems and dilemmas and propose solutions. The course contributes to the formation of moral attitudes of students to medicine, patients, and other health professions in a team.

Class syllabus:
Introduction to general ethics. Ethics, morality, and moral reasoning. Basic ethical theories in the context of medical ethics. Ethics and law.
Introduction to medical ethics. Basic terminology of medical ethics. Hippocratic tradition and oath. Medical oath of the World Medical Association (Geneva Declaration). Principles of medical ethics and their application. Code of ethics.
Dignity. Patients' rights. The doctor-patient relationship. Paternalism and partnership.
Informed consent and the right to refuse treatment. Ethical aspects of providing information.
Ethics at the beginning of human life (contraception, sterilization, assisted reproduction, abortion).
Basics of thanatology. Dying with dignity. The issue of euthanasia and assisted suicide.
Ethical aspects of biomedical research and publishing. Ethics committee.

Recommended literature:
Beauchamp L.T., Childress, F.J. Principles of Biomedical Ethics. 6th. ed. New York, Oxford : Oxford University Press, 2009, 417 p. ISBN 978-0-19-533570-5.
Declaration on the Promotion of Patients´Rights in Europe.

European Charter of Patients` Rights.
Declaration of Geneva. World Medical Association. 2006.
Medical Ethics Manual [on-line]. World Medical Association. URL: https://www.wma.net/what-we-do/education/medical-ethics-manual/

Languages necessary to complete the course:
English language

Notes:
The subject is supported by MS Teams.

Past grade distribution
Total number of evaluated students: 1015

A	ABS0	B	C	D	E	FX
69,16	0,1	22,46	7,29	0,49	0,49	0,0

Lecturers: doc. Mgr. Juraj Čáp, PhD., Mgr. Martina Nebošková, PhD.

Last change: 23.03.2022

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚVZ/J-S-VL-605/18	Financing of Healthcare System and Health Insurance

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 1 / 1 **per level/semester:** 14 / 14
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 8.

Educational level: I.II.

Prerequisites:

Course requirements:
Evaluation of students is provided through attending, running (10 items - max. 50 p.) and final written (10 items - max. 50 p.) tests.
Minimal level to pass the subject: 65 %.
Achieved points
Evaluation
100 – 91 A (excellent - 1)
90 – 81 B (very good – 1.5)
80 – 73 C (good - 2)
72 – 66 D (satisfactory – 2.5)
65 – 60 E (sufficient - 3)
59 and less Fx (fail - 4)
Scale of assessment (preliminary/final): 0/100

Learning outcomes:
After completion of the subject the student understands the history of health insurance system in Slovakia and relations between health insurance participants, current health care system in Slovakia, rights and obligations of insured person, and principles of solidarity in the public health insurance system. The student is able to identify the forms of health care financing and prevention, basic payment methods. The student understands the development of available sources, principles of health care purchasing, and control mechanisms during the health care providing and in health insurance system.

Class syllabus:
Health insurance models.
Reform of health insurance system in Slovakia, sources of funding, their structure, principle of redistribution.
Participants in health insurance system.
The tasks of health insurance company in the provision of health care, rights and obligations of insured person.
Control mechanisms in health insurance system.

Different forms of health care financing, payment methods.
Current situation in health care financing.

Recommended literature:
Obligatory literature:
ONDRUŠ, P., ONDRUŠOVÁ, I. A KOL. Manažment a financovanie v zdravotníctve: príručka zdravotníckeho manažéra Bratislava: Matica slovenská, 2017. 320 s.
KOVÁČ E.: Zdravotné poistenie. Bratislava, Herba, 2009, s. 96, ISBN 978-80-89171-62-0
Zákon č. 580/2004 Z. z. v znení neskorších predpisov
Zákon č. 581/2004 Z. z. v znení neskorších predpisov
aktuálna Správa o stave vykonávania verejného zdravotného poistenia (Vestník ÚDZS)
materiály dostupné na: www.health.gov.sk, www.udzs.sk

Languages necessary to complete the course:
slovak

Notes:

Past grade distribution
Total number of evaluated students: 0

A	ABS0	B	C	D	E	FX
0,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: prof. MUDr. Viera Švihrová, CSc.

Last change: 17.08.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚSLME/J-S-VL-577/19	Forensic Medicine and Medical Legislative

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 2 / 1 **per level/semester:** 28 / 14
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 9.

Educational level: I.II.

Prerequisites: JLF.ÚPA/J-S-VL-534/17 - Pathological Anatomy (2)

Course requirements:
Exam

Learning outcomes:
Students are able to evaluate various forms of violence towards the human beings, even with the application of marginal forensic disciplines (toxicology, serology, criminalistics, balistics, biomechanics). After the course of Forensic Medicine the student is well prepared for administrative and practical tasks in medical examination of cadavers and the crime scene. While asked by the police authorities he/she is competent to perform the general overlook of the living persons being suspected of the criminal activity, both as offencers or victims. The information pool of forensic medicine should be applied by the student also in the other medical disciplines.

Class syllabus:
I. Autopsy.
II. Forensic thanatology.
III. Administrative and practical tasks on the crime scene investigation.
IV. Basics of forensic alcohology and toxicology.
V. Forensic traumatology, evaluation and insurance compensation of traumatic accidents
VI. Drugs and drug abuse, types of dependencies
VII. Medical aspects of traffic accidents, single and double-trace vehicles
VIII. Injuries caused by firearms, explosives

Recommended literature:
Buris, L.: Forensic Medicine. Springer Vrlg., 1993, 416 pp
DiMaio, V.J., DiMaio, D.: Forensic Pathology, CRC Press, Washington, D.C., 2001, 565 pp

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 673

A	ABS0	B	C	D	E	FX
45,17	0,0	30,76	12,63	8,32	2,67	0,45

Lecturers: prof. MUDr. Ľubomír Straka, PhD., MUDr. Veronika Rybárová, PhD., doc. MUDr. Jozef Krajčovič, PhD., doc. MUDr. Martin Janík, PhD., MUDr. Richard Sivulič, PhD., RNDr. Katarína Hanzelyová

Last change: 07.04.2022

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KDTBC/J-S-VL-615/19	Functional Examination of Lungs in Childhood

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: ,5 / ,5 **per level/semester:** 7 / 7
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 9.

Educational level: I.II.

Prerequisites:

Course requirements:
Lectures and practicals attendance /minim. 80%/, final oral exam

Learning outcomes:
After subject completion student acquires basic information about pulmonary function testing in childhood, is able to evaluate ventilation parameters, bronchoprovocation tests, indentify ventilation disordes, evaluate exhaled air analysis

Class syllabus:
1. Definition of ventilation parameters 2. Evaluation of flow-volume loop 3. Bronchoprovocation test 4. Bronchodilatation tests 5. Bodyplethysmography, Diffusion capacity 6. Exhaled air analysis

Recommended literature:
1. FIŠEROVÁ, J., CHLUMSKÝ, J., SATINSKÁ, J. A KOL. Funkční vyšetření plic. Praha: GEUM, 2004. ISBN 80-86256-38-3. 2. KRIŠTÚFEK, P. a kol. Praktická respirológia a ftizeológia. Bratislava: Osveta, 2000. ISBN 80-8063-044-5. 3. FÁBRY, J. Funkčné vyšetrenie pľúc u detí. In: OROSOVÁ, J. a kol. Pneumológia, pneumoonkológia a hrudníková chirurgia. Bratislava: Infoma, 2011. ISBN 978-80-89087-52-5. s. 123-128. 4. FÁBRY, J., KUBICOVÁ, Z., RAČEKOVÁ, E. Prínos funkčného vyšetrenia pľúc v detskej pneumonologickej praxi. Lekársky Obzor, roč. 55, č. 1-2 (2006), s. 23-32.

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 0

A	ABS0	B	C	D	E	FX
0,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: MUDr. Jaroslav Fábry, PhD.

Last change: 28.03.2022
Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.IK1/J-S-VL-591/22	General Medicine and Practice at General Practitioner

Educational activities:
Type of activities: lecture
Number of hours:
per week: 1 **per level/semester:** 14
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 9.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Internal medicine 3, Pediatrics 1

Course requirements:
EN
The condition for successful completion of the course and obtaining credit is participation in practical exercises, which students attend directly in practice, ie. in non-state medical outpatient clinics (general practitioner and general practitioner for children and adolescents - PLDD).
Scale of assessment (preliminary/final): monitoring activity in practical exercises and writing case reports

Learning outcomes:

Class syllabus:
History of paediatrics and general medicine. Basic terms. PLDD and general practice management for adults. Diagnosis and treatment of a patient in a PLDD outpatient clinic and general practitioner - from symptoms and syndrome to diagnosis (diagnostics, differential diagnosis, therapeutic options, etc.) Specific work of PLDD doctor and general practitioner - preventive examinations, vaccination, diagnostics, pre-hospital medical care, LSPP, visiting service, field work, occupational health care, incapacity, cooperation with the Social Insurance Agency, ÚPSaR. Acute conditions in ambulance PLDD and general practitioner. Keeping medical records in PLDD and general practitioners, examination of dead, assessment of possession of weapons and ammunition, SBS, ability to drive a motor vehicle, cooperation with police. Electronic Healthcare.

Recommended literature:
Robert Rakel David Rakel: Textbook of Family Medicine 9th Edition,2015,ISBN: 9780323239905
eBook ISBN: 9780323340939

Languages necessary to complete the course:
English language

Notes:

Past grade distribution Total number of evaluated students: 367	
ABS0	M
99,73	0,27
Lecturers: doc. MUDr. Daniela Kantárová, PhD., MPH	
Last change: 08.03.2022	
Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin	

STATE EXAM DESCRIPTION

Academic year: 2026/2027	
University: Comenius University Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.GPK/J-SVL-SS53/21	**Course title:** Gynecology and Obstetrics
Number of credits: 3	
Recommended semester: 11., 12..	
Educational level: I.II.	
Recommended prerequisites: Gynecology and obstetrics 3	
Course requirements: Practical and oral state exam. Scale of assessment (preliminary/final): Final.	
Learning outcomes: The student is able to complete the knowledge about gynecological and pediatric diseases, the student can deepen the practical skills of the gynecology and obstetrics principles, knows the principles of everyday care of the gynecological patient and the pregnant female, knows the principles of work on the gynecological and obstetrical clinic and the surgery room.	
Class syllabus: Practical and oral state exam.	
State exam syllabus: Practical and oral state exam.	
Recommended literature: Cunningham, F. et al.: Williams Obstetrics. Williams Obstetrics 26e. McGraw Hill / Medical; 26th edition, 2022, 1328 s., ISBN-13:‍978-1260462739. Hoffman, B. et al.: Williams Gynecology. McGraw-Hill / Medical; 4th ed., 2020, 1328 s., ISBN-13: 978-1260456868.	
Languages necessary to complete the course: English.	
Last change: 29.03.2022	
Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin	

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.GPK/J-S-VL-562/19	Gynecology and Obstetrics (1)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 3 / 2 **per level/semester:** 42 / 28
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 9.

Educational level: I.II.

Prerequisites: JLF.KVVTCh/J-S-VL-522a/22 - Surgical Propedeutics (2)

Course requirements:
90% mandatory participation in practical exercises, one afternoon shift (16:00-20:00), and credit test: minimum success rate: 60%.
Scale of assessment (preliminary/final): Continuous

Learning outcomes:
Credits

Class syllabus:
Lectures: Diagnosis of pregnancy. Changes in female organism during pregnancy. Fertilization and further development of the fetal egg. Fetal egg at the end of pregnancy. Placental and fetal circulation. Prenatal care (screening). Diet of pregnant women. Drugs and pregnancy. Normal birth - causes. Physiology of uterine activity. Labor phases. Medical management of labor. The management of labor in the home and in extraordinary circumstances. Breech delivery. Surgical methods in breech birth. Preterm labor. Preterm premature rupture of membranes. Amniotic fluid assessment. Intrauterine growth restriction. Diagnosis and treatment of fetal threat during pregnancy and childbirth. Bleeding during pregnancy, labor, and postpartum. Immunological problems in pregnancy. Gestational trophoblastic disease. Pathology of placenta and umbilical cord. Hypertensive disorders in pregnancy. Diabetes mellitus, hematologic disorders, and hepatopathies in pregnancy.
Seminars: Anatomy of external and internal genitals, female pelvis, pelvimetry - simulation-based education. Basic examination techniques in obstetrics. Amnioscopy, gravidometry, and calculation of due date of delivery. Patient history in gynecology – obstetrics - simulation-based education. Spontaneous vaginal delivery. Fetal injury during delivery - simulation-based education. Principles of cardiotocography. Puerperium – physiology and pathology. Ultrasound in gynecology and obstetrics. Emergency situations in obstetrics - differential diagnosis. Operative obstetrics (Caesarean section, forceps, vacuum extraction and external cephalic version) - simulation-based education. Labor analgesia and anesthesia. Prenatal genetic counselling.

Recommended literature:

Cunningham, F. et al.: Williams Obstetrics. Williams Obstetrics 26e. McGraw Hill / Medical; 26th edition, 2022, 1328 s., ISBN-13:ʃ978-1260462739.
Hoffman, B. et al.: Williams Gynecology. McGraw-Hill / Medical; 4th ed., 2020, 1328 s., ISBN-13: 978-1260456868.

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 687

A	ABS0	B	C	D	E	FX
98,54	0,15	0,87	0,29	0,15	0,0	0,0

Lecturers: MUDr. Michaela Hrtánková, PhD., MUDr. Petra Kasajová, PhD., prof. MUDr. Kamil Biringer, PhD., prof. MUDr. Ján Danko, CSc., prof. MUDr. Erik Kúdela, PhD., MUDr. Erik Kozubík, PhD., MUDr. Terézia Pribulová, PhD., MUDr. Tomáš Rokos, PhD., MUDr. Zuzana Ondák Laučeková, PhD.

Last change: 18.08.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.GPK/J-S-VL-563/19	Gynecology and Obstetrics (2)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 3 / 2 **per level/semester:** 42 / 28
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 10.

Educational level: I.II.

Prerequisites: JLF.GPK/J-S-VL-562/19 - Gynecology and Obstetrics (1)

Course requirements:
90% mandatory participation in practical exercises, one afternoon shift (16:00-20:00), and credit test: minimum success rate: 60%.
Scale of assessment (preliminary/final): Continuous

Learning outcomes:
Credits

Class syllabus:
Lectures:
Ovarian and menstrual cycles. Breast cycle. Neurohumoral regulation.
Periods of a woman's life (newborn to senium).
Menstrual cycle disorders.
Pediatric gynecology.
Endometriosis.
Precancerosis of female genital organs.
Benign and malignant uterine tumors.
Benign and malignant ovarian tumors.
Breast diseases.
Inflammatory diseases of female genital organs.
Acute situations in gynecology.
Sterility and infertility. Principles of steroid treatment, contraception.
Pelvic pain syndrome.
Seminars:
Postterm pregnancy. Preinduction and induction of abortion and labor.
Multiple pregnancy.
Abnormal fetal lie, position and presentation, and labor.
Maternal injury in labor and treatment (simulator).
Special examination methods in gynecology (simulation center).
Diagnostic methods in senology.
Pelvic organ prolapse in females.

Urinary incontinence in females.
Tumors of the vulva and vagina.

Recommended literature:
Cunningham, F. et al.: Williams Obstetrics. Williams Obstetrics 26e. McGraw Hill / Medical; 26th edition, 2022, 1328 s., ISBN-13:ʹ978-1260462739.
Hoffman, B. et al.: Williams Gynecology. McGraw-Hill / Medical; 4th ed., 2020, 1328 s., ISBN-13: 978-1260456868.

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 648

A	ABS0	B	C	D	E	FX
98,3	0,0	1,08	0,46	0,15	0,0	0,0

Lecturers: prof. MUDr. Kamil Biringer, PhD., prof. MUDr. Erik Kúdela, PhD., MUDr. Michaela Hrtánková, PhD., MUDr. Petra Kasajová, PhD., MUDr. Erik Kozubík, PhD., MUDr. Terézia Pribulová, PhD., MUDr. Tomáš Rokos, PhD., prof. MUDr. Ján Danko, CSc., MUDr. Zuzana Ondák Laučeková, PhD.

Last change: 07.04.2022

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.GPK/J-S-VL-564/22	Gynecology and Obstetrics (3)

Educational activities:
Type of activities: practicals
Number of hours:
per week: **per level/semester:** 200s
Form of the course: on-site learning

Number of credits: 5

Recommended semester: 11., 12..

Educational level: I.II.

Prerequisites: JLF.GPK/J-S-VL-563/19 - Gynecology and Obstetrics (2) and JLF.GPK/J-S-VL-579/19 - Summer Practice-Gynecology and Obstetrics

Course requirements:
90% mandatory participation on practical exercises.
Scale of assessment (preliminary/final): Continuous.

Learning outcomes:
Total number of students assessed: 100
A: 100%, B: 0 %, C: 0 %, D: 0%, E: 0 %, FX: 0 %, ABS0: 0 %

Class syllabus:
Anatomy and physiology of female genital organs. Female pelvis. Birth canal. Female pelvis in obstetrics. Ovarian and menstrual cycle. Neuro-humoral regulation. Cyclic changes of internal genital organs in female life periods. Special diagnosis in gynecology and obstetrics. Female life periods. Fertilization and next development of fertilized ovum. Changes in female organism during pregnancy. Fetus, umbilical cord, amniotic fluid and placenta at the end of pregnancy. Placental and fetal circulation. Pregnancy diagnosis. Prenatal health care. Diet and life style of pregnant women. Drugs and pregnancy. Normal delivery – causes, physiology of labor, labor phases, management of vaginal delivery. Home labor and labor under extraordinary conditions. Normal puerperium. Basic demographic parameters. Breech delivery. Surgical techniques during breech delivery. Planned parenthood. Contraception. Benign tumors and pre-cancerosis of female genital tract. Malignant tumors of female genital tract. Anticancer strategy. Inflammatory diseases in gynecology. Puerperal infections. Endometriosis. Pelvic pain syndrome. Endoscopy and laser therapy in gynecology. Diseases in pregnancy. Multiple pregnancy. Labor dystocia. Urinary incontinence - diagnosis and treatment. Sterility and infertility. Basics and techniques of assisted reproductive medicine. Ovarian hyperstimulatory syndrome. Premature rupture of membranes. Amniotic fluid assessment. Fetal hypotrophy. Placental pathology. Diagnosis and therapy of threatened fetus during pregnancy and delivery. Immunological problems in pregnancy. Climacteric period. Acute situations in gynecology and obstetrics. Inflammatory diseases of female genital tract. Sacral pain syndrome.

Recommended literature:

Cunningham, F. et al.: Williams Obstetrics. Williams Obstetrics 26e. McGraw Hill / Medical; 26th edition, 2022, 1328 s., ISBN-13:ʃ978-1260462739.
Hoffman, B. et al.: Williams Gynecology. McGraw-Hill / Medical; 4th ed., 2020, 1328 s., ISBN-13: 978-1260456868.

Languages necessary to complete the course:
English.

Notes:

Past grade distribution
Total number of evaluated students: 396

A	ABS0	B	C	D	E	FX
71,46	0,25	19,95	5,56	2,53	0,25	0,0

Lecturers: prof. MUDr. Kamil Biringer, PhD., prof. MUDr. Erik Kúdela, PhD., MUDr. Michaela Hrtánková, PhD., MUDr. Petra Kasajová, PhD., MUDr. Erik Kozubík, PhD., MUDr. Terézia Pribulová, PhD., MUDr. Tomáš Rokos, PhD., MUDr. Zuzana Ondák Laučeková, PhD., MUDr. Mária Hederová Gazdačková, MUDr. Martin Jamriška

Last change: 07.04.2022

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.CPMV/J-S-VL-650/26	Health Informatics and Telemedicine

Educational activities:
Type of activities: practicals
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 8.

Educational level: I.II.

Prerequisites:

Course requirements:
účasť na min 80% cvičení
Scale of assessment (preliminary/final): záverečné

Learning outcomes:
Po absolvovaní predmetu študent:
• Vysvetlí základné pojmy digitálneho zdravotníctva (eHealth, mHealth, AI, IoT) a ich využitie v klinickej praxi.
• Opíše a používa základné funkcie elektronického zdravotného záznamu (EHR) vrátane vyhľadávania a zadávania údajov.
• Aplikuje princípy klinických informačných systémov a nástrojov podpory rozhodovania (CDSS) pri riešení modelových klinických situácií.
• Vysvetlí základné princípy umelej inteligencie, strojového učenia a veľkých jazykových modelov v medicíne a uvedie ich praktické využitia.
• Použije a kriticky hodnotí AI nástroje a digitálne techológie v klinickej praxi
• Analyzuje a interpretuje základné zdravotnícke dáta a prezentuje výsledky jednoduchou formou.
• Posúdi kvalitu a využiteľnosť digitálnych zdravotníckych aplikácií alebo AI nástrojov na základe stanovených kritérií.
• Aplikuje princípy ochrany osobných údajov a kybernetickej bezpečnosti pri práci so zdravotníckymi dátami.
• Opíše a demonštruje priebeh telemedicínskej konzultácie vrátane komunikácie s pacientom.
• Vyhľadá a použije relevantné informácie z medicínskych databáz pri riešení klinického problému.
• Diskutuje etické, právne a sociálne aspekty digitalizácie zdravotníctva na konkrétnych príkladoch.
• Vypracuje a prezentuje jednoduchý projekt z oblasti digitálneho zdravotníctva alebo AI v tíme

Class syllabus:
Stručná osnova predmetu:
1. Úvod do digitálneho zdravotníctva. Evolúcia medicínskej informatiky. eHealth, mHealth, Digital Health ekosystém. Kľúčové trendy: AI, big data, IoT v zdravotníctve.

2. Digitálna transformácia nemocnice a zdravotného systému - Smart hospital – koncepty a implementácia. Národné eHealth projekty (SR, EU). Interoperabilita systémov, NCZI, NZIS. Hodnotenie zdravotníckych technológií (HTA) v digitálnom veku.
3. Elektronický zdravotný záznam, nemocničné informačné systémy - Typy zdravotnej dokumentácie. Architektúra EHR systémov. Interoperabilita, HL7 FHIR štandard. DICOM štandard. Nemocničné informačné systémy. Ambulantné informačné systémy. Laboratórne informačné systémy. Rádiologické informačné systémy a PACS. Práca s demo EHR systémom (OpenEMR / Epic Sandbox). Vkladanie a vyhľadávanie klinických záznamov.
4. Klinické rozhodovanie a CDSS - Clinical Decision Support Systems (CDSS). Algoritmy pre diagnostiku a liečbu. Upozornenia, kontrola liekov, usmernenia. Príklady: Isabel DDx, DXplain, Epic CDS. Simulácia klinického rozhodovania s podporou CDSS. Prípadové štúdie s diferenciálnou diagnostikou.
5. Umelá inteligencia v medicíne I - Strojové učenie, hlboké učenie – princípy. Typy AI modelov v zdravotníctve. Tréningové dáta, bias, validácia. Regulačný rámec: FDA, CE, MDR pre AI/ML. Interaktívny workshop: vizualizácia princípov ML na medicínskych dátach.
6. Umelá inteligencia v medicíne II - AI v rádiológii, patológii, dermatológii, oftalmológii. Klinická validácia AI nástrojov. Praktické cvičenie s AI nástrojom pre analýzu medicínskych snímok (demo). Kritické hodnotenie výsledkov.
7. Veľké jazykové modely (LLM) v klinickej praxi - Použitie LLM v anamnéze, dokumentácii, edukácii. Halucinácia, limity, etické otázky. Zodpovedné využívanie AI asistentov. Hands-on: Tvorba klinickej správy s AI asistenciou. Overovanie a kritické hodnotenie AI-generovaného textu.
8. Telemedicína I - Definícia a typy telemedicíny. Videokonzultácie, asynchronná telemedicína. Simulácia telemedicínskeho rozhovoru. Hodnotenie platformy pre diaľkové konzultácie (demo).
9. Telemedicína II - Wearables a diaľkové monitorovanie pacienta. mHealth aplikácie – klasifikácia a regulácia. Internet of Medical Things (IoMT). Smartwatch, CGM, implatabilné zariadenia. Validácia a hodnotenie zdravotníckych aplikácií. Hodnotenie mHealth aplikácií podľa štandardizovaných kritérií (ORCHA, AHA hodnotenie).
10. Zdravotnícke dáta, bioštatistika a real-world evidence - Typy zdravotníckych dát (klinické, genomické, administratívne). Registre, kohortové štúdie, real-world evidence. Základy bioštatistiky v EHR kontexte. Open data, MIMIC, PhysioNet. Exploratorická analýza anonymizovaného klinického datasetu. Základná vizualizácia dát.
11. Kybernetická bezpečnosť a ochrana zdravotníckych dát - Hrozby v zdravotníckom IT prostredí (ransomware, phishing). Právne aspekty a GDPR v zdravotníctve. Pseudonymizácia, šifrovanie, správa prístupov.Etické princípy AI v zdravotníctve (transparentnosť, spravodlivosť, zodpovednosť). Incidenty – prípadové štúdie.
12. Personalizovaná medicína - Genomika, proteomika, multiomic data. AI v genomickej analýze (variantová interpretácia). Klinická genomika v onkológii a vzácnych chorobách. ELSI – etické, právne a sociálne aspekty.
13. Databázy - Orientácia v digitálnych zdravotníckych zdrojoch. Práca s PubMed, UpToDate, ClinicalKey, PETRA, ČREPČ
14. Záverečné hodnotenie

Recommended literature:

Odporúčaná literatúra:

Shortliffe E.H., Cimino J.J. (eds.): Biomedical Informatics (Springer, 2021)
Topol E.J.: Deep Medicine – How AI Can Make Healthcare Human Again (Basic Books, 2019)
Coiera E.: Guide to Health Informatics (CRC Press, 2015)

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 0

A	ABS0	B	C	D	E	FX
0,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: prof. MUDr. Jana Plevková, PhD., prof. MUDr. Tibor Baška, PhD., doc. RNDr. Zuzana Danková, PhD., MUDr. Tomáš Buday, PhD., MBA, MSc., Ing. Lukáš Martvoň, PhD., Ing. Marián Mižik, Mgr. Miloš Hrabovský

Last change: 20.08.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KHT/J-S-VL-565/19	Hematology and Transfusiology

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 2 / 1 **per level/semester:** 28 / 14
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 10.

Educational level: I.II.

Prerequisites: JLF.IKG/J-S-VL-540/18 - Internal Medicine (2) and JLF.IKG/J-S-VL-538/17 - Internal Medicine Propedeutics (2)

Course requirements:
Student must complete at least 80% of prescribed period of training. Absences from classes must be duly excused.
Assesment of students is performed by written form - test with 10-20 questions; student is required to achieve for success ≥ 60%.
Scale of assessment (preliminary/final): continuous

Learning outcomes:
After completion of the Hematology and transfusiology the student gets practical and well arranged information about hematologic and hematooncologic diseases, is informed about possible changes in blood count and hemostatic system of hematologic and hematooncologic patients, understands pathomechanism of selected disorders, gains knowledge about examination of patient with hematologic disease and medical record writing, is able to propound the algorithm of basic laboratory and other examinations, to make differential diagnosis and knows the basic principles of treatment. Student obtains information about the routine practice in hematological laboratories, acquires knowledge about blood groups and transfusion service. Completion of the Hematology and transfusiology contributes to formation of the students ethical approach to patients with hematologic and hematooncologic diseases.

Class syllabus:
- Anaemia: Definition of the anaemic syndrome, classification, morphologic and pathophysiologic criteria, clinical and laboratory findings in patients with anaemia, diagnostics of anaemia; iron deficiency anaemia, megaloblastic anaemia, hemolytic anaemia, anaemia of chronic diseases, dif.dg. approach to micrrocytic, macrocytic and normocytic anaemias, treatment od anaemia. Blood count and blood smear - anizocytosis, poikylocytosis, hypochromic red blood cells.
- Disorders of hemostasis: Physiology of hemostasis, primary hemostasis, hemocoagulation, fibrinolysis. Basic examination of hemostasis, importance of coagualation tests - APTT, PT, TT and platelet count examination, bleeding time, D-dimers, fibrinolytic activity, natural inhibitors of hemostasis, antiphospholipid antibodies, value of PCR in diagnostics of gene polymorphisms. Bleeding disorders: patophysiology, classification, diagnostics, dif.dg. and

treatment. Thrombophilia: definition, arterial and venous thrombosis, the most common thrombophilic states, resistance to activated protein C (factor V Leiden), prothrombin gene mutation, hyperhomocysteinaemia, deficiency of natural inhibitors of coagulation, sticky platelet syndrome, diagnostics and treatment of thrombophilia, National registry of thrombophilic states, care about patient with thrombophilia

- Leukaemia: Definition, acute and chronic leukaemias, myeloblastic and lymphoblastic leukaemias, FAB a WHO classification of acute leukaemias, clinical and laboratory findings - cytology, flow cytometry, cytogenetics and histology of bone marrow, demonstration of bone marrow examination procedure with the use of teaching model (bone marrow aspiration and trephine biopsy), dif. dg, myelodysplastic syndrome (MDS) and aplastic anaemia, treatment of leukaemia - chemotherapy (induction, consolidation, intensification), bone marrow transplantation, supportive care, definition or leukaemia relapse and remission.
- Malignant lymphomas (ML): Definition, Hodgkin and non-Hodgkin lymphoma, B- and T-cell lymphomas, clinical findings, histological diagnostics (biopsy of lymph node, extranodal tissue and bone marrow), importance of laboratory tests and oncomarkers, role of ultrasound, X.ray, CT, MRI and PET-CT examinations in diagnostics, staging and re-staging of ML, indolent and aggressive ML, extranodal lymphoma, multiple myeloma, role of chemotherapy, immunotherapy, irradiation and stem cell transplantation in treatment of ML, IPI - international prognostic index for ML.
- Myeloproliferative neoplasms (MPN): Definition and classification of MPN, clinical and laboratory characteristics, definition of individual diseases - polycythemia vera, essential thrombocytosis, primary myelofibrosis, chronic myelogenous leukaemia, diagnostics and dif.dg. of MPN, current treatment possibilities and prognosis of MPN.
- Transfusiology: Definition of blood transfusion, blood groups, blood donating, transfusion service in SR, administration of blood products, comapatibility test, bed-side test, biological exam, indications for treatment with blood products and blood-based derivates, storage and examnitions of blood products, visit of hematological laboratory and blood bank - demonstration of blood group testing and compatibility test examination. Practical administration of blood product (bed-side test, biological exam), post-transfusion reaction and its treatment.

Recommended literature:

1. Metha A.B. et al. Haematology at a glance. 4th ed., Hoboken, Wiley-Blackwell, 2014. 136 s. ISBN 978-1-118-73467-4
2. Provan D. ABC of Clinical Haematology. 4th ed., Wiley-Blackwell , 2018. 112 s. ISBN 978-1-118-89234-3
3. Fauci J. et al. Harrison´s Principles of Internal Medicine. 20th ed. New York: McGraw-Hill, 2018.
2800 s. ISBN 1259644030
4. Keohane E.M. et al. Rodak´s Hematology: Clinical Principles and Applications. 5th ed.. Philadelphia: Saunders, 2015. 912 s. ISBN 0323239064
5. Rodgers G.P. et al. The Bethesda Handbook of Clinical Hematology. 4th ed. Philadelphia: Lippincott Williams & Wilkins, 2018. 576 s. ISBN 978-1-49-635400-6
6. Abraham J. et al. The Bethesda Handbook of Clinical Oncology. 5th ed. Philadelphia: Lippincott Williams
& Wilkins, 2018. 800 s. ISBN 1496344189
7. Anderson S et al. Anderson´s Atlas of Hematology. 3rd ed. Philadelphia: Lippincott Williams & Wilkins, 2021. 614 s. ISBN 9781975118259
8. Rodak B.F. et al. Clinical Hematology Atlas. 3rd ed. Philadelphia: Saunders, 2015. 296 s. ISBN 9780323322492
9. Greer J.P. et al. Wintrobe´s Clinical Hematology. 14th ed. Philadelphia: Lippincott Williams & Wilkins, 2018. 2432 s. ISBN 9781496347428

10. Kaushansky K. et al. William´s Hematology. 10th ed. New York: McGraw-Hill Professional, 2014. 2460 s. ISBN 9781260464122
11. McKenzie S.B. et al. Clinical Laboratory Hematology. 4th ed. London: Pearson, 2020. 1264 s. ISBN 9780134709390

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 645

A	ABS0	B	C	D	E	FX
58,14	0,0	29,15	9,46	2,17	1,09	0,0

Lecturers: prof. MUDr. Ján Staško, PhD., doc. MUDr. Juraj Sokol, PhD., MBA, MUDr. Lenka Lisá, PhD., MUDr. Lucia Stančiaková, PhD., doc. MUDr. Tomáš Šimurda, PhD., MPH, MUDr. Zuzana Jedináková, PhD., MUDr. Richard Jusko, MUDr. Alena Strýčková, PhD., RNDr. Jana Žolková, PhD.

Last change: 12.08.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KHT/J-S-VL-636/20	Hemostasis – Vascular Medicine

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: ,5 / 1 **per level/semester:** 7 / 14
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 9.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Internal disease II

Course requirements:
Student must complete 100% of prescribed period of training and prepare semestral work.
Scale of assessment (preliminary/final): continuous

Learning outcomes:
By completing the course, the student will gain knowledge about advances in the diagnosis and treatment of congenital and acquired disorders of hemostasis as well as in the diagnosis and treatment of serious cardiovascular and cerebrovascular diseases. By the end of this course, students will be able to identify risk factors and clinical manifestations of these diseases. Emphasis is also placed on innovative diagnostic and therapeutic procedures.

Class syllabus:
- Characteristics of terms and meaning of hemostasis disorders and vascular diseases
- Overview of the pathophysiology of hemostasis disorders, cardiovascular and cerebrovascular diseases
- Characteristics of the most important risk factors and clinical manifestations of hemostasis disorders, cardiovascular and cerebrovascular diseases
- Advances in the diagnosis and treatment of hemostasis disorders and innovations in the diagnosis and treatment of cardiovascular and cerebrovascular diseases
- Practical examples of innovations in the diagnosis and treatment of selected disorders of hemostasis and vascular diseases in hematology, hematooncology, angiology, vascular surgery, cardiology and neurology

Recommended literature:
1. Fauci, J. et al. Harrison´Principles of Internal Medicine. 20th Edition, New York: McGraw – Hill, 2018. 2800 pp. ISBN 1259644030.
2. Rodgers, G.P. et al. The Bethesda Handbook of Clinical Hematology. 4th Edition, Philadelphia: Lippincott Williams & Wilkins, 2018. 576 pp. ISBN 978-1-49-635400-6.

3. Creager M et al. Vascular Medicine: A Companion to Braunwald's Heart Disease. 3rd Edition, Elsevier Saunders, 2020. 920 pp. ISBN 9780323636001.
4. Touyz RM et al. Textbook of Vascular Medicine. 1st Edition, Springer Nature Switzerland. 102 pp. ISBN 978-3-030-16481-2.
5. Sokol J. a kol. Hematológia a transfúziológia I: (neonkologická, laboratórna a transfúziologická časť). Vysokoškolské učebnice. Bratislava: 2025. ISBN 9788069139091.
6. Šimurda T. a kol. von Willebrandova choroba - diagnostika a liečba. Grada 2025. 978-80-271-5849-2.
7. Stančiaková L. Trombofilné stavy a manažment venózneho tromboembolizmu. Osveta 2023. 978-80-8063-518-3.
8. Štvrtinová V. a kol.: Venózny tromboembolizmus. -2. prepracované a doplnené vyd.- Bratislava: Slovak Academic Press (SAP). 2018.- 388 s.
9. Sokol J. a kol.: Priame perorálne antikoagulanciá. -1.vyd.- Martin: Osveta. 2018 - 265 s.

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 12

A	ABS0	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: prof. MUDr. Ján Staško, PhD., doc. MUDr. Juraj Sokol, PhD., MBA, MUDr. Lenka Lisá, PhD., MUDr. Lucia Stančiaková, PhD., doc. MUDr. Tomáš Šimurda, PhD., MPH, MUDr. Zuzana Jedináková, PhD., MUDr. Richard Jusko, MUDr. Alena Strýčková, PhD., RNDr. Jana Žolková, PhD.

Last change: 12.08.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚHE/J-S-VL-505/25	Histology and Embryology (1)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 4 / 2 **per level/semester:** 56 / 28
Form of the course: on-site learning

Number of credits: 7

Recommended semester: 2.

Educational level: I.II.

Prerequisites:

Course requirements:
- Student actively participates in 93% of all practical classes (a student is allowed to miss out one practical for serious reason).
- Forms of knowledge control:
1. discussion by microscope – description of histological slides (in case that student is not able to discuss histomorphology of basic human tissues in question, he/she will be asked to substitute the session in the last conpensatory week),
2. student is required to pass 4 written tests (including multiple choice questions with one correct answer; TRUE/FALSE questions; diagram description), minimum percentage to pass each test is 70%,
3. practical (credit exam) – to identify and describe 2 human tissue slides (discussion and final result on responsibility of teacher). Evaluated A-Fx.
Scale of assessment (preliminary/final): 20/80

Learning outcomes:
After completition of the subject, the student understands routine work with light microscope and is able to orient in basic staining methods (e.g. HE, Giemsa, PAS, Gomori, Orcein, Cajal, Oil red, Luxol blue, Anilin blue, Trichrom). Students understand histological terminology. Based on theoretical knowledge, student is able to identify microscopically main human tissues including their differential diagnosis and to discuss the topic in question (epithelium, connective tissue, cartilage, bone, muscles, nervous tissues, bone marrow and blood). Student is able to apply histomorphological knowledge in functional histology of organs and systems, e.g. functional histology of gland epithelium, muscle contraction, bone marrow cell production. Along with it, student understands the connection of histology and embryology with other medical branches such as biology, physiology, pathological physiology and pathological anatomy.

Class syllabus:
- Introduction to histology and embryology, role of histology and embryology in medical study. Cell in light microscopy and electron microscopy (review).
- Functional histology of epithelial tissue I and II - covering and glandular epithelia, clinical correlations.

- Functional histology of supporting / connective tissues - cells, extracellular matrix, fibers, types of connective tissues, clinical correlations.
- Functional histology of skeletal tissues - cartilages and bones, clinical correlations.
- Functional histology of bone marrow, peripheral blood, composition of plasma, stem cell, haematopoiesis topography, reactive elements, interstitium, clinical correlations.
- Functional histology of muscles - general characteristics, types of muscles, mechanism of contraction, connective tissue associated with muscles, regeneration of muscles, clinical correlations.
- Functional histology of nervous tissues - neuron synapses, division of nervous system, white and gray matter, degeneration and regeneration, clinical correlations.
- Central and peripheral nervous system - embryology, meninges and spaces, cerebrum, cerebellum, spinal cord, peripheral nerves, functional histology of CNS and PNS, cerebrospinal fluid, clinical correlations.
- Cardiovascular system I - embryology, general organization, structure of heard wall – endocard, myocard, epicard, conducting system, clinical correlations.
- Cardiovascular system II - embryology, arteries, veins, capillaries, lymphatics, clinical correlations.
- Lymphoid system - embryology, classification of lymphocytes, primary and secondary lymphatic organs and tissues, functional histology of thymus, lymph node, spleen, and tonsil, clinical correlations.
- Differential diagnosis of human tissues and organs.

Recommended literature:

Adamkov M., Hurta Csizmár S.: Introduction to Functional Histology, Textbook, 5th Revised and Update Edition, Vydavateľstvo P+M, s.r.o., Turany, 2024, 410 s. ISBN 978-80-89410-80-4
Mescher A.L.: Junqueira´s basic histology: Text and Atlas. McGraw-Hill Education, 2018, 576 p. ISBN 1260026175
Sadler T.W.: Langman's Medical Embryology. Wolters Kluwer, 2019, 432 p. ISBN 978149638907
Gartner, L.P.: Color Atlas and Text of Histology. Lippincott Williams and Wilkins, 2017, 544 p. ISBN 1496346734
Moore, K.L., Persaund T.V.N., Torchia M.G.: Before we are born (Essentials of Embryology and Birth Defects). Elsevier, 2019, 350 p. ISBN 9780323608497
Ovalle W., Nahirney P.: Netter´s Essential Histology, 3rd edition. Elsevier, 2020, 568 p. ISBN 978-
0-3236-9464-3

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 96

A	ABS0	B	C	D	E	FX
36,46	0,0	33,33	19,79	4,17	4,17	2,08

Lecturers: RNDr. Veronika Mešťanová, PhD., doc. MVDr. Soňa Bálentová, PhD., Ing. Veronika Cígerová, PhD., doc. RNDr. Mária Kovalská, PhD., Ing. Bibiana Krajňáková, PhD., RNDr. Lenka Lacková, PhD.

Last change: 10.07.2025

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚHE/J-S-VL-506/16	Histology and Embryology (2)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 3 / 2 **per level/semester:** 42 / 28
Form of the course: on-site learning

Number of credits: 7

Recommended semester: 3.

Educational level: I.II.

Prerequisites: JLF.ÚHE/J-S-VL-505/15 - Histology and Embryology (1) and JLF.ÚA/J-S-VL-502/24 - Anatomy (2)

Course requirements:
- Student actively participates in 93% of all practical classes (a student is allowed to miss out one practical for serious reason).
- Forms of knowledge control:
1. discussion by microscope – description of histological slides (in case that student is not able to discuss histomorphology of basic human tissues in question, he/she will be asked to substitute the session in the last conpensatory week),
2. student is required to pass 4 written tests (including multiple choice questions with one correct answer; TRUE/FALSE questions; diagram description), minimum percentage to pass each test is 70%,
3. practical (credit exam) – to identify and describe 2 human tissues slides (discussion and final result on responsibility of teacher).
The exam in Histology and Embryology includes 2 parts :
- practical part - 3 slides (to pass at least two of them – well founded description and discussion),
- oral part - 3 exam questions (general histology / cytology, organ functional histology, and embryology).
Evaluated: A-Fx
Scale of assessment (preliminary/final): 20/80

Learning outcomes:
Students who successfully complete this course is able to identify microscopically main organs and tissues of all human systems and describe their salient histomorphological features in association with characteristic functions. Student understands differential diagnosis between microscopically similar organs of human system (e.g. stomach vs. intestine, cerebral vs. cerebellar cortex, adenohypophysis vs. neurohypophysis). Based on functional histology, student better understands principles of physiological and pathological processes and changes in human tissues and organs. Student should understand a complex dynamics of human being development from gametogenesis to delivery in phylogenetic and ontogenetic relations. The goal is to provide students with an

understanding of the principles of embryogenesis that can be used in the diagnosis, care and prevention of birth defects.

Class syllabus:

- Digestive system I, oral cavity - embryology, epithelial lining, tongue, development of tooth, structure of tooth and associated structures, clinical correlations.
- Digestive system II, alimentary canal - embryology, pharynx, esophagus, stomach, small and large intestines, appendix, anus, GALT system, clinical correlations.
- Digestive system III, glands - embryology, types of secretory cells, salivary glands, saliva, liver, gallbladder, pancreas, clinical correlations.
- Respiratory system - embryology, general organization and subdivision, upper portion, trachea, bronchial tree, respiratory portion, BALT, clinical correlations.
- Endocrine system - embryology, principles of endocrine glands, hormones classification, functional histology of hypothalamus, adenohypophysis and neurohypophysis, thyroid gland, parathyroid glands, adrenal glands, and Langerhans islets, clinical correlations.
- Urinary system - embryology, composition of urinary system, functional histology of kidney, blood circulation, histological structure of ureter, urinary bladder, and urethra, clinical correlations.
- Reproductive systems - embryology, general characteristics of male reproductive system, structure and functions of testes, excretory genital ducts, accessory glands, clinical correlations. General characteristic of female reproductive system – structure and functions of ovaries, uterus, including cervix, uterine tube, and vagina, clinical correlations.
- Skin - embryology, general structure of skin, functional histology of epidermis, including basal lamina, dermis, and hypodermis, structure and functions of epidermal derivatives, wound healing, clinical correlations.
- Breast - embryology, functional histology of inactive (resting) mammary gland, during pregnancy, and during lactation, milk, hormonale regulations, clinical correlations.
- Differential diagnosis of human tissues and organs.
- Apoptosis - general characteristics, pathways, regulations, main histomorphological, biochemical, and physiological features, role in normal and pathological tissues, clinical correlations.
- Principles of immunohistochemistry, antigens, antibodies, CD system, application in differential diagnosis of normal and pathological human tissues, clinical correlations.
- Gametogenesis - spermatogenesis and spermiogenesis, functional histology of sperm, sperma, oogenesis, functional histology of ovum, ovulation, corpus luteum, clinical correlations.
- Fertilization - phases of fertilization, zygote, development of blastocyst, causes of infertility, clinical correlations.
- Menstrual cycle - functional histology of endometrium, phases of menstrual cycle, preparation of endometrium for implantation.
- Implantation - phases of implantation, decidual reaction, simultaneous development of conceptus, clinical correlations.
- Placenta - development of placenta, functional histology of placenta, utero-placental membrane and permeability, clinical correlations.
- Embryonal and fetal period of development, birth defects (review).

Recommended literature:

Adamkov M., Hurta Csizmár S.: Introduction to Functional Histology, Textbook, 5th Revised and Update Edition, Vydavateľstvo P+M, s.r.o., Turany, 2024, 410 s. ISBN 978-80-89410-80-4
Mescher A.L.: Junqueira´s basic histology: Text and Atlas. McGraw-Hill Education, 2018, 576 p. ISBN 1260026175
Sadler T.W.: Langman's Medical Embryology. Wolters Kluwer, 2019, 432 p. ISBN 978149638907

Gartner, L.P.: Color Atlas and Text of Histology. Lippincott Williams and Wilkins, 2017, 544 p. ISBN 1496346734
Moore, K.L., Persaund T.V.N., Torchia M.G.: Before we are born (Essentials of Embryology and Birth Defects). Elsevier, 2019, 350 p. ISBN 9780323608497
Ovalle W., Nahirney P.: Netter´s Essential Histology, 3rd edition. Elsevier, 2020, 568 p. ISBN 978-
0-3236-9464-3

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 1107

A	ABS0	B	C	D	E	FX
20,42	0,0	18,7	23,67	15,99	13,01	8,22

Lecturers: RNDr. Veronika Mešťanová, PhD., doc. MVDr. Soňa Bálentová, PhD., Ing. Veronika Cígerová, PhD., doc. RNDr. Mária Kovalská, PhD., Ing. Bibiana Krajňáková, PhD., RNDr. Lenka Lacková, PhD.

Last change: 13.09.2024

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚHE/J-S-VL-506/26	Histology and Embryology (2)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 3 / 2 **per level/semester:** 42 / 28
Form of the course: on-site learning

Number of credits: 6

Recommended semester: 3.

Educational level: I.II.

Prerequisites: JLF.ÚHE/J-S-VL-505/25 - Histology and Embryology (1) and JLF.ÚA/J-S-VL-502/25 - Anatomy (2)

Course requirements:
- Student actively participates in 93% of all practical classes (a student is allowed to miss out one practical for serious reason).
- Forms of knowledge control:
1. discussion by microscope – description of histological slides (in case that student is not able to discuss histomorphology of basic human tissues in question, he/she will be asked to substitute the session in the last conpensatory week),
2. student is required to pass 4 written tests (including multiple choice questions with one correct answer; TRUE/FALSE questions; diagram description), minimum percentage to pass each test is 70%,
3. practical (credit exam) – to identify and describe 2 human tissues slides (discussion and final result on responsibility of teacher).
The exam in Histology and Embryology includes 2 parts :
- practical part - 3 slides (to pass at least two of them – well founded description and discussion),
- oral part - 3 exam questions (general histology / cytology, organ functional histology, and embryology).
Evaluated: A-Fx
Scale of assessment (preliminary/final): 20/80

Learning outcomes:
Students who successfully complete this course is able to identify microscopically main organs and tissues of all human systems and describe their salient histomorphological features in association with characteristic functions. Student understands differential diagnosis between microscopically similar organs of human system (e.g. stomach vs. intestine, cerebral vs. cerebellar cortex, adenohypophysis vs. neurohypophysis). Based on functional histology, student better understands principles of physiological and pathological processes and changes in human tissues and organs. Student should understand a complex dynamics of human being development from gametogenesis to delivery in phylogenetic and ontogenetic relations. The goal is to provide students with an

understanding of the principles of embryogenesis that can be used in the diagnosis, care and prevention of birth defects.

Class syllabus:

- Digestive system I, oral cavity - embryology, epithelial lining, tongue, development of tooth, structure of tooth and associated structures, clinical correlations.
- Digestive system II, alimentary canal - embryology, pharynx, esophagus, stomach, small and large intestines, appendix, anus, GALT system, clinical correlations.
- Digestive system III, glands - embryology, types of secretory cells, salivary glands, saliva, liver, gallbladder, pancreas, clinical correlations.
- Respiratory system - embryology, general organization and subdivision, upper portion, trachea, bronchial tree, respiratory portion, BALT, clinical correlations.
- Endocrine system - embryology, principles of endocrine glands, hormones classification, functional histology of hypothalamus, adenohypophysis and neurohypophysis, thyroid gland, parathyroid glands, adrenal glands, and Langerhans islets, clinical correlations.
- Urinary system - embryology, composition of urinary system, functional histology of kidney, blood circulation, histological structure of ureter, urinary bladder, and urethra, clinical correlations.
- Reproductive systems - embryology, general characteristics of male reproductive system, structure and functions of testes, excretory genital ducts, accessory glands, clinical correlations. General characteristic of female reproductive system – structure and functions of ovaries, uterus, including cervix, uterine tube, and vagina, clinical correlations.
- Skin - embryology, general structure of skin, functional histology of epidermis, including basal lamina, dermis, and hypodermis, structure and functions of epidermal derivatives, wound healing, clinical correlations.
- Breast - embryology, functional histology of inactive (resting) mammary gland, during pregnancy, and during lactation, milk, hormonale regulations, clinical correlations.
- Differential diagnosis of human tissues and organs.
- Apoptosis - general characteristics, pathways, regulations, main histomorphological, biochemical, and physiological features, role in normal and pathological tissues, clinical correlations.
- Principles of immunohistochemistry, antigens, antibodies, CD system, application in differential diagnosis of normal and pathological human tissues, clinical correlations.
- Gametogenesis - spermatogenesis and spermiogenesis, functional histology of sperm, sperma, oogenesis, functional histology of ovum, ovulation, corpus luteum, clinical correlations.
- Fertilization - phases of fertilization, zygote, development of blastocyst, causes of infertility, clinical correlations.
- Menstrual cycle - functional histology of endometrium, phases of menstrual cycle, preparation of endometrium for implantation.
- Implantation - phases of implantation, decidual reaction, simultaneous development of conceptus, clinical correlations.
- Placenta - development of placenta, functional histology of placenta, utero-placental membrane and permeability, clinical correlations.
- Embryonal and fetal period of development, birth defects (review).

Recommended literature:

Adamkov M., Hurta Csizmár S.: Introduction to Functional Histology, Textbook, 5th Revised and Update Edition, Vydavateľstvo P+M, s.r.o., Turany, 2024, 410 s. ISBN 978-80-89410-80-4
Mescher A.L.: Junqueira´s basic histology: Text and Atlas. McGraw-Hill Education, 2018, 576 p. ISBN 1260026175
Sadler T.W.: Langman's Medical Embryology. Wolters Kluwer, 2019, 432 p. ISBN 978149638907

Gartner, L.P.: Color Atlas and Text of Histology. Lippincott Williams and Wilkins, 2017, 544 p. ISBN 1496346734
Moore, K.L., Persaund T.V.N., Torchia M.G.: Before we are born (Essentials of Embryology and Birth Defects). Elsevier, 2019, 350 p. ISBN 9780323608497
Ovalle W., Nahirney P.: Netter´s Essential Histology, 3rd edition. Elsevier, 2020, 568 p. ISBN 978-
0-3236-9464-3

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 0

A	ABS0	B	C	D	E	FX
0,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: RNDr. Veronika Mešťanová, PhD., doc. MVDr. Soňa Bálentová, PhD., Ing. Veronika Cígerová, PhD., doc. RNDr. Mária Kovalská, PhD., Ing. Bibiana Krajňáková, PhD., RNDr. Lenka Lacková, PhD.

Last change: 02.06.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚSLME/J-S-VL-641/22	Hyperbaric and diving medicine

Educational activities:
Type of activities: practicals
Number of hours:
per week: 1 **per level/semester:** 14
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 7.

Educational level: I.II.

Prerequisites:

Course requirements:
90% participation in seminars

Learning outcomes:
The graduate of the course of hyperbaric and diving medicine masters:
• principles of treatment of the patient in an environment of increased atmospheric pressure (hyperbaric chamber),
• physical gas laws and the benefit of oxygen breathing in overpressure,
• clinical indications and contraindications of hyperbaric therapy,
• basics of technical construction of hyperbaric chambers,
• principles of handling compressed gases and the principles of occupational safety in the hyperbaric chamber,
• pathology and clinics of divers' health disorders, their treatment on-site, in hyperbaric chamber (decompression procedures).

Class syllabus:
The hyperbaric treatment (past and today). Biophysical aspects of hyperbaric therapy (physics of gases, O2, N2, He, CO2 in hyperbaric therapy, breathing of gases in elevated pressure). Technical aspects of hyperbaric therapy (construction of hyperbaric chambers, HP cylinders, colour coding, storage, safe manipulation, gas analysis, HP compressors). Clinical aspects of hyperbaric therapy (indications, contraindications, management of hyperbaric treatment). Standard use of hyperbaric chamber in daily practice (practical demonstration). Accidents in hyperbaric chambers (loss of pressure, explosive decompression, fire in a chamber). Complications and delayed effects of hyperbaric therapy (patients, medical staff), death in hyperbaric chamber, medicolegal procedures. Fundamentals of diving medicine (fitness to dive, organizations of diver’s health care, diving accidents, on-site medical assistance in the dive accident, medicolegal procedures in diver’s death.

Recommended literature:
Novomeský, F. and Toklu A.S. Fundamentals of diving medicine. Martin: Osveta Publ., 2021, s. 354, ISBN 9788080635008

Harch, P.G., McCullough, V. The oxygen revolution. Hyperbaric oxygen therapy. 3rd ed. New York: Hatherleigh Press, 2016, s. 336, ISBN 9781578266272

Languages necessary to complete the course:
English language

Notes:
winter semester, minimum number of students: 5, maximum number of students: 20

Past grade distribution
Total number of evaluated students: 37

A	ABS0	B	C	D	E	FX
37,84	62,16	0,0	0,0	0,0	0,0	0,0

Lecturers: prof. MUDr. František Novomeský, PhD., prof. MUDr. Ľubomír Straka, PhD., MUDr. Veronika Rybárová, PhD.

Last change: 18.03.2022

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚMI/J-S-VL-603/19	Immunology

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 1 / 1 **per level/semester:** 14 / 14
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 4.

Educational level: I.II.

Prerequisites: JLF.ÚLBl/J-S-VL-512/25 - Medical Biology and Genetics (1)

Course requirements:
- it is obligatory to be present at practicals (1 absence is tolerated) - 1 test during the semester - 2 oral presentations according the schedule - credit test
Exam: Oral exam consists of 2 questions. Each one is evaluated separatly. No question could be graduated Fx for successfull exam.
Achievement of at least 60% from the combined mid#semester and credit test scores.
Scale of assessment (preliminary/final): 0% / 100%

Learning outcomes:
The student receives information from specific and nonspecific immunity, immune commpetent cells, mechanisms of regulation of immune answer. The student is able to characterise the antigens, their structure and immunogenic potential as well as immunoblobulins, their function, mechanisms of antibody production, idiotypes, allotypes, isotypes. The reached knowledges enable to understand the problems of vaccination, types of vaccines, hypersensitivity, autoimmunity and immunodeficiecies. Transplantation and tumor immunity are covered at introductional level. The students are able to understand, indicate and interprete the basical immunological diagnostical tests and procedures. The gained information are the base for the further study of in different clinical branches, that can be completed in the study of clinical immunology in the 10th semester.

Class syllabus:
Introduction to immunology, Discrimination between self and non self, Antigens a receptors, Terminology, Nonspecific immunity – bariers, cells, mechanism and functions, Specific immunity – molecules, immunoglobulins, organs and cells differenciation, Lymphocytes –, activation, APC Regulation of immunity , cytokines Tumor immunity, Transplantation immunity, Hypersensitivity, Immunotherapy, Immunostimulation, IDS, Antiinfective immunity

Recommended literature:
Abbas AK et al. Basic Immunology . Elsevier Saunders 2012, pp. 320.
Doan T et al. Lippincott´s Illustrated Review Immunology. Lippincot Williams §Wilkins a Wolters Kluwer business 2008, pp. 334.

Neuschlová, M., Kompaníková, J., Sadloňová, V., Nováková, E.: Immunology – basic laboratory tests. Martin : Portal JLF UK 2021; 152 s. ISBN 978-80-8187-110-8. https://portal.jfmed.uniba.sk//articles.php?aid=450.
Neuschlová, M., Nováková, E., Kompaníková, J., Sadloňová, V.: A to Z Glossary of Immunological Terms. Martin : Portal JLF UK 2021; 80 s. ISBN 978-80-8187-088-0. https://portal.jfmed.uniba.sk//articles.php?aid=435.
Murray PR et al. Medical Microbiology Seventh Edition. Philadelphia: Elsevier Saunders 2013; pp. 874.
Greenwood D et al. Medical Microbiology Eighteenth Edition. Edinburgh: Elsevier Saunders 2012; pp. 778.
Reading from MEFANET and faculty web site for immunology.

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 734

A	ABS0	B	C	D	E	FX
26,84	0,0	26,02	24,11	13,49	6,68	2,86

Lecturers: prof. MUDr. Elena Nováková, PhD., MUDr. Jana Kompaníková, PhD., doc. MUDr. Vladimíra Sadloňová, PhD.

Last change: 09.02.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KICM/J-S-VL-567/19	Infectology

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 3 / 1 **per level/semester:** 42 / 14
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 10.

Educational level: I.II.

Prerequisites: JLF.ÚFa/J-S-VL-530/21 - Pharmacology (2) and JLF.ÚMI/J-S-VL-518/17 - Microbiology (2) and JLF.IKG/J-S-VL-538/17 - Internal Medicine Propedeutics (2)

Course requirements:
Assessment of students takes place in the form of a practical exam, a credit test and an oral exam. Upon successful completion of the credit test (Assessment: A 91 - 100%, B 81 - 90%, C 73 - 80%, D 66 - 72%, E 60 - 65%, Fx < 60%), the student will be admitted to oral exam.
Scale of assessment (preliminary/final): 1/3 S

Learning outcomes:
After course studend understand of the basic characterics of infectious diseases, transmission, clinical manifestation, diagnosis, differential diagnosis, treatment and prophylaxis.

Class syllabus:
Lectures:
Viral hepatitis syndrome
Hospital acquired infection
Neuroinfections
COVID-19
Intestinal infections
Viral haemorrhagic fevers and other arbovirosis
HIV
Seminares:
Differential diagnosis of fever
Zoonoses
Viral hepatitis syndrome
Meningitis and meningoencephalitis
Sepsis
Bone and joint infections
Herpesvirus infections
Selected parasitic infections
Anti-infective therapy
Tropical and travel medicine

Hemorrhagic fevers
Lymphadenopathy
HIV/AIDS
Differential diagnosis of diarrhea
Differential diagnosis of tonsillitis/pharyngitis
Differential diagnosis of exanthems
Soft tissue infections
Nosocomial infections

Recommended literature:
Hobstová, J.: Infekčné choroby. Karolinum Praha, 2003, 1. vydanie, 259s.
Bannister, B.: Infekčné choroby. Blackwell Science. 2000, 2 vydanie, 484s

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 652

A	ABS0	B	C	D	E	FX
55,37	0,0	21,93	11,81	5,21	4,29	1,38

Lecturers: doc. MUDr. Katarína Šimeková, PhD., MUDr. Róbert Rosoľanka, PhD., MUDr. Tatiana Hurtová, PhD., MSc.

Last change: 25.08.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KDAIM/J-S-VL-611/19	Intensive Medicine in Pediatrics

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: ,5 / ,5 **per level/semester:** 7 / 7
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 10.

Educational level: I.II.

Prerequisites:

Course requirements:
Attendance of all practical lectures and lectures. Successful accomplisment of the practical part of simulation sessions(patient choking by foreign body/object, orotracheal intubation, thoracic drainage, CVC and PICC insertion, Basic and advance Cardio-pulmonary resuscitation).
For A grades, it is necessary to have a success rate of more than 90% in the practical part,
For B grades it is necessary to have a success rate in the practical part of 80-89%,
For the evaluation C it is necessary to have a success rate in the practical part of 70-79%,
For evaluation D it is necessary to have a success rate in the practical part of 60-69%,
For the evaluation of E it is necessary to have a success rate in the practical part of 50-59%,
Credits will not be awarded to a student who has a success rate in the practical part below 50%.

Learning outcomes:
Student by participance in a particular subject will obtain basic information about the diagnosis, differential diagnosis and therapeutical quidelines for critical cases they are common in Pediatric Intensive Care and Resuscitation. After repetitive practical simulation sessions participant will be able to apply an appropriate knowledge and she/he will be able to solve some urgent situation independently, such as Basic and Advanced Cardio-pulmonary resuscitation in children all ages; treat urgent situations such as tension pneumotorax, foreign body aspiration, secure the airways by supra and subglottis equipment (laryngeal mask and orotracheal intubation), secure CVC, AC and PICC insertion. As an addition a participant will become familiar with basics of pulmonary ventilation , specifically more devoted to protective regimens of pulmonary ventilation. The biggest benefit for each participant is probably becoming familiar and more skilled in various manual medical procedures.

Class syllabus:
Introduction into Study of Pediatric Intensive Care and Resuscitation Care. Basic and Advanced Cardio-pulmonary resuscitation. ARDS pathophysiology. Basics of Artificial Pulmonary Ventilation in Pediatrics. Specificity of protective ventilation. Open lung tool strategy. Pathophysiology, clinical onset and therapeutical possibilities in managing of foreign body aspiration in pediatrics. Pathophysiology, clinical onset and therapeutical possibilities in managing of tension pneumotorax in pediatrics. Central venous cathethers, arterial catheters, peripheral

inserted central venous catheters, intraosseal needles in pediatrics. Supraglottic and Subglottis method of securing opened airways in pediatrics.

Recommended literature:
European resuscitation council guidelines for resuscitation 2021. internetový zdroj
Roger´s textbook of Pediatric Intensive Care. Fourth edition. Lippincott Williams Wilkins, 2008. 1839 s.

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 23

A	ABS0	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: doc. MUDr. Slavomír Nosáľ, PhD., MUDr. Tomáš Bělohlávek, PhD., MUDr. Alžbeta Lešundák, MUDr. Zuzana Kubisová, PhD.

Last change: 13.08.2025

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

STATE EXAM DESCRIPTION

Academic year: 2026/2027	
University: Comenius University Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.IK1/J-SVL-SS52/21	**Course title:** Internal Medicine
Number of credits: 7	
Recommended semester: 11., 12..	
Educational level: I.II.	

Course requirements:
The state final examination may be performed by student who completes the 100% of pre-state practice.

Learning outcomes:
By completing the course, the student acquires fundamental knowledge and practical skills covering the entire field of internal medicine. The aim is for the graduate of the course to be able to manage a patient in various settings, apply the acquired theoretical knowledge, analyze, establish a working diagnosis, plan examinations, and recommend appropriate treatment.

Class syllabus:
State Examination – consists of a practical examination (patient medical record) and a theoretical examination (2 theoretical questions).
Practical part of the state examination:
At one of the designated teaching departments of JLF CU (1st Department of Internal Medicine, Department of Internal Medicine – Gastroenterology, Department of Occupational Medicine and Toxicology, Department of Tuberculosis and Respiratory Diseases, Department of Hematology and Transfusion Medicine), the student performs the practical part according to the instructions of the responsible teaching staff member, a member of the examination board. The practical part is usually carried out the day before the theoretical part takes place. It consists of a complete patient examination and preparation of the medical record, including taking the medical history, conducting a physical examination, establishing a differential diagnosis, proposing further examinations, and suggesting treatment.
Theoretical part of the state examination:
Conducted at the respective clinic (1st Department of Internal Medicine, Department of Internal Medicine – Gastroenterology) before the state examination boards. From the designated topics, the student draws two theoretical questions.
After answering all the questions and considering the result of the practical examination, the board recommends to the chairperson of the board the overall assessment.

State exam syllabus:

Recommended literature:
Loscalzo et al.
Harrison´s Principles of Internal Medicine 21st edition (Vol. 1 & Vol. 2), New York: McGraw Hill, 2022. 4384 p. ISBN 978-1264268504
Samoš M, Bolek T, Bánovčin P, Dedinská I, Vyšehradský R, Benko J, Mokáň M a kol.
Practical Classes in internal Medicine for the 4th and 5th hrade of JFM -winter semester.
P+M s.r.o. Turany 2021, 300 s.

Samoš M, Bolek T, Bánovčin P, Dedinská I, Sokol J, Staško J Mokáň M a kol.
Practical Classes in internal Medicine for the 4th and 5th hrade of JFM -summer semester. P+M s.r.o.
Turany 2021, 267 s.
Feather A. et al.
Kumar and Clark's Clinical Medicine 10th edition, Elsevier Science, 2020. 1564p. ISBN 0702078689
Brian R. Walker et al.
Davidsons Principles and Practice of Medicin 22nd Edition. Churchill Livingstone, 2014. 1392p. ISBN 9780702050350
Stephen J. McPhee et al.
Pathophysiology of Disease: An Introduction to Clinical Medicine, 8th edition. McGraw-Hill, 2018. 832p. ISBN 9781260026504
Goldman, L., Schafer, A.I.
Goldman - Cecil Medicine. 2-Volume Set, 25th ed.Philadelphia: Elsevier, 2023. 3040 s. ISBN 9780323930383
Chrobák L.
Physical Examination in Internal Medicine. Praha: Grada, 2003. 240p. ISBN 8024706172
Bickley Lynn S. Bates' Guide
To Physical Examination and History Taking. Lippincott Williams & Wilkins, 2023. ISBN 9781975210533

Languages necessary to complete the course:
England language

Last change: 26.08.2025

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.IKG/J-S-VL-539/19	Internal Medicine (1)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 2 / 2 **per level/semester:** 28 / 28
Form of the course: on-site learning

Number of credits: 4

Recommended semester: 7.

Educational level: I.II.

Prerequisites: JLF.IKG/J-S-VL-537/17 - Internal Medicine Propedeutics (1)

Course requirements:
To obtain credit it is necessary to take part on 6 Practicals. 2 credit tests

Learning outcomes:

Class syllabus:
Lectures 1. Ischemic heart disease. 2. Hypertension. Differential diagnosis of primary and secondary hypertension. 3. Arrhythmias. 4. Systolic and diastolic heart failure. 5. Inflammatory heart diseases (endocarditis, myocarditis, pericarditis). Cardiomyopathies. 6. Most important heart valve disorders (inborn, acquired). Neurocirculatory asthenia. 7. Tromboembolic disease. 8. Diseases of the arteries and veins of the extremities. New trends in the treatment. 9. Bronchial asthma. 10.Chronic obstructive pulmonary disease (COPD). 11.Lung tumors. 12. Diseases of pleura and mediastinum. 13. Sarcoidosis. Fibrosis. Lung mycoses. Parasitary lung diseases. 14. Disorders of the body fluids volume and mineral balance. Disorders of electrolytes and acidobasis balance. Practical lessons: 1. Ischemic heart disease, myocardial infarction. Examination of patient. Evaluation of pathological ECG curves. 2. Hypertension disease - primary, secondary hypertension. Principles of antihypertensive therapy. Examination of the patient. 3. Infammatory heart diseases (endocarditis, myocarditis, pericarditis). Cardiomyopathies. Most important heart valve disorders. Examination of the patient. 4. Systolic and diastolic heart failure. Arrhythmias. Demonstration of the patients. Evaluation of pathological ECG curves. 5. Examination of the patients with diseases of the arteries and veins in the extremities. Peripheral atherosclerosis of lower extremities. Thromboembolic disease. 6. Functional examination of lungs. Practical demonstration. Examination of the patient with chronic bronchitis, asthma bronchiale. 7. Examination of patients with pneumonia and lung tumors.

Recommended literature:

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 697

A	ABS0	B	C	D	E	FX
38,88	0,0	37,45	19,37	3,59	0,72	0,0

Lecturers: prof. MUDr. Rudolf Hyrdel, CSc., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin, prof. MUDr. Peter Galajda, CSc., doc. MUDr. Jurina Sadloňová, CSc., doc. MUDr. Robert Vyšehradský, PhD., MUDr. Anna Ružinák Bobčáková, PhD., MUDr. Ján Červeň, MPH, MUDr. Ľuboš Hamada, MUDr. Ivana Lipták Žiačiková, doc. MUDr. Peter Bánovčin, PhD., MBA, MUDr. Michal Demeter, PhD., doc. MUDr. Martin Ďuriček, PhD., MUDr. Jakub Hoferica, PhD., MUDr. Peter Lipták, PhD., MUDr. Lenka Nosáková, PhD., MUDr. Michal Prokopič, PhD., MUDr. Martin Schnierer, PhD., MUDr. Diana Vážanová, PhD., doc. MUDr. Ľubomír Skladaný, PhD., MUDr. Jakub Benko, PhD., doc. MUDr. Tomáš Bolek, PhD., MUDr. Matej Stančík, PhD., MUDr. Martin Jozef Péč, PhD., MUDr. Tímea Jusková, MUDr. Milan Dragula, PhD., MUDr. Karol Graňák, PhD., MUDr. Lucia Kapičáková, MUDr. Lívia Jamrišková, PhD., MUDr. Andrej Kollár, MUDr. Juraj Krivuš, PhD., MUDr. Patrik Lecký, PhD., MUDr. Stanislava Mikulová, PhD., MUDr. Michal Mokáň, PhD., doc. MUDr. Ivana Ságová, PhD., MUDr. Terézia Gondášová, prof. MUDr. Matej Samoš, PhD.

Last change: 06.04.2022

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.IKG/J-S-VL-540/18	Internal Medicine (2)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 2 / 2 **per level/semester:** 28 / 28
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 8.

Educational level: I.II.

Prerequisites: JLF.IKG/J-S-VL-538/17 - Internal Medicine Propedeutics (2) and JLF.IKG/J-S-VL-539/19 - Internal Medicine (1)

Course requirements:
Credit tests

Learning outcomes:

Class syllabus:
Lectures
Ulcer disease of stomach and duodenum, etiopathogenesis, clinical sings, complications, functional diagnostics, therapy
and life-regimen.
Chronic inflammatory and degenerative diseases of liver, cirrhosis and carcinoma of the liver, etiopathogenesis, clinical sings and therapy.
Inflammatory and tumorous diseases of the oesophagus,
stomach and duodenum.
Inflammatory and tumorous diseases of small and large
intestine.
Diseases of the gallbladder, biliar ducts (lithiasis,
inflammatory complications and tumors), inflammatory
and tumorous diseases of pancreas.
Diseases of the thyroid gland.
Diseases of the suprarenal glands.
Disorders of protein and aminoacids metabolism. Gout.
Porphyria. Metabolic osteopathies.
Diabetes mellitus - principles of the diagnostics and therapy.
Chronic complications od diabetes mellitus.
Disorders of lipid metabolism - dyslipoproteinaemias.
Principles of metabology, metabolic diseases, organisation
and importance of metabolic units: basics of parenteral
and enteral treatment.
Gerontology. Clinical picture of internal diseases in old

age, risk geronts and pharmacotherapy in old age.
Clinical genetics.
Practical lessons
Diseases of small and large intestine. Non -specific intestinal
inflammations practical training of indagation, demonstration of rectoscopy.
Diseases of oesophagus, stomach, duodenum. Ulcer disease
of stomach and duodenum, practical demonstrations of fibroscopy.
Disease of liver, biliar ducts and pancreas, practical evaluation of the results of examinations.
Diabetes mellitus - principles of diagnostics and therapy.
Examination of the patients with chronic complications
of diabetes mellitus.
Diseases of hypophysis and thyroid and adrenal gland. Examination of the patients with the endocrine diseases.
Nutritional disorders - malnutrition. Principles of parenteral and enteral nutrition. Organisation of metabolic unit.
Basic examination methods in genetics. (Department
of clinical genetics).

Recommended literature:
Ďuriš, I. a kol. : Princípy internej medicíny 1.2.3. Bratislava,
SAP 2001. 295 s.
Hrnčiar, J. a kol. : Endokrinné a hormonálno metabolické
choroby.
Mařatka, Z. a kol. : Praha, Karolinum, 1999, 490 s.

Languages necessary to complete the course:
english

Notes:

Past grade distribution
Total number of evaluated students: 763

A	ABS0	B	C	D	E	FX
59,37	0,0	28,44	8,52	3,01	0,66	0,0

Lecturers: prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin, prof. MUDr. Rudolf Hyrdel, CSc., prof. MUDr. Peter Galajda, CSc., doc. MUDr. Jurina Sadloňová, CSc., doc. MUDr. Robert Vyšehradský, PhD., MUDr. Anna Ružinák Bobčáková, PhD., MUDr. Ján Červeň, MPH, MUDr. Ľuboš Hamada, MUDr. Ivana Lipták Žiačiková, doc. MUDr. Peter Bánovčin, PhD., MBA, MUDr. Michal Demeter, PhD., doc. MUDr. Martin Ďuriček, PhD., MUDr. Jakub Hoferica, PhD., MUDr. Peter Lipták, PhD., MUDr. Lenka Nosáková, PhD., MUDr. Michal Prokopič, PhD., MUDr. Martin Schnierer, PhD., MUDr. Diana Vážanová, PhD., doc. MUDr. Ľubomír Skladaný, PhD., MUDr. Jakub Benko, PhD., doc. MUDr. Tomáš Bolek, PhD., MUDr. Matej Stančík, PhD., MUDr. Michal Mokáň, PhD., MUDr. Martin Jozef Péč, PhD., MUDr. Tímea Jusková, doc. MUDr. Matej Vnučák, PhD., MUDr. Karol Graňák, PhD., MUDr. Lucia Kapičáková, MUDr. Andrej Kollár, MUDr. Patrik Lecký, PhD., MUDr. Martin Migra, PhD., MUDr. Stanislava Mikulová, PhD., doc. MUDr. Ivana Ságová, PhD., MUDr. Peter Novodvorský, PhD.

Last change: 06.04.2022

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.IK1/J-S-VL-541/19	Internal Medicine (3)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 2 / 1 **per level/semester:** 28 / 14
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 9.

Educational level: I.II.

Prerequisites: JLF.IKG/J-S-VL-539/19 - Internal Medicine (1)

Course requirements:
Attendance of at least 80% of practical sessions. During the credit week, it is possible to make up for an excused absence (up to 20%). Making up for missed practical sessions (in accordance with the Study Regulations of JLF CU and the Decree of the Dean of JLF CU in Martin) is possible up to 20% of the total number, with the consent of the head of the department. In serious and justified cases, if a student misses more than 20% of the compulsory instruction, the Dean of the Faculty shall decide on granting an excuse on the proposal of the head of the department.
The final grade in the subject shall be awarded to the student based on the successful completion of the written assessment and attendance at the practical sessions.
Student evaluation is carried out in written form, with a minimum pass mark of 60%.
Grading scale: A: 95–100%, B: 85–94%, C: 75–84%, D: 65–74%, E: 60–64%, FX: below 60%
Active participation in practical sessions
Weight of continuous/final evaluation: 100/0

Learning outcomes:
By completing the course, the student acquires fundamental knowledge and practical skills in the field of nephrology, becoming familiar with the most important kidney diseases, their diagnostics, differential diagnostics, including laboratory and special examination methods, and their treatment. Further knowledge and practical skills are acquired in the area of the most common intoxications in internal medicine, including their proper diagnosis and subsequent therapeutic management, as well as in the field of metabolic syndrome, possible disorders of calcium metabolism, disorders of the internal environment, and the principles of antibiotic therapy and glucocorticoid therapy.

Class syllabus:
Examinations of patients with acute and chronic glomerulonephritis.
Examinations of patients with tubulointerstitial nephritis.
Functional methods in nephrology.
Examinations of patients with chronic kidney disease. Uremic syndrome.
Organization of the hemodialysis unit, examination and care of patients in chronic dialysis programme. Peritoneal dialysis and other elimination methods,
Acute intoxications – diagnosis, differential diagnosis general principles of therapy.

Indications of acute hemodialysis and hemoperfusion.
Obesity, dyslipidemia and prediabetic states.
Metabolic syndrome and risk factors of cardiovascular diseases.
Disorders of calcium metabolism.
Osteoporosis. Examination of patients with bone diseases.
Principles of glucocorticoid therapy.
Dehydration. Principles of treatment.
Disturbances in intrinsic environment - metabolic and mineral dysbalance.
Examination of patients with septic states, differential diagnosis of febrile states.
Principles of antibiotic therapy.

Recommended literature:

Loscalzo et al.
Harrison´s Principles of Internal Medicine 21st edition (Vol. 1 & Vol. 2), New York: McGraw Hill, 2022. 4384 p. ISBN 978-1264268504
Samoš M, Bolek T, Bánovčin P, Dedinská I, Vyšehradský R, Benko J, Mokáň M a kol.
Practical Classes in internal Medicine for the 4th and 5th hrade of JFM -winter semester.
P+M s.r.o. Turany 2021, 300 s.
Samoš M, Bolek T, Bánovčin P, Dedinská I, Sokol J, Staško J Mokáň M a kol.
Practical Classes in internal Medicine for the 4th and 5th hrade of JFM -summer semester. P+M s.r.o.
Turany 2021, 267 s.
Feather A. et al.
Kumar and Clark's Clinical Medicine 10th edition, Elsevier Science, 2020. 1564p. ISBN 0702078689
Brian R. Walker et al.
Davidsons Principles and Practice of Medicin 22nd Edition. Churchill Livingstone, 2014. 1392p. ISBN 9780702050350
Stephen J. McPhee et al.
Pathophysiology of Disease: An Introduction to Clinical Medicine, 8th edition. McGraw-Hill, 2018. 832p. ISBN 9781260026504
Goldman, L., Schafer, A.I.
Goldman - Cecil Medicine. 2-Volume Set, 25th ed.Philadelphia: Elsevier, 2023. 3040 s. ISBN 9780323930383
Chrobák L.
Physical Examination in Internal Medicine. Praha: Grada, 2003. 240p. ISBN 8024706172
Bickley Lynn S. Bates' Guide
To Physical Examination and History Taking. Lippincott Williams & Wilkins, 2023. ISBN 9781975210533

Languages necessary to complete the course:

English language.

Notes:

Past grade distribution

Total number of evaluated students: 646

A	ABS0	B	C	D	E	FX
37,46	0,15	35,14	18,11	6,5	2,63	0,0

Lecturers: prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin, prof. MUDr. Peter Galajda, CSc., doc. MUDr. Jurina Sadloňová, CSc., doc. MUDr. Tomáš Bolek, PhD., MUDr. Matej Stančík, PhD., MUDr. Michal Mokáň, PhD., doc. MUDr. Peter Bánovčin, PhD., MBA, doc. MUDr. Martin Ďuriček, PhD., prof. MUDr. Rudolf Hyrdel, CSc., MUDr. Jakub Benko, PhD., doc. MUDr. Ivana Ságová, PhD., MUDr. Milan Dragula, PhD., MUDr. Karol Graňák, PhD., MUDr. Lívia Jamrišková, PhD., doc. MUDr. Matej Vnučák, PhD., doc. MUDr. Daniel Čierny, PhD., MUDr. Lucia Kapičáková, MUDr. Andrej Kollár, MUDr. Tímea Jusková, MUDr. Patrik Lecký, PhD., MUDr. Stanislava Mikulová, PhD., MUDr. Jakub Jurica, PhD., prof. MUDr. Matej Samoš, PhD., MUDr. Martin Jozef Péč, PhD.
Last change: 26.08.2025
Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.IK1/J-S-VL-542/19	Internal Medicine (4)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 2 / 2 **per level/semester:** 28 / 28
Form of the course: on-site learning

Number of credits: 4

Recommended semester: 10.

Educational level: I.II.

Prerequisites: JLF.IK1/J-S-VL-541/19 - Internal Medicine (3)

Course requirements:
Attendance of at least 80% of practical sessions. During the credit week, it is possible to make up for an excused absence (up to 20%). Making up for missed practical sessions (in accordance with the Study Regulations of JLF CU and the Decree of the Dean of JLF CU in Martin) is possible up to 20% of the total number, with the consent of the head of the department. In serious and justified cases, if a student misses more than 20% of the compulsory instruction, the Dean of the Faculty shall decide on granting an excuse on the proposal of the head of the department.
The final grade in the subject shall be awarded to the student based on the successful completion of the written assessment, oral exam and attendance at the practical sessions.
Student evaluation is carried out in written and oral form, with a minimum pass mark of 60%.
Grading scale: A: 95–100%, B: 85–94%, C: 75–84%, D: 65–74%, E: 60–64%, FX: below 60%
Active participation in practical exercises is mandatory. Oral exam.
Weight of continuos/final evaluation: 10/90

Learning outcomes:
By completing the course, the student acquires fundamental knowledge and practical skills in the field of acute conditions in internal medicine and its individual subspecialties, such as cardiology, gastroenterology and hepatology, endocrinology, diabetology, disorders of metabolism and nutrition, nephrology, hematology, as well as in the area of comatose states. The student also acquires basic knowledge of the management of oncology patients.

Class syllabus:
Acute states in cardiology – organization of coronary unit.
Functional methods in cardiology – evaluation of findings.
Cardiogenic shock and principles of cardiopulmonary resuscitation.
Principles of pharmacotherapy in cardiology.
Video conference – cardiologic topic.
Comatose states.
Acute states in gastroenterology.
Bleeding from gastrointestinal tract .
Acute states in hematology – hemorrhagic states.

Acute states in endocrinology.
Acute states in diabetology – acute hyperglycemic and hypoglycemic states.
Acute states in nephrology – acute kidney injury.
Examination and care of oncologic patients.

Recommended literature:

Loscalzo et al.
Harrison´s Principles of Internal Medicine 21st edition (Vol. 1 & Vol. 2), New York: McGraw Hill, 2022. 4384 p. ISBN 978-1264268504
Samoš M, Bolek T, Bánovčin P, Dedinská I, Vyšehradský R, Benko J, Mokáň M a kol.
Practical Classes in internal Medicine for the 4th and 5th hrade of JFM -winter semester.
P+M s.r.o. Turany 2021, 300 s.
Samoš M, Bolek T, Bánovčin P, Dedinská I, Sokol J, Staško J Mokáň M a kol.
Practical Classes in internal Medicine for the 4th and 5th hrade of JFM -summer semester. P+M s.r.o.
Turany 2021, 267 s.
Feather A. et al.
Kumar and Clark's Clinical Medicine 10th edition, Elsevier Science, 2020. 1564p. ISBN 0702078689
Brian R. Walker et al.
Davidsons Principles and Practice of Medicin 22nd Edition. Churchill Livingstone, 2014. 1392p. ISBN 9780702050350
Stephen J. McPhee et al.
Pathophysiology of Disease: An Introduction to Clinical Medicine, 8th edition. McGraw-Hill, 2018. 832p. ISBN 9781260026504
Goldman, L., Schafer, A.I.
Goldman - Cecil Medicine. 2-Volume Set, 25th ed.Philadelphia: Elsevier, 2023. 3040 s. ISBN 9780323930383
Chrobák L.
Physical Examination in Internal Medicine. Praha: Grada, 2003. 240p. ISBN 8024706172
Bickley Lynn S. Bates' Guide
To Physical Examination and History Taking. Lippincott Williams & Wilkins, 2023. ISBN 9781975210533

Languages necessary to complete the course:
English language.

Notes:

Past grade distribution
Total number of evaluated students: 641

A	ABS0	B	C	D	E	FX
40,25	0,0	22,46	17,78	10,76	8,11	0,62

Lecturers: prof. MUDr. Rudolf Hyrdel, CSc., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin, prof. MUDr. Peter Galajda, CSc., doc. MUDr. Jurina Sadloňová, CSc., prof. MUDr. Matej Samoš, PhD., doc. MUDr. Tomáš Bolek, PhD., MUDr. Matej Stančík, PhD., MUDr. Lívia Jamrišková, PhD., MUDr. Michal Mokáň, PhD., doc. MUDr. Peter Bánovčin, PhD., MBA, prof. MUDr. Ivana Dedinská, PhD., MUDr. Milan Dragula, PhD., MUDr. Karol Graňák, PhD., doc. MUDr. Matej Vnučák, PhD., doc. MUDr. Ivana Ságová, PhD., MUDr. Martin Jozef Péč, PhD.

Last change: 26.08.2025

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.IK1/J-S-VL-543/22	Internal Medicine (5)

Educational activities:
Type of activities: practicals
Number of hours:
per week: **per level/semester:** 440s
Form of the course: on-site learning

Number of credits: 13

Recommended semester: 11., 12..

Educational level: I.II.

Prerequisites: JLF.IK1/J-S-VL-542/19 - Internal Medicine (4) and JLF.IKG/J-S-VL-554/22 - Summer Practice-Internal Medicine and JLF.KHT/J-S-VL-565/19 - Hematology and Transfusiology and JLF.KPF/J-S-VL-561/19 - Phthisiology and JLF.KPLT/J-S-VL-574/19 - Occupational Medicine and Toxicology and JLF.KICM/J-S-VL-567/19 - Infectology

Course requirements:
The condition for the successful completion of the course and the award of credits is:
Completion of the pre-state examination practice in its entirety (100%).

Learning outcomes:
By completing the course, the student acquires fundamental knowledge and practical skills covering the entire field of internal medicine. The aim is for the graduate of the course to be able to manage a patient in various settings, apply the acquired theoretical knowledge, analyze, establish a working diagnosis, plan examinations, and recommend appropriate treatment.

Class syllabus:
As part of the pre-state block practice, the student performs practical activities under the supervision of the attending physician, within the scope of duties of a junior doctor. The student is assigned a hospital room, admits and discharges patients, and proposes diagnostic and therapeutic procedures. They improve their practical skills and the management of diagnostic–therapeutic processes in hospitalized patients with various internal diseases. In addition, they participate in ward rounds and special seminars.
The practice lasts 9 weeks, consisting primarily of a 5-week placement at the 1st Department of Internal Medicine and the Department of Internal Medicine – Gastroenterology, one week in the coronary and metabolic unit, where the student becomes familiar with the basic diagnostic and therapeutic procedures for managing acute conditions. Furthermore, the student completes one week of practice at the Department of Hematology and Transfusion Medicine, the Department of Pulmonology and Phthisiology, and the Department of Occupational Medicine and Toxicology.

Recommended literature:
Harrison's® Principles of Internal Medicine, 21st edition. McGraw-Hill Companies, 2022
Mokáň M. a kol.
Vnútorné lekárstvo. Bratislava, Univerzita Komenského, 1. diel, 2004, 206 s.

Mokáň M. a kol.
Vnútorné lekárstvo. Bratislava, Univerzita Komenského, 2. diel, 2004, 254 s.
Mokáň M. a kol.
Vnútorné lekárstvo. Bratislava, Univerzita Komenského, 3. diel, 2004, 322 s.
Samoš M, Bolek T, Bánovčin P, Dedinská I, Vyšehradský R, Benko J, Mokáň M a kol.
Praktické cvičenia z vnútorného lekárstva pre IV. a V. ročník JLF UK v Martine – zimný semester. P+M s.r.o. Turany 2021, 300 s.
Samoš M, Bolek T, Bánovčin P, Dedinská I, Sokol J, Staško J Mokáň M a kol.
Praktické cvičenia z vnútorného lekárstva pre IV. a V. ročník JLF UK v Martine – letný semester. P+M
s.r.o. Turany 2021, 270 s.
Klener P.
Vnitřní lékařství, Praha, Galén , Karolinum, 2011, 1 174 s.
Češka R. a kol.
Interna. (3. aktualizované vydání) Praha: Triton, 2020, 855 s.
Souček M. a kol.
Vnitřní lékařství 1. díl. Praha: Grada, 2025. 1560 s.
Marek J. a kol.
Markova farmakoterapie vnitřních nemocí. Praha: Grada, 2019. 896 s. ISBN
Špinar J. a kol.
Propedeutika a vyšetřovací metody vnitřních nemocí. Praha: Grada, 2008, 255 s.
Klener P. a kol.
Propedeutika ve vnitřním lékařství. e-kniha. Praha: Galén, 2012

Languages necessary to complete the course:
Englisch lenguage.

Notes:

Past grade distribution
Total number of evaluated students: 375

A	ABS0	B	C	D	E	FX
81,33	0,53	11,2	5,07	1,33	0,53	0,0

Lecturers: prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin, prof. MUDr. Peter Galajda, CSc., doc. MUDr. Jurina Sadloňová, CSc., prof. MUDr. Matej Samoš, PhD., doc. MUDr. Peter Bánovčin, PhD., MBA, doc. MUDr. Martin Ďuriček, PhD., prof. MUDr. Rudolf Hyrdel, CSc., MUDr. Martin Schnierer, PhD., MUDr. Lenka Lisá, PhD., doc. MUDr. Juraj Sokol, PhD., MBA, MUDr. Lucia Stančiaková, PhD., prof. MUDr. Ján Staško, PhD., doc. MUDr. Tomáš Šimurda, PhD., MPH, prof. MUDr. Ivana Dedinská, PhD., MUDr. Michal Mokáň, PhD., MUDr. Matej Stančík, PhD., doc. MUDr. Tomáš Bolek, PhD., MUDr. Martin Jozef Péč, PhD., MUDr. Róbert Rosoľanka, PhD., prof. MUDr. Renata Péčová, PhD., MPH, prof. MUDr. Dušan Meško, PhD.

Last change: 26.08.2025

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.IKG/J-S-VL-537/17	Internal Medicine Propedeutics (1)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 3 / 2 **per level/semester:** 42 / 28
Form of the course: on-site learning

Number of credits: 5

Recommended semester: 5.

Educational level: I.II.

Prerequisites: JLF.ÚFy/J-S-VL-515/25 - Physiology (1)

Course requirements:
1. To attend both practicals. 2. To pass through the final evaluation. the final evaluation is performed by menanas of a written test. The pass-through criterion: 65%. Evaluation: A:93-100%, B:86-92%,C:79 -86%, D:72-78%,E:65-71%, Fx:64%.

Learning outcomes:
Obtaining of practical skills and theoretical knowledge in the field of Internal Medicine Propedeutics. Ability to perform complete history taking and physical examination and proposal of diagnostic plan with laboratory and auxilliary diagnostic methods in the fields of cardiology and pneumology.

Class syllabus:
Lectures:
1. Pacient´s history, s importance. Elaboration of the complex anamnestic findings.
2. Basic examination methods (inspection, palpation, percussion, auscultation) Status praesens generalis.
3. Examination of the head and neck (physiological and pathological findings).
4. Examination of the chest and lungs (physiological findings).
5. Examination of the heart and vessels (physiological findings).
6. Pathological findings in the heart and heart valve disorders.
7. Origin and evaluation of the normal ECG recordings.
8. Evaluation of the pathological ECG recordings.
9. Auwiliary examination methods in diagnostica of cardiovascular diseases.
10. Auxiliary examination methods in vessel diseases and lymphatic system.
11. Pathological findings of respiratory tract and lungs.
12. Chest radiography – describing, interpretation, radiographic sings. Radiographic manifestation of the lung diseases.
13. Auxiliary examination methods in respiratory diseases.
14. Complex evaluation of the patient with cardiovascular and respiratory diseases.
Practicals:
1. Patients history and elaboration of the complex anamnestic findings.

2. Training of the basics of physical examination (inspection, palpation, percussion, auscultation). Status praesens generalis.
3. Procedures in examination of the head and neck (physiological findings).
4. Training of the examination of the chest and lungs (physiological findings).
5. Training of the examination of the heart and vessels (physiological findings).
6. Auscultation findings in heart, pathological finding in valvular diseases of the heart.
7. Evaluation of the physiological ECG curves.
8. Evaluation of the pathological ECG curves. Test.
9. Diagnostical usage of the auxiliary examination methods in cardiovascular diseases (X-rax, ultrasonography, CT,laboratory parametres, scintigraphy etc.)
10. Clinical examination of the patients with the diseases of the vessels and lymphatic system, auxiliary methods in angiology.
11. Examination of the patients with obstructive broncjhopulmonary disease and restrictive diseases of the lungs.
12. Interpretaion of the pathological X-ray slides.
13. Auxiliary examination methods in pneumology.
14. Elaboration of the model of the patients with cardiovascular or respiratory disease.

Recommended literature:
Novey, D.W. Rapid Acces Quide to the Physical Examination. Chicago: Year Boo Med. Publ.1988,634 pp. ISBN 0-8151-6434-3

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 951

A	ABS0	B	C	D	E	FX
48,37	0,0	23,76	17,77	7,36	2,73	0,0

Lecturers: prof. MUDr. Rudolf Hyrdel, CSc., doc. MUDr. Robert Vyšehradský, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin, prof. MUDr. Peter Galajda, CSc., doc. MUDr. Jurina Sadloňová, CSc., prof. MUDr. Matej Samoš, PhD., MUDr. Anna Ružinák Bobčáková, PhD., MUDr. Ján Červeň, MPH, MUDr. Ľuboš Hamada, MUDr. Ivana Lipták Žiačiková, doc. MUDr. Peter Bánovčin, PhD., MBA, MUDr. Michal Demeter, PhD., doc. MUDr. Martin Ďuriček, PhD., MUDr. Jakub Hoferica, PhD., MUDr. Peter Lipták, PhD., MUDr. Lenka Nosáková, PhD., MUDr. Michal Prokopič, PhD., MUDr. Martin Schnierer, PhD., MUDr. Diana Vážanová, PhD., doc. MUDr. Ľubomír Skladaný, PhD., MUDr. Jakub Benko, PhD., doc. MUDr. Tomáš Bolek, PhD., MUDr. Matej Stančík, PhD., MUDr. Martin Jozef Péč, PhD., prof. MUDr. Dušan Meško, PhD., MUDr. Tímea Jusková, doc. MUDr. Matej Vnučák, PhD., MUDr. Karol Graňák, PhD., MUDr. Lucia Kapičáková, MUDr. Lívia Jamrišková, PhD., MUDr. Andrej Kollár, MUDr. Juraj Krivuš, PhD., MUDr. Patrik Lecký, PhD., MUDr. Stanislava Mikulová, PhD., doc. MUDr. Ivana Ságová, PhD., MUDr. Ivan Kocan, PhD., MUDr. Terézia Gondášová, MUDr. Jakub Jurica, PhD.

Last change: 06.04.2022

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.IKG/J-S-VL-538/17	Internal Medicine Propedeutics (2)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 3 / 2 **per level/semester:** 42 / 28
Form of the course: on-site learning

Number of credits: 6

Recommended semester: 6.

Educational level: I.II.

Prerequisites: JLF.ÚFy/J-S-VL-516/16 - Physiology (2) and JLF.IKG/J-S-VL-537/17 - Internal Medicine Propedeutics (1)

Course requirements:
To attend both practicals. 2. To pass through the final evaluation. The final evaluation is performed by menans of a written test. The pass-through criterion: 65%. Evaluation: A:93-100%, B:86-92%, C:79-86%, D:72-78%,E: 65-71%, Fx:64%

Learning outcomes:
Obtaining of practical skills and theoretical knowledge in the field of Internal Medicine Propedeutics. Ability to perform complete history taking and physical examination and proposal of diagnostic plan with laboratory and auxilliary diagnostic methods in the fields of gastroenterology, endocrinology, diabetology, hematology, occupational medicine and genetics.

Class syllabus:
Lectures:
1. Examination of the abdomen and the abdominal organs.
2. Examination of the patients with diseases of gastrointestinal tract.
3. Auxiliary and functional examination methods in gastroenterology and hepatology.
4. Examination of the liver and diagnostics methods in hepatology.
5. Examination of the kidneys and patients with kidney diseases.
6. Auxiliary examination methods and laboratory tests in nephrology.-
7. Examination of the patients with diabetes mellitus.
8. Examination of the joints, muscles and spine.
9. Hematology I.
10. Hematology II.
11. Examination of the patients with endocrine diseases, auxiliary examination methods in endocrinology.
12. Reliability of laboratory methods and basic conditions of their.
13. Examination of the patients with occupational diseases and acute intoxications (alcohol, medicaments, drugs).
14. Examination of the genetic patients. Laboratory and auxiliary examinations.
Practicals:

1. Training of the examination of the abdomen and abdominal organs (physiological findings).
2. Examination of the patients with diseases of gastrointestinal tract and evaluation of the results.
3. Principles of evaluation of X-ray examination, ultrasonography, demonstration of fibroscopy, rectoscopy, colonoscopy, some invasive examinations.
4. Auxiliary examination methods in hepatology.
5. Examination of the patients and evaluation of nephrologic findings in patients with the diseases if uropoietic tract.
6. Function Examination of kidneys.
7. Examination of the patients with diabetes mellitus.
8. Training of the examination of the joints, muscles and spine physiological findings). Pathological findings during examination of musculoskeletal apparatus. Tes.
9. Hematology I.
10. Hematology II.
11. Examination and evaluation of the results of laboratory examinations in patients with endocrine diseases.
12. Evaluation of laboratory findings and their interpretation.
13. Algoritm and interpretation of examinations of the patients with acute intoxications (alcohol, medicaments, drugs).
14. Credit test. Elaboration of the model patient´s record.

Recommended literature:

Novey,D.W. Rapid Acces Quide to the Physical Examination. Chicago: Year Boo Med. Publ. 1988,634
pp .ISBN 0-8151-6434-3

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 951

A	ABS0	B	C	D	E	FX
40,17	0,0	30,28	20,5	6,31	2,21	0,53

Lecturers: prof. MUDr. Rudolf Hyrdel, CSc., doc. MUDr. Oto Osina, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin, prof. MUDr. Peter Galajda, CSc., doc. MUDr. Jurina Sadloňová, CSc., prof. MUDr. Matej Samoš, PhD., doc. MUDr. Robert Vyšehradský, PhD., MUDr. Anna Ružinák Bobčáková, PhD., MUDr. Ján Červeň, MPH, MUDr. Ľuboš Hamada, MUDr. Ivana Lipták Žiačiková, doc. MUDr. Peter Bánovčin, PhD., MBA, MUDr. Michal Demeter, PhD., doc. MUDr. Martin Ďuriček, PhD., MUDr. Jakub Hoferica, PhD., MUDr. Peter Lipták, PhD., MUDr. Lenka Nosáková, PhD., MUDr. Michal Prokopič, PhD., MUDr. Martin Schnierer, PhD., MUDr. Diana Vážanová, PhD., MUDr. Peter Hyrdel, PhD., doc. MUDr. Ľubomír Skladaný, PhD., doc. MUDr. Juraj Sokol, PhD., MBA, prof. MUDr. Ján Staško, PhD., MUDr. Jakub Benko, PhD., doc. MUDr. Ivana Ságová, PhD., MUDr. Matej Stančík, PhD., MUDr. Michal Mokáň, PhD., MUDr. Martin Jozef Péč, PhD., prof. MUDr. Dušan Meško, PhD., MUDr. Tímea Jusková, doc. MUDr. Matej Vnučák, PhD., MUDr. Karol Graňák, PhD., MUDr. Lucia Kapičáková, MUDr. Lívia Jamrišková, PhD., MUDr. Andrej Kollár, MUDr. Juraj Krivuš, PhD., MUDr. Patrik Lecký, PhD., MUDr. Stanislava Mikulová, PhD., MUDr. Terézia Gondášová, MUDr. Jakub Jurica, PhD., MUDr. Zdenka Matušková, PhD., prof. MUDr. Ivana Dedinská, PhD.

Last change: 06.04.2022

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.BioMed/J-S-VL-628/19	Introduction to Medical Data Analysis

Educational activities:
Type of activities: practicals
Number of hours:
per week: 1 **per level/semester:** 14
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 10.

Educational level: I.II.

Prerequisites:

Course requirements:

Learning outcomes:
A student shall understand and critically assess results of data analysis in medical research publications. The student shall know the ways of translating a medical research question into a data-analytic one. The student shall understand possible methods for data collection and the relation between a sample and a population. The student shall have firm understanding of the basic tools of data visualization (such as histogram, boxplot), descriptive statistics (such as the sample average, standard deviation, median, interquartile range) and data analysis (such as the ROC curve, sensitivity, specificity, hypothesis testing and confidence intervals, logistic regression, survival analysis, correlation and regression analysis). The student will be able to select an appropriate tool for a particular problem. The student shall gain experience with analyzing real medical data, sufficient for performing such an analysis of a novel data on her/his own

Class syllabus:
1st seminar Case study 1 (Indicators of Prostate Biopsy Results): Experiment vs observation study. Case-control study. Data types (qualitative, quantitative). Descriptive statistics (mean, median, standard deviation, interquartile range; frequency table, contingency table). Data visualization (histogram, boxplot; mosaicplot). 2nd seminar Case study 1, continued (Indicators of Prostate Biopsy Results): What is a biomarker? Diagnostic accuracy of a biomarker. Sensitivity, specificity, ROC curve, AUC, Youden index. Pravalence. Positive predictive value, negative predictive value – the key information for a physician and a patient. Diagnostic accuracy of PSA (prostate-specific antigen) for prostate cancer. 3rd seminar Case study 1, continued (Indicators of Prostate Biopsy Results): How to take into account the difference in the age composition of patients and controls? Logistic regression. Odds Ratio, risk. Confidence interval. P-value and statistical significance. 4th seminar Case study 2 (Identification of Risk Factors for Death after Carinal Resection): Selection of important predictors: does prior surgery matters? Akaike Information Criterion. Confidence band for ROC curve. 5th seminar Case study 3 (Effect of Protase Inhibitors on Pulmonary Admissions): Contingency tables. Independence test. Statistical significance versus scientific (medical) importance. Case study 4 (Effectiveness of a Drug in Reducing Nausea After Gallbladder Removal): Test of trend in contingency table. Is there a statistically significant difference in the

decrease of nausea rating between the drug and placebo? 6th seminar Case study 5 (Laryngectomy Survival): Survival curve, censoring, Kaplan Meier estimator. Log-rank test: Is the survival the same for the Radiation Therapy patients as for the patients that underwent the larynx conservation surgery? Hazard ratio. 7th seminar Case study 6 (Exhaled Nitric Oxide as an Indicator of Exercise-Induced Bronchoconstriction): Scatterplot. Correlation vs causation. Regression. Single predictor, multiple predictors. Selection of predictors. Quality of fit. Predictions.

Recommended literature:
Riffenburgh R.H. Statistics in Medicine. 3-rd ed. Academic Press, 2012. ISBN 9780123848642.

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 0

A	ABS0	B	C	D	E	FX
0,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: doc. Mgr. Marián Grendár, PhD.

Last change: 29.03.2022

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027	
University: Comenius University Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.ÚMBl/J-S-VL-597/17	**Course title:** Laboratory Practicals in Molecular Biology
Educational activities: **Type of activities:** practicals **Number of hours:** **per week:** 1 **per level/semester:** 14 **Form of the course:** on-site learning	
Number of credits: 1	
Recommended semester: 6.	
Educational level: I.II.	
Prerequisites:	
Recommended prerequisites: Subject Molecular biology (JLF.ÚMB/J-S-VL-590/17)	
Course requirements: Participation on laboratory examinations and delivery of laboratory protocol. Scale of assessment (preliminary/final): Final grade	
Learning outcomes: The graduate acquires the basic practical skills in molecular biology methods – DNA extraction, PCR, real-time PCR, Sanger sequencing and fragment analysis design, pipetting and interpretation.	
Class syllabus: Practical exercise: Basic methods of molecular biology applied in molecular diagnostics – isolation of DNA, basics of primer design, Ensembl database, preparation of PCR protocol, preparation of real time PCR protocol, preparation of dideoxysequecning workflow, pipetting of PCR, real-time PCR and dideoxysequencing, interpretation of PCR, real-time PCR, dideoxysequencing and fragment analysis experiments.	
Recommended literature: Fast Real-Time PCR System http://www3.appliedbiosystems.com/cms/groups/mcb_support/documents/generaldocuments/cms_041436.pdf p. -9-14, 33-47. DNA sequencing and capillary electrophoresis http://www3.appliedbiosystems.com/cms/groups/mcb_support/documents/generaldocuments/cms_041003.pdf p. 2-14	
Languages necessary to complete the course: English	
Notes: No.	

Past grade distribution
Total number of evaluated students: 25

A	ABS0	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: doc. RNDr. Zora Lasabová, PhD., doc. Mgr. Tatiana Burjanivová, PhD.

Last change: 24.03.2022

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚCJ/J-S-VL-644/25	Latin terminology in ananatomy

Educational activities:
Type of activities: practicals
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 1.

Educational level: I.II.

Prerequisites:

Course requirements:
passing the test, attendance

Learning outcomes:
The aim of the course is to acquire the basics of the Latin anatomical terminology and facilitate orientation in it that is a necessary step for a successful introduction to the study of Anatomy. The main outcome of the course is mastering the principles of specialized terms formation, their correct pronunciation, understanding grammar connections and automating the use of terms indicating directions, planes or positions of anatomical structures. The course is not a substitute for another compulsory course Basics of Medical Terminology.

Class syllabus:
1. Pronunciation and Reading
Pronunciation of groups of sounds and whole terms, reading the terms with correct pronunciation, reading autopsy reports and findings with terms used in context and their correct pronunciation, reading comprehension
2. Adjectives in Anatomy
Introduction to the issue of adjectives used in anatomy, word order, agreeing adjective, agreement of nouns in gender, number and case, opposites
3. Grading of adjectives
Anatomical planes and directions expressed through comparatives of adjectives of the 3rd declensions, opposites
4. Numerals in anatomy
Basic and ordinal numerals 1-12, use of Roman numerals to denote anatomical structures, designation of vertebrae, nerves and fingers with numbers and their terminological equivalents
5. Nouns in anatomy
Introduction to nouns, declension, declensions 1-5, conjunction with an adjective and word order, agreeable and disagreeable adjectives, meaning of the genitive sg., specifics of nouns of the third declension
6. Review
7. Test

Recommended literature:

Bujalková, M., Šimon, F.: TERMINOLOGY MEDICA LATINA.
Textbook of medical terminology for medical students. Martin: Osveta Publishing House 2022.
236 p. 4th supplemented and revised edition. ISBN 978-80-8063-511-4
internet
handouts

Languages necessary to complete the course:

English language, Latin language

Notes:

Past grade distribution

Total number of evaluated students: 0

A	ABS0	B	C	D	E	FX
0,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: Mgr. Desana Kiselová, doc. Mgr. Erika Juríková, PhD.

Last change: 14.08.2025

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚVZ/J-S-VL-609/19	Legal Aspect of Health Care Providing

Educational activities:
Type of activities: practicals
Number of hours:
per week: 1 **per level/semester:** 14
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 10.

Educational level: I.II.

Prerequisites:

Course requirements:
Attendance 7x4 p. (max. 28 p.)
studying selected legal issues (max. 36 points)
clear publication of the selected topic (max. 36 points)
Evaluation: A: 91–100 %, B: 81–90 %, C: 73–80 %, D: 72–66 %, E: 65–60 %, FX: 59 % and less.
Scale of assessment (preliminary/final): 0/100

Learning outcomes:
After completion of the subject the student understands legal aspects of health care providing. The student is able to apply basic information on current legislation in force in practice.

Class syllabus:
Obligations of a healthcare professional in the provision of healthcare (documentation, agreements, use of codes and stamps). Obligations of the healthcare provider. Control mechanisms - Health Care Surveillance Authority. Obligations of a health worker in relation to the Social Insurance Agency. Legal responsibility of healthcare providers.

Recommended literature:
Recommended literature:
Zákon č. 576/2004 Z. z. o zdravotnej starostlivosti v znení neskorších predpisov Zákon č. 578/2004 Z. z. o poskytovateľoch zdravotnej starostlivosti v znení neskorších predpisov Zákon č. 581/2004 Z. z. o zdravotných poisťovniach, dohľade nad zdravotnou starostlivosťou v znení neskorších predpisov Zákon č. 461/2003 Z. z. o sociálnom poistení v znení neskorších predpisov Zákon č. 355/2007 Z. z. o ochrane, podpore a rozvoji verejného zdravia v znení neskorších predpisov

Languages necessary to complete the course:
slovak

Notes:

Past grade distribution
Total number of evaluated students: 0

A	ABS0	B	C	D	E	FX
0,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: prof. MUDr. Viera Švihrová, CSc.

Last change: 17.08.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚLBch/J-S-VL-510/16	Medical Biochemistry (1)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 3 / 2 **per level/semester:** 42 / 28
Form of the course: on-site learning

Number of credits: 5

Recommended semester: 3.

Educational level: I.II.

Prerequisites: JLF.ÚLBch/J-S-VL-508/25 - Medical Chemistry

Course requirements:
The form of evaluation is only written. The 60 % of total score points is necessary.
Rating: A: 91-100%, B: 81-90%, C: 73-80%, D:66-72%, E:60-65%, Fx:59% and less.

Learning outcomes:
The student receives information such as biomolecules are synthesized, degraded and metabolized in the human body. The students deepen their knowledge about biochemical pathways in different organs under normal circumstances and they also learn how the metabolic processes work under pathological conditions at the molecular level, which is a prerequisite for correct diagnosis, treatment and individualized approach to the subject. The result of learning is understanding formation, causes and treatment of many diseases. The student can apply his theoretical knowledge and try to solve scenarios with diseases and its potential complications during preparing a seminar presentation as well as the practical examination of biological material.

Class syllabus:
Digestion and absorption of carbohydrates, their transport and regulation in the gastrointestinal tract. Glycogen synthesis, degradation and their regulation. Glycolysis under aerobic and anaerobic conditions, gluconeogenesis, substrate-level and hormonal regulation, disorders. Pentose phosphate pathway, entry of fructose and galactose into metabolic pathways, and their regulation. Metabolism of glucuronic acid, proteoglycans, and glycoproteins. Oxidation of acetyl-CoA, pyruvate dehydrogenase complex and its regulation. Energetics of the citric acid cycle. Regulation of the citric acid cycle and its significance for cellular energy metabolism. Formation of the proton gradient in mitochondria and its role in cellular energy metabolism; regulation of oxidative phosphorylation; inhibitors of electron transport and ATP synthesis. Electron transport across mitochondrial membranes. Digestion and absorption of lipids, their transport and regulation in the gastrointestinal tract. Synthesis and degradation of long-chain fatty acids, their regulation and disorders. Metabolism of odd-chain fatty acids. Synthesis and degradation of triacylglycerols, phospholipids, and glycolipids and their regulation. Cholesterol synthesis and degradation and their regulation. Conversion of cholesterol to bile acids and their functional significance in lipid digestion. Synthesis and oxidation of ketone bodies and their regulation. Lipoprotein synthesis in

the small intestine and liver, apolipoproteins, and dyslipoproteinemias. Metabolism of unsaturated fatty acids, eicosanoids and their biological significance. Nucleotide metabolism.

Recommended literature:

E. E. Abali., S. D. Cline, D. S. Franklin, S. M. Viseli: Lippincott's Illustrated Reviews: Biochemistry. Eight edition, Lippincott Williams & Wilkins, 2022. 625 pp.
R. K. Murray et al.: Harper's Illustrated Biochemistry, McGraw-Hill Medical New York, 2014. 818 pp.
Lehotský et al.: Medical chemistry and biochemistry II. Comenius University Bratislava, 2012. 139 pp.
P. Račay: Medical chemistry and biochemistry III. Comenius University Bratislava, 2012. 68 pp.
P. Račay: Selected chapters from enzymology, membrane biochemistry and biochemistry of genetic information. JLF UK portal MEFANET Martin, 2013. 90 pp. J.

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 1063

A	ABS0	B	C	D	E	FX
3,48	0,09	22,2	31,33	27,09	13,08	2,73

Lecturers: prof. MUDr. Dušan Dobrota, CSc., prof. RNDr. Peter Kaplán, CSc., prof. Mgr. Monika Kmeťová Sivoňová, PhD., RNDr. Andrea Evinová, PhD., doc. Ing. Ján Strnádel, PhD., doc. Mgr. Eva Babušíková, PhD., RNDr. Katarína Dibdiaková, PhD., doc. RNDr. Jozef Hatok, PhD., doc. Mgr. Jana Jurečeková, PhD., doc. RNDr. Martin Kolísek, Dr.rer.nat., prof. RNDr. Ján Lehotský, DrSc., doc. RNDr. Tatiana Matáková, PhD., Mgr. Radovan Murín, PhD., prof. RNDr. Peter Račay, PhD., prof. Ing. Zuzana Tatarková, PhD.

Last change: 10.08.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚLBch/J-S-VL-511/26	Medical Biochemistry (2)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 4 / 4 **per level/semester:** 56 / 56
Form of the course: on-site learning

Number of credits: 8

Recommended semester: 4.

Educational level: I.II.

Prerequisites: JLF.ÚLBch/J-S-VL-010/16 - Medical Biochemistry (1)

Course requirements:
The form of evaluation is written and oral examination.
The minimum percentage of success is 60%.
Rating: A: 91-100%, B: 81-90%, C: 73-80%, D: 66-72%, E:60-65%, Fx:59% and less.

Learning outcomes:
The students understand of basic metabolic processes in various organs, understand normal the ongoing biochemical processes in healthy tissue as well as pathological tissue. Detailed understanding of the biochemical processes in the human body creates conditions for causal-based therapy with an individual approach to each patient. To maintain of this trend of cognition, as well as the introduction of new knowledge at the molecular level into practice, it is necessary to educate professionals, practitioners are able to cope with a huge increase in biochemical knowledge.

Class syllabus:
Digestion and absorption of proteins, the urea cycle and glutamine metabolism, integration of amino acids into intermediary metabolism, metabolism of individual amino acids, inherited and acquired metabolic disorders, and specialized products derived from amino acids in the human body. Integration of the metabolism of major nutrients (carbohydrates, lipids, and proteins), including the involvement of vitamins in individual metabolic pathways. Metabolic interrelationships in obesity, starvation, pregnancy, lactation, stress, and physical activity. Synthesis and degradation of tetrapyrrole pigments, related pathological disorders and their metabolic aspects. Biochemistry of atherosclerosis and diabetes mellitus. Signal transduction and signaling molecules in biological systems. Hormonal regulation and the biochemistry of extracellular and intracellular communication. Biochemical functions and metabolism of individual tissues and organs relevant to the diagnosis of specific pathological processes (muscle, bone, connective and nervous tissues; biochemistry of the liver, kidneys, blood, and blood cells). Acid–base balance, regulation of homeostasis, mineral metabolism, and xenobiochemistry.

Recommended literature:
P. Račay: Medical chemistry and biochemistry III. Comenius University Bratislava, 2012. 68 pp.

P. Račay: Selected chapters from enzymology, membrane biochemistry and biochemistry of genetic information. JLF UK portal MEFANET Martin, 2013. 90 pp.
J. Lehotský et al.: Medical chemistry and biochemistry II. Comenius University Bratislava, 2012. 139 pp.
R. K. Murray et al.: Harper's Illustrated Biochemistry, McGraw-Hill Medical New York, 2014. 818 pp.
R. A. Harvey, D. R. Ferrier: Lippincott's Illustrated Reviews: Biochemistry. Lippincott Williams & Wilkins Philadelphia, 2017. 520 pp.

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 0

A	ABS0	B	C	D	E	FX
0,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: prof. MUDr. Dušan Dobrota, CSc., prof. RNDr. Ján Lehotský, DrSc., prof. RNDr. Peter Kaplán, CSc., prof. Mgr. Monika Kmeťová Sivoňová, PhD., doc. Mgr. Eva Babušíková, PhD., prof. Ing. Zuzana Tatarková, PhD., doc. RNDr. Jozef Hatok, PhD., doc. Mgr. Jana Jurečeková, PhD., Mgr. Radovan Murín, PhD., prof. RNDr. Peter Račay, PhD., doc. Ing. Ján Strnádel, PhD., doc. MUDr. Michal Cibulka, PhD.

Last change: 10.08.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚLBch/J-S-VL-511/17	Medical Biochemistry (2)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 4 / 4 **per level/semester:** 56 / 56
Form of the course: on-site learning

Number of credits: 10

Recommended semester: 4.

Educational level: I.II.

Prerequisites: JLF.ÚLBch/J-S-VL-509/15 - Medical Chemistry (2) and JLF.ÚLBch/J-S-VL-510/25 - Medical Biochemistry (1)

Course requirements:
The form of evaluation is written and oral examination.
The minimum percentage of success is 60%.
Rating: A: 91-100%, B: 81-90%, C: 73-80%, D: 66-72%, E:60-65%, Fx:59% and less.

Learning outcomes:
The students understand of basic metabolic processes in various organs, understand normal the ongoing biochemical processes in healthy tissue as well as pathological tissue. Detailed understanding of the biochemical processes in the human body creates conditions for causal-based therapy with an individual approach to each patient. To maintain of this trend of cognition, as well as the introduction of new knowledge at the molecular level into practice, it is necessary to educate professionals, practitioners are able to cope with a huge increase in biochemical knowledge.

Class syllabus:
Nucleotides metabolism, regulation and metabolic diseases.
Protein metabolism, protein digestion and absorption, urea cycle. Amino acids in the intermediate metabolism. Metabolism of individual amino acids, amino acids special metabolites. Carbohydrate, proteins and lipids metabolic interrelationships: obesity, stress, pregnancy, lactation, starvation, aging, exercise, vegetarian diet. Tetrapyroles metabolism, synthesis, degradation and regulation. Biochemical basis of the diabetes mellitus and atherosclerosis.
Cell signaling, signal molecules. Hormones and neurohormonal regulation, extracellular and intracellular communication. Biochemical's function of some organs: kidney, liver, muscle, nerve tissue and blood elements Acid-base balance, buffer systems, regulation of acid-base balance, metabolic acidosis and alkalosis and respiratory acidosis and alkalosis. Xenobiochemistry.

Recommended literature:
P. Račay: Medical chemistry and biochemistry III. Comenius University Bratislava, 2012. 68 pp.
P. Račay: Selected chapters from enzymology, membrane biochemistry and biochemistry of genetic information. JLF UK portal MEFANET Martin, 2013. 90 pp.

J. Lehotský et al.: Medical chemistry and biochemistry II. Comenius University Bratislava, 2012. 139 pp.
R. K. Murray et al.: Harper's Illustrated Biochemistry, McGraw-Hill Medical New York, 2014. 818 pp.
R. A. Harvey, D. R. Ferrier: Lippincott's Illustrated Reviews: Biochemistry. Lippincott Williams & Wilkins Philadelphia, 2017. 520 pp.

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 1071

A	ABS0	B	C	D	E	FX
6,63	0,0	14,01	22,97	15,31	24,46	16,62

Lecturers: prof. MUDr. Dušan Dobrota, CSc., prof. RNDr. Ján Lehotský, DrSc., prof. RNDr. Peter Kaplán, CSc., prof. Mgr. Monika Kmeťová Sivoňová, PhD., doc. Mgr. Eva Babušíková, PhD., prof. Ing. Zuzana Tatarková, PhD., RNDr. Katarína Dibdiaková, PhD., RNDr. Andrea Evinová, PhD., doc. RNDr. Jozef Hatok, PhD., doc. Mgr. Jana Jurečeková, PhD., doc. RNDr. Martin Kolísek, Dr.rer.nat., doc. RNDr. Tatiana Matáková, PhD., Mgr. Radovan Murín, PhD., prof. RNDr. Peter Račay, PhD., doc. Ing. Ján Strnádel, PhD.

Last change: 06.04.2022

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚLBl/J-S-VL-512/25	Medical Biology and Genetics (1)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 2 / 2 **per level/semester:** 28 / 28
Form of the course: on-site learning

Number of credits: 7

Recommended semester: 2.

Educational level: I.II.

Prerequisites:

Course requirements:
Successful passing of two credit tests (not less than 60%), 100% attendance at practical classes.
Preliminary assessment: Test, stand-alone work, preparation of presentation according to given topic.
Final assessment: Mark, according to credit tests results.
Scale of assessment (preliminary/final): 100 / 0

Learning outcomes:
After completing the subject, the student has knowledge in general cytology – structure, function and pathology of the cell.

Class syllabus:
Biopolymers – proteins, nucleic acids, polysaccharides. The cell theory. Cell as a basic structural and functional unit. Organization of the cell memory system, genetic information. DNA replication. Gene expression. Biological membranes – structure and function. Cell surfaces. Membrane transport. Membrane organelles – nucleus, mitochondria, endoplasmic reticulum, Golgi complex, lysosomes, peroxisomes. Cytoskeleton. Influence of external factors on cell. Cell division – mitosis. Meiosis, gametogenesis. Cell death.

Recommended literature:
Halašová E., Franeková M., Péč M., Kubatka P: Selected Lessons in Medical Biology, 2016, 193 pp.
Halašová E., Bukovská E., Franeková M.: Medical Biology Practicum, 2015, 140 pp.
Karp G.: Cell and molecular biology, John Wiley and Sons, Inc., 2005, 780 pp.
Turnpenny P., Ellard S.: Emerys Elements of Medical Genetics, 2007, 423 pp.

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 96

A	ABS0	B	C	D	E	FX
12,5	0,0	17,71	23,96	23,96	9,38	12,5

Lecturers: prof. RNDr. Erika Halašová, PhD., prof. MUDr. Martin Péč, PhD., MPH, RNDr. Mária Franeková, PhD., Mgr. Jana Mazuchová, PhD.

Last change: 24.08.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚLBl/J-S-VL-513/26	Medical Biology and Genetics (2)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 3 / 3 **per level/semester:** 42 / 42
Form of the course: on-site learning

Number of credits: 7

Recommended semester: 3.

Educational level: I.II.

Prerequisites: JLF.ÚLBl/J-S-VL-512/25 - Medical Biology and Genetics (1)

Course requirements:
Successful passing of two credit tests (not less than 60%), 100% attendance at practical classes, successful passing of oral exam.
Preliminary assessment: test, stand-alone work, preparation of presentation according to given topic.
Final assessment: mark, according to oral exam.
Scale of assessment (preliminary/final): 0 / 100

Learning outcomes:
After completing the subject, the student has knowledge in molecular biology and genetics, in genetics of blood groups, immunogenetics as well as in genetics of cancer cell, viruses and bacteria.

Class syllabus:
Cell genome. Karyotype. General laws of inheritance – Mendel´s laws, gene interactions, gene linkage, sex-linked inheritance. Genetics of blood groups. Mutations – gene, chromosomal, numerical. Population genetics. Pedigree analysis. Genetics of prokaryotes and viruses. Immunogenetics – HLA system. Cancer cell genetics – protooncogenes, oncogenes. Cytogenetic methods, methods of gene engineering.

Recommended literature:
Halašová E., Franeková M., Péč M., Kubatka P: Selected Lessons in Medical Biology, 2016, 193 pp.
Halašová E., Bukovská E., Franeková M.: Medical Biology Practicum, 2015, 140 pp.
Karp G.: Cell and molecular biology, John Wiley and Sons, Inc., 2005, 780 pp.
Turnpenny P., Ellard S.: Emerys Elements of Medical Genetics, 2007, 423 pp.

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 0

A	ABS0	B	C	D	E	FX
0,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: prof. RNDr. Erika Halašová, PhD., RNDr. Mária Franeková, PhD., Mgr. Jana Mazuchová, PhD., prof. MUDr. Martin Péč, PhD., MPH

Last change: 24.08.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚLBf/J-S-VL-504/15	Medical Biophysics

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 4 / 2 **per level/semester:** 56 / 28
Form of the course: on-site learning

Number of credits: 8

Recommended semester: 1.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Basic characteristics of the principles of biophysical process in the organism. Biophysical principles of diagnostics methods and terapeutics methods by ionizing and nonionizing radiation in medicine and basic principles of protection counter ionizing radiation (limits, efective dose and personal dosimetry).

Course requirements:
Students are assessed by means of an oral exam, a credit test, and continuous assessment during exercises and seminars. The assessment of the student's continuous work prior to the oral exam is carried out by adding up the points obtained and classifying them into the following categories:
A maximum of 130 points can be obtained for practical session, i.e. 10 points for each session.
Assessment scale for semester: A ≥ 101, B ≥ 86, C ≥ 71, D ≥ 56, E ≥ 41, Fx < 40.
A maximum of 20 points can be obtained for the credit test, with the following grading scale for the test: A ≥ 18, B ≥ 15, C ≥ 12, D ≥ 9, E ≥ 6, Fx < 6.
The overall assessment of the Medical Biophysics course consists of the semester assessment, the test, and 3 exam questions.
Scale of assessment (preliminary/final): 20/80

Learning outcomes:
After completion of the subject Medical Biophysics, students are able to master the basic physical and physical-chemical processes in biological systems and human body. Students understand biophysical principles of physiological and pathological processes in humans at a level of a cell, tissues and the organ systems. They know and apply to practice the basic biological effects of physical factors affecting the human body and a protection against their harmful influences. They master the biophysical principles of medical instrumentation used in diagnostic and some therapeutical methods.

Class syllabus:
-Structure and function of cell membrane. Transport mechanisms. The resting membrane potential.
-The action potential, its origin and propagation. Synapse and synaptic transmission.
-Biophysical principles of muscle contraction. Skeletal, cardiac and smooth muscle. Biophysical

basics of respiration. External and internal breathing, ventilation, distribution, diffusion and perfusion.
-Biophysics of the circulatory system. Heart as a force pump, structure, function, power output.
-Laminar and turbulent blood flow - basic laws. Blood pressure. Capillary blood flow, filtration in capillary loop, oedema.
-Biophysical mechanism of sensory perception. Biophysics of vision. Biophysics of hearing.
-Recording of electrical and nonelectrical biosignals.
-Interaction of mechanical and meteorological factors with living systems.
-Interaction of electrical and magnetic fields and nonionising radiation with living systems.
-Radioactivity and ionising radiation.
-Origin of ionizing radiation and the interaction of ionizing radiation with living systems, radiological quantities and units. Detection of ionising radiation.
-X-ray imaging techniques. Imaging techniques using radionuclides.
-Biophysical principles of some diagnostical and therapeutical methods in medicine.
-Biocybernetics. Simulation and modelling of biological processes. Theory of information. Controlled and regulated biological systems.

Recommended literature:

Set books:
Misek J., Veternik, M, Jakus J. et al.: Medical Biophysics with Practical Course. University textbook. Jessenius Fac . of Med. Com. Univ. Martin , 2022, 253p. ISBN 978-80-8187-129-0
Ronto, G., Tarjan, I. et al. An Introduction to Biophysics with Medical Orientation. Budapest: Akademiai Kiado, 1999. 448 s. ISBN 96 305 7607 4
Recommended books:
Nave, C. R., Nave, B. C. Physics for the Health Sciences. Philadelphia: W. B. Saunders Comp., 1985. 42l s. ISBN 0-7216-1309-8.
Kukurová, E. Biophysical elixir for students and absolvents of medicine. Bratislava: Comenius University, l99l. 302 s.
Davidovits, P. Physics in Biology and Medicine. Amsterdam: Elsevier, 2013. 331 s. ISBN 978-0-12-386513-7.

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 1426

A	ABS0	B	C	D	E	FX
13,88	0,0	20,97	28,68	17,74	16,41	2,31

Lecturers: doc. RNDr. Michal Šimera, PhD., doc. Ing. Jakub Míšek, PhD., prof. RNDr. Ivan Poliaček, PhD., Ing. Marcel Veterník, PhD., Mgr. Nadežda Višňovcová, PhD.

Last change: 10.08.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚLBch/J-S-VL-508/25	Medical Chemistry

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 2 / 3 **per level/semester:** 28 / 42
Form of the course: on-site learning

Number of credits: 6

Recommended semester: 1.

Educational level: I.II.

Prerequisites:

Course requirements:
Student assessment is carried out in the form of an examination consisting of a written and an oral part. Minimum pass rate: 60%. Grading scale: A: 91–100%, B: 81–90%, C: 73–80%, D: 66–72%, E: 60–65%, FX: 59% and below.
Scale of assessment (preliminary/final): 40/60

Learning outcomes:
By completing the course, the student acquires basic knowledge about biologically important compounds and the principles of chemical processes in living systems. The student will understand the principles of bioenergetics and enzyme kinetics, the laws governing chemical reactions in aqueous solutions, the mechanisms of regulation of chemical processes at the enzymatic level, and will gain fundamental information about the properties of biological membranes necessary for understanding substance exchange, hormone action, and cell signaling. The acquired knowledge can be applied in the study of biological oxidations, metabolism of substances, and the acid–base balance of body fluids. Completion of the course also contributes to an understanding of the relationships between the structure and function of biologically important compounds, the basics of storage and transfer of genetic information, and introduces current applications of recombinant DNA technology in clinical medicine.

Class syllabus:
Biologically important elements and compounds. Weak noncovalent interactions and their significance for biopolymers and biological membranes.
Thermodynamics. Entropy, Gibbs free energy, and coupled reactions in living systems.
Rate of chemical reactions. Types of reactions and their significance in metabolic pathways. Kinetics of enzyme reactions, enzyme inhibition. Enzyme catalysis and regulation at the enzyme level.
Properties of aqueous solutions. Chemical reactions in aqueous solutions.
Chemical properties and biological significance of amino acids, peptides, proteins, carbohydrates and their derivatives, triacylglycerols, phospholipids, sphingolipids, steroids, nucleotides, coenzymes, and vitamins.

Relationship between structure and function of proteins. Chemical properties and biological importance of myoglobin and hemoglobin.
Structure of biological membranes. Lipid and protein components of membranes, membrane fluidity.
Membrane transport. Mechanisms of passive and active transport of ions and molecules.
Structure and properties of DNA, mRNA, tRNA, and rRNA. Genetic information and the eukaryotic genome.
Mechanism of DNA replication and repair of DNA damage.
RNA synthesis – transcription and post-transcriptional modifications of RNA.
Characteristics of the genetic code, mutations. Mechanism of protein synthesis and post-translational modifications.
Regulation of gene expression in eukaryotes. Clinical examples of disorders of gene expression regulation.
Practical applications of recombinant DNA technology in human genetics, prenatal diagnostics, gene therapy, and examples of inherited diseases.

Recommended literature:

P. Kaplán: Medical Chemistry, P+M Turany, 2012. 127 pp.
P. Račay: Medical chemistry and biochemistry III. Comenius University Bratislava, 2012. 68 pp.
P. Račay: Medical chemistry and biochemistry IV. Comenius University Bratislava, 2012. 86 pp.
J. Lehotský et al.: Medical chemistry and biochemistry II. Comenius University Bratislava, 2012. 139 pp.
R. K. Murray et al.: Harper's Illustrated Biochemistry, McGraw-Hill Medical New York, 2012. 818 pp. R. A. Harvey, D. R. Ferrier: Lippincott's Illustrated Reviews: Biochemistry. Lippincott Williams & Wilkins Philadelphia, 2012. 520 pp.

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 98

A	ABS0	B	C	D	E	FX
5,1	0,0	11,22	25,51	18,37	26,53	13,27

Lecturers: prof. RNDr. Peter Račay, PhD., doc. Mgr. Eva Babušíková, PhD., doc. RNDr. Jozef Hatok, PhD., prof. Mgr. Monika Kmeťová Sivoňová, PhD., Mgr. Radovan Murín, PhD., prof. Ing. Zuzana Tatarková, PhD., doc. MUDr. Michal Cibulka, PhD., doc. Mgr. Jana Jurečeková, PhD.

Last change: 10.08.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚLBch/J-S-VL-509/15	Medical Chemistry (2)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 1 / 1,5 **per level/semester:** 14 / 21
Form of the course: on-site learning

Number of credits: 4

Recommended semester:

Educational level: I.II.

Prerequisites: JLF.ÚLBch/J-S-VL-508/22 - Medical Chemistry (1)

Recommended prerequisites:
Lecture/Practical
Extent (in hours) – per week: 1.5/1
Method - attendance form
Credits: 4

Course requirements:
Evaluation of students is performed as a written and oral exam, minimal level to pass: 60 % for written part.
Evaluation:
A: 91–100 %,
B: 81–90 %,
C: 73–80 %,
D: 66–72 %,
E: 60–65 %,
FX: 59 % and less.
Scale of assessment (preliminary/final): 50/50

Learning outcomes:
After completion of the subject the student understands regulatory mechanisms of chemical processes on enzyme level and gains essential informations about properties of biological membranes, required for understanding the mechanisms of substance exchange, hormone action and cell signaling. Completion of the subject also contributes to knowledge of biochemical foundations of storage and transfer of genetic information and introduces to contemporary applications of genomic technology in clinical medicine. Student gains knowledge of molecular foundation of several diseases and understands the importance of chemistry in search of effective diagnostic and therapeutic procedures.

Class syllabus:
- Enzyme catalysis, regulations at the enzyme level – mechanisms of short-term and long-term control.

- Structure of biological membranes. Lipid and protein components of membranes, membrane fluidity. Synthetic membranes. Structural changes of membranes at pathological conditions.
- Membrane transport. Mechanisms of passive and active transport of ions and compounds. Transport of polar and nonpolar species, gases and drugs. Transepithelial transport.
- Nucleotides and nucleic acids. Chemical and biological properties of nucleotides. Coenzymes and second messengers derived from nucleotides.
- Primary, secondary and tertiary structure of DNA and genetic information. Organization of eukaryotic genome.
- Mechanism of DNA replication and repair mechanisms of damaged DNA.
- Structure and properties of mRNA, tRNA, rRNA. Synthesis of RNA – transcription and post-transcriptional modification of RNA.
- Proteosynthesis. Characteristics of genetic code, mutations. Mechanism of synthesis of proteins and post-translational modifications. Inhibitors of proteosynthesis, antimetabolites and antibiotics.
- Regulation of gene expression in eukaryotes. Clinical examples of deregulation of gene expression. - Gene manipulations. Technology of recombinant DNA and methods used in gene manipulations. Practical applications of gene manipulation in human genetics, prenatal diagnostics, gene therapy, examples of inherited disease.

Recommended literature:

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 1321

A	ABS0	B	C	D	E	FX
15,22	0,0	20,29	25,28	15,14	15,82	8,25

Lecturers: prof. MUDr. Dušan Dobrota, CSc., prof. RNDr. Peter Račay, PhD., doc. Mgr. Eva Babušíková, PhD., doc. RNDr. Jozef Hatok, PhD., prof. Ing. Zuzana Tatarková, PhD., doc. Mgr. Jana Jurečeková, PhD., prof. RNDr. Peter Kaplán, CSc., prof. Mgr. Monika Kmeťová Sivoňová, PhD., prof. RNDr. Ján Lehotský, DrSc., Mgr. Radovan Murín, PhD.

Last change: 06.04.2022

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚSLME/J-S-VL-637/22	Medical Criminalistics

Educational activities:
Type of activities: practicals
Number of hours:
per week: 1 **per level/semester:** 14
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 10.

Educational level: I.II.

Prerequisites:

Course requirements:
90 % participation in seminars

Learning outcomes:
After completing the course, the student knows the basics of frontier forensic disciplines (toxicology, serology, criminology) related to the doctor´s practice. After completing the LK course, the student is qualified to perform administrative and practical professional tasks during the examination of the deceased, not only in the medical facility, but also outside the hospital. The student masters the procedures for inspecting the crime scene, is familiar with the procedures of the police in the investigation of a crime, respectively suspected of a criminal offense. Student can actively cooperate and participate in the investigation of various types of crime. At the request of law enforcement authorities, he is able to examine living persons and evaluate the finding forensically. The aim of the subject LK is to gain such experiences, practical habits and procedures that can be implemented also in other fields of medical practice.

Class syllabus:
I. COOPERATION WITH THE POLICE
(Dead body inspection, Crime scene inspection, Crime scene psychology, Covering the traces of the crime from a forensic medical point of view, Examination of biological traces, Examination of a living person - persons suspected and accused of committing a crime, examination witnesses)
II. PRINCIPLES FOR THE COLLECTION OF BIOLOGICAL MATERIAL IN SUSPECTED CRIME CASES
(Introduction to forensic toxicology, Volatile poisons, Extractive poisons, Metal poisons, Other type of poisons, Unknown poisons, Possibilities and methods of alcohol detection, Basics of forensic serology, Forensic methods of identification of living and dead person)

Recommended literature:
DiMaio, V.J., DiMaio, D.: Forensic Pathology, CRC Press, Washington, D.C., 2001, 565 pp
Saukko, P., Knight B.: Knight´s Forensic Pathology, CRC Press, Boca Raton, 2016
Spitz, W.U., Diaz, F.J.: Spitz and Fisher´s Medicolegal Investigation of Death, Charles C Thomas, Springfield, 2020

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 0

A	ABS0	B	C	D	E	FX
0,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: doc. MUDr. Martin Janík, PhD., prof. MUDr. Ľubomír Straka, PhD., MUDr. Veronika Rybárová, PhD., MUDr. Richard Sivulič, PhD.

Last change: 18.03.2022

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.PK/J-S-VL-532/25	Medical Psychology and Basics of Communication

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 1 / 1 **per level/semester:** 14 / 14
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 3.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
0

Course requirements:
Requirement to apply for exam:
- participation in practicals at least 5times (10 lessons)
- participation in lectures at least 2 times
- favourable results during running controls
- favourable results in test

Check in the course of practicals:
- Evaluation till the end of 7th week: control questions during practical exercises
- Evaluation till the end of 14th week: control questions during practical exercises

Evaluation of the results of running controls:
A/1 = 93 – 100 %; B/1,5 = 86 – 92 %; C/2 = 79 – 85 %; D/2,5 = 72 – 78 %; E/3 = 65 – 71 %, Fx = less than 65 %
The share of the running controls on final evaluation of the subject: 10 %
Final evaluation: oral exam or test
Scale of assessment (preliminary/final): 10/90

Learning outcomes:
After completion of the subject the student has a basic knowledge in psychological aspects in medicine aimed to psychological aspects of the disease and the sick person/patient, medical examinations, treatment and health environment. Student knows characteristics and assessment of mental functions, principles of psychosomatic and somatopsychic relations. He/she has basic knowledge in specifics of verbal and nonverbal communication in medicine.

Class syllabus:
Medical psychology – basic terms, characteristics and content of the field. Psychosomatic and psychophysiology, psychosomatic and somatopsychic relations. Psychopathogenesis. Bio-psycho-social model of disease.

Mental functions – basic characteristics, methods of examination, issues of normality and pathology, behaviour and experiencing (externalizing and internalizing behavior), state and trait variables, psychopathology.
Psychological aspects of the disease and the sick person/patient. Experiencing and elaboration of disease (adaptation to disease, disorder, illness). Pathopsychology. The issue of pain, aggravation, simulation, dissimulation, self-harm, deliberate induction of symptoms, alexithymia, types of patient´s behavior, problems of terminal states and dying.
Psychological problems of medical examination, observation and interview as a diagnostic tool in medicine. Psychological diagnosis and its importance in medical practice.
Psychological problems of treatment. Psychological methods of treatment, psychotherapy and its mechanisms. Psychological crisis, crisis intervention.
Psychological problems of health environment, outpatient and inpatient care.
Psychological aspects of the doctor´s work and other health professionals. The issue of burnout, coping with the burden and frustrating experiences, problems of cooperation and rivalry. Medical ethics. Iatropathogenesis.
Mental hygiene, prevention, specific psychohygienic problems.
Verbal and nonverbal communication and its importance in medicine. Communication with specific groups of patients. Patient noncompliance.
Specifics of communication in different developmental stages. Communication with pediatric patient, geriatric patient. Communication with seriously ill and dying patients.
Communication with patients with acute and non-acute mental disorder, with physical, sensory and intellectual disabilities.

Recommended literature:
Compulsory literature:
McManus IC. Psychology in Medicine. Butterworth 1992
Ayers S., Visser R. Psychology for medicine. Sage, Los Angeles 2011, 530 p.
Lloyd M, Bor R. Communication skills for medicine. Elsevier, 2009, 222 p.
Recommended literature:
Alder B. et al. Psychology and sociology applied to medicine. 3rd. ed. Elesevier, Edinburgh 2009, 182 p.

Languages necessary to complete the course:
english

Notes:

Past grade distribution
Total number of evaluated students: 104

A	ABS0	B	C	D	E	FX
86,54	0,0	11,54	0,96	0,96	0,0	0,0

Lecturers: doc. MUDr. Igor Ondrejka, PhD., MUDr. PhDr. Igor Hrtánek, PhD., MUDr. Miloslav Oppa, PhD., MUDr. Zuzana Mlynčeková, PhD., doc. Mgr. Martina Dubovcová, PhD., MPH, MUDr. Dana Fuňáková, PhD., Mgr. Eva Kiššová

Last change: 05.08.2025

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚMI/J-S-VL-517/26	Microbiology (1)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 2 / 2 **per level/semester:** 28 / 28
Form of the course: on-site learning

Number of credits: 4

Recommended semester: 4.

Educational level: I.II.

Prerequisites: JLF.ÚLBl/J-S-VL-512/25 - Medical Biology and Genetics (1)

Course requirements:
- it is obligatory to be present at practicals (1 absence is tolerated)
- test during the semester
- oral presentation of seminar work

End study evaluation of students is based on written test - The final grade is determined by counting the points for the test during semester and the final exam test.
Scale of assessment (preliminary/final): 33,3% / 66,7%

Learning outcomes:
The student receives information from general bacteriology, virology, parasitology and mycology, about their structure, metabolism, pathogenic potential, pathogenesis of infectious diseases, genetics and antibiotics used for the treatment, as well as about methods of desinfection and prevention (vaccination included). The student is trained to use principal diagnostical procedures, to understand their theoretical background, indication and interpretation. The student is able to manage the most common way of sampling of infectious materials, to process them for microscopy, cultivation, identification and ATB susceptibility and tools of pathogenity testing. The student is able to continue the study that requires the basis of bacterial cell structure, metabolism, genetics and to use the gained knowledge for understanding the requirements of the next degree (microbiology 2).

Class syllabus:
Introduction to microbiology, Structure of bacterial cell, Physiology and metabolism of bacterial cell, Genetics of bacterial cell, Antibiotics, vaccines, desinfection, Antibiotics and resistance, Pathogenic potential of microorganisms, Pathogenesis of infection Safety in microbiological laboratory,organization of study, Microscopy, native smear,fixed smear, Staining procedures: Gram, Acid fast, Burri method, Wirtz Conklin for spores, Neisser, Albert for metachromatic granules, Cultivation, inoculation, Identification of bacteria. Cultivation media. Anaerobic bacteria cultivation. Detection of pathogenic potential of bacteria – enzymes, toxins, ATB susceptibility testing

Recommended literature:

Murray, P.R., Rosenthal, K.S., Pfaller, M.A. Medical Microbiology. 7th ed. Philadelphia: Elsevier Saunders, 2013. 874 s. ISBN 978-0-323-08692-9.
Murray, P.R., Rosenthal,K.S., Pfaller, M.A. Medical Microbiology. 8th ed. Philadelphia: Elsevier Saunders, 2016. 836 s. ISBN 978-0323-299956-5
Harvey, R. A., Champe, P.C., Fischer, B.D. Lippincott´s Illustrated Review Microbiology. Lippincott Williams&Wilkins, 2007. 438 s. ISBN 13: 978-0-7817-8215-9
Greenwood, D., Barer, M., Slack, R., Irwing, W. Medical Microbiology. 18.ed. Edinburgh: Elsevier Saunders, 2012.778 s. ISBN 978-0-7020-4089-4
Reading from MEFANET and faculty web site for microbiology

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 0

A	ABS0	B	C	D	E	FX
0,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: prof. MUDr. Elena Nováková, PhD., MUDr. Jana Kompaníková, PhD., doc. MUDr. Vladimíra Sadloňová, PhD.

Last change: 02.06.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚMI/J-S-VL-517/17	Microbiology (1)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 2 / 2 **per level/semester:** 28 / 28
Form of the course: on-site learning

Number of credits: 5

Recommended semester: 4.

Educational level: I.II.

Prerequisites: JLF.ÚLBl/J-S-VL-512/21 - Medical Biology and Genetics (1)

Course requirements:
- it is obligatory to be present at practicals (1 absence is tolerated)
- test during the semester
- oral presentation of seminar work

End study evaluation of students is based on written test - The final grade is determined by counting the points for the test during semester and the final exam test.
Scale of assessment (preliminary/final): 33,3% / 66,7%

Learning outcomes:
The student receives information from general bacteriology, virology, parasitology and mycology, about their structure, metabolism, pathogenic potential, pathogenesis of infectious diseases, genetics and antibiotics used for the treatment, as well as about methods of desinfection and prevention (vaccination included). The student is trained to use principal diagnostical procedures, to understand their theoretical background, indication and interpretation. The student is able to manage the most common way of sampling of infectious materials, to process them for microscopy, cultivation, identification and ATB susceptibility and tools of pathogenity testing. The student is able to continue the study that requires the basis of bacterial cell structure, metabolism, genetics and to use the gained knowledge for understanding the requirements of the next degree (microbiology 2).

Class syllabus:
Introduction to microbiology, Structure of bacterial cell, Physiology and metabolism of bacterial cell, Genetics of bacterial cell, Antibiotics, vaccines, desinfection, Antibiotics and resistance, Pathogenic potential of microorganisms, Pathogenesis of infection Safety in microbiological laboratory,organization of study, Microscopy, native smear,fixed smear, Staining procedures: Gram, Acid fast, Burri method, Wirtz Conklin for spores, Neisser, Albert for metachromatic granules, Cultivation, inoculation, Identification of bacteria. Cultivation media. Anaerobic bacteria cultivation. Detection of pathogenic potential of bacteria – enzymes, toxins, ATB susceptibility testing

Recommended literature:

Murray, P.R., Rosenthal, K.S., Pfaller, M.A. Medical Microbiology. 7th ed. Philadelphia: Elsevier Saunders, 2013. 874 s. ISBN 978-0-323-08692-9.
Murray, P.R., Rosenthal,K.S., Pfaller, M.A. Medical Microbiology. 8th ed. Philadelphia: Elsevier Saunders, 2016. 836 s. ISBN 978-0323-299956-5
Harvey, R. A., Champe, P.C., Fischer, B.D. Lippincott´s Illustrated Review Microbiology. Lippincott Williams&Wilkins, 2007. 438 s. ISBN 13: 978-0-7817-8215-9
Greenwood, D., Barer, M., Slack, R., Irwing, W. Medical Microbiology. 18.ed. Edinburgh: Elsevier Saunders, 2012.778 s. ISBN 978-0-7020-4089-4
Reading from MEFANET and faculty web site for microbiology

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 974

A	ABS0	B	C	D	E	FX
28,85	0,0	21,87	23,51	14,07	10,88	0,82

Lecturers: prof. MUDr. Elena Nováková, PhD., MUDr. Jana Kompaníková, PhD., doc. MUDr. Vladimíra Sadloňová, PhD.

Last change: 06.04.2022

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚMI/J-S-VL-518/26	Microbiology (2)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 3 / 3 **per level/semester:** 42 / 42
Form of the course: on-site learning

Number of credits: 7

Recommended semester: 5.

Educational level: I.II.

Prerequisites: JLF.ÚMI/J-S-VL-517/17 - Microbiology (1)

Course requirements:
- it is obligatory to be present at practicals (1 absence is tolerated)
- 2 tests during the semester
- 2 oral presentations according the schedule
Oral exam - The oral exam consists of 4 questions. Each one is evaluated separatly. No question could be graduated Fx for successfull exam.
Scale of assessment (preliminary/final): 0% / 100%

Learning outcomes:
The student receives information from specialised bacteriology, virology, parasitology and mycology about the structure, metabolism, pathogenic potential and pathogenesis of human infectious diseases, antibiotics used for the treatment as well as methods of identification.
The student is trained to use principal diagnostical procedures, to understand their theoretical background, indication and interpretation. The student is able to manage the most common way of sampling of infectious materials, to process them for microscopiy, cultivation, identification and ATB suscptibility and tools of pathogenity testing. The students knows most important microbial ethiology of infectious of respiratory, gastrointestinal, urogenital tract, skin, soft tissues, central nervous system in different age groups including fetus, newborn, pre-school age children, children, adolescent, adult, geriatric patients,pregnant women and immunocompromised persons.

Class syllabus:
Bacteriology G + cocci staphylococci. streptococci
Bacteriology G – cocci neisseria, haemophilus
Bacteriology, G - rods, enterobacteriaceae
Bacteriology, G - rods, nonfermenting rods
Strana: 2
Bacteriology, G + rods, anaerobes
Spirochetales, chlamydia, mycoplasma
Introduction to virology
Virology, DNA viruses , RNA viruses
Hepatitis viruses, prions, HIV

Medical mycology, medical parasitology
RTI, STI, GIT and UGT infection – ethiology
CNS, blood infection, bacterial intoxication – ethiology
Ethiology of infections of newborne, old patient, fetus infection
Hospital infection and opportunistic infections ethiology
Direct and indirect diagnostical methods
New approaches in identification of infectious ethiology

Recommended literature:

Murray, P.R., Rosenthal, K.S., Pfaller, M.A. Medical Microbiology. 7th ed. Philadelphia: Elsevier Saunders, 2013. 874 s. ISBN 978-0-323-08692-9.
Murray, P.R., Rosenthal,K.S., Pfaller, M.A. Medical Microbiology. 8th ed. Philadelphia: Elsevier Saunders, 2016. 836 s. ISBN 978-0323-299956-5.
Harvey, R. A., Champe, P.C., Fischer, B.D. Lippincott´s Illustrated Review Microbiology. Lippincott Williams&Wilkins, 2007. 438 s. ISBN 13: 978-0-7817-8215-9
Greenwood, D., Barer, M., Slack, R., Irwing, W. Medical Microbiology. 18.ed. Edinburgh: Elsevier Saunders, 2012.778 s. ISBN 978-0-7020-4089-4.
Neuschlová, M., Kompaníková, J., Sadloňová, V., Nováková, E.: Immunology – basic laboratory tests. Martin : Portal JLF UK 2021; 152 s. ISBN 978-80-8187-110-8. https://portal.jfmed.uniba.sk//articles.php?aid=450.
Neuschlová, M., Nováková, E., Kompaníková, J., Sadloňová, V.: A to Z Glossary of Immunological Terms. Martin : Portal JLF UK 2021; 80 s. ISBN 978-80-8187-088-0. https://portal.jfmed.uniba.sk//articles.php?aid=435.
Reading from MEFANET and faculty web site for microbiology

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 0

A	ABS0	B	C	D	E	FX
0,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: prof. MUDr. Elena Nováková, PhD., MUDr. Jana Kompaníková, PhD., doc. MUDr. Vladimíra Sadloňová, PhD.

Last change: 18.08.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚMBl/J-S-VL-590/24	Molecular Biology

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 2 / 1 **per level/semester:** 28 / 14
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 5.

Educational level: I.II.

Prerequisites: JLF.ÚLBl/J-S-VL-513/22 - Medical Biology and Genetics (2) and JLF.ÚLBch/J-S-VL-509/15 - Medical Chemistry (2)

Recommended prerequisites:
Basic knowledge of molecular biology (structure of DNA, replication, transcription, translation) and genetics (Mendelian inheritance).

Course requirements:
100% participation on seminars and practical, knowledge test - test and project
Scale of assessment (preliminary/final): Sum of preliminary results determines the final grade.

Learning outcomes:
The graduate should acquire basic overview about medical molecular biology and molecular genetics and knowledge concerning application of the methods of molecular biology in medicine general, understand the basic principles of molecular diagnostics, precision personalized medicine and interpretation of the results of the molecular-genetic examinations.

Class syllabus:
Organization of the human genome, human genome sequencing projects, basic free accessible databases in medicine. Importance and testing of DNA polymorphisms in pharmacogenetics. . Methods of molecular biology in medicine and diagnostics – PCR, real-time PCR, droplet digital PCR, fragment analysis, Sanger sequencing and next-generation sequencing (NGS). Variant classification according to sequence change and the functional effect, nomenclature for describing variants, gain of function mutations, loss of function mutations. Genetic testing, molecular diagnostics of monogenic disorders, usage of free accessible internet resources and databases (OMIM, ClinVAr, dbSNP). The evolution of cancer, multistep model of carcinogenesis cancer critical genes, driver and passenger mutations. Relevance of the detection of genetic changes for diagnosis, prognosis and therapy prediction in different cancer, methods of molecular biology used in diagnosis and follow-up of cancer, microsatellite instability. Non-invasive molecular diagnostics from circulation – cancer, prenatal testing. Targeted personalized and gene therapy – application of NGS, possibilities and perspectives. Annotation of practical lecture. Practical lectures are carried out in form of seminars with practical demonstrations. Methods of molecular biology – genotyping in pharmacogenetics, SNP and point mutation analysis using PCR, result interpretation from allelic

discrimination plot and digital PCR. Principles of DNA sequencing according Sanger, application of BLAST for evaluation, , description and interpretation of results, sequencing analysis of point mutation, small deletion and insertion. Examples of molecular diagnostic and result interpretation of monogenic diseases and cancer, working with OMIM, ClinVAr.

Recommended literature:

T . Strachan, J. Goodship, P. Chinnery: Genetics and Genomics in Medicine, 2015 by Garland Science, Taylor and Francis Group, NewYork and London (selected chapters) ISBN 978-0-8153-4480-3

www.ncbi.nlm.nih.gov/omim/ - Online Medelian Inheritance in Man

Zora Lasabová: Molekulová biológia v medicíne a genetike. Vysokoškolské učebné texty. vydanie. Vydavateľstvo Asklepios 2011. ISBN 978-80-7167-164-0

Languages necessary to complete the course:

English

Notes:

No.

Past grade distribution

Total number of evaluated students: 189

A	ABS0	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: doc. RNDr. Zora Lasabová, PhD., doc. Mgr. Tatiana Burjanivová, PhD.

Last change: 14.05.2024

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.NnK/J-S-VL-616/19	Neonatological Propedeutics

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 1 / 1 **per level/semester:** 14 / 14
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 9.

Educational level: I.II.

Prerequisites:

Course requirements:
Final fulfillment of the course completion conditions in the form of continuous evaluation.
Scale of assessment (preliminary/final): continuous

Learning outcomes:
At the end of the course students should acquire basic skills in physical examination and screening examination of physiological and pathological newborns, they will learn basic procedures in the diagnosis of pathological conditions. After completing the course, the student is able to assess the state of a physiological newborn in the early postnatal period based on the acquired knowledge.

Class syllabus:
Prvé vyšetrenie a ošetrenie novorodenca, skríningové vyšetrenia enterálna a parenterálna výživa, vyšetrenie kardiovaskulárneho systému, vyšetrenie respiračného systému, hodnotenie rontgenových snímok

Recommended literature:
K.Maťašová: Neonatológia nielen pre medikov, P+M Turany, 2021, 254 s, ISBN: 9788089694808

Languages necessary to complete the course:
English language

Notes:
Teachers: doc. MUDr. Lucia Časnocha Lúčanová, PhD., prof. MUDr. Mirko Zibolen, CSc., prof. MUDr. Katarína Maťašová, PhD., doc. MUDr. Tomáš Jurko, PhD., MUDr. Zuzana Uhríková, PhD., MUDr. Silvia Borová, PhD.

Past grade distribution
Total number of evaluated students: 22

A	ABS0	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: prof. MUDr. Mirko Zibolen, CSc., prof. MUDr. Katarína Maťašová, PhD., doc. MUDr. Tomáš Jurko, PhD., doc. MUDr. Lucia Časnocha Lúčanová, PhD., MUDr. Zuzana Uhríková, PhD.
Last change: 06.09.2026
Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.NnK/J-S-VL-588/19	Neonatology

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: ,5 / ,5 **per level/semester:** 7 / 7
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 10.

Educational level: I.II.

Prerequisites:

Course requirements:
Final fulfillment of the course completion conditions in the form of continuous evaluation
Scale of assessment (preliminary/final): continuous

Learning outcomes:
At the end of the course students should be able to obtain more detailed information about physiological and pathological conditions in neonatology. By solving case reports of patients, they will better understand the issue and also the diversity of clinical manifestations of individual diseases in the neonatal period. The graduate of the course is able to describe the most common pathological situations in neonatology and propose appropriate treatment.

Class syllabus:
care of physiological newborn, newborn with extremely low birth weight, perinatal asphyxia, newborn resuscitation, hypoxic-ischemic encephalopathy, periventricular leukomalacia, intracranial haemorrhage in neonatal period, respiratory diseases in neonatal neonatal nurses, neonatal neonatal nursing, neonatal neonatal disease , case reports

Recommended literature:
K.Maťašová: Neonatológia nielen pre medikov, P+M Turany, 2021, 254 s, ISBN: 9788089694808

Languages necessary to complete the course:
English language

Notes:
Teachers: doc. MUDr. Lucia Časnocha Lúčanová, PhD., prof. MUDr. Mirko Zibolen, CSc., prof. MUDr. Katarína Maťašová, PhD., doc. MUDr. Tomáš Jurko, PhD., MUDr. Zuzana Uhríková, PhD., MUDr. Silvia Borová, PhD.

Past grade distribution
Total number of evaluated students: 233

A	ABS0	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: prof. MUDr. Mirko Zibolen, CSc., prof. MUDr. Katarína Maťašová, PhD., doc. MUDr. Tomáš Jurko, PhD., doc. MUDr. Lucia Časnocha Lúčanová, PhD., MUDr. Zuzana Uhríková, PhD.

Last change: 06.09.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.NlK/J-S-VL-545/26	Neurology

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 4 / 2 **per level/semester:** 56 / 28
Form of the course: on-site learning

Number of credits: 5

Recommended semester: 10.

Educational level: I.II.

Prerequisites: JLF.IKG/J-S-VL-538/17 - Internal Medicine Propedeutics (2) and JLF.ÚFa/J-S-VL-530/21 - Pharmacology (2) and JLF.PK/J-S-VL-549/24 - Psychiatry (2)

Course requirements:
Successful completion of the course is conditional upon active participation in practical classes and passing the final examination.
Final Examination Requirements for General Medicine (VL):
- Participation in the examination requires active attendance at practical classes – at least 10 out of 12 days of the block. An excused absence is tolerated for up to 2 out of 12 days. Each additional absence must be compensated – substitute teaching will always be arranged individually.
- The final examination in Neurology is oral, consisting of two questions.
- Students must register for the examination no later than one day prior to the scheduled date.
- Students may withdraw from the examination no later than one day prior to the scheduled date.
- If a student is unable to attend the examination, they may be excused only for serious reasons, submitted within five days after the examination date.
- Students are required to present their ISIC student card at the examination.

Learning outcomes:
By completing the course Neurology, the student will:
- Acquire fundamental knowledge of the content and structure of the subject, the principles and methods of neurological examination, and the clinical approaches to patients with neurological disorders.
- Apply knowledge of neuroanatomy and neurophysiology of the peripheral and central nervous system in clinical patient assessment.
- Become familiar with the function of individual neurological systems and the methods of their clinical evaluation.
- Gain an overview of the indications and use of auxiliary diagnostic methods in neurology (imaging, electrophysiological, and laboratory techniques).
- Develop practical skills – will be able to perform an independent neurological examination, analyse pathological findings, determine syndromes, and localise lesions of the nervous system.

- Deepen theoretical knowledge of the epidemiology, aetiology, pathophysiology, clinical presentation, diagnosis, differential diagnosis, and treatment of the most common neurological diseases.
- Master the principles of management of acute neurological conditions (e.g. stroke, epileptic seizure, acute polyneuropathies).
- Enhance clinical reasoning through solving model scenarios and case studies.

Class syllabus:

1. Regulation of motor functions at the spinal and supraspinal levels. Central and peripheral paralysis. Quantitative and qualitative disorders of consciousness. Cranial nerves. Sensory and somatosensory systems.
2. Syndromes of the cerebral lobes. Meningeal syndrome. Spinal cord syndromes. Limbic system and memory. Autonomic (vegetative) nervous system.
3. Ischaemic stroke and cerebral venous sinus thrombosis. Interventional neuroradiology in the diagnosis and treatment of stroke. Haemorrhagic stroke and subarachnoid haemorrhage.
4. Tumours of the brain, meninges, spinal cord and peripheral nervous system. Intracranial hypertension and hypotension. Hydrocephalus. Injuries of the nervous system.
5. Acute neurology: differential diagnosis of comatose states.
6. Generalised and focal epilepsies. Sleep disorders and polysomnography. Migraine and other headaches.
7. Guillain–Barré syndrome, CIDP, MMN and other polyneuropathies. Myasthenia gravis and Lambert–Eaton syndrome. Motor neurone disease (MND). Muscular dystrophies, polymyositis and other myopathies.
8. Multiple sclerosis (MS) and its variants. Neuromyelitis optica spectrum disorders (NMOSD). Disorders associated with anti–MOG antibodies. Other demyelinating conditions. Infectious diseases of the nervous system.
9. Parkinson's disease (PD). Essential and other tremors. Dystonias. Other neurodegenerative and neurometabolic disorders: PSP, MSA, Wilson's disease, and Huntington's disease.
10. Panic disorder. Tetanic and hyperventilation syndrome. Anxiety–depressive disorder. Obsessive–compulsive disorder. New trends in the pharmacotherapy of neurological diseases.
11. Vertebrogenic pain syndromes (cervical, thoracic, and lumbosacral). Pain and algology. Minimally invasive algological procedures and neuromodulation techniques.
12. Alzheimer's disease and other dementias. Human prion diseases. Functional neurological disorders. Vestibular neurology.

Recommended literature:

Mayer, S.A., Marshall, R.S.On Call Neurology E-Book. 4th ed. Elsevier, 2020. 579 s. eISBN 9780323611008
https://ebookcentral.proquest.comúlibúuniba-ebooksúdetail.action?docID=6039439
Drobný, M. et al.Neurology Textbook. Reference Text and Study Guide. Martin: Profa-J. 2015. 656 s.
ISBN 978-80-972153-09
Daroff, R.B.et al.Bradleys and Daroffs Neurology in Clinical Practice, Elsevier, 8th ed., 2021. 2400 s. ISBN 9780323642613
Biller, J. Practical Neurology, LWW, 5th ed. 2017. 962 s. ISBN 9781496326959
Mumenthaler, M. et al. Neurology. Stuttgart: Thieme, 2003. 1008 s. ISBN 3135239047

Languages necessary to complete the course:

English language

Notes:

Past grade distribution
Total number of evaluated students: 0

A	ABS0	B	C	D	E	FX
0,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: prof. MUDr. Egon Kurča, PhD., FESO, prof. MUDr. Ema Kantorová, PhD., doc. MUDr. Vladimír Nosáľ, PhD., FESO, prof. MUDr. Štefan Sivák, PhD., MUDr. Monika Turčanová Koprušáková, PhD., MUDr. Jana Dluhá, PhD., MUDr. Babeta Hofericová, MUDr. Róbert Ružinák, PhD., MUDr. Pavol Skáčik, PhD., MUDr. Kristián Šveda, MUDr. Jana Olekšáková, PhD., MUDr. Lucia Babálová, PhD., MUDr. Daniela Feďáková, MUDr. Jaroslav Petrišin, Monika Braniková, MUDr. Klaudia Kalmárová, PhD.

Last change: 04.06.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.NchK/J-S-VL-619/26	Neurosurgery

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 2,5 / 1 **per level/semester:** 35 / 14
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 10.

Educational level: I.II.

Prerequisites: JLF.KVVTCh/J-S-VL-522a/22 - Surgical Propedeutics (2)

Course requirements:
The condition for the obtaining the credits from neurosurgery is the 4/5 (80 %) attendance of the practical seminars at Clinic of Neurosurgery. After obtaining the credit, an oral exam follows. After its successful completion, the course is completed.

Learning outcomes:
The graduate has knowledge of pathophysiology, classification, diagnostic and treatment methods for the most common diseases in neurosurgery: degenerative diseases of the spine, spinal and spinal cord injuries, tumors of the spine and spinal cord, craniocerebral injuries, vascular neurosurgery, intracranial tumors, intracranial and intraspinal infections, injuries, entrapment syndromes and tumors of peripheral nerves. Gains basic knowledge of pediatric neurosurgery.

Class syllabus:
Degenerative spinal disease - pathophysiology and biomechanics of the spine affected by the degenerative process. Overview of diagnostic methods and basic spinal surgical procedures.
Spinal cord injuries - overview of the mechanics, pathophysiology and classification of spinal cord injuries. Clinical picture, diagnosis and treatment of spinal cord injuries and an overview of basic surgical procedures.
Tumors of the spine and spinal cord - focus on an overview of histological types of tumors affecting the spine, spinal cord and spinal canal, diagnostic methods and basic surgical procedures.
Craniocerebral injuries - an overview of brain injury management based on an understanding of the pathophysiology and biomechanics of intracranial space and brain injury. Classification of head injuries, characteristics of intracranial hypertension, diagnosis and treatment of brain injuries. Overview of basic neurosurgical procedures in patients with craniocerebral injuries.
Vascular neurosurgery - basic characteristics, diagnostics and overview of surgical procedures in intracranial hemorrhage, cerebral ischemia, treatment options for intracranial aneurysms and arteriovenous and other vascular malformations.
Intracranial tumors - an overview of histological types of tumors affecting the brain, skull and intracranial space, the use of diagnostic methods and the basic principles of surgical treatment. Characteristics of intraoperative neuromonitoring and awake operations.

Inflammatory diseases of the intracranial and spine - characteristics, diagnosis and principles of conservative and surgical treatment of inflammatory diseases, such as brain abscess, subdural empyema, epidural and intraspinal abscess, spondylodiscitis and others.
Peripheral nerve injuries, entrapment syndromes, peripheral nerve tumors – characteristics, clinical picture, diagnostic tools and an overview of neurosurgical operations.
Pediatric neurosurgery - specifics of a pediatric neurosurgical patient, characteristics of congenital developmental defects of CNS and supporting structures, hydrocephalus, CNS tumors in childhood. Specifics of childhood CNS injuries, CNS birth injuries. Overview of basic surgical procedures.

Recommended literature:
Lectures and seminars
Greenberg, Mark S. Handbook of Neurosurgery. New York: Thieme Medical Publishers,7th edition, 2010, s. 1338, ISBN: 978-1-60406-326-4
Agarwal Nitin et al. Neurosurgery Fundamentals. Thieme Medical Publishers Inc. 432p. ISBN: 9781626238220

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 0

A	ABS0	B	C	D	E	FX
0,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: prof. MUDr. Branislav Kolarovszki, PhD., MBA, MUDr. Romana Richterová, PhD., MUDr. René Opšenák, PhD., MUDr. Gabriela Mičurová, PhD.

Last change: 03.06.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KNM/J-S-VL-623/26	Nuclear Medicine

Educational activities:
Type of activities: practicals
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 8.

Educational level: I.II.

Prerequisites: JLF.ÚLBf/J-S-VL-504/15 - Medical Biophysics and JLF.ÚA/J-S-VL-503/16 - Anatomy (3)

Course requirements:
Active 100% participation on practicals, successful final test (12 or more correct answers to 20 questions, grades according to actual scoring).

Learning outcomes:
Basic overview about the Nuclear medicine procedures and knowledge about the radiation safety rules.

Class syllabus:
1. History of Nuclear medicine, theoretical introduction. Principles of radioactivity, radiobiology, radionuclide therapy, radioanalytical methods, emission and hybrid imaging. Differences among the Radiology, Radiotherapy and Nuclear Medicine.
2. Principles of radiation safety, manipulation with unsealed radioactive sources, department trip.
3. Bone scintigraphy.
4. Diagnostic Nuclear Medicine in oncology diseases. Benefits of PET and hybrid methods, sentinel node diagnostics.
5. Nuclear cardiology.
6. Less common Nuclear Medicine diagnostics in non-oncological indications excluding bones and heart (studies of lungs, kindeys, CNS, GIT, glands etc.).
7. Radionuclide therapy, theranostics, inpatient care in Nuclear Medicine.

Recommended literature:
Nuclear Medicine Guide (living publication of European Association of Nuclear Medicine, online since 2018): https://www.eanm.org/publications/european-nuclear-medicine-guide/
Kim C.K.: Nuclear Medicine and PET/CT Cases, https://global.oup.com/academic/product/nuclear-medicine-and-petct-cases-9780199773695?cc=sk&lang=en&#
Actual materials (presentations) given durint practicals or available online on MEFANET.

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 0

A	ABS0	B	C	D	E	FX
0,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: MUDr. Hubert Poláček, PhD., prof. MUDr. Kamil Zeleňák, PhD., MUDr. Martin Števík, PhD., MPH

Last change: 02.06.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KPLT/J-S-VL-574/19	Occupational Medicine and Toxicology

Educational activities:
Type of activities: practicals
Number of hours:
per week: 1 **per level/semester:** 14
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 9.

Educational level: I.II.

Prerequisites: JLF.IKG/J-S-VL-539/19 - Internal Medicine (1)

Course requirements:
obligatory participation in seminars and final test
Scale of assessment (preliminary/final): final test

Learning outcomes:

Class syllabus:
1. Professional diseases - definition, overview, national and international list of occupational diseases. System for the assessment, reporting and compensation of occupational diseases. The job description of department or clinic of occupational medicine, the role of occupational health service in the system of care for the health of employees. Preventive medical examinations.
Occupational diseases of the respiratory system - Pneumoconiosis.
2. Overview of diseases after exposure to physical factors of the working environment - occupational diseases from long-term, excessive and repetitive load of limbs, diseases form vibrations.
Health damage from over noise and ionizing and nonionizing radiation.
3. Occupational diseases after exposure to toxic and carcinogenic metals, organic solvents, toxic gases, pesticides.
4. Occupational cancers. Professional allergic diseases - rhinitis, asthma bronchiale, hypersensitive pneumonitis.
5. Examination, diagnosis and treatment of patients with professional health damage.

Recommended literature:
1. Buchancová a kol. Pracovné lekárstvo a toxikológia. Martin, Osveta, 2003, 1133s.
2. LaDou, J.: Current Occupational and Environmental Medicine. Mc Grax-Hill Education Europe, 2007, 846 s.
3. Krutý, F., Buchancová, J.: Pracovné lekárstvo a toxikológia. Environmentálne pľúcne choroby. Poškodenia zdravia z fyzikálnych faktorov. V: Ďuriš, I., s kol.: Princípy internej medicíny SAP Bratislava, 2001, 2951 s.
4. Osina, O., Sadloňová, J.: Toxikológia - vybrané kapitoly - druhé doplnené vydanie. Vysokoškolské skriptá, 2020

5. Pelclová, D. a kol.: Nemoci z povolání a intoxikace. Praha, Karolinum. 2002, 207 s.
6. Rom, W.N. : Environmental and Occupational Medicine, Philadelphia, 2007, 1884 s.
7. Harbison, R.D. (Editor): Hamilton and Hardy´s Industrial Toxicology. N.J.: John Wiley and Sons, 6th ed., 2015, 1339 s.
8. Levy, Barry, S.: Occupational and Environmental Health. Oxford: Oxford University Press, 6th ed., 2011, 854s.

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 651

A	ABS0	B	C	D	E	FX
56,07	0,0	32,72	8,6	2,3	0,31	0,0

Lecturers: MUDr. Zdenka Matušková, PhD., MUDr. Juliana Prindešová Bušíková, PhD.

Last change: 07.04.2022

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KHCh/J-S-VL-640/22	Oncology

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 1 / 1 **per level/semester:** 14 / 14
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 8.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Internal Medicine Propedeutics 2, Pathological Anatomy 2

Course requirements:
The condition for obtaining the credit is 66% (2/3) participation in the overall study (lectures + practical exercises), written test, minimum success rate: 60%. Rating: A: 95% - 100%, B: 88% - 94%, C: 77% - 87%, D: 66% - 76%, E: 60% - 65%, Fx: 60% and less.
Scale of assessment (preliminary/final): Test

Learning outcomes:
By completing the course the students will obtain data about the epidemiological situation of oncological diseases in Slovak Republic and in the world, knowledge of individual exogenous and endogenous risk factors. They will also get acquainted with proven genetic factors, their diagnosis as well as the basics of personalized treatment. Students will obtain an overview of basic diagnostic and therapeutic, as well as preventive methods in cancer diseases.

Class syllabus:
- Terminology, epidemiology of malignant tumors.
- Basics of etiopathogenesis of malignant tumors.
- Importance of molecular biology and genetics.
- TNM classification.
- Acquisition of basic skills in the examination of patients with cancer.
- Overview of the most common diagnostic methods for malignant tumors.
- Overview of treatment modalities with a multidisciplinary approach to determining treatment strategy.
- Basics of chemotherapy, radiotherapy, surgical and supportive treatment of tumors, complications.
- Screening and prevention of malignant tumors.
- In the field of special oncology - main aspects of epidemiology, etiopathogenesis, clinical picture,
diagnostics, therapy of the most common selected cancers.

Recommended literature:
Recommended selected chapters from the following publications:
DeVita, Hellman, and Rosenberg's.Cancer: Principles&Practice of Oncology, 11th Edition, WoltersKluwer 2018, ISBN/ISSN 9781496394637, 2432 p
Niederhuber, Armitage, Doroshow, Kastan and Tepper.Abeloff'sClinicalOncology 6th Edition, Elsevier2020, ISBN978-0-323-47674-4, 2072 p
Drilon, Postow, Vasan and Carlo. PocketOncology (Pocket Notebook) SecondEdition, WoltersKluwer 2018, ISBN :ſ1496391039, 374 p

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 46

A	ABS0	B	C	D	E	FX
97,83	0,0	0,0	0,0	0,0	0,0	2,17

Lecturers: prof. MUDr. Anton Dzian, PhD., MUDr. Jana Gabajová, MUDr. Marián Ďuroška, MUDr. Monika Péčová, PhD., MUDr. Ivan Kecskés

Last change: 29.03.2022

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.OK/J-S-VL-568/19	Ophthalmology

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 3 / 1 **per level/semester:** 42 / 14
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 9.

Educational level: I.II.

Prerequisites: JLF.ÚFy/J-S-VL-516/16 - Physiology (2) and JLF.KVVTCh/J-S-VL-522a/22 - Surgical Propedeutics (2)

Course requirements:
The student assessment is undertaken with oral examination consisting of 3 questions. The assessment of answer is A, B, C, D, E, FX. Minimum grade for passing en exam: E.

Learning outcomes:
After completion of the subject the student fully understands the anatomy and physiology of the eye, its peri-ocular structures and visual pathways. The student understands the theory and is able to apply knowledge in the basics of ophthalmic anamnesis in children, adults and elderly patients. The student is able to analyze and identify special diagnostic techniques in ophthalmology as well as imaging methods (CT, MRI, ultrasound). The graduated student deeply understands issues of refractive errors and its correction with lenses and surgery.
After completion of the subject the student is able to identify the mechanisms leading to a decline in visual function caused by pathological changes of the eye and visual pathways. The student fully understands the pathophysiology, diagnosis, treatment and prognosis of the most prevalent retinal diseases like diabetic retinopathy, age related macular degeneration and retinal detachment.
After completing the course the graduate is able to apply knowledge based on the history and basic tests to diagnose the most common eye diseases and different types of injuries or trauma.
After completion of the subject the student understands the therapeutic principles of ocular diseases and ophthalmic surgical treatment and is able to identify the early signs of post operative complications like infections, haemorrhages and hypertension. The graduate understands and is able to practice first aid for eye injuries, including burns and perforations.

Class syllabus:
1. Anatomy and physiology of the eye and orbit, refractive errors and correction.
Basics in refraction, retinoscopy, Keratometry, assesement of visual acuity with and without correction. ETDRS optotyps. Theory and practise with slit lamp.
2. Diseases of cornea, sclera and conjuctiva.
Examination of the cornea and conjuctiva with the slit lamp, Placido rings
keratoscopy. Swab collection techniques for conjunctival samples.
3. Uveitis (anterior, intermediate and posterior). Ophthalmic presentations of HIV.

Examination of anterior chamber and vitreous with slit lamp, fundoscopy, direct and indirect ophthalmoscopy.
4. Disease of the orbit, eyelids and tear ducts.
Eyelids examination and function assessment of m.levator palp.sup., exophthalmometry, syringing of the tear ducts. Tear film assessment – Schirmer and B.U.T. test.
5. Disease of the retina (hereditary, diabetic retinopathy, hypertension retinopathy, Age related macular degeneration, Full thickness macular hole, Central serous chorioretinopathy, Retinopathy of prematurity). Ophthalmoscopy, optical coherence tomography, fluorescein angiography, Amsler chart, Colour vision test.
6. Disease of the transparent media, crystalline lens and cataract surgery.
Examination of the red papillary reflex and transparent media. Optic and ultrasound biometry, phacoemulsification.
7. Glaucoma. Dynamic and static perimetry. Tonometry (Goldman, Schiotz, non-contract). Gonioscopy. HRT II, GDx, OCT RNFL.
8. Red eye syndrome – dif. dg.(hyposphagma, Conjunctivitis, Uveitis, acute glaucoma).
Slit lamp examination, first AID for eye injury and caustication, eyelid evertion.
9. Neuro-ophthalmology and paediatric ophthalmology, optic neuropathy, and defects of visual pathways. Pupillary defects. Strabismus. Amblyopia. Children ophthalmic examination and screening. VEP, EMG, external ocular motility, examination of diplopia and strabismus.
10. Retinal detachment, ocular tumours, dif.dg. of

Recommended literature:
- Jack Kanski, Brad Bowling. Clinical Ophthalmology: A Systematic Approach, 7th Edition. Saunders 2011.
-Adam T. Gerstenblith, Michael P. Rabinowitz et al. The wills eye manual. 6th edition. Lippincott Williams & Wilkins, Philadelphia 2012
- David J. Spalton et al. Atlas of clinical optalmology. 3rd edition. Oxford, Mosby 2005.
- Myron Yanoff, Jay S. Duker. Ophthalmology. 3rd edition. Mosby 2009.

Languages necessary to complete the course:
english language

Notes:

Past grade distribution
Total number of evaluated students: 664

A	ABS0	B	C	D	E	FX
57,53	0,0	28,61	10,39	1,81	1,66	0,0

Lecturers: doc. MUDr. Peter Žiak, PhD., MUDr. Juraj Halička, PhD.

Last change: 07.04.2022

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.OTK/J-S-VL-570/26	Ortopedics

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 2,5 / 2 **per level/semester:** 35 / 28
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 9.

Educational level: I.II.

Prerequisites: JLF.KVVTCh/J-S-VL-524/22 - Surgery (2)

Course requirements:
100% participation in practical exercises with the possibility of one excused absence is required. Replacement of missing practical exercises is possible up to 20% of the total number, with the consent of the head of the department (in accordance with the Study Regulations and the regulation of the Dean of Jessenius Faculty of Medicine Comenius University in Martin).
For each unjustified non-participation, it is necessary to prepare a paper on a given topic in the range of 1500 words.
Lectures are available in storage of Jessenius Faculty of Medicine
Scale of assessment (preliminary/final): The final evaluation will consist of the final grade, which is calculated as the arithmetic average of the grades for the practical exam (patient examination and medical examination), for the test and for the final oral exam (2 questions).Evaluation of the test: A: 91-100 %, B: 81-90 %, C: 73-80 %, D: 66-72 %, E: 60-65 %, Fx: less than 60 %

Learning outcomes:
Students gain an overview of diseases and injuries of the musculoskeletal system. Become familiar with developmental and acquired diseases, specificities of developmental diseases, theire diagnosis and treatment options, focusing on prevention and screening examinations, become familiar with therapeutical options of skeletal trauma, can separately consider the possible therapeutic approaches based on the interpretation of X-ray findings. Acquire basic algorithms of treatment of acute skeletal trauma. After completing the course student is able to diagnose basic degenerative diseases of the skeleton and suggest possible treatment. Has a complete overview of the current state of knowledge and surgical treatment options, as well of reconstructive and acute orthopedics.

Class syllabus:
- Introduction to clinical examination of the musculoskeletal system, basic inspection, manual examination and special examination methods.
- Principles of conservative treatment - neurophysiological effects, physiotherapy, occupational therapy, ortho-prosthetics.
- Principles of surgical treatment.
- Pathophysiology of fractures and soft tissue injuries, therapeutic procedures and principles of treatment.

- Diagnosis and treatment of bone tumours, tumours of muscles and tendons by anatomical site.
- Diagnosis and treatment of congenital and acquired diseases of skeletal system.
- Diagnosis and treatment of diseases of the upper limb, including damage to muscles, tendons and fractures.
- Diagnosis and treatment of pelvic fractures and diseases - congenital dysplasia (DDH), conservative and surgical treatment.
- Diagnosis and treatment of diseases of the lower limb, including damage to muscles, tendons and fractures.
- Basic principles of arthroplasty.
- Congenital deformities of the spine and rib cage, their diagnosis and treatment.
- Degenerative diseases of the spine, diagnosis - possibilities of conservative and surgical treatment.
- Diagnosis and treatment of diseases of the musculoskeletal system in children.
- Orthopedic diseases of senile age, treatment options.

Recommended literature:

Essential Orthopaedics and Trauma, 5th Edition, David J. Dandy and Dennis J. Edwards, Imprint: Churchill Livingstone, ISBN: 978-0-443-06718-, Copyright: 200, 504 Pages

Review of Orthopaedics, 6th Edition, Mark D. Miller, Stephen R. Thompson and Jennifer Hart, Reference

Imprint: Saunders, ISBN: 978-1-4377-2024-2, Copyright: 2012, 896 Pages

Handbook of Fractures, Kenneth A. Egol, Kenneth J. Koval, Joseph David Zuckerman, Philadelphia: Lippincott Williams & Wilkins, 2006. ISBN: 0-7817-9009-, 3 Pp. 685

Oxford Handbook of Orthopaedics and Trauma, Gavin Bowden, Martin McNally, Simon Thomas, and Alexander Gibson, ISBN: 978-0-19-856958-9, 02 September 2010, 656 pages,

AO Foundation Surgery Reference

Rockwood and Green´s Fractures in Adults 7th Edition, Robert W.Bucholz, Charles M. Court-Brown, James D. Heckman, Paul Tornetta III, Lippincott Williams & Wilkins, 2010. ISBN 978-1-60547-677-3

Campbells Operative Orthopaedics, 13th Edition, Frederick M. Azar, James H. Beaty, S. Terry Canale, Elsevier, 2017. ISBN: 978-0-323-37462-0

Languages necessary to complete the course:

English language

Notes:

Past grade distribution

Total number of evaluated students: 28

A	ABS0	B	C	D	E	FX
64,29	0,0	32,14	0,0	3,57	0,0	0,0

Lecturers: MUDr. Zoltán Cibula, PhD., MHA, doc. MUDr. Maroš Hrubina, PhD., MUDr. Stanislav Křivánek, PhD., MUDr. Marian Melišík, PhD., MUDr. Jozef Almási, PhD., MPH, MUDr. Marek Rovňák, PhD., MUDr. Martin Feranec, PhD., MUDr. Jozef Holjenčík, MUDr. Peter Lisý

Last change: 03.06.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KORL/J-S-VL-569/19	Otorhinolaryngology

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 3 / 1 **per level/semester:** 42 / 14
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 9.

Educational level: I.II.

Prerequisites: JLF.ÚFy/J-S-VL-516/16 - Physiology (2) and JLF.KVVTCh/J-S-VL-522a/22 - Surgical Propedeutics (2)

Course requirements:
Condition - completed practical lessons at 100%. At least 20% of practical lessons can be justified. Compensation for missed pract.lessons will usually be made in the credit week.
Scale of assessment (preliminary/final): Student Assessment conducted by a practical exam, test with 10 questions a final oral answer – 2 questions. Overall Rating A, B, C, D, E, Fx. Minimum threshold for success: E.

Learning outcomes:
Completing the course the student obtains detailed information about the anatomy and physiology of the external nose, nasal cavity, pharynx, larynx, statoacoustic organ, oesophagus and tracheobronchial area / ENT organs /. Theory and in practice will become familiar with the basics of history and special investigative techniques in Otorhinolaryngology / ENT / and using imaging methods (CT, MRI, ultrasound) in diseases of ENT organs. Graduated understand the possibilities of diagnosis, treatment and prognosis of diseases of ENT organs. After completing the course can based on the history and basic ENT examination to diagnose the disease. Graduated understand the principles of therapy of ENT diseases, including the most common types of surgical treatment. He is able to understands and is able to practice first aid in acute diseases of ENT organs.

Class syllabus:
1./Nasal and paranasal cavities - anatomy, physiology, pathology, history, exammnation, therapy
2./Pharynx and oral cavity - anatomy, physiology , pathology, history, exammnation, therapy
3./Larynx - anatomy, physiology, pathology, history, exammnation, therapy
4./Suffocation in E.N.T. , E.N.T. surgery
5./ Ear I - anatomy, physiology, pathology, history, exammnation, therapy
6./ Ear II - hearing examination /speech, tuning forks, audiometry/ , vestibular system
7./ E.N.T.endoscopy
8./ Medical record ,individual work with patient,varia
9./ Operation room, varia
10./ Medical record ,individual work with patient,varia

Recommended literature:

1.Becker,W. et al.: Ear, Nose, and Throat Diseases , Thieme,1994 ,583pp.
2.Colman, H.B.: Hall Colman´s Diseases of the nose, Throat and Ear,and Head and neck.,Churchill 3. https://portal.jfmed.uniba.sk/autori.php?tid=134 - elektronické skriptá
EN: https://portal.jfmed.uniba.sk/clanky.php?aid=494 - electronic scripts
EN: https://portal.jfmed.uniba.sk/clanky.php?aid=459 - electronic scripts

Languages necessary to complete the course:

English language

Notes:

Past grade distribution

Total number of evaluated students: 655

A	ABS0	B	C	D	E	FX
69,47	0,0	15,88	8,7	2,6	3,21	0,15

Lecturers: prof. MUDr. Andrej Hajtman, PhD., doc. MUDr. Vladimír Čalkovský, PhD.

Last change: 16.02.2024

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚPA/J-S-VL-533/26	Pathological Anatomy (1)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 4 / 3 **per level/semester:** 56 / 42
Form of the course: on-site learning

Number of credits: 8

Recommended semester: 5.

Educational level: I.II.

Prerequisites: JLF.ÚA/J-S-VL-502/24 - Anatomy (2) and JLF.ÚHE/J-S-VL-505/15 - Histology and Embryology (1) and JLF.ÚLBl/J-S-VL-513/22 - Medical Biology and Genetics (2)

Course requirements:
I. to absolve succesfully at least 13 of 14 practical lectures/seminars. Student has to appologize the absence immediatelly and personally. Appologized absences (more than 1) require to absolve given practicum in the last compensatory 15th week of the WS, II. successful completing of the central test at the level of at least 12 of 20 available points (i.e. 60%) a III. successful completing of all 6 „small“ tests at the level of at least 18 of 30 available points (i.e. 60%).
Scale of assessment (preliminary/final): Tests

Learning outcomes:

Class syllabus:
Introduction to pathology. Methods in pathology. Death and post.mortal changes. Regressive changes: Necrosis, apoptosis, atrophy. Intracellular and extracellular errors of metabolism of lipids, carbohydrates and proteins. Pathology of inflammation: causes, manifestations, types. Exsudative superficial and interstitial inflammation. Alterative inflammation. Proliferative inflammation. Healing and reparative processes. Progressive changes: Hypertrophy, hyperplasia, metaplasia, adaptation.Granulomatous and „specific“ inflammation. Global circulatory disorders: causes and manifestations. Local circulatory disorders. Introduction to oncological pathology I.: terminology, histogenesis, oncogenesis. Introduction to oncological pathology II.: dignity, grading, staging. Epithelial tumors – classification, typing and grading. Mesenchymal tumors – classification, typing and grading. Praecanceroses. Dysplasias of the squamous and glandular epithelium. Neuroectodermal tumorus:classification, typing and grading. Teratomas. Melanocytic proliferations and neoplasms. Immunopathology: classification, immune defects, autoimmune diseases. Transplantation pathology. Immunity of neoplastic diseases. Hyperergic immunopathologic diseases – connective tissue diseases. Tumours of the blood, haematopoietic and lymphoid tissues – introduction. Myelodysplastic syndromes and myeloproliferative neoplasias.

Recommended literature:
• Underwood J.C.E.: General and systematic pathology. Edinbourgh, Churchill Livingstone 2000
• Rubin E., Farber J.L.: Pathology. J.B.Lippincott, Philadelphia 1994

• Harish Mohan: Textbook of Pathology, seventh edition, ISBN 9789351523697, 2015
• Vinary Kumar, M.D., Abul K. Abbas, Jon C. Aster: Rubin´s Basic Pathology, ISBN 978-0-8089-2432-6
• Milikowski C., Berman I.: Color atlas of basic histopathology. Appleton and Lange, Stamford 1997
• Damjanov I., Linder J.: Pathology. A Color Atlas. Mosby, 2000
• Cotran R. S., Robbins S.L., Kumar V.: Basic Pathology. Philadelphia: W.B. Saunders, 2002, ISBN
0-7216- 5122-4
• Mačák J.: General Pathology. Masaryk University 2008, ISBN 978-80-210-4549-1

Languages necessary to complete the course:
english languageovak

Notes:

Past grade distribution
Total number of evaluated students: 0

A	ABS0	B	C	D	E	FX
0,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: MUDr. Michal Kalman, PhD., MUDr. Tomáš Balhárek, PhD., prof. MUDr. Katarína Adamicová, PhD., MUDr. Petra Kolenčíková, PhD., MUDr. Juraj Marcinek, PhD., MUDr. Jozef Mičák, PhD., MUDr. Katarína Tobiášová, PhD.

Last change: 02.06.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚPA/J-S-VL-534/17	Pathological Anatomy (2)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 5 / 4 **per level/semester:** 70 / 56
Form of the course: on-site learning

Number of credits: 10

Recommended semester: 6.

Educational level: I.II.

Prerequisites: JLF.ÚA/J-S-VL-501/24 - Anatomy (1) and JLF.ÚA/J-S-VL-502/24 - Anatomy (2) and JLF.ÚHE/J-S-VL-506/16 - Histology and Embryology (2) and JLF.ÚPA/J-S-VL-533/26 - Pathological Anatomy (1)

Course requirements:
Test
Scale of assessment (preliminary/final): Credit Test

Learning outcomes:

Class syllabus:
Malignant lymphomas. Pathology of the heart I. (ICHS, myocardial infarction, valvular anomalies). Pathology of the heart II. (Hypertrophy and dilatation of the heart and cardiomyopathy). Atherosclerosis - causes, pathogenesis, manifestations and complications. Inflammatory bronchial and pulmonary diseases (focal and diffuse pneumonias). Interstitial lung diseases, fibrosis of the lungs. Tumours of the lungs. Diseases of the oral cavity, salivary glands and oesophagus. Diseases of the stomach and duodenum (inflammations, peptic ulcer disease, tumours). Diseases of the small and large bowel (malabsorption, inflammations, tumours). Diseases of the liver (hepatitis, cirrhosis, tumours) and exocrine pancreas. Pathology of the breast (non-neoplastic and neoplastic diseases). Glomerulonephritis (etiology, pathogenesis, classification). Interstitial nephritis (etiology, pathogenesis, classification). Tumours of the kidney. Pathology of the cervix and corpus uteri (non-neoplastic and neoplastic diseases). Pathology of the ovary and Fallopian tube (non-neoplastic and neoplastic diseases). Pathology of the prostate, urinary bladder, testis. Non-neoplastic blood disorders. Pathology of the endocrine system. Pathology of the skin. Pathology of the CNS I (ischaemia, bleeding, vascular changes). Pathology of the CNS II (prion´s diseases, degenerative diseases). Pathology of HIV infection and of AIDS. Pathology of selected clinical conditions. Pathology of the pregnancy. Perinatal pathology. Disorders of the bones and joints.

Recommended literature:

• Underwood J.C.E.: General and systematic pathology. Edinbourgh, Churchill Livingstone 2000
• Rubin E., Farber J.L.: Pathology. J.B.Lippincott, Philadelphia 1994
• Harish Mohan: Textbook of Pathology, seventh edition, ISBN 9789351523697, 2015
• Vinary Kumar, M.D., Abul K. Abbas, Jon C. Aster: Rubin´s Basic Pathology, ISBN

978-0-8089-2432-6
• Milikowski C., Berman I.: Color atlas of basic histopathology. Appleton and Lange, Stamford 1997
• Damjanov I., Linder J.: Pathology. A Color Atlas. Mosby, 2000
• Cotran R. S., Robbins S.L., Kumar V.: Basic Pathology. Philadelphia: W.B. Saunders, 2002, ISBN
0-7216- 5122-4
• Mačák J.: General Pathology. Masaryk University 2008, ISBN 978-80-210-4549-1

Languages necessary to complete the course:
english language

Notes:

Past grade distribution
Total number of evaluated students: 992

A	ABS0	B	C	D	E	FX
12,9	0,0	23,79	26,81	15,02	11,19	10,28

Lecturers: prof. MUDr. Katarína Adamicová, PhD., MUDr. Tomáš Balhárek, PhD., MUDr. Michal Kalman, PhD., MUDr. Petra Kolenčíková, PhD., MUDr. Juraj Marcinek, PhD., MUDr. Jozef Mičák, PhD., MUDr. Katarína Tobiášová, PhD.

Last change: 06.04.2022

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚLBch/J-S-VL-555/18	Pathological Biochemistry

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 1 / 1 **per level/semester:** 14 / 14
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 7.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Lectures

Course requirements:
Evaluatuation of students is accomplished by written examination, minimal success level: 65 %.
Evaluation : A: 91–100 %, B: 81–90 %, C: 73–80 %, D: 66–72 %, E: 60–65 %, FX: 59 % and less

Learning outcomes:
The Pathobiochemistry course is designed to deepen students' understanding of the molecular and cellular mechanisms underlying the development and progression of selected pathological processes and diseases. Emphasis is placed on disturbances of cellular homeostasis, oxidative stress, mitochondrial and endoplasmic reticulum dysfunction, impaired proteostasis, cell death, and alterations in energy metabolism. These mechanisms are subsequently applied to understanding the pathogenesis of metabolic, malignant, neurodegenerative, and cardiovascular diseases, as well as ischemia–reperfusion injury. Particular attention is paid to the interplay between metabolic, redox, and signaling processes and their role in cellular adaptation to pathological conditions. The course also covers modern molecular methods used to identify disease-related alterations in DNA, proteins, and cellular processes. Students will also become familiar with the principles of in vitro modeling of pathological processes and the use of cellular models in biomedical research. The course thus integrates fundamental biochemical knowledge with the molecular mechanisms of disease and their diagnostic and therapeutic relevance.

Class syllabus:
1. Aging, Oxidative Stress, and Disturbances of Cellular Homeostasis
2. Disorders of Proteostasis, Autophagy, and Interorganelle Communication
3. Molecular Pathobiochemistry of Cancer Cells and Metabolic Reprogramming
4. Molecular Mechanisms of Diabetes Mellitus and Atherosclerosis
5. Cerebral Ischemia and Ischemia–Reperfusion Injury
6. Molecular Mechanisms of Neurodegenerative Diseases
7. Pathobiochemistry of the Heart – Ischemia, Myocardial Infarction, and Heart Failure
8. Pathobiochemistry of Obesity Development and Progression, and Its Treatment

9. Molecular Methods in Disease Diagnostics and Research
10. Cell Engineering and In Vitro Disease Modeling

Recommended literature:
Patronos G.P., Ansorge W.J. Molecular Diagnostics, Elsevier, 2010, 598s
Harpers Biochemistry, McGraw Hill, 2000
Cecils Texbook of medicine, Saunders, 1992
Pathophysiology of diseases, Lange, 2010, 762s

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 88

A	ABS0	B	C	D	E	FX
90,91	0,0	0,0	9,09	0,0	0,0	0,0

Lecturers: prof. MUDr. Dušan Dobrota, CSc., prof. RNDr. Ján Lehotský, DrSc., prof. Ing. Zuzana Tatarková, PhD., prof. RNDr. Peter Kaplán, CSc., prof. RNDr. Peter Račay, PhD., doc. Ing. Ján Strnádel, PhD.

Last change: 18.08.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚPF/J-S-VL-535/17	Pathological Physiology (1)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 3 / 2 **per level/semester:** 42 / 28
Form of the course: on-site learning

Number of credits: 5

Recommended semester: 5.

Educational level: I.II.

Prerequisites: JLF.ÚFy/J-S-VL-515/25 - Physiology (1) and JLF.ÚLBch/J-S-VL-510/25 - Medical Biochemistry (1)

Course requirements:
Assessment of students is carried out in the form of 2 tests of continuous assessment of the study, minimum passing score is 73%. Assessment scale: A: 96-100%, B: 90-95%, C: 84-89%, D: 79-83%, E: 73-78%, FX: 72% and less. Active participation in practicals (100%). Analysis of virtual case studies.
Scale of assessment (preliminary/final): Scale of assessment (preliminary/final): 100/0

Learning outcomes:
The graduate of the course will understand the mechanisms of origin, development and termination of pathological processes related to homeostasis disorders, changes in organism reactivity, development and complications of diabetes mellitus and cerebral ischemia. Based on the analysis of virtual case studies, student is able to solve the pathomechanisms of the most common symptoms and signs of homeostasis disorders. The student can apply the knowledge gained from seminars and practicals to solve health problems of patients with disorders of homeostasis, immunity, thermoregulation, systemic inflammatory response, pain, circulatory shock, disorders of consciousness and dysfunction of the arterial and venous system of the lower extremities. The graduate of the course is able to identify the essential and basic pathomechanisms of these disease processes.

Class syllabus:
Introduction to pathophysiology – definition, main tasks of pathophysiology in medical education, content, organization and forms of the teaching process.
Health and disease – the concept of health and disease, illness and disease, stages and time course of the disease, aetiology of health, aetiology of the disease.
General etiopathogenesis of diseases - noxae and mechanisms of their influence on the body, physical, chemical. biological and social factors, the role of apoptosis, genetics and disorders in autoregulation in pathogenesis.
Mechanism leading to fluid and electrolyte balance disturbances, their consequences - movement of body fluids and electrolytes across the cell membrane and among body fluid compartments;

regulation of body fluid and electrolytes and its disturbances; volume imbalances, osmolality imbalances, dehydration, hyperhydration, edema.
Disorders of acid base balance - regulation of pH in extracellular fluid, compensatory responses to alterations in pH, metabolic acidosis and alkalosis, respiratory acidosis and alkalosis, mixed acid-base disorders, the influence of pH disorders on functions of the body systems.
Role of the changed reactivity of the body in the pathogenesis of diseases - mechanisms responsible for physiological reactivity of the body, for development of hyperreactivity and hyporeactivity. Stress – mechanisms responsible for the development of stress reaction; the role of stress in health protection and pathogenesis of diseases.
Inflammation as a protective and auto-aggressive process, systemic inflammatory response of the body (SIRS) - local inflammation versus SIRS, SIRS – causes, mechanisms, consequences. SIRS and sepsis.
Pathophysiology of nutrition – mechanisms involved in the development of obesity and malnutrition - classification, consequences for body organs and systems functions. Disturbances of lipids, proteins, and purines metabolism – pathomechanisms involved in the development of hyper- and hypolipidemias, hyper-and hypoproteinemias; hyperuricemia: consequences.
Pathophysiology of pain - definitions, classifications of pain; neuroanatomy and neurophysiology of pain; theory of pain onset, neuromodulation of pain; acute and chronic pain; visceral and somatic pain; disturbances in pain nociception and perception, the importance of pain in body defence and pathogenetic mechanisms of disease development.
Pathophysiology of carbohydrate metabolism; diabetes mellitus (DM) - disturbances in carbohydrate digestion; DM – definitions, classifications, etiopathogenesis, pathomechanisms involved in the development of DM and its symptoms and signs; acute and chronic complications of DM – mechanisms involved in their development.
Pathophysiology of circulatory shock - definitions and general pathomechanisms involved, stages of shock, types of shock, reversible and irreversible stages, effects of shock on the function of body organs and systems.
Pathophysiology of cerebral ischemia - definition, causes and mechanisms involved in the development of brain ischemia – a blood pressure decrease, rheologic properties of blood and microcirculation, collateral circulation, no-reflow phenomenon, the threshold of ischemic injury, ischemic penumbra, diaschisis, ischemic brain edema, consequences of brain ischemia.
Dysfunction of arterial and venous circulation in lower extremities - arterial occlusion by thrombosis, embolism, vasospastic diseases – causes, mechanisms, consequences. Deep venous thrombosis, thrombophlebitis, chronic venous insufficiency, causes, mechanisms, consequences, lymphedema.
Pathophysiology of pulmonary and visceral circulation - differences between pulmonary and systemic circulation, the pathogenesis of pulmonary hypertension, pathophysiology of pulmonary embolism, pulmonary shunts, disturbances of the blood circulation in the GIT – causes, mechanisms, consequences.
Pathophysiology of blood - anaemia, polycythaemia, leukaemia – classification, causes, mechanisms, consequences. Most common disturbances of coagulation, causes, mechanisms and consequences.
Pathophysiology of ageing and terminal stages - definitions, mechanisms responsible for ageing of tissues and organs, changes of organs and systems of the body due to ageing. Mechanisms involved in terminal stages development, symptoms and signs of terminal stages.
Pathophysiology of immunity - disturbances of immunity, their role in the pathogenesis of diseases.
Pathophysiology of thermoregulation - fever, hyperthermia, hypothermia, mechanisms involved in onset and development, changes of body functions, positive and negative consequences; burns and frostbites - mechanisms of development, manifestations.

Pathophysiology of disorders of consciousness.

Recommended literature:

Hammer GD, McPhee SJ. Pathophysiology of Disease. An Introduction to Clinical Medicine. McGraw-Hill, 2018. 832 s. ISBN 978-1260026504
Silbernagl S., Lang F. Color Atlas of Pathophysiology. Thieme, Stuttgart, 2016. 448 s. ISBN 978-3131165534
Seifter JL, Walch EC, Sloane DE. Integrated Physiology and Pathophysiology. Elsevier, 2021. 544 s. ISBN 978-0323597326
Plevkova J., Hanacek J., Tatar M., Brozmanova M., Buday T. Pathological physiology, selected chapters. 2017. JFM CU - Mefanet portal https://portal.jfmed.uniba.sk/articles.php?aid=371
Tatár M., Hanáček J. Pathophysiology - Topics for Seminars. Bratislava: Comenius University, 2001. 220 s. ISBN 80-223-1582-6
Plevkova J., Hanacek J. Dysfunction of the electrophysiological processes in the heart – mechanisms and manifestation. Textbook, 2016, JFM CU - Mefanet portal https://portal.jfmed.uniba.sk/articles.php?aid=334
Huether, S.E., McCance K.L., Brashers V.L.Understanding Pathophysiology. 9th ed. Elsevier Science, 2025, 1120 s. ISBN 9780323937283

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 949

A	ABS0	B	C	D	E	FX
20,02	0,0	48,68	25,71	4,53	1,05	0,0

Lecturers: prof. MUDr. Renata Péčová, PhD., MPH, MUDr. Martina Neuschlová, PhD., MUDr. Peter Kunč, PhD., prof. RNDr. Mariana Brozmanová, PhD., MUDr. Filip Olekšák, PhD., MUDr. Adam Markocsy, PhD., MUDr. Branislav Šlenker, PhD., MUDr. Eva Jurková Malicherová, PhD.

Last change: 28.08.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚPF/J-S-VL-536/17	Pathological Physiology (2)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 3 / 3 **per level/semester:** 42 / 42
Form of the course: on-site learning

Number of credits: 7

Recommended semester: 6.

Educational level: I.II.

Prerequisites: JLF.ÚFy/J-S-VL-516/16 - Physiology (2) and JLF.ÚPF/J-S-VL-535/17 - Pathological Physiology (1)

Course requirements:
Assessment of students is carried out in the form of 2 tests of continuous assessment of the study, minimum passing score is 74%. Assessment scale: A: 96-100%, B: 90-95%, C: 85-89%, D: 79-84%, E: 74-78%, FX: 73% and less. Active participation in practicals (100%). Evaluation of ECG recording, including its pathogenetic analysis. Oral examination.
Scale of assessment (preliminary/final): Scale of assessment (preliminary/final): 10/90

Learning outcomes:
The graduate of the course will understand the mechanisms of origin, development and termination of pathological processes related to cardiac circulatory disorders, pulmonary and visceral circulation, obstructive diseases of the respiratory system, kidney diseases leading to their insufficiency, underlying liver disorders and underlying endocrine, gastrointestinal and blood disorders. Based on an evaluation of pathological electrocardiographic records, student can address electrical disorders of the heart during arrhythmias and myocardial ischemia and hypertrophy; student can solve basic disorders of ventilation insufficiency based on the analysis of spirometric records. Student can analyse pathomechanisms of disorders of mechanical function of the heart leading to its failure, disorders of external ventilation, disorders of oxygen supply to the body and disorders of glomerular and tubular kidney function. Student can also analyse the causes of the most important symptoms and signs of cardiovascular, respiratory and renal diseases. The graduate of the course is able to identify the essential and basic pathomechanisms of the above disease processes.

Class syllabus:
Disorders of blood pressure regulation - systemic arterial hypertension, mechanisms of development of primary and secondary hypertension, mechanisms of complications of arterial hypertension. Systemic arterial hypotension – mechanisms, consequences.
Ischemic heart disease (IHD) - mechanisms of development of IHD, mechanisms of electrical and mechanical heart function disorders caused by ischemia, atherosclerosis as the main pathogenic factor of IHD, types of IHD, mechanisms of reperfusion injury. Arrhythmias.
Pathophysiology of heart failure - mechanisms leading to the development and progression of heart failure, mechanisms responsible for systolic and diastolic dysfunction of the heart, for acute

and chronic heart failure, for right-sided and left-sided heart failure, mechanisms of heart failure manifestations.
Pathophysiology of valvular heart diseases.
Pathomechanisms of the most common symptoms and signs of cardiovascular diseases.
Disorders of external breathing - mechanisms and causes involved in the onset of ventilation, diffusion, perfusion disorders and changes of ventilation-perfusion ratio; the effect of these disorders on gas exchange in the lungs and on blood gases.
Pathophysiology of obstructive ventilation breathing disorders - pathophysiology of bronchial asthma - etiopathogenesis, manifestations, mechanisms causing gas exchange disorders in the lungs.
Pathophysiology of chronic obstructive pulmonary disease (COPD) – pathogenesis, manifestations, gas exchange disorder.
Lung function tests – parameters of spirographic examination and its interpretation. Disturbances of external ventilation. Disturbances of respiratory system defence mechanisms.
Hypoxia - causes and mechanisms involved in the development of hypoxia, main types of hypoxia and compensatory mechanisms, the impact of hypoxia on the function of tissues, organs and systems of the organism. Hyperoxia – causes, mechanisms responsible for tissue damage in hyperoxia. Respiratory failure (RF) - causes, types of RF, consequences of RF on the function of body organs and systems.
Pathomechanisms of the most common symptoms and signs of respiratory diseases.
Pathophysiology of glomerular and tubular dysfunctions - causes and mechanisms of glomerular dysfunction, consequences of this disorder on kidney function and homeostasis of the organism; proteinuria, hematuria. Dysfunction of tubular system of the kidney – causes and mechanisms; nephrotic syndrome.
Pathophysiology of acute kidney injury (AKI) and chronic kidney disease (CKD) – etiology, pathogenesis and clinical manifestations; uremic syndrome, mechanisms responsible for multiorgan dysfunction in AKI and CKD.
Pathomechanisms of the most important symptoms and signs of impaired kidney function.
Pathophysiology of gastrointestinal tract disorders – disorders of the esophagus, disorders of the stomach, disorders of the small intestine and colon.
Pathophysiology of liver diseases – types of liver dysfunction, manifestations of liver dysfunction, pathophysiology of selected liver diseases and pathomechanisms of clinical manifestations.
Pathophysiology of endocrine system disorders – general pathomechanisms responsible for hormonal dysfunction; disorders of adrenal medulla and adrenal cortex, disorders of the parathyroids and calcium and phosphorus metabolism, disorders of hypothalamus and pituitary gland, thyroid disease, disorders of the female and male reproductive system.
Electrocardiography. Electrophysiology of the heart, ECG waveforms and intervals, ECG leads. Genesis of the normal ECG. Major ECG abnormalities. Algorithm of ECG evaluation.
Pathogenetic analysis of ECG records with disturbances of impulse formation.
Pathogenetic analysis of ECG records with disturbances of impulse conduction.
Pathogenetic analysis of ECG records in myocardial infarction and chronic ischemic heart disease, in hypertrophy and dilation of atria and ventricles of the heart and in changes in plasma electrolyte levels.

Recommended literature:

Hammer GD, McPhee SJ. Pathophysiology of Disease. An Introduction to Clinical Medicine. McGraw-Hill, 2018. 832 s. ISBN 978-1260026504
Silbernagl S., Lang F. Color Atlas of Pathophysiology. Thieme, Stuttgart, 2016. 448 s. ISBN 978-3131165534
Seifter JL, Walch EC, Sloane DE. Integrated Physiology and Pathophysiology. Elsevier, 2021. 544 s. ISBN 978-0323597326

Plevkova J., Hanacek J., Tatar M., Brozmanova M., Buday T. Pathological physiology, selected chapters. 2017. JFM CU - Mefanet portal https://portal.jfmed.uniba.sk/articles.php?aid=371
Tatár M., Hanáček J. Pathophysiology - Topics for Seminars. Bratislava: Comenius University, 2001. 220 s. ISBN 80-223-1582-6
Plevkova J., Hanacek J. Dysfunction of the electrophysiological processes in the heart – mechanisms and manifestation. Textbook, 2016, JFM CU - Mefanet portal https://portal.jfmed.uniba.sk/articles.php?aid=334
Huether, S.E., McCance K.L., Brashers V.L.Understanding Pathophysiology. 9th ed. Elsevier Science, 2025, 1120 s. ISBN 9780323937283
Adlam D., Hampton J., Hampton J.The ECG Made Easy. 10th ed. Elsevier Science, 2024, 210 s. ISBN 9780323937665

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 930

A	ABS0	B	C	D	E	FX
41,61	0,0	22,26	19,25	7,85	8,28	0,75

Lecturers: prof. MUDr. Renata Péčová, PhD., MPH, MUDr. Martina Neuschlová, PhD., MUDr. Peter Kunč, PhD., prof. RNDr. Mariana Brozmanová, PhD., MUDr. Filip Olekšák, PhD., MUDr. Adam Markocsy, PhD., MUDr. Branislav Šlenker, PhD., MUDr. Eva Jurková Malicherová, PhD.

Last change: 28.08.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KDD/J-S-VL-547/24	Pediatric Propedeutics

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 2 / 2 **per level/semester:** 28 / 28
Form of the course: on-site learning

Number of credits: 5

Recommended semester: 7.

Educational level: I.II.

Prerequisites: JLF.IKG/J-S-VL-537/17 - Internal Medicine Propedeutics (1) and JLF.ÚHE/J-S-VL-506/16 - Histology and Embryology (2) and JLF.ÚPF/J-S-VL-535/17 - Pathological Physiology (1)

Course requirements:
90% attendance at lectures and practical and theoretical exam
Scale of assessment (preliminary/final): practical and theoretical exam

Learning outcomes:
: Student will get the knowledge about the growth physiology, child development and the nutrition in particular age categories. He will know theoretically and practically the principles of basic examination of paediatric patient in all the age categories and he will be able to detect the physiological and pathological findings by physical examination of the body systems. The student after the subject attendance will get the skills to describe particular laboratory and imaging techniques and tests used in paediatrics and we will know the normal values of basic biochemical and haematological examinations in childhood.

Class syllabus:
Principles of physical examination in paediatrics and peculiarities of paediatric documentation
First examination and nursing of new-born
Screening examination in neonatal age
New-born classification
Examination of child with cardiovascular disease
Examination of child with respiratory disease
Examination of child with gastrointestinal disease
Examination of child with diseases of endocrine system
Examination of child with uropoetic disease
Examination of child with disease of musculoskeletal system
Basic principles of neurologic examination of child, indications and evaluation of cerebrospinal liquor sampling
Basic diagnostic and therapeutic algorithms in paediatric, vascular accesses, punctures, lavages, infusions, transfusions
Basic laboratory tests interpretation

Principles of examination in clinical immunology and allergology
Metabolisms of water and main electrolytes

Recommended literature:

Šagát, T., Šašinka, M., Kovács, L., Bánovčin, P. a kol. Pediatria I,II. Bratislava: Herba 2019. 1736 s. ISBN 978-80-89631-90-2
Jakušová Ľ., Buchanec, J., Bánovčin, P. a kol.: Dorastové lekárstvo. Martin: Osveta, 1: vydanie, 2014. ISBN 978-80-8063-419-3
Jeseňák, M., Bánovčin, P. a kol. Vrodené poruchy imunity. Bratislava: A-medi manažment s.r.o. 2014 580 s. ISBN 978-80-970825-6-7
K. Maťašová: Neonatológia nielen pre medikov, P+M Turany, 2021, 254s., ISBN: 9788089694808
L.Časnocha Lúčanová: Infekcie novorodencov. P+M Turany, 2019, 120s., ISBN: 9788089694600
Bánovčin, P., Zibolen, M. a kol. Základné informácie o materskom mlieku a dojčení pre pracovníkov v zdravotníctve. Bratislava: A-medi manažment s.r.o. 2016, 112 s. ISBN:978-80-89797-17-2
Fedor, M. a kol.: Intenzivní péče v pediatrii. Osveta, 2006, 461 s., ISBN 8080632170
European Resuscitation Council Guidelines 2021. voľne dostupný internetový zdroj: https://cprguidelines.eu/
Nichols, D.G. a kol.: Roger´s textbook of Pediatric Intensive Care. Fourth edition. Lippincott Williams Wilkins, 2008. 1839 s.
Časopis Pediatria /vyd. SAMEDI Bratislava

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 151

A	ABS0	B	C	D	E	FX
65,56	0,0	19,87	8,61	3,31	2,65	0,0

Lecturers: doc. MUDr. Zuzana Havlíčeková, PhD., prof. Mgr. MUDr. Miloš Jeseňák, PhD., MBA, doc. MUDr. Slavomír Nosáľ, PhD., prof. MUDr. Mirko Zibolen, CSc., prof. MUDr. Katarína Maťašová, PhD., doc. MUDr. Peter Ďurdík, PhD., MUDr. Anna Ďurdíková, PhD., MUDr. Stanislava Suroviaková, PhD., doc. MUDr. Jarmila Vojtková, PhD., MUDr. Otília Petrovičová, PhD., MUDr. Marek Pršo, PhD., doc. MUDr. Miroslava Brndiarová, PhD., MUDr. Vladimír Zoľák, PhD., doc. MUDr. Lucia Časnocha Lúčanová, PhD., doc. MUDr. Tomáš Jurko, PhD., MUDr. Tomáš Bělohlávek, PhD., MUDr. Marián Fedor, PhD., MUDr. Alžbeta Lešundák, MUDr. Zuzana Kubisová, PhD., MUDr. Veronika Kucianová, MUDr. Filip Olekšák, PhD.

Last change: 16.05.2024

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KDCh/J-S-VL-586/19	Pediatric Surgery

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: ,5 / ,5 **per level/semester:** 7 / 7
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 10.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Surgery 2

Course requirements:
a) Successful completion of all seminars and practical exercises.
b) Elaboration of a seminar work on a topic corresponding to state examination from pediatric surgery.
Scale of assessment (preliminary/final): continuous

Learning outcomes:
The graduate knows the concept, content and basics of pediatric surgery, its diagnostic and examination methods, basic therapeutic procedures and techniques. The graduate knows the most common and most serious congenital and acquired surgical diseases of children. He is familiar with the specifics of childhood and the main differences in the management of pediatric and adult surgical patients.

Class syllabus:
Lectures focused on the specifics of surgical diseases in childhood, neonatal surgery, principles of fetal surgery and the specifics of chest and abdominal trauma in children.
Practical exercises aimed at acquiring basic skills in handling surgical instruments, classical and laparoscopic suturing, working at the patient's bedside, in the operating room and the pediatric surgery clinic.
Seminar work focused on specific surgical diseases of childhood in the range of state examination in pediatric surgery.

Recommended literature:
Dragula M.: Moderné trendy v detských chirurgických odboroch 1-3. 1.vyd. Turany : Tlačiareň P +M, 2019. ISBN 978-80-7228-747-5
Šnajdauf J, Škába R et al: Dětská chirurgie. 1. vyd. Praha : Karolinum, 2005. 395 s. ISBN 80-7262-329-X
Vidiščák, M. a kol: Novorodenecká chirurgia I. Krivá : M-SERVIS s.r.o., 2008. 225 s. ISBN 978-80-969978-1-7

Šnajdauf, J., Cvachovec, K., Trč, T. et al: Detská traumatologie. Praha : Galén, 2002. 180 s. ISBN 80-7262-152-1
Puri P.: Pediatric Surgery I, II. Berlin : Springer-Verlag, 2020. 658 s. ISBN 978-3-662-43587-8
Davenport M., Geiger J.: Operative Pediatric Surgery. 8th ed. New York : CRC Press, 2020. 887 p. ISBN 978-0-815-37000-0
Puri p., Hollwarth M.E.: Pediatric Surgery. 2nd ed. Berlin : Springer-Verlag, 2019. 664 p. ISBN 78-3-662-56280-2
Puri P: Newborn Surgery. 2. vyd. London : Arnold, 2003, 955 s. ISBN 0-340-76144-X
Grosfeld JL, O´Neill JA jr, Fonkalsrud EW, Coran AG: Pediatric Surgery I., II., 6. vyd. Philadelphia : Mosby Elsevier, 2006. 2146 s. ISBN 13 978-0-323-02842-4
Journal of Pediatric Surgery
Seminars in Pediatric Surgery

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 295

A	ABS0	B	C	D	E	FX
93,9	0,34	3,73	1,36	0,0	0,34	0,34

Lecturers: MUDr. Marián Molnár, PhD., MBA, doc. MUDr. Dalibor Murgaš, PhD., MUDr. Matej Gura, PhD., MUDr. Michal Líška, MUDr. Andrii Pauk, MUDr. Barbora Špaková, PhD., MUDr. Nadežda Višňovcová

Last change: 14.03.2022

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

STATE EXAM DESCRIPTION

Academic year: 2026/2027	
University: Comenius University Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.KDD/J-SVL-SS54/21	**Course title:** Pediatrics
Number of credits: 4	
Recommended semester: 11., 12..	
Educational level: I.II.	
Recommended prerequisites: Pediatrics 3	
Course requirements: The student will answer three theoretical questions in front of an examining committee.	
Learning outcomes: A graduate masters the basics of medical examination with the use of simple instruments, basic laboratory and examination methods and interpretation of their results, diagnostics, differential diagnostics and therapy of most common illnesses of child age. In case of life threatening conditions a graduate knows the basics of administering qualified help.	
Class syllabus: A graduate has good theoretical and practical clinical skills, which will help him/her to provide medical care at inpatient/in house children ward as a secondary doctor/resident under the expert guidance of experienced doctor. The curriculum places importance on most important and most common differential diagnostic problems in pediatric medicine as well as recognition of most common birth defects of child age and pathological conditions of newborns.	
State exam syllabus:	
Recommended literature: Behrman, R. E. Kliegman, R.M., Jenson, H.B. Nelson Textbook of Pediatrics. Philadelphia: W. B. Saunders Comp., 2011. ISBN 978143770755 Lissauer, T., Clayden, G. Illustrated textbook of Paediatrics. 2004. 410 s. ISBN 0-7234-3178-7 Behrman, R.E. Essentials of Pediatrics. Philadelphia: W.B.Saunders Comp., 2000. 795 pp. Allen, Hugh D. et al. Moss and Adams´ Heart Disease in Infants, Children and Adolescents, Including the Fetus and Young Adult. Philadelphia: Lippincott Williams & Wilkins, 2001. 1468 pp.	
Languages necessary to complete the course: English language	
Last change: 22.07.2021	

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KDD/J-S-VL-571/19	Pediatrics (1)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 2 / 2 **per level/semester:** 28 / 28
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 9.

Educational level: I.II.

Prerequisites: JLF.KDD/J-S-VL-547/24 - Pediatric Propedeutics

Course requirements:
90% attendance of the practicals; elaboration of the complete medical record at the last practical lesson with the active discussion about the patients's evaluation with the teacher
Scale of assessment (preliminary/final): monitoring student activity

Learning outcomes:
The student acquires the basic theoretical and clinical knowledge in the diagnosis and treatment of diseases referred in Brief syllabus, with focusing on their specifications in different age periods.

Class syllabus:
Gastroesophageal reflux disease, diagnosis and treatment Physiological newborn Acute conditions in endocrinology Vasculitis and differential diagnosis of arthralgia in childhood Acute dehydration - etiology and treatment in children Malabsorption and malnutrition in childhood Valvular heart diseases in childhood Fever in children, differential diagnosis and treatment

Recommended literature:
Šagát, T., Šašinka, M., Kovács, L., Bánovčin, P. a kol. Pediatria I,II. Bratislava: Herba 2019. 1736 s. ISBN 978-80-89631-90-2
Jakušová Ľ., Buchanec, J., Bánovčin, P. a kol.: Dorastové lekárstvo. Martin: Osveta, 1: vydanie, 2014. ISBN 978-80-8063-419-3
Jeseňák, M., Bánovčin, P. a kol. Vrodené poruchy imunity. Bratislava: A-medi manažment s.r.o. 2014 580 s. ISBN 978-80-970825-6-7
K. Maťašová: Neonatológia nielen pre medikov, P+M Turany, 2021, 254s., ISBN: 9788089694808
L.Časnocha Lúčanová: Infekcie novorodencov. P+M Turany, 2019, 120s., ISBN: 9788089694600
Bánovčin, P., Zibolen, M. a kol. Základné informácie o materskom mlieku a dojčení pre pracovníkov v zdravotníctve. Bratislava: A-medi manažment s.r.o. 2016, 112 s. ISBN:978-80-89797-17-2
Fedor, M. a kol.: Intenzivní péče v pediatrii. Osveta, 2006, 461 s., ISBN 8080632170
European Resuscitation Council Guidelines 2021. voľne dostupný internetový zdroj: https://cprguidelines.eu/

Nichols, D.G. a kol.: Roger´s textbook of Pediatric Intensive Care. Fourth edition. Lippincott Williams Wilkins, 2008. 1839 s.
Časopis Pediatria /vyd. SAMEDI Bratislava

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 668

A	ABS0	B	C	D	E	FX
99,7	0,15	0,0	0,15	0,0	0,0	0,0

Lecturers: doc. MUDr. Ľubica Jakušová, PhD., prof. Mgr. MUDr. Miloš Jeseňák, PhD., MBA, doc. MUDr. Jarmila Vojtková, PhD., prof. MUDr. Peter Bánovčin, CSc., doc. MUDr. Zuzana Havlíčeková, PhD., prof. MUDr. Katarína Maťašová, PhD., doc. MUDr. Slavomír Nosáľ, PhD., MUDr. Stanislava Suroviaková, PhD., prof. MUDr. Mirko Zibolen, CSc., doc. MUDr. Peter Ďurdík, PhD., MUDr. Anna Ďurdíková, PhD.

Last change: 07.04.2022

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KDD/J-S-VL-572/19	Pediatrics (2)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 3 / 2 **per level/semester:** 42 / 28
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 10.

Educational level: I.II.

Prerequisites: JLF.KDD/J-S-VL-571/19 - Pediatrics (1)

Course requirements:
90% attendance at practicals, medical record work out at last practical and active discussion with the teacher during practicals
Scale of assessment (preliminary/final): monitoring of student´s activity

Learning outcomes:
Student will get the theoretical and practical knowledge in diagnosis, differential diagnosis and treatment of selected disorder with attention to their special features in different age periods.

Class syllabus:
Vomiting and abdominal pain – differential diagnosis Inflammatory bowel disorders Inflammatory heart disease Acute respiratory insufficiency, ARDS Acute states in pediatrics: acute renal failure, acute liver failure, acute pancreatitis, diabetic ketoacidosis Chnges in complete blood count, anemias an trombocytopenias in childhood Autoimmune disorders in childhood, Immune system in childhood ant itd disorders Intensive care in neonatology

Recommended literature:
Šagát, T., Šašinka, M., Kovács, L., Bánovčin, P. a kol. Pediatria I,II. Bratislava: Herba 2019. 1736 s. ISBN 978-80-89631-90-2
Jakušová Ľ., Buchanec, J., Bánovčin, P. a kol.: Dorastové lekárstvo. Martin: Osveta, 1: vydanie, 2014. ISBN 978-80-8063-419-3
Jeseňák, M., Bánovčin, P. a kol. Vrodené poruchy imunity. Bratislava: A-medi manažment s.r.o. 2014 580 s. ISBN 978-80-970825-6-7
K. Maťašová: Neonatológia nielen pre medikov, P+M Turany, 2021, 254s., ISBN: 9788089694808
L.Časnocha Lúčanová: Infekcie novorodencov. P+M Turany, 2019, 120s., ISBN: 9788089694600
Bánovčin, P., Zibolen, M. a kol. Základné informácie o materskom mlieku a dojčení
pre pracovníkov v zdravotníctve. Bratislava: A-medi manažment s.r.o. 2016, 112 s.
ISBN:978-80-89797-17-2
Fedor, M. a kol.: Intenzivní péče v pediatrii. Osveta, 2006, 461 s., ISBN 8080632170

European Resuscitation Council Guidelines 2021. voľne dostupný internetový zdroj: https://cprguidelines.eu/
Nichols, D.G. a kol.: Roger´s textbook of Pediatric Intensive Care. Fourth edition. Lippincott Williams Wilkins, 2008. 1839 s.
Časopis Pediatria /vyd. SAMEDI Bratislava

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 651

A	ABS0	B	C	D	E	FX
99,85	0,0	0,0	0,15	0,0	0,0	0,0

Lecturers: prof. MUDr. Peter Bánovčin, CSc., doc. MUDr. Ľubica Jakušová, PhD., prof. Mgr. MUDr. Miloš Jeseňák, PhD., MBA, doc. MUDr. Peter Ďurdík, PhD., MUDr. Anna Ďurdíková, PhD., doc. MUDr. Zuzana Havlíčeková, PhD., MUDr. Stanislava Suroviaková, PhD., doc. MUDr. Jarmila Vojtková, PhD., doc. MUDr. Slavomír Nosáľ, PhD., prof. MUDr. Katarína Maťašová, PhD., prof. MUDr. Mirko Zibolen, CSc., MUDr. Otília Petrovičová, PhD., MUDr. Marek Pršo, PhD., MUDr. Vladimír Zoľák, PhD., MUDr. Tomáš Bělohlávek, PhD., MUDr. Marián Fedor, PhD., MUDr. Alžbeta Lešundák, MUDr. Zuzana Kubisová, PhD., MUDr. Veronika Kucianová

Last change: 07.04.2022

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KDD/J-S-VL-573/22	Pediatrics (3)

Educational activities:
Type of activities: practicals
Number of hours:
per week: **per level/semester:** 240s
Form of the course: on-site learning

Number of credits: 6

Recommended semester: 11., 12..

Educational level: I.II.

Prerequisites: JLF.KDD/J-S-VL-572/19 - Pediatrics (2) and JLF.KDD/J-S-VL-580/19 - Summer Practice-Pediatrics

Course requirements:
Exam consist of practical part - medical record work out at last practical and active discussion with the teacher during practicals

Learning outcomes:
Absolvent has practical skills in child care, from admittion to the hospital to discharge. Separate implementation of the history and physical examination. Proposal for diagnostic procedures, their interpretation, differential diagnosis. &work with medical documentation. Graduate knows basic diagnostic and treatment algorithms for the most common pediatric diseases.

Class syllabus:
Work at the department and in ambulance. Assisting in numerous diagnostic and therapeutics procedures. Work with documentation, admittion and discharge of patients. Evaluation of laboratory findings, biochemical tests, X-rays and ECG. Active participation in ward rounds, seminars and two duties within six hours.

Recommended literature:
Šagát, T., Šašinka, M., Kovács, L., Bánovčin, P. a kol. Pediatria I,II. Bratislava: Herba 2019. 1736 s. ISBN 978-80-89631-90-2
Jakušová Ľ., Buchanec, J., Bánovčin, P. a kol.: Dorastové lekárstvo. Martin: Osveta, 1: vydanie, 2014. ISBN 978-80-8063-419-3
Jeseňák, M., Bánovčin, P. a kol. Vrodené poruchy imunity. Bratislava: A-medi manažment s.r.o. 2014 580 s. ISBN 978-80-970825-6-7
K. Maťašová: Neonatológia nielen pre medikov, P+M Turany, 2021, 254s., ISBN: 9788089694808
L.Časnocha Lúčanová: Infekcie novorodencov. P+M Turany, 2019, 120s., ISBN: 9788089694600
Bánovčin, P., Zibolen, M. a kol. Základné informácie o materskom mlieku a dojčení pre pracovníkov v zdravotníctve. Bratislava: A-medi manažment s.r.o. 2016, 112 s. ISBN:978-80-89797-17-2
Fedor, M. a kol.: Intenzivní péče v pediatrii. Osveta, 2006, 461 s., ISBN 8080632170

European Resuscitation Council Guidelines 2021. voľne dostupný internetový zdroj: https://cprguidelines.eu/
Nichols, D.G. a kol.: Roger´s textbook of Pediatric Intensive Care. Fourth edition. Lippincott Williams Wilkins, 2008. 1839 s.
Časopis Pediatria /vyd. SAMEDI Bratislava

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 373

A	ABS0	B	C	D	E	FX
77,21	0,27	15,01	6,7	0,27	0,54	0,0

Lecturers: prof. MUDr. Peter Bánovčin, CSc., doc. MUDr. Ľubica Jakušová, PhD., prof. Mgr. MUDr. Miloš Jeseňák, PhD., MBA, doc. MUDr. Peter Ďurdík, PhD., MUDr. Anna Ďurdíková, PhD., doc. MUDr. Zuzana Havlíčeková, PhD., MUDr. Stanislava Suroviaková, PhD., doc. MUDr. Jarmila Vojtková, PhD., doc. MUDr. Slavomír Nosáľ, PhD., prof. MUDr. Katarína Maťašová, PhD., MUDr. Marek Pršo, PhD., MUDr. Vladimír Zoľák, PhD., MUDr. Otília Petrovičová, PhD., doc. MUDr. Miriam Kuricová, PhD., doc. MUDr. Lucia Časnocha Lúčanová, PhD., doc. MUDr. Tomáš Jurko, PhD., MUDr. Tomáš Bělohlávek, PhD., MUDr. Marián Fedor, PhD., MUDr. Alžbeta Lešundák, MUDr. Zuzana Kubisová, PhD., MUDr. Veronika Kucianová

Last change: 07.04.2022

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚFa/J-S-VL-529/21	Pharmacology (1)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 3 / 2 **per level/semester:** 42 / 28
Form of the course: on-site learning

Number of credits: 5

Recommended semester: 7.

Educational level: I.II.

Prerequisites: JLF.ÚPF/J-S-VL-535/17 - Pathological Physiology (1) and JLF.ÚLBch/J-S-VL-511/17 - Medical Biochemistry (2)

Course requirements:
1. To participate actively on the practical sessions;
2. To pass 2 written tests during the semester or one final test in the end of semester.
The minimal limit of successfulness: 60 %. Assessment: A: 91–100 %, B: 81–90 %, C: 73–80 %, D: 66–72 %, E: 60–65 %, Fx: 60 % and lower.
3. Pharmacotherapeutic plan presentation.
Scale of assessment (preliminary/final): 50/50

Learning outcomes:
The student graduated a subject knows:
The basic pharmacokinetic principles (absorption, distribution, biotransformation and elimination of drugs) and factors influencing the fate of drugs in the organisms;
The essential of pharmacodynamics –mechanisms of drugs action from the molecular to the level of the organism;
Drugs prescription – the rules and methods for prescription of brand products (HVLP) as well the basics of individually prepared medicinal products (ILP);
The following special pharmacology topics:
• Pharmacology of the autonomic nervous system;
• Respiratory system;
• Gastrointestinal system;
• Anticancer agents;
• Immunopharmacology;
• Autacoids Pharmacology (histamine, serotonin, prostanoids, CGRP);
• Drugs affect the metabolism of hormones, homeostasis of minerals, bone metabolism;
• Pharmacology of vitamins.
The main properties of drugs are characterised from the following point of view: mechanism of action, indications, contraindications, side effects, essential interactions and dosage.

Class syllabus:
General Pharmacology:

- Introduction to pharmacology: basic definitions, kinds of therapy, the route of drug administrations; Drug metabolism: absorption, distribution, metabolism, elimination and excretion of drugs; The basic pharmacokinetic parameters; Basics of pharmacodynamics: mechanism of drug action, the drug action at the molecular level; Factors influencing pharmacokinetic and pharmacodynamic of drugs, endogenous and exogenous factors determined drug effect.
Basics of drugs prescription:
- Pharmacopoeia, classification and nomenclature of drugs, ways of administration, prescription, rules for drugs prescribing – trade products, extemporaneous drugs, opiates, antibiotics;
- Prescription of liquid drug forms – trade products, basics of extemporaneous drugs;
- Prescription of solid and soft drug forms – trade products, basics of extemporaneous drugs;
- Special Pharmacology:
- Pharmacology of ANS: parasympathomimetics, parasympatholytics; sympathomimetics; sympatholytic;
- Pharmacology of GIT: treatment of peptic ulcer disease and inflammatory bowel disease, antiemetics, emetics, prokinetic agent, spasmolytics, treatment of diarrhoea, laxatives, pancreatic enzymes, drugs affecting the function of the bile ducts;
- Pharmacology of respiratory system: treatment of asthma and COPD, antitussives and expectorants;
- Hormones: pancreatic hormones and antidiabetic drugs, adrenal hormones, sex hormones and contraceptives, the hypothalamus and pituitary hormones, thyroid hormones and antithyroid drugs;
- Drugs affecting homeostasis of minerals, bone metabolism, vitamins;
- Principles of anticancer pharmacotherapy;
- Pharmacology of autacoids (histamine antagonists, treatment of allergies, drugs affecting serotonin metabolism, CGRP, migraine treatment, drugs affecting prostaglandins);
- Fundamentals of immunopharmacology (immunosuppression, immunomodulation);
- Clinical trials of drugs;
- Practical lessons aimed at the application of acquired knowledge obtained from the subjects Pharmacology 1. in clinical cases.

Recommended literature:

Ritter JM, Flower RJ, Henderson G, Loke YK, MacEwan D, Robinson E, Fullerton J. Rang & Dale's Pharmacology. 10th ed. Elsevier; 2023.
Katzung, B.G.: Basic Clinical Pharmacology, 19 th edition, New York : McGraw-Hill, 2021.
www.ema.europa.eu

Languages necessary to complete the course:

English

Notes:

Past grade distribution

Total number of evaluated students: 486

A	ABS0	B	C	D	E	FX
30,66	0,0	32,72	19,96	11,73	4,94	0,0

Lecturers: prof. MUDr. Mgr. Juraj Mokrý, PhD., doc. PharmDr. Martin Kertys, PhD., Mgr. Eduard Gondáš, PhD., prof. RNDr. Soňa Fraňová, PhD., prof. MUDr. Martina Šutovská, PhD., Mgr. Matúš Dohál, PhD., doc. MUDr. Marta Jošková, PhD.

Last change: 04.08.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚFa/J-S-VL-530/26	Pharmacology (2)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 3 / 2 **per level/semester:** 42 / 28
Form of the course: on-site learning

Number of credits: 6

Recommended semester: 8.

Educational level: I.II.

Prerequisites: JLF.ÚFa/J-S-VL-529/21 - Pharmacology (1) and JLF.ÚPF/J-S-VL-536/17 - Pathological Physiology (2)

Course requirements:
During semester: The successful passing two written tests or one final test; Presentation of Pharmacotherapeutic plan.
Final exam: Written test and oral examination (Content of final exam: General and Special Pharmacology, Drug prescription).
The minimal limit of successfulness: 60 %. Assessment: A: 91–100 %, B: 81–90 %, C: 73–80 %, D: 66–72 %, E: 60–65 %, Fx: 60 % and lower.
Scale of assessment (preliminary/final): 30/70

Learning outcomes:
Graduate of the subject Pharmacology 2 masters: Pharmacotherapy of diseases of the cardiovascular system, CNS, management of pain, rational use of antimicrobial drugs. He masters the principles of pharmacotherapy of pain and inflammation, the basics of poison treatment, the specifics of pharmacotherapy in selected groups of patients. Individual parts of Special pharmacology are focused on the characteristics of representatives of selected pharmacological groups in terms of mechanism of action, indication, contraindications, adverse reactions, serious interactions, pharmacokinetic parameters and dosage.

Class syllabus:
Pharmacology of CNS: Classification of the receptor systems and drugs; Hypnotics and Sedatives; Anxiolytics; Antidepressants; Antimanics; Antipsychotics; Nootropic and Cognitive substances; Anticonvulsants; Antiparkinsonic drugs; Drugs used in anaesthesiology: General anaesthetics; Local anaesthetics; Muscle relaxants; Premedication.
- Pharmacology of CVS: Therapy of hypertension; Therapy of heart failure; Antiarrhythmic drugs; Treatment of angina pectoris; Peripheral vasodilators; Anticoagulants; Thrombolytics; Prevention and therapy of CVS diseases; Antithrombotics; Lipid-lowering agents; Pharmacotherapy of obesity.
- Antimicrobial substances: ATB (Inhibitors of bacterial cell wall synthesis, Inhibitors of protein and nucleic acid synthesis); Antituberculotics; Antifungal agents; Anthelmintics; Antimalarial; Antiviral drugs.

- Treatment of pain and inflammation: Opioid analgesics and adjuvant therapy; Non-opioid analgesics; Principles of pain treatment; NSAIDs, Antirheumatics, Antiuratic drugs.
- Principles of toxicology: Treatment of drug poisoning; Drug addiction and addiction therapy.
- Specifics of pharmacotherapy in selected groups of patients: Specifics of pharmacotherapy in Paediatrics, Geriatrics.
- Practical lessons aimed at the application of acquired knowledge obtained from the subjects Pharmacology 2. in clinical cases.

Recommended literature:

Ritter JM, Flower RJ, Henderson G, Loke YK, MacEwan D, Robinson E, Fullerton J. Rang & Dale's Pharmacology. 10th ed. Elsevier; 2023.
Katzung, B.G.: Basic Clinical Pharmacology, 19 th edition, New York : McGraw-Hill, 2021.
www.ema.europa.eu

Languages necessary to complete the course:

English language

Notes:

Past grade distribution

Total number of evaluated students: 0

A	ABS0	B	C	D	E	FX
0,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: prof. RNDr. Soňa Fraňová, PhD., prof. MUDr. Martina Šutovská, PhD., prof. MUDr. Mgr. Juraj Mokrý, PhD., doc. PharmDr. Martin Kertys, PhD., Mgr. Eduard Gondáš, PhD., Mgr. Matúš Dohál, PhD., doc. MUDr. Marta Jošková, PhD.

Last change: 04.08.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KPF/J-S-VL-561/19	Phthisiology

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: ,5 / ,5 **per level/semester:** 7 / 7
Form of the course: on-site learning

Type, volume, methods and workload of the student - additional information
Lecture/Practical
Extent (in hours) – per week:0,5/0,5
Method – attendance form

Number of credits: 1

Recommended semester: 10.

Educational level: I.II.

Prerequisites: JLF.ÚMI/J-S-VL-518/17 - Microbiology (2) and JLF.ÚFa/J-S-VL-529/21 - Pharmacology (1) and JLF.IK1/J-S-VL-541/19 - Internal Medicine (3)

Course requirements:
1. 100% attendance et practicals.
2. To pass through the final evaluation. The final evaluation is performed by means of an online test.
Scale of assessment (preliminary/final): 0,5/0,5 C (1 Credit)

Learning outcomes:
Student learns the current knowledge on epidemiology, clinical picture, diagnostics, differential diagnostics, treatment, and prevention of tuberculosis.

Class syllabus:
Lectures:
1. Tuberculosis. Etiology, Epidemiology, Pathogenesis, Clinical Manifestation
2. Tuberculosis. Diagnostics, Classification.
3. Treatment of tuberculosis. Extrapulmonary tuberculosis. Non-tuberculous mycobacteriosis.
Practicals:
1. Clinical examination of patients with respiratory diseases in the spectrum of differential diagnosis of pulmonary tuberculosis (patients with active tuberculosis are not examined for epidemiological reasons). Referral of examined patients by students with a discussion on clinical manifestation, diagnosis and differential diagnosis, moderated by a teacher.
2. Draft plan of antituberculotic treatment for patients referred in the previous practical. Discussion on treatment regimens and its side effects, moderated by a teacher. Subsequently, the students are divided into smaller groups, each group receives an anonymized medical record of a patient with tuberculosis. After becoming familiar with it, students present cases with an emphasis on diagnosis, differential diagnosis and treatment. The presentations are moderated by the teacher and open for discussion by the entire study group.

Recommended literature:

Longo, D. L., Fauci, A. S., Kasper, D. L., Hauser, S. L., Jameson, J. L., Loscalzo, J., Holland, S. M., & Langford, C. A. (Eds.). (2025). Harrison's principles of internal medicine (22nd ed.). McGraw Hill.
Ait-Khaled N, Enarson DA. Tuberculosis: A Manual for Medical Students. Geneva: World Health Organization; 2003. Dostupné online: https://iris.who.int/server/api/core/bitstreams/578dbbf5-45b7-473e-8ad8-96e5842de614/content

Languages necessary to complete the course:
english

Notes:

Past grade distribution
Total number of evaluated students: 620

A	ABS0	B	C	D	E	FX
62,9	0,0	21,13	9,19	4,84	1,94	0,0

Lecturers: doc. MUDr. Robert Vyšehradský, PhD., MUDr. Anna Ružinák Bobčáková, PhD., MUDr. Ján Červeň, MPH, MUDr. Ľuboš Hamada, MUDr. Ivana Lipták Žiačiková, MUDr. Terézia Gondášová

Last change: 25.08.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚTV/J-S-VL-TV1/22	Physical Education (1)

Educational activities:
Type of activities: practicals
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 1.

Educational level: I.II.

Prerequisites:

Course requirements:
presence

Learning outcomes:
The graduate of this subject personify his attitude to the necessity of healthy life style. He will understand the health sense of active movement for the human health. He will bring into his attitude and conviction the role of active movement, sport as a effective prevention against civilization illnesses of today as a part of therapy to improve the state of health of the whole population. He will become own surely about the importance of sport and motion activities by harmonic young human character progress.

Class syllabus:
Deepen the base of collective games knowledge (basketball, volleyball, football, floorball, hockeyball). Explain and show the rules on examples. Collective games needs integration of individual ability and skills for its profit to the whole collective. All listed games support the active life style and offer progress of balance between physical and mental work of students at medical faculty.

Recommended literature:
Lubor Tománek , Teória a didaktika basketbalu
Ludmila Zapletalová, Vladimír Přidal, Peter Mačura, 1996 Teória a didaktika volejbalu

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 497

ABS0	M
100,0	0,0

Lecturers: PaedDr. Jozef Šimeček

Last change: 08.03.2022
Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚTV/J-S-VL-TV2/22	Physical Education (2)

Educational activities:
Type of activities: practicals
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 2.

Educational level: I.II.

Prerequisites:

Course requirements:
presence

Learning outcomes:
The graduate of this subject personify his attitude to the necessity of healthy life style. He will understand the health sense of active movement for the human health. He will bring into his attitude and conviction the role of active movement, sport as a effective prevention against civilization illnesses of today as a part of therapy to improve the state of health of the whole population. He will become own surely about the importance of sport and motion activities by harmonic young human character progress.

Class syllabus:
Deepen the base of collective games knowledge (basketball, volleyball, football, floorball, hockeyball). Explain and show the rules on examples. Collective games needs integration of individual ability and skills for its profit to the whole collective. All listed games support the active life style and offer progress of balance between physical and mental work of students at medical faculty.

Recommended literature:
Lubor Tománek , Teória a didaktika basketbalu
Ludmila Zapletalová, Vladimír Přidal, Peter Mačura, 1996 Teória a didaktika volejbalu

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 466

ABS0	M
100,0	0,0

Lecturers: PaedDr. Jozef Šimeček

Last change: 08.03.2022
Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚTV/J-S-VL-TV3/22	Physical Education (3)

Educational activities:
Type of activities: practicals
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 3.

Educational level: I.II.

Prerequisites:

Course requirements:
presence

Learning outcomes:
The graduate of this subject personify his attitude to the necessity of healthy life style. He will understand the health sense of active movement for the human health. He will bring into his attitude and conviction the role of active movement, sport as a effective prevention against civilization illnesses of today as a part of therapy to improve the state of health of the whole population. He will become own surely about the importance of sport and motion activities by harmonic young human character progress.

Class syllabus:
Deepen the base of collective games knowledge (basketball, volleyball, football, floorball, hockeyball). Explain and show the rules on examples. Collective games needs integration of individual ability and skills for its profit to the whole collective. All listed games support the active life style and offer progress of balance between physical and mental work of students at medical faculty.

Recommended literature:
Lubor Tománek , Teória a didaktika basketbalu
Ludmila Zapletalová, Vladimír Přidal, Peter Mačura, 1996 Teória a didaktika volejbalu

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 352

ABS0	M
100,0	0,0

Lecturers: PaedDr. Jozef Šimeček

Last change: 08.03.2022
Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚTV/J-S-VL-TV4/22	Physical Education (4)

Educational activities:
Type of activities: practicals
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 4.

Educational level: I.II.

Prerequisites:

Course requirements:
presence

Learning outcomes:
The graduate of this subject personify his attitude to the necessity of healthy life style. He will understand the health sense of active movement for the human health. He will bring into his attitude and conviction the role of active movement, sport as a effective prevention against civilization illnesses of today as a part of therapy to improve the state of health of the whole population. He will become own surely about the importance of sport and motion activities by harmonic young human character progress.

Class syllabus:
Deepen the base of collective games knowledge (basketball, volleyball, football, floorball, hockeyball). Explain and show the rules on examples. Collective games needs integration of individual ability and skills for its profit to the whole collective. All listed games support the active life style and offer progress of balance between physical and mental work of students at medical faculty.

Recommended literature:
Lubor Tománek , Teória a didaktika basketbalu
Ludmila Zapletalová, Vladimír Přidal, Peter Mačura, 1996 Teória a didaktika volejbalu

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 353

ABS0	M
100,0	0,0

Lecturers: PaedDr. Jozef Šimeček

Last change: 08.03.2022
Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚFy/J-S-VL-515/16	Physiology (1)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 5 / 4 **per level/semester:** 70 / 56
Form of the course: on-site learning

Number of credits: 9

Recommended semester: 3.

Educational level: I.II.

Prerequisites: JLF.ÚLBf/J-S-VL-504/15 - Medical Biophysics and JLF.ÚA/J-S-VL-501/25 - Anatomy (1)

Course requirements:
1. Completion of 93% of practical exercises and active participation in practical exercises
2. Passing two tests of continuous assessment of the study with at least 60% success (Physiology of Blood, Physiology of nervous system, senses and muscles).
3. Preparation of at least one power-point presentation on selected topic
Scale of assessment (preliminary/final): 100/0

Learning outcomes:
The graduate gain a knowledge and understands the functions of the human body on the molecular, subcellular, cellular, tissue, organ and system levels up to an integrated - holistic understanding of the functions of a healthy organism in interaction with society and nature - environmental factors. After completing Physiology 1, he/she understands the functions of the blood, muscles, nervous system, thermoregulation, endocrine system and kidneys. Interactive lectures, analysis of case studies as well as the use of simulation technologies will contribute to the deepening of knowledge. The practical part of the teaching of Physiology 1 will enable the graduate to better understand the abovementioned functions and gain basic experience and skills for independent investigation of some functions by modern methods.

Class syllabus:
Physiology of Blood (body fluids, plasma, erythrocytes, leukocytes, platelets, blood groups, mechanisms of blood clotting, basic methods of blood examination), Physiology of skeletal and smooth muscles, Exercise physiology, Physiology of peripheral, autonomic and central nervous system, Physiology of endocrine system, mechanisms and regulation of urine production and excretion and ontogenetic aspects of given systems.

Recommended literature:
Hall, J.E. et al. Textbook of Medical Physiology. 13th. ed. Philadelphia: Elsevier, 2016. 1145 pp. ISBN: 978-14557-7005-2
Barett KE et al.: Ganong´s Review of Medical Physiology. 24th Ed. McGraw-Hill Medical, 2012. 768 pp. ISBN: 978-00-717-8003-2

Javorka, K. et al.: Medical Physiology. Laboratory manual.5. vydanie Bratislava: UK, 2019, 162 pp. ISBN: 978-80-223-4792-1
Koeppen BM, Stanton BA: Berne & Levy Physiology. 6th Edition. Philadelphia: Mosby/Elsevier, 2008, 864 pp. ISBN: 978-0-323-04582-7.
Čalkovská, A., Javorka, K. Lessons in Physiology. Publisher: Jessenius Faculty of Medicine in Martin, Comenius University in Bratislava, 2016. 194 pp. 1st ed. Print: KO & KA spol. s.r.o., Bratislava, ISBN: 978-80-8187-013-2

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 1058

A	ABS0	B	C	D	E	FX
17,01	0,47	20,32	40,36	16,73	5,1	0,0

Lecturers: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Kamil Javorka, DrSc., prof. MUDr. Michal Javorka, PhD., prof. MUDr. Daniela Mokrá, PhD., prof. MUDr. Ingrid Tonhajzerová, PhD., MUDr. Zuzana Lazarová, PhD., MUDr. Ivan Žila, PhD., RNDr. Pavol Mikolka, PhD., Mgr. Danica Jurčáková, PhD., doc. MUDr. Nikola Ferencová, PhD.

Last change: 13.09.2024

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚFy/J-S-VL-516/16	Physiology (2)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 5 / 4 **per level/semester:** 70 / 56
Form of the course: on-site learning

Number of credits: 10

Recommended semester: 4.

Educational level: I.II.

Prerequisites: JLF.ÚFy/J-S-VL-515/16 - Physiology (1)

Course requirements:
1. Completion of 93% of practical exercises and active participation in practical exercises
2. Passing three tests of continuous assessment of the study with at least 60% success (Physiology of gastrointestinal system, Physiology of cardiovascular system and Physiology of respiratory system).
3. Preparation of at least one power-point presentation on selected topic
Scale of assessment (preliminary/final): 50/50

Learning outcomes:
The graduate gain a knowledge and understands the functions of the human body on the molecular, subcellular, cellular, tissue, organ and system levels up to an integrated - holistic understanding of the functions of a healthy organism in interaction with society and nature - environmental factors. After completing Physiology 2 he/she understands the functions of the digestive system, cardiovascular system and respiratory system. Interactive lectures, analysis of case studies as well as the use of simulation technologies will contribute to the deepening of knowledge. The practical part of the teaching of Physiology 2 will help the graduate to better understand the abovementioned functions and gain basic experience and skills for independent investigation of some functions by modern methods.

Class syllabus:
Physiology of the digestive system, mechanisms of digestion and resorption of nutrients, regulation of food and water intake, Physiology of nutrition, Physiology of the cardiovascular system (physiology of heart, blood vessels, specific areas of circulation, regulation of cardiovascular system, reflexes, basic methods of cardiovascular examination), Physiology of respiratory system (ventilation, distribution, diffusion, perfusion, pulmonary surfactant, respiratory mechanics, blood gas transport, artificial lung ventilation, regulation of breathing, airway and lung reflexes, examination methods) and ontogenetic aspects of the functions of these systems.

Recommended literature:
Hall, J.E. et al. Textbook of Medical Physiology. 13th. ed. Philadelphia: Elsevier, 2016. 1145 pp. ISBN: 978-14557-7005-2

Barett KE et al.: Ganong´s Review of Medical Physiology. 24th Ed. McGraw-Hill Medical, 2012. 768 pp. ISBN 978-00-717-8003-2
Javorka, K. et al.: Medical Physiology. Laboratory manual.5. vydanie Bratislava: UK, 2019, 162 pp. ISBN: 978-80-223-4792-1
Koeppen BM, Stanton BA: Berne & Levy Physiology. 6th Edition. Philadelphia: Mosby/Elsevier, 2008, 864 pp. ISBN: 978-0-323-04582-7
Čalkovská, A., Javorka, K. Lessons in Physiology. Publisher: Jessenius Faculty of Medicine in Martin, Comenius University in Bratislava, 2016. 194 pp. 1st ed. Print: KO & KA spol. s.r.o., Bratislava. ISBN 978-80-8187-013-2

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 1162

A	ABS0	B	C	D	E	FX
20,57	0,09	21,43	20,48	13,08	11,79	12,56

Lecturers: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Kamil Javorka, DrSc., prof. MUDr. Michal Javorka, PhD., prof. MUDr. Daniela Mokrá, PhD., prof. MUDr. Ingrid Tonhajzerová, PhD., MUDr. Zuzana Lazarová, PhD., MUDr. Ivan Žila, PhD., RNDr. Pavol Mikolka, PhD., Mgr. Danica Jurčáková, PhD., doc. MUDr. Nikola Ferencová, PhD.

Last change: 13.09.2024

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.PK/J-S-VL-548/24	Psychiatry (1)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 2 / 1 **per level/semester:** 28 / 14
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 7.

Educational level: I.II.

Prerequisites: JLF.PK/J-S-VL-532/25 - Medical Psychology and Basics of Communication

Course requirements:
1. The participation in practicals is compulsory for at least 12-times
2. Substitution of practicals by participation in a lecture
3. Specific part of the teaching will take place online
Check in the course of practicals:
- Evaluation till the end of 7th week: active participation in practicals; permanent study check (control question); examination of patients, case reports and analysis.
- Evaluation till the end of 14th week: written test – minimal success 60 %; examination of patients, case reports and analysis; permanent study check (control question).
Evaluation of the results during practicals
Rating: A/1 = 91 – 100 %; B/1,5 = 81 – 90 %; C/2 = 73 – 80 %; D/2,5 = 66 – 72 %; E/3 = 60 – 65 %, Fx = less than 60 %
Scale of assessment (preliminary/final): 20/80

Learning outcomes:
After completion of the subject the student has a knowledge in basics of general psychiatry – student is able to understand content of the subject, etiopathogenesis, diagnostic methods and treatment of psychiatric disorders and general psychopathology, with an emphasis on communication with patients with impaired mental functions. Student is able to perform basic examination aimed to patient´s history and disturbed mental functions.

Class syllabus:
P R O G R A M M E O F L E C T U R E S I N P S Y C H I A T R Y
1. Introduction to psychiatry. Basic concepts. Etiology and pathogenesis of mental disorders. Epidemiology in psychiatry.
2. Psychopathology I. Disturbances of perception. Disturbances of thinking. Disturbances of memory.
3. Psychopathology II. Disturbances of emotions. Disturbances of will and action. Disturbances of consciousness and attention. Disturbances of sleep.
4. Psychopathology III. Disturbances of intelligence. Disturbances of personality.
5. Methods of psychiatric therapy I. Psychopharmacotherapy

6. Methods of psychiatric therapy II. Psychotherapy and other therapeutic methods.
7. Syndromology of mental disorders. Principles of classification in clinical psychiatry.
P R O G R A M M E O F P R A C T I C A L I N P S Y C H I A T R Y S E S S I O N S
1. Disturbances of consciousness. Quantitative and qualitative disturbances of consciousness. Sleep disorders.
2. Disturbances of perception. Hallucinations and illusions, gnostic and psychosensoric disturbances.
3. Intellectual impairment. Retardation and degradation of intellectual abilities.
4. Disturbances of emotion.
5. Disturbances of thinking. Disturbances of speed of thinking, disturbances of structure of thinking, delusions.
6. Disturbances of memory. Quantitative and qualitative disturbances of memory.
7. Disturbances of motor activity, disturbances in behavior. Catatonic disturbances.
8. Disturbances of personality. Global and special disturbances of personality.
9. Syndromes in Psychiatry. Emotional syndromes, syndromes of disturbed consciosness, syndromes of disturbed motor activity and behavior, paranoid syndromes, asthenic syndromes, syndromes of organic lesions.
10. Mental status examination. Basic principles of the examination of psychiatric patients. m Observation, description of the patient´s behavior, interview. Mental status examination of patients of different diagnostic groups. Mental status examination of psychotic and non - psychotic patients. Special approaches to the examination according to diagnostic groups.
11. Therapeutic methods in Psychiatry.
12. Psychiatric report, written record. Some practical questions of the examination of patients in psychiatry. Structure and parts of psychiatric report.
13. Laboratory tests in Psychiatry. Overview of laboratory tests frequently used in psychiatry. Significance and value of laboratory tests in diagnosis of mental disorders. Significance of psychodiagnosis /neuropsychological testing.
14. Compensatory week. It is determined for substitution, consultation and signature of Psychiatry I evaluation after fulfillment of all requirements.

Recommended literature:

x Geddes, J. et al. Psychiatry. 4th ed. Oxford: Oxford University Press Inc., New York 2012. 477 s. ISBN 978-0-19-923396-0 x Gelder, M. et al. Psychiatry. Oxford: Oxford University Press, 2006. 333 s. ISBN 0-19-852863-9 x Black, D.W., Andreasen, N.C. Introductory Textbook of Psychiatry. Washington: American Psychiatric Publishing, 5th ed., 2011. 717 s. ISBN 978-1-58562-382-2(alk.Paper), ISBN 978-1-58562-400-3 (pbk.: alk paper) Gelder, M. et al. Oxford Textbook of Psychiatry. Oxford: Oxford University Press, 1998. 944 s. ISBN 0-19-262501-2 Moore, D. P., Jefferson, J. W. Handbook of Medical Psychiatry. St. Louis: Mosby, 1996. 545 s. ISBN 0-8151-6484-X Andreasen, N. C., Black, D. W. Introductory Textbook of Psychiatry.Washington: American Psych. Press, 1991. 565 s. ISBN 0-88048-112-9 Kolibáš, E. Introduction to Clinical Psychiatry. Bratislava: EKOL, 1996. 107 s. ISBN 80-967610-0-5 Janicak, P.G. Handbook of Psychopharmacotherapy. Philadelphia: Lippincott Williams & Wilkins, 1999. 391 s. ISBN 0-683-30722-3 Stefan, M. et al. An Atlas of Schizophrenia. London: Parthenon Publ. Group, 2002. 98 s. ISBN 1-85070-074-5 Sartorius, N., Schulze, H. Reducing the Stigma of Mental Illness. Cambridge: Cambridge University Press, 2005. 238 s. ISBN 13: 978-0-521-54943-1

Languages necessary to complete the course:
english

Notes:

Past grade distribution
Total number of evaluated students: 161

A	ABS0	B	C	D	E	FX
82,61	0,0	7,45	4,97	2,48	2,48	0,0

Lecturers: doc. MUDr. Igor Ondrejka, PhD., MUDr. PhDr. Igor Hrtánek, PhD., MUDr. Miloslav Oppa, PhD., MUDr. Andrea Gurová, PhD., MUDr. Zuzana Mlynčeková, PhD.

Last change: 05.08.2025

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.PK/J-S-VL-549/24	Psychiatry (2)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 2 / 1 **per level/semester:** 28 / 14
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 8.

Educational level: I.II.

Prerequisites: JLF.PK/J-S-VL-548/24 - Psychiatry (1)

Course requirements:
1. The participation in practicals is compulsory 12-times according to timetable.
2. Replacement of the practical session by participation in the lecture and in 13th week
3. Favourable results during running controls.
4. Favourable results in test
1. Evaluation till the end of 14th week: active participation in practicals; permanent study check (control question), examination of patients, case reports and analysis, test – minimal success 60 %; Rating: A/1 = 91 – 100 %; B/1,5 = 81 – 90 %; C/2 = 73 – 80 %; D/2,5 = 66 – 72 %; E/3 = 60 – 65 %, Fx = less than 60 %
Examination: oral exam or test exam
Scale of assessment (preliminary/final): 20/80

Learning outcomes:

Class syllabus:
P R O G R A M M E O F L E C T U R E S I N P S Y C H I A T R Y
1. Affective disorders I. Depressive disorders.
2. Affective disorders II. Manic disorders. Bipolar affective disorders.
3. Schizophrenia, schizotypal disorder, persistent delusional disorders, schizoaffective disorder.
4. Reactive disorders, neurotic disorders. Posttraumatic stress disorders. Adjustment disorders. Somatoform disorders. Eating disorders. Sleep disorders.
5. Psychoactive substance use disorders. Psychoactive substance dependence due to alcohol and other drugs. Abuse and harmful use, dependence, intoxication, withdrawal state.
6. Organic and symptomatic mental disorders. Old age psychiatry. Child and adolescent psychiatry.
P R O G R A M M E O F P R A C T I C A L S E S S I O N S I N P S Y C H I A T R Y
1. Affective disorders I. Depressive disorders. Manic episode.
2. Affective disorders II. Bipolar affective disorder. Persistent affective states. Other affective disorders and affective disorders not otherwise specified. Differential diagnosis and treatment of affective disorders.
3. Schizophrenia.
4. Persistent delusional disorders. Delusional disorders (paranoia), paraphrenia.

5. Schizotypal disorder. Schizoaffective disorders.
6. Reactive disorders, neurotic disorders. Posttraumatic stress disorder. Adjustment disorder. Neurosis, somatoform disorders .
7. Personality disorders and conduct disorders. Specific personality disorders.
8. Alcoholism. Clinical findings, complication, alcoholic psychoses.
9. Other drug dependences. Clinical findings, intoxication, and withdrawal phenomena.
10. Symptomatic mental disorders. Symptomatic and organic mental disorders. Basic concepts, clinical features, diagnosis, treatment.
11. Organic mental disorders. Dementias and other organic mental disorders. Mental retardation.
12. Child psychiatry. Mental disorders of childhood and adolescence. Eating disorders. Diagnosis and treatment.
13. Psychiatric sexology. Sleep disorders. Some legal aspects and matters of organization in psychiatry. Practical aspects of care in psychiatry. Forensic services.
14. Compensatory practical session.

Recommended literature:

Geddes, J. et al. Psychiatry. 4th ed. Oxford: Oxford University Press Inc., New York 2012. 477 s. ISBN 978-0-19-923396-0
Gelder, M. et al. Psychiatry. Oxford: Oxford University Press, 2006. 333 s. ISBN 0-19-852863-9
Black, D.W., Andreasen, N.C. Introductory Textbook of Psychiatry. Washington: American Psychiatric Publishing, 5th ed., 2011. 717 s. ISBN 978-1-58562-382-2(alk.Paper), ISBN 978-1-58562-400-3 (pbk.: alk paper)
Gelder, M. et al. Oxford Textbook of Psychiatry. Oxford: Oxford University Press, 1998. 944 s. ISBN 0-19-262501-2
Moore, D. P., Jefferson, J. W. Handbook of Medical Psychiatry. St. Louis: Mosby, 1996. 545 s. ISBN 0-8151-6484-X
Andreasen, N. C., Black, D. W. Introductory Textbook of Psychiatry.Washington: American Psych. Press, 1991. 565 s. ISBN 0-88048-112-9 Kolibáš, E. Introduction to Clinical Psychiatry. Bratislava: EKOL, 1996. 107 s. ISBN 80-967610-0-5 Janicak, P.G. Handbook of Psychopharmacotherapy. Philadelphia: Lippincott Williams & Wilkins, 1999. 391 s. ISBN 0-683-30722-3
Stefan, M. et al. An Atlas of Schizophrenia. London: Parthenon Publ. Group, 2002. 98 s. ISBN 1-85070-074-5 Sartorius, N., Schulze, H. Reducing the Stigma of Mental Illness. Cambridge: Cambridge University Press, 2005. 238 s. ISBN 13: 978- 0-521-54943-1

Languages necessary to complete the course:
english

Notes:

Past grade distribution
Total number of evaluated students: 157

A	ABS0	B	C	D	E	FX
52,87	0,0	41,4	4,46	1,27	0,0	0,0

Lecturers: doc. MUDr. Igor Ondrejka, PhD., MUDr. PhDr. Igor Hrtánek, PhD., MUDr. Miloslav Oppa, PhD., MUDr. Andrea Gurová, PhD., MUDr. Zuzana Mlynčeková, PhD.

Last change: 05.08.2025

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027	
University: Comenius University Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.ÚVZ/J-S-VL-617/19	**Course title:** Public Health (1)
Educational activities: **Type of activities:** practicals / lecture **Number of hours:** **per week:** 3 / 1 **per level/semester:** 42 / 14 **Form of the course:** on-site learning	
Number of credits: 4	
Recommended semester: 7.	
Educational level: I.II.	
Prerequisites: JLF.ÚFy/J-S-VL-516/16 - Physiology (2) and JLF.IKG/J-S-VL-537/17 - Internal Medicine Propedeutics (1) and JLF.ÚO/J-S-VL-531/17 - Ethics in medicine	
Recommended prerequisites: Physiology 2, Internal Medicine Propedeutics 1, Medical Ethics	
Course requirements: SCORING SYSTEM OF THE COURSE a/ active attendance at 13 seminars (á 2 points)* in total max. 26 points b/ preparation and presentation of two assigned tasks** (á 7 points) 1n total max. 14 points c/ test exam – (60 multi choice questions) 1 points per question max 60 points *Form of evaluation of the active participation during seminars will be determined by the teacher at the beginning of the session (e.g. short feedback test/quiz, problem-solving, group work and applying the topic to real-world situations). Passive attendance alone will not be evaluated. **Each student will choose two themes of active output assignments which they will prepare and present during respective seminar in the specified form (interactive demonstration, leading of panel discussion, case, study, presentation). Supporting documents (ppt presentations, background documents, outlines, prepared sets of questions for panel discussion etc.) should be uploaded them into the moodle e-learning system until given deadlines. Attendance at the seminars is mandatory. Absences may be excused by the respective teacher for valid reasons up to a maximum of 20% of the total class time, in accordance with the Study Regulations of JFM CU. In the case of more than 20% of missing seminars their excuse is possible only upon a written request and the approval of the dean of the faculty. For successful completion of the course, at least 60 points in final evaluation are needed. Requirements for eligibility to sign for exam: • 2 prepared and presented assignments during practicals • Full attendance at practicals. Only two excused missing practicals are allowed Total evaluation (max. 100 points): Acquired points Evaluation 100 – 91 A (excellent - 1) 90 – 81 B (very good - 1, 5) 80 – 73 C (good - 2)	

72 – 66 D (satisfying - 2,5)
65 – 60 E (enough - 3)
59 - and less Fx (not enough - 4)
Scale of assessment (preliminary/final): 40/60

Learning outcomes:
After completion of the subject the student understands the role of hygiene (as a preventive medical branch) within public health in prevention, health promotion and protection. The student is able to apply theoretical knowledge in practice. The student is able to identify risk factors influencing health status of individuals and population. The student is able to apply health and preventive strategies on a community level to improve health of different population groups living in different conditions and environments. The student is able to analyse methods of monitoring of population health, its indicators, morbidity, mortality, social determinants of health, and health statistics. The student understands importance of health promoting and preventive programs, basic principles of health care economy, health care systems, and organization of health care in the world. The student is able to apply knowledge to consistent preventive thinking and to act in health related issues and in relevant research, to interpret and implement health promotion and protection, and prevention of diseases.

Class syllabus:
Public Health. Prevention, health protection and promotion. Environmental hygiene. Hygiene of children and adolescent. Occupational Health. Radiation hygiene. Nutritional hygiene. Social medicine - history, research methods. World Health Organization (WHO), Red Cross Movement , European Centre for Disease Control (ECDC) Prevention and control of chronic diseases. Basic demographic indicators. Indicators of population health. Social determinants of health. Healthcare systems in the world – definitions, models. Health care facilities, health care economy and policy. Health inequalities, equity in health. Quality in health care. Evidence-based health care. Modeling and simulation in medical and health sciences.

Recommended literature:
OBLIGATORY LITERATURE
KAWACHI, I. RICCIARDI, W.: Oxford Handbook of Public Health Practice (4 ed.). Oxford University Press. 2020, ISBN-13:9780198800125
Public Health Textbook. https://www.healthknowledge.org.uk/public-health-textbook
https://moodle.uniba.sk
RECOMMENDED LITERATURE
NAKLÁDALOVÁ, M. et al.: Occupational Musculoskeletal Diseases. Multimedia Guide fot the English Programme Students. https://www.occupational.diseases.upol.cz/book/
https://www.who.int/

Languages necessary to complete the course:
english

Notes:

Past grade distribution
Total number of evaluated students: 682

A	ABS0	B	C	D	E	FX
65,69	0,0	28,89	4,25	1,03	0,15	0,0

Lecturers: prof. MUDr. Tibor Baška, PhD., Mgr. Eliška Štefanová, PhD., Mgr. Róbert Čecho, PhD., MUDr. Peter Vyšehradský, PhD., PhDr. Mgr. Martin Novák, PhD., Mgr. Miroslava Sovičová, PhD.
Last change: 17.08.2026
Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚVZ/J-S-VL-618/19	Public Health (2)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 1 / 1 **per level/semester:** 14 / 14
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 10.

Educational level: I.II.

Prerequisites: JLF.ÚVZ/J-S-VL-617/19 - Public Health (1)

Recommended prerequisites:
Public Health 1

Course requirements:
EVALUATION OF THE COURSE
1. Active attendance at the practicals : 3 points for each session max. 12 points
2. Pre-exam test : 14 questions – 2 points each max. 28 points
3. Final oral examination (the student draws 2 questions) max. 60 points
Final evaluation (max. 100 points):
Achieved points
Evaluation/grade
100 – 91 A (excellent - 1)
90 – 81 B (very good – 1.5)
80 – 73 C (good - 2)
72 – 66 D (satisfactory – 2.5)
65 – 60 E (sufficient - 3)
59 and less Fx (fail - 4)
Attendance at practicals is mandatory. Absences may be excused for valid reasons up to a maximum of 20% of the total class time, in accordance with the Study Regulations of JFM CU.
For successful completion of the course, at least 60 points in final evaluation are needed.
Scale of assessment (preliminary/final): 40/60

Learning outcomes:
After completion of the subject the student understands epidemiological methods, basic terms of medical statistics, features of epidemic process, immunization and vaccination, disinfection, disinsection, rodent control, main characteristics of communicable diseases occurrence, epidemiology of chronic non-communicable diseases and their primary, secondary and tertiary prevention, essential terms of tropical and travel medicine

Class syllabus:

Epidemiology – historical introduction, basic terms of epidemiology of communicable diseases (source, infectious agent, outbreak area, epidemic process and its conditions, features), principles of control of communicable diseases, preventive and repressive measures (measures in outbreak area), Epidemic measures in practice Prevention of hospital infections Epidemiological classification of infectious diseases, international cooperation in communicable disease control Epidemiological method, population approach in study of diseases, descriptive methods, population and sample, determining of normality and abnormality, validity of diagnostic methods Analytic epidemiological studies (observational studies, intervention studies), screening, introduction to clinical epidemiology, principles of evidence based medicine Vaccinology - epidemiological importance, trends and perspectives. Vaccination schedule Essentials of travel and tropical medicine Epidemiology of chronic diseases, population intervention methods of prevention and health promotion Population health in Slovakia, Europe and World Multifactorial ethiology of non-communicable diseases. Risk factors and their evaluation Evaluation of cardiovascular risk Epidemiology and prevention of oncologic diseases. Current problems of epidemiology in European and Global context, a role of international institutions (WHO, ECDC)

Recommended literature:

OBLIGATORY LITERATURE
Špaleková, M.: EPIDEMIOLOGY FOR STUDY OF PUBLIC HEALTH - Vol. 1, 1st Ed., Comenius University in Bratislava, 2015, 162p, ISBN: 978-80-223-3933-9 https://zona.fmed.uniba.sk/fileadmin/lf/sucasti/Teoreticke_ustavy/Ustav_epidemiologie/2020-2021ZS/Epidemiology_Vol.I..pdf
Špaleková, M.: EPIDEMIOLOGY FOR STUDY OF PUBLIC HEALTH - Vol. 2, 1st. Ed., Comenius University in Bratislava, 2015, 86p, ISBN: 978-80-223-3934-6 https://zona.fmed.uniba.sk/fileadmin/lf/sucasti/Teoreticke_ustavy/Ustav_epidemiologie/2020-2021ZS/Epidemiology_II.Vol._.pdf
RECOMMENDED LITERATURE
Beaglehole, R., Bonita, R., Kjellsröm, T. Basic epidemiology. 2nd edition, Geneva:WHO, 2006. 213 pp. ISBN 92-4-154707-3
Ahrens, W., Pigeot, I.: Handbook of Epidemiology. Springer, 2014, 2498 p.
Preventing Chronic Diseases. A Vital Investment. WHO Global Report. Ženeva:WHO, 182 s. ISBN 92-4-156300-1
https://apps.who.int/iris/handle/10665/43328
Global Status Report on NCDs. 2014 Geneva: World Health Organization. ISBN: 978 92 4 156485 4 : https://apps.who.int/iris/bitstream/handle/10665/148114/9789241564854_eng.pdf
Global health risks. 2009 Geneva: World Health Organization. https://www.who.int/healthinfo/global_burden_disease/GlobalHealthRisks_report_full.pdf
ECDC. Immunisation and vaccines. https://www.ecdc.europa.eu/en/immunisation-and-vaccines
Centers for Disease Control and Prevention http://www.cdc.gov/
World Health Organization www.who.int

Languages necessary to complete the course:

english

Notes:

Past grade distribution

Total number of evaluated students: 651

A	ABS0	B	C	D	E	FX
56,68	0,0	25,81	12,6	3,07	1,69	0,15

Lecturers: prof. MUDr. Tibor Baška, PhD., PhDr. Mgr. Martin Novák, PhD., doc. PhDr. Romana Ulbrichtová, PhD., doc. PhDr. Simona Kelčíková, PhD.
Last change: 17.08.2026
Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.RK/J-S-VL-622/18	Radiology

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 1,5 / 1,5 **per level/semester:** 21 / 21
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 8.

Educational level: I.II.

Prerequisites: JLF.ÚLBf/J-S-VL-504/15 - Medical Biophysics and JLF.ÚA/J-S-VL-503/16 - Anatomy (3)

Course requirements:
1. Mandatory requirements are: 100 % attendance of clinical practices and at least 7 lectures. It is necessary to write an essay for each missed practicum (the same topic; at least 2000 words). 2. During semester, students can be evaluated by short written test anytime (at least 60 % success rate is mandatory; A: 95 % - 100 %, B: 88 % - 94 %, C: 77 % - 87 %, D: 66 % - 76 %, E: 60 % - 65 %). 3. Practical exam (last practicum) – interpretation of basic pathological findings on X-Ray, ultrasound, CT, MR, DSA and MMG images. 4. Final oral exam (3 questions). No question can be graduated by FX to pass the exam successfully.

Learning outcomes:
During the course, medical students should become familiar with: 1. PRINCIPLES OF RADIOLOGICAL TECHNIQUES, PRINCIPLES OF RADIATION BIOLOGY AND RADIATION PROTECTION, CONTRAST MEDIA IN RADIOLOGY Origin of ionizing radiation and interaction of ionizing radiation, radiological quantities and units, fundamentals of ionizing radiation detection, physical characteristics of radiological devices used for diagnostics and therapy, basics of radiobiology, basic principles of radiation protection, radiation protection of health care workers when working with sources of radiation, radiation protection of patients , justification of medical exposures, medical exposure optimization, diagnostic reference levels for medical exposure, radiation exposure of patients in radiodiagnostics, special requirements for ensuring radiation protection of children and pregnant women, emergency situations and accidents. A student is capable to do the following: - To list the components of an X-ray unit and explain the process of X-ray generation - To describe the principles of and common indications for fluoroscopy - To list and describe the factors affecting image quality and dose in radiography and fluoroscopy - To describe the principles of soft tissue radiography in mammography - To describe the positioning of the patient for common radiographic techniques (e.g. chest X-ray) - To describe the normal anatomy of the various organs on radiographic images - To explain the concept of spatial, temporal and contrast resolution - To explain the principle of contrast in the different imaging modalities - To describe the relative diagnostic value of a computed tomography (CT) examination for the various organ systems and indications - To explain the physical basis of image formation of

computed tomography - To describe the scale of Hounsfield units (HU) and the principle of window centre and width - To list normal levels of attenuation (in HU) for various organs and common pathologies (e.g. haemorrhage, calcifications) - To describe the normal anatomy of the various organs on CT - To explain the relative value of a magnetic resonance imaging (MRI) examination for the various organ systems and indications - To describe the basic principles of image formation with MRI - To list the most commonly used pulse sequences in MRI (including T2-weighted sequences, T1-weighted sequences, fat suppressed sequences such as STIR sequences, FLAIR sequences, diffusion-weighted imaging) - To describe the absolute or relative contraindications against MR imaging - To explain the safety issues in the MR environment with regard to patients and staff - To describe the normal anatomy of the various organs on MRI - To explain the relative value of an ultrasound examination for various organ systems and indications - To describe the basic principles of image formation with ultrasonography and to list the tissue properties that determine it - To list the frequency of transmission and different types of transducers for various indications for ultrasonography - To be aware of the indications and contraindications for contrast-enhanced ultrasonography - To describe the principles of the Doppler effect - To describe the normal anatomy of the various organs on ultrasonography - To describe the principles of digital subtraction angiography (DSA) - To have a basic understanding of the different types and techniques of image-guided interventions - To describe the basic infrastructure of imaging informatics, including Picture Archiving and Communication Systems (PACS) and Radiological Information Systems (RIS) - To list the sources and properties of ionising radiation and radioactive decay - To describe the generation of X-rays and their interaction with matter - To describe the most important dose measures, including absorbed energy dose (Gy), organ and effective doses (Sv) - To be familiar with the principles of the dose length product (DLP) - To explain stochastic, deterministic and teratogenic radiation effects - To describe the effects of ionising radiation on cells, tissues and organs and to list the mechanisms of repair - To list types and magnitudes of radiation risk from radiation exposure in medicine and to compare it to radiation exposure from natural sources - To list concepts of dose measurement and the relevant dose limits - To understand the As Low As Reasonably Achievable (ALARA) principle - To list the factors influencing image quality and dose in diagnostic radiology - To describe the indications for the use of X-ray contrast media in the study of various organs/organ systems - To describe the indications for the use of CT contrast media in the study of various organs/organ systems - To list typical risks and side effects of commonly used of iodinated contrast media (X-ray and CT contrast media) - To describe the indications for the use of MR contrast media in the study of various organs/organ systems - To list typical risks and side effects of commonly used MRI contrast media - To have a basic understanding of contrast media for ultrasonography - To have a basic understanding of the various timing phases of contrast media application and their respective values according to the clinical problem - To describe risk factors of contrast media nephrotoxicity and to list measures to reduce it - To have a basic understanding of nephrogenic systemic fibrosis (NSF) and to list measures to reduce it - Definitions: Artificial Intelligence (AI), Machine Learning (ML), Deep Learning (DL), Artificial Neural Network (ANN), Deep neural network (DNN):
- Fundamentals of Artificial Intelligence: Supervised, unsupervised, reinforcement learning. Algorithm development. Data sharing.
- Deep learning and its applications in medical imaging (Classification, Detection, Segmentation, Image enhancement)
- Possible benefits, risks, available evidence and future with AI. 2. NEURORADIOLOGY - To describe the normal anatomy and physiology of the brain, skull, skull base, spine, spinal cord and nerve roots on cross-sectional imaging - To describe the relative values of and indications for radiography, ultrasonography, CT and MRI in neuroradiology - To explain when to refer a patient to ultrasonography/Doppler sonography, CT or MRI in neuroradiology - To list typical imaging features of ischaemic and haemorrhagic stroke on cross-sectional imaging - To describe

common imaging features of traumatic brain injury and spinal trauma on cross-sectional imaging - To list typical imaging features of white matter disease, inflammation and degeneration on cross-sectional imaging - To describe typical imaging features of the most common tumours of the brain and spine - To describe the anatomy and to describe typical imaging features of pathologies of pontocerebellar angle - To describe the acute headache imaging management and to describe typical imaging features of related diseases - To identify and describe the imaging features of brain complications: mass effect, infiltration, engagement, oedema, contrast enhancement - To have a basic knowledge of neuroradiological interventions including revascularisation and coiling - To have a basic understanding of the common indications, contraindications and limitations in neuroradiology 3. HEAD AND NECK IMAGING - To describe the normal anatomy and physiology of the head and neck on cross-sectional imaging - To describe the relative values of and indications for radiography, fluoroscopy, ultrasonography, CT and MRI in head and neck imaging - To explain when to refer a patient to radiography, ultrasonography, CT or MRI of the head and neck - To describe common imaging manifestations of trauma, inflammation and infection of the head and neck region - To describe typical imaging manifestations of tumours of the head and neck region - To have a basic understanding of the common indications, contraindications and limitations in head and neck imaging 4. CARDIOVASCULAR RADIOLOGY - To describe the normal anatomy and physiology of the heart and vessels on radiographs, ultrasonography/ Doppler sonography, CT and MRI - To describe the relative values of and indications for radiography, ultrasonography, CT and MRI in cardiovascular imaging - To explain when to refer a patient to radiography, ultrasonography/Doppler sonography, CT or MRI of the cardiovascular system - To describe the different types of cardiac configuration on chest radiography - To explain which chambers form the border of the cardiac silhouette on chest radiography - To have a basic understanding of congenital heart disease and the diagnostic features on conventional radiographs - To differentiate radiological features and causes of cardiac enlargement, including acquired valvular disease and pericardial disease - To describe radiological features of vascular occlusion, stenosis and thrombosis - To explain the diagnostic evaluation of ischaemic heart disease - To describe the normal dimensions of the aorta and classify aortic aneurysms and dissections - To have a basic understanding of the common indications, contraindications and limitations in cardiovascular imaging 5. EMERGENCY RADIOLOGY - To have an understanding when to refer a patient to radiography, ultrasonography/Doppler sonography, CT, MRI or DSA in emergencies in adult and child age 6. INTERVENTIONAL RADIOLOGY - To describe the normal anatomy and physiology of the arterial and venous system and have an understanding of its relevance to interventional radiology - To list typical endovascular approaches to common disorders in interventional radiology - To list typical approaches for image-guided biopsy taking, placement of drainages and ablative techniques - To have an understanding of the risk involved in common interventional techniques - To list the standard procedure in emergency situations, including resuscitation techniques - To have a basic understanding of the common indications, contraindications and limitations in interventional radiology 7. CHEST RADIOLOGY AND BREAST IMAGING - To describe the anatomy and physiology of the respiratory system, heart and vessels, mediastinum and chest wall on radiographs and CT - To describe the relative values of and indications for radiography and CT in thoracic imaging - To explain when to refer a patient to radiography, CT or MRI of the chest - To have an understanding of imaging patterns in chest radiology including consolidations, nodules, hyperlucencies, hyperinflation - To describe the chest radiography signs, including silhouette sign, air bronchogram, air crescent sign, deep sulcus sign - To describe the imaging appearance of monitoring and support devices (“tubes and lines”) including endotracheal tubes, central venous catheters, nasogastric tubes, chest drains, pacemakers - To list the typical chest radiography appearances and common causes of pleural effusion - To describe the clinical and imaging features of pneumothorax and tension pneumothorax

- To list typical imaging features of pneumonia on radiographs and CT - To list typical imaging features of emphysema on radiographs and CT - To describe the typical imaging appearances of bronchiogenic carcinoma and pulmonary metastases on radiographs and CT - To list the typical imaging patterns of mediastinal masses on radiographs and CT - To have an understanding of the clinical work-up of lung nodules - To describe the imaging signs of pulmonary embolism - To have a basic understanding of the common indications, contraindications and limitations in thoracic imaging - To be aware of the differences between high resolution CT (HRCT) of the chest, CT angiography of the pulmonary arteries and staging CT of the chest - To describe the normal anatomy and physiology of the female breast, axilla and associated structures and how they change with age - To have a basic understanding of the main radiological techniques employed in breast imaging (including mammography, ultrasonography and MRI) as well as their indications and relative diagnostic value - To know when to refer a patient for mammography, ultrasound and/or MRI of the breast - To have a basic understanding of the appearance of common benign diseases and of breast cancer on mammography - To have a basic understanding of techniques of ultrasound of the breast and of the appearance of common breast pathologies on ultrasound - To have a basic understanding of MRI of the breast - To have a basic understanding of the common indications, contraindications and limitations in breast imaging 8. GASTROINTESTINAL AND ABDOMINAL RADIOLOGY - To describe the normal anatomy and physiology of the internal viscera, abdominal organs, omentum, mesentery and peritoneum on conventional radiology, CT, ultrasound and MRI - To describe the relative values of and indications for radiography, fluoroscopy, ultrasonography, CT and MRI in gastrointestinal and abdominal imaging - To explain when to refer a patient to radiography, ultrasonography, CT or MRI of the abdomen - To list typical imaging features of acute abdominal conditions, including perforation, haemorrhage, inflammation, infection, obstruction, ischaemia and infarction on radiographs, ultrasound and CT - To list typical imaging features of colon tumours, diverticulitis, and inflammatory bowel diseases - To describe typical imaging features of primary and secondary tumours of the solid abdominal organs and of the gastrointestinal tract - To have a basic understanding of the common indications, contraindications and limitations in gastrointestinal and abdominal imaging 9. UROGENITAL RADIOLOGY, GYNAECOLOGICAL AND OBSTETRIC RADIOLOGY - To describe the normal anatomy and physiology of the retroperitoneum, kidneys, ureters, bladder, urethra and genital tract on ultrasonography and cross-sectional imaging - To describe the relative values of and indications for radiography, ultrasonography, CT and MRI in urogenital radiology - To explain when to refer a patient to radiography, CT or MRI of the urogenital system - To have an understanding of contrast medium management in renal failure - To list typical imaging features of the most common diseases of the kidneys and of the urinary tract - To list typical imaging features of the most common pathologies of the prostate, seminal vesicles and testes - To have a basic understanding of the common indications, contraindications and limitations in urogenital imaging - To describe the normal anatomy and physiology of the female reproductive organs on ultrasound, CT and MRI - To describe the relative values of and indications for radiography, ultrasonography, CT and MRI in gynaecological and obstetric imaging - To explain when to refer a patient to radiography, ultrasonography/Doppler sonography, CT or MRI in gynaecological and obstetric imaging - To explain how the female reproductive organs change with age and during pregnancy - To list typical imaging features of benign and malignant tumours of the female reproductive organs - To describe the typical imaging features of the most common disorders associated with pregnancy and delivery - To list techniques to reduce exposure doses for radiographic and CT examinations of the female reproductive organs - To have a basic understanding of the common indications, contraindications and limitations in gynaecologic and obstetric imaging 10. PAEDIATRIC RADIOLOGY - To describe normal paediatric anatomy and physiology and how it changes with age on conventional radiology, ultrasonography and cross-sectional imaging -

To describe the relative values of and indications for radiography, ultrasound, radiography CT and MRI in children - To explain when to refer a child to radiography, ultrasonography/Doppler sonography, CT or MRI - To explain the increased vulnerability of children to ionizing radiation - To have a basic understanding of the typical imaging manifestations of accidental and non-accidental trauma - To list basic imaging features of the most common disorders of the brain, spine, chest, gastrointestinal tract and abdomen, urogenital system and musculoskeletal system in neonates, infants, children and adolescents - To have a basic understanding of the common indications, contraindications and limitations in paediatric imaging 11. MUSCULOSKELETAL IMAGING - To describe the normal anatomy and physiology of the musculoskeletal system on conventional radiology and cross-sectional imaging - To describe the relative values of and indications for radiography, ultrasonography, CT and MRI in musculoskeletal imaging - To explain when to refer a patient to radiography, ultrasonography, CT or MRI of the musculoskeletal system - To list common imaging presentations of trauma involving the skeleton on conventional radiographs - To list typical imaging presentations of degenerative disorders of the musculoskeletal system on conventional radiographs - To describe common imaging manifestations of musculoskeletal infection and inflammation, metabolic diseases, including osteoporosis, and common bone tumours - To have a basic understanding of the common indications, contraindications and limitations in musculoskeletal imaging

Class syllabus:

1. Introduction to radiology (the physical basis of image formation including conventional x-ray, computed tomography, angiography, MMG, magnetic resonance imaging and ultrasound). Hybrid imaging techniques. PACS. Artificial intelligence. Principles of radiation protection. Contrast media. 2. Neuroradiology I. – Brain. 3. Neuroradiology II. - Spine; Radiology of head and neck. 4. Cardiac and vascular radiology. 5. Emergency radiology. 6. Interventional radiology. 7. Radiology of thorax. Breast radiology. 8. Abdominal radiology. 9. Urogenital radiology. 10. Paediatric radiology. 11. Musculoskeletal radiology.

Recommended literature:

Mandatory literature:
1. Breistenseher M., et al. Textbook of Clinical Radiology University Publisher 3.0 2012 ISBN 978-3-9503296-7-4
2. Heřman M., et al. Basics of Radiology Palacký University Olomouc 2021 ISBN 978-80-244-5697-3 e-book ISBN: 978-80-244-5837-3
Additional literature:
3. Adam A., et al. Grainger & Allison's Diagnostic Radiology, 6th Edition Churchill Livingstone Elsevier 2015 ISBN: 978-0-7020-4295-9 e-book ISBN: 978-0-7020-6128-8
4. Geschwind J., et al. Abrams' Angiography: Interventional Radiology - 3rd edition Lippincott Williams & Wilkins 2013 ISBN13: 978-1609137922
5. Zeleňák K., et. al. Radiology Imaging Techniques of Brain Tumours InTech 2013 DOI: 10.5772/53470
http://www.intechopen.com/books/clinical-management-and-evolving-novel-therapeutic-strategies-for-patients-with-brain-tumors/radiology-imaging-techniques-of-brain-tumours
6. Krajina A., et al. Therapeutic Embolization of Cranial Tumors, Diagnostic Techniques and Surgical Management of Brain Tumors InTech 2011 DOI: 10.5772/19639
http://www.intechopen.com/books/diagnostictechniques-and-surgical-management-of-brain-tumors/therapeutic-embolization-of-cranial-tumors
7. Zeleňák K, et. al. Atlas elementárnych rádiologických nálezov - I. diel (2. vydanie) P + M 2021 ISBN: 9788089694945

8. Zeleňák K, et. al. Atlas elementárnych rádiologických nálezov - II. diel P + M 2020 ISBN: 978-80-89694-68-6
9. Zeleňák K, et. al. How to Improve the Management of Acute Ischemic Stroke by Modern Technologies, Artificial Intelligence, and New Treatment Methods Life (Basel) 2021 DOI:10.3390/life11060488, https://www.mdpi.com/2075-1729/11/6/488/pdf
10.Zeleňák K, et. al. Embolization of Ruptured Infratentorial Pial AVM in Pregnancy Life (Basel) 2023 DOI: 10.3390/life13040896
https://doi.org/10.3390/life13040896
11.The#ESR Modern Radiology eBook
https://www.myesr.org/education/modern-radiology-ebook/

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 828

A	ABS0	B	C	D	E	FX
34,54	0,0	24,64	16,43	7,37	6,04	10,99

Lecturers: prof. MUDr. Kamil Zeleňák, PhD., MUDr. Martin Ševík, PhD., MPH, MUDr. Ján Sýkora, PhD., MUDr. Martin Vorčák, PhD., MUDr. Zuzana Gešvandtner Trabalková, MUDr. Adam Krkoška, MUDr. Anna Lazorová, MUDr. Marianna Nehajová, MUDr. Štefánia Vetešková

Last change: 11.08.2025

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚPF/J-S-VL-592/19	Research Preparation

Educational activities:
Type of activities: lecture
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 8.

Educational level: I.II.

Prerequisites:

Course requirements:
Obligatory attendace in lectures (a 1 points. - max. 14 points.)
Excused two missed lectures (in accordance with Internal Study Regulations) – points are not included, unless the missed lecture is substituted (way of the substitution upon arrangement with respective teacher).
Processing of a model bibliographic search: (max. 43 points.)
Each student will demonstrate his/her ability to work with bibliogrpahic databases PubMed or SCOPUS through concise bibliographic search of original published scholar articles dealing with a chosen problem . The search should be submitted until the 7th week of the semester.
Critical evaluation of a quality of the retrieved literary resources: (max. 43 ponits.)
Each student will evaluate each resource in the bibliographic search considering its quality (reliabity): methods, design, strength of an evidence, weak and strong points. Developed critical evaluation will be submitted until end of the semester .
Overall evaluation of the course:
Achieved points Evaluation
100 - 91 A (1)
90 - 81 B (1, 5)
80 - 73 C (2)
72 - 66 D (2,5)
65 - 60 E (3)
59 and lessj Fx (4)
Scale of assessment (preliminary/final): 0/100

Learning outcomes:
After completion of the subject the student understands principles of the scientific dealing with problems in laboratory, clinical and population research in medical sciences. He/she is able to retrieve and critically appraise scientific information, he/she knows basic methods of empiric data collection, study design, standard formal structure of the scientific work and understands principles of scientific communication and scientometry.

Class syllabus:

Fundaments and structure of a modern science Scientific and non-scientific methods – kinds and characteristics Methods of scientific data collection Methods of processing and analyzing scientific information Research process and its phases Kinds of research and development of research project Ethics of scientific work and presentation of results Evidence based medicine Types of scientific and expert publications Student scientific and expert work at the Jessenius Faculty of Medicine, Comenius University in Martin

Recommended literature:

Obligatory literature:

Entrez PubMed (Medline). Available at: http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=PubMed

SCOPUS. Dostupné na: www.scopus.com

ŠTUDOVŇA GOOGLE. Dostupné na: https://scholar.google.sk/

McDonald, J.: Handbook of Biological Statistics. http://www.biostathandbook.com/

https://moodle.uniba.sk/

Recommended literature:

MEŠKO, D. a kol. Medinfo 1. Praktická príručka pre lekárov, zdravotníkov a študentov. Martin: Osveta, 2005, 152 s., ISBN: 80-8063-197-2

MEŠKO, D. a kol. Akademická príručka. 1. vyd. Martin: Osveta, 2004, 316 s.

Languages necessary to complete the course:

english

Notes:

Past grade distribution

Total number of evaluated students: 0

A	ABS0	B	C	D	E	FX
0,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: prof. MUDr. Jana Plevková, PhD., prof. MUDr. Tibor Baška, PhD., Mgr. Jana Zibolenová, PhD., prof. MUDr. Ján Švihra, PhD.

Last change: 17.08.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027	
University: Comenius University Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.CPMV/J-S-VL-638/22	**Course title:** Simulation Team Training in Medicine
Educational activities: **Type of activities:** practicals / lecture **Number of hours:** **per week:** ,5 / 1 **per level/semester:** 7 / 14 **Form of the course:** on-site learning	
Number of credits: 1	
Recommended semester: 9.	
Educational level: I.II.	
Prerequisites:	
Recommended prerequisites: not applicable	
Course requirements: 100% attendance Scale of assessment (preliminary/final): final evaluation	
Learning outcomes: Cognitive Domain (Knowledge) – Student 1. Lists the basic management algorithms for acute conditions (anaphylaxis, shock, ACS, stroke, intoxications, failure of vital functions). 2. Describes the competencies of individual members of the healthcare team (physician, nurse) in emergency situations. 3. Explains the principles of effective team communication in the context of SBTT (Simulation-Based Team Training). 4. Differentiates types of emergency conditions and their clinical manifestations. 5. Evaluates the importance of interprofessional collaboration in the provision of healthcare. Psychomotor Domain (Skills) – Student 1. Performs basic procedural tasks: securing IV access, applying ECG, defibrillation, intubation, oxygenation, ABCDE assessment. 2. Applies emergency medicine algorithms in simulated clinical scenarios. 3. Coordinates team activities during the simulation of an acute condition. 4. Responds to changes in the patient's clinical status in a simulated environment. 5. Evaluates the effectiveness of team collaboration after simulation through debriefing. Affective Domain (Attitudes) – Student 1. Demonstrates respect and a professional approach toward team members during simulation. 2. Participates in team discussions and decision-making in stressful situations. 3. Reflects on personal mistakes and learns from them during debriefing. 4. Promotes a culture of patient safety through effective communication. 5. Recognizes the importance of interprofessional education for clinical practice.	

Class syllabus:

SBTT Students complete 7 courses during the semester, each undergo SCE - simulated clinical experiences using a high fidelity simulator and a team of experts from the Medical Education Support Center, which will explain the basic principles of management of selected conditions based on current guidelines, explain the competencies of the nurse / doctor, who performs what, who is responsible for what, explains the principles of effective communication in the team, always taking into account the current selected acute situation, and in the simulation they will train these procedures together in procedural skills that are necessary to manage emergencies (provision of IV periphery and central vein, intraosseous approach, ECG loading, defibrillation, intubation, ABDCE examination, provision of oxygenation and ventilation, etc.)

Basics of communication while working in a team

SBTT Anaphylactic shock

SBTT Acute coronary syndrome

SBTT Trauma, bleeding, shock

SBTT Stroke

SBTT Intoxications, homeostasis disorders

SBTT Failure of vital functions

Recommended literature:

Levine et al., The Comprehesive Textbook of Simulation in Medicine. ISBN-13: 978-1461459927, Springer

Michaelsen et al., Team-Based Learning: Small Group Learning's Next Big Step: New Directions for Teaching and Learning (J-B TL Single Issue Teaching and Learning) ISBN-13: 978-0470462126

Languages necessary to complete the course:

English Language

Notes:

Past grade distribution

Total number of evaluated students: 24

A	ABS0	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: prof. MUDr. Jana Plevková, PhD., MUDr. Tomáš Buday, PhD., MBA, MSc., Ing. Lukáš Martvoň, PhD.

Last change: 24.08.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚCJ/J-S-VL-SJ1/26	Slovak Language (1)/Foreign Language (1)

Educational activities:
Type of activities: practicals
Number of hours:
per week: 3 **per level/semester:** 42
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 1.

Educational level: I.II.

Prerequisites:

Course requirements:
90% (SL) 95% participation in seminars, two written credit tests, the minimum percentage to pass each test is 60%.
Evaluation: A: 91-100%, B: 90-81%, C: 80-73%, D: 72-66%, E: 65-60%, FX: less than 60%
Scale of assessment (preliminary/final): 100%/0% (SL) 50% / 50%

Learning outcomes:
The objective of teaching the Slovak language at the Jessenius Faculty of Medicine, Comenius University, is to provide international students with the fundamentals of Slovak grammar, basic medical terminology required for communication with Slovak patients, and the vocabulary of everyday spoken language for daily communication in a Slovak-speaking environment. Students of Slovak should be able to actively use all four language skills – reading, listening comprehension, speaking, and writing. Particular emphasis is placed on the skills predominantly required for clinical practice – comprehension of spoken language and speaking.

Class syllabus:
Slovak language:
Lesson 1: Introduction to the Slovak language - alphabet - pronunciation - basic phrases and greetings - introducing yourself - verb TO BE. Lesson 2: genders of nouns and adjectives - verb TO HAVE (as a representative of the group (–ať)) - possessive pronouns - colors - introduction to adjectives. Lesson 3: demonstrative - numbers from 1 -10 - adjectives. Lesson 4: numbers from 10 and above - selected verbs with the ending –a/-ova - accusative singular - vocabulary on the topic FAMILY, Lesson 5: verbs - nominative plural, Lesson 6: review of lessons introduction to the language + 1A - 3A. Lesson 7: test I. Lesson 8: accusative plural – vocabulary on the topic - SYMPTOMATOLOGY – modal verbs, Lesson 9: Date – ordinal numerals – vocabulary on the topic HUMAN BODY. Lesson 10: HOSPITAL – past tense, Lesson 11: singular local – What time is it? expressing time in Slovak – plural local. Lesson 12: review of 3B- 5B. Lesson 13: test II
German language:
1. Anatomieunterricht
Anatomie des menschlichen Körpers
Körperteile

Grammatik: Konjugation der regelmäßigen Verben – Präsens
2. Anatomieunterricht
Skelett Typen und Bau der Knochen
Gelenktypen
Grammatik: Konjugation der unregelmäßigen Verben – Präsens
3. Anatomie und Krankheiten
Gelenkerkrankungen: Arthrose
Künstliche Körperteile
Anatomieunterricht am Tablet- PC
Grammatik: Passivformen
4. Kardiologie
Das Herz
Lungen- und Körperkreislauf
Grammatik: Deklination von Adjektiven, Imperativ
5. Herzerkrankungen
Myokardinfarkt – Ursachen,
Symptome und Therapie
Grammatik: Imperativ
6. Test I
7. Pneumologie
Die Lunge
Aufbau der Atmungsorgane
Grammatik: Trennbare Verben
8. Pneumologie
Funktion der Atmungsorgane
Gespräch beim Hausarzt
Grammatik: Untrennbare Verben
9. Lungenerkrankungen
Die Atemwegserkrankungen
COPD, Asthma, Grippe
Grammatik: Verben – Vergangenheit
10. Urologie
Urogenitaltrakt bei der Frau und beim Mann
Aufbau und Funktion der Nieren
Grammatik: Nebensätze
11. Erkrankungen der Nieren und Harnwege
Erkrankungen der Prostata (Vorsteherdrüse)
Harnsteine (Urolithiasis)
Harnwegsinfekt; Blasenschwäche (Harninkontinenz)
Grammatik: Infinitiv mit zu
12. Verdauung
Aufbau und Funktion des Verdauungssystems
Der Verdauungsprozess
Grammatik: Hilfsverben mit Infinitiv + zu
13. Erkrankungen des Verdauungstraktes
Darmerkrankungen
Darmspiegelung (Koloskopie)
Grammatik: Präpositionen mit Dativ und Akkusativ
14. Test II

Recommended literature:

Slovak language:

Ďurajka, Jamrichová (2022). Slovak for medical students. Comenius University in Bratislava.

Kolektív autorov (2020) Slovenčina pre zahraničných študentov. Bratislava: Vydavateľstvo UK.

Kolektív autorov (2013) Slovensko-anglický a anglicko-slovenský slovník pre zahraničných študentov. Bratislava: Vydavateľstvo UK.

German language:

Bujalková, M., Barnau, A.: Fachdeutsch Medizin. Ein Lehrbuch für zukünftige Ärzte. Martin: Vydavateľstvo Osveta, 2018. 227 s., učebnica.

Džuganová, B. Barnau, A.: Nemčina pre lekárov a pracovníkov v zdravotníctve, Bratislava: Easton Books, 2017. 274s., učebnica.

Firnhaber-Sensen, U. - Rodi, M.: Deutsch im Krankenhaus Neu. Berlin: Langenscheidt 2009. 128 s.

Languages necessary to complete the course:

Slovak language, English language, German language

Notes:

Past grade distribution

Total number of evaluated students: 6

A	ABS0	B	C	D	E	FX
50,0	0,0	33,33	16,67	0,0	0,0	0,0

Lecturers: doc. Mgr. Erika Juríková, PhD., Mgr. Bojana Ladrová, PhD., Mgr. Anna Barnau, PhD.

Last change: 06.07.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027	
University: Comenius University Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.ÚCJ/J-S-VL-SJ2/26	**Course title:** Slovak Language (2)/Foreign Language (2)
Educational activities: **Type of activities:** practicals **Number of hours:** **per week:** 3 **per level/semester:** 42 **Form of the course:** on-site learning	
Number of credits: 3	
Recommended semester: 2.	
Educational level: I.II.	
Prerequisites: JLF.ÚCJ/J-S-VL-SJ1/26 - Slovak Language (1)/Foreign Language (1)	
Course requirements: 90% (SL) 95% participation in seminars, two written credit tests, the minimum percentage to pass each test is 60%, final written and oral exam/final presentation in Slovak language (SL) Evaluation: A: 91-100%, B: 90-81%, C: 80-73%, D: 72-66%, E: 65-60%, FX: less than 60% Scale of assessment (preliminary/final): 100%/0% (SL) 40% / 60%	
Learning outcomes: The outcome of the education should be the ability to use basic grammar (A1/A2) in combination with acquired basic medical terminology and selected vocabulary used in daily practice.	
Class syllabus: Slovak language: Lesson 1: Review of the winter semester. Food – instrumental singular. Lesson 2: : Travel – Restaurant – instrumental plural - My apartment. Lesson 3: Free time – future tense – weather. Lesson 4: adverbs – comparison – Examination. Lesson 5: Review 5C - 7E. Lesson 6: Test I. Lesson 7: Slovakia – adjectives – comparison – clothing. Lesson 9: My practice – dative singular and plural – Pharmacy. Lesson 10: At the university – genitive singular/plural. Lesson 11: Review 8A – 10E. Lesson 12: Test II. Lesson 13: Final presentations. German Language: 1. Gynäkologie und Geburtshilfe Frauenheilkunde Anatomie der Gebärmutter Grammatik: Wortbildung 2. Schwangerschaft Geburtshilfe Gefahren in der Schwangerschaft Grammatik: Adjektive 3. Frauenkrankheiten Brustkrebs Postmenstrualsyndrom	

Grammatik: Mehrteilige Konjunktionen
4. Hämatologie
Das Blut – Zusammensetzung des Blutes
Physiologie des Blutes – Hämostase
Grammatik: Partizipien I und II
5. Blutgruppen
Blutgruppen - Systeme
Rhesus Faktor
Grammatik: Partizipien als Adjektivattribute
6. Test I
7. Bluterkrankungen
Anämie
Hämophilie
Grammatik: Präpositionen mit Genitiv
8. Bluterkrankungen
Leukämie – Blutkrebs
Ablauf der Blutgerinnung
Grammatik: Präpositionen mit Genitiv
9. Otorhinolaryngologie
Aufbau und Funktion des Ohres, das Hören
Die Nase – Aufbau und Funktion
Grammatik: Erweiterte Partizipialattribute
10. H-N-O-Krankheiten
Heuschnupfen, Sinusitis, Angina
Larynxkarzinom, Tinnitus, Otitis media
Grammatik: n-Deklination der Substantive
11. H-N-O-Krankheiten
Formen von Sinusitis
Medizinische Berufe
Grammatik: n-Deklination der Substantive
12. Stomatologie
Aufbau der Zähne
Milchgebiss Erwachsenengebiss
Grammatik: Pronominaladverbien und Fragewörter
13. Zahnerkrankungen
Karies, Plaque, Parodontitis und Zahnausfall
Stufen bei Karies
Gespräch beim Zahnarzt
Grammatik: Antonyme
14. Test II

Recommended literature:

Slovak language:
Ďurajka, Jamrichová (2022). Slovak for medical students. Comenius University in Bratislava.
Kolektív autorov (2020) Slovenčina pre zahraničných študentov. Bratislava: Vydavateľstvo UK.
Kolektív autorov (2013) Slovensko-anglický a anglicko-slovenský slovník pre zahraničných študentov. Bratislava: Vydavateľstvo UK.
German language:
Bujalková, M., Barnau, A.: Fachdeutsch Medizin. Ein Lehrbuch für zukünftige Ärzte. Martin: Vydavateľstvo Osveta, 2018. 227 s., učebnica.

Džuganová, B. Barnau, A.: Nemčina pre lekárov a pracovníkov v zdravotníctve, Bratislava: Easton Books, 2017. 274s., učebnica.
Firnhaber-Sensen, U. - Rodi, M.: Deutsch im Krankenhaus Neu. Berlin: Langenscheidt 2009. 128 s.

Languages necessary to complete the course:
Slovak language, English language, German language

Notes:

Past grade distribution
Total number of evaluated students: 6

A	ABS0	B	C	D	E	FX
33,33	0,0	50,0	16,67	0,0	0,0	0,0

Lecturers: doc. Mgr. Erika Juríková, PhD., Mgr. Bojana Ladrová, PhD., Mgr. Anna Barnau, PhD.

Last change: 06.07.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚCJ/J-S-VL-SJ3/26	Slovak Language (3)/Foreign Language (3)

Educational activities:
Type of activities: practicals
Number of hours:
per week: 4 **per level/semester:** 56
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 3.

Educational level: I.II.

Prerequisites: JLF.ÚCJ/J-S-VL-SJ1/15 - Slovak Language (1)/Foreign Language (1)

Course requirements:
90% (SL) 95% participation in seminars, two written credit tests, the minimum percentage to pass each test is 60%.
Evaluation: A: 91-100%, B: 90-81%, C: 80-73%, D: 72-66%, E: 65-60%, FX: less than 60%
Scale of assessment (preliminary/final): 100%/0% (SL)50% / 50%

Learning outcomes:
The aim of teaching Slovak is to familiarize the student with the basic vocabulary used in contact with patients. The student gradually acquires vocabulary and phrases that will enable him to conduct a conversation with a patient, take a medical history and examine the patient using professional language at a basic level/in selected departments.

Class syllabus:
Slovak language: Week 1: Revision of the points of contact between conversation and grammar from the 1st grade. Week 2. Lesson 1: The human body - names of parts, internal organs. Dialogues at the doctor's, angina, cough, abdominal pain. Gr. repetition: nominative pl,. Selected adjectives, colors. Week 3. Lesson 2: Hospital - departments, clinics, naming specialists, diseases/difficulties, hospital staff. Gr. revision - forming adjectives from nouns. Week 4. Lesson 3: At the doctor's, basic questions, What hurts you, examinations. Selected case reports. Gr. repetition: Imperative. In the emergency room, doctor's instructions. Week 5: Lesson 4: Theoretical introduction to the topic Anamnesis: Gr. revision: verbs in the present tense – passive form, accusative singular, instrumental singular/plural – practice using medical terminology. Anamnesis – question formation, personal and family anamnesis, patient’s personal data. Week 6. Active practice of anamnesis. Summary of potential answers. Revision: occupations, marital status. Selected case studies. Revision of lessons 1-4. 7. TEST 1/Practical use of knowledge from lessons 1 – 4. Fixation in practice – types of tasks focused on listening comprehension + creation of dialogues and short case studies. Week 8. Lesson 5: Revision of numbers. Examination – blood pressure, pulse, temperature, types of examinations. Selected case studies. Week 9: Lesson 6: Medicines – types of medicines, method of use, in the pharmacy – dialogues. Gr. revision: dative sing/pl – use of the preposition proti . Week 10: Lesson 7: Infectious diseases (names), symptoms of flu, angina. Selected case studies. Creating dialogues using the vocabulary of lessons 5-7. Week 11. Lesson 8: Urology - organs, diseases. For

examination by a urologist. Selected case studies. Week 12. Repetition of lessons 5-8. Exercises aimed at fixing knowledge and practicing all language competencies. Week 13. TEST 2. Practical exercises, simulation of hospital practice.
German language:
1. Endokrinologie
Die exokrinen und endokrinen Drüsen
Hormonbildende Drüsen
Grammatik: Direkte und indirekte Fragesätze
2. Endokrinologie
Hormonbildende Drüsen
Funktion und Wirkung der Hormone
Grammatik: Direkte und indirekte Fragesätze
3. Stoffwechsel- und Hormonerkrankungen
Stoffwechsel
Hormonerkrankungen
Grammatik: Direkte und indirekte Fragesätze
4. Stoffwechsel- und Hormonerkrankungen
Schilddrüsenerkrankungen
Hashimoto-Thyreoiditis
Grammatik: Direkte und indirekte Fragesätze
5. Stoffwechsel- und Hormonerkrankungen
Zuckerkrankheit (Diabetes mellitus)
Fettstoffwechselerkrankungen
Grammatik: Zahlen, Zielwerte ermitteln
6. Test I
7. Augenheilkunde
Aufbau des Auges
Anhangsorgane des Auges Augenmuskeln
Grammatik: Nominalisierung von Verben
8. Funktion des Auges
Sehvorgang
Akkomodation
Grammatik: Nominalisierung von Adjektiven
9. Funktion des Auges
Sehvorgang
Wie die Farbe entsteht
Grammatik: Nominalisierung von Verben und Adjektiven
10. Augenkrankheiten
Augenbeschwerden durch Entzündungen
Uveitis
Grammatik: Passiversatzformen
11. Altersbedingte Augenkrankheiten
Altersbedingte Makuladegeneration
Glaukom, Katarakt
Grammatik: Passiversatzformen
12. Sehschwäche
Fehlsichtigkeit (Weit-, Kurz- und Stabsichtigkeit)
Wie es zur Kurzsichtigkeit kommt
Grammatik: Passiversatzformen

13. Sehschwäche
Augenoperationen
Refraktive Chirurgie
Grammatik: Passiversatzformen
14. Test II

Recommended literature:

Slovak language:

Kolektív autorov (2020) Slovenčina pre zahraničných študentov. Bratislava: Vydavateľstvo UK.
Kolektív autorov (2013) Slovensko-anglický a anglicko-slovenský slovník pre zahraničných študentov. Bratislava: Vydavateľstvo UK.
Balková, D. a kol. (2020) Odborná slovenčina v medicínskej praxi – kazuistiky. Bratislava: Vydavateľstvo UK.

German language:

Bujalková, M., Barnau, A.: Fachdeutsch Medizin. Ein Lehrbuch für zukünftige Ärzte. Martin: Vydavateľstvo Osveta, 2018. 227 s., učebnica.
Džuganová, B. Barnau, A.: Nemčina pre lekárov a pracovníkov v zdravotníctve, Bratislava: Easton Books, 2017. 274s., učebnica.
Firnhaber-Sensen, U. - Rodi, M.: Deutsch im Krankenhaus Neu. Berlin: Langenscheidt 2009. 128 s.

Languages necessary to complete the course:

Slovak language
English language
German language

Notes:

Past grade distribution

Total number of evaluated students: 2

A	ABS0	B	C	D	E	FX
0,0	0,0	50,0	50,0	0,0	0,0	0,0

Lecturers: doc. Mgr. Erika Juríková, PhD., Mgr. Bojana Ladrová, PhD., Mgr. Anna Barnau, PhD.

Last change: 03.07.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚCJ/J-S-VL-SJ4/26	Slovak Language (4)/Foreign Language (4)

Educational activities:
Type of activities: practicals
Number of hours:
per week: 4 **per level/semester:** 56
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 4.

Educational level: I.II.

Prerequisites: JLF.ÚCJ/J-S-VL-SJ2/25 - Slovak Language (2)/Foreign Language (2) and JLF.ÚCJ/J-S-VL-SJ3/26 - Slovak Language (3)/Foreign Language (3)

Course requirements:
95% participation in seminars, two written credit tests, the minimum percentage to pass each test is 60%, final written and oral exam.
Evaluation: A: 91-100%, B: 90-81%, C: 80-73%, D: 72-66%, E: 65-60%, FX: less than 60%
Scale of assessment (preliminary/final): 40% / 60%

Learning outcomes:
The aim of teaching Slovak language 3 and 4 is to teach a foreign student the basic vocabulary used in contact with the patient, but also the basics of Slovak medical terminology, so that the student is able to orient himself in the hospital and at the same time read and understand medical notices, recommendations and instructions.

Class syllabus:
Slovak language:
1. Repetition of the basics from the winter semester. Rescue service - questions, instructions.
2. Lesson 9: Accidents, injuries, first aid, ambulance. Case report: Rheumatic fever.
3. Lesson 10: Cardiovascular diseases - heart disease, examination. Case report: Heart attack.
4. Lesson 11: Diseases of the digestive system - parts of the digestive system, symptoms of diseases. Case report: Appendicitis.
5. Patient communication training Lesson 9-11. Case report: Water in the body.
6. TEST 1.
7. Lesson 12: Gynecology 1 - organs, examination by a gynecologist, cancer.
8. Gynecology 2 - dialogue "Mrs. Pekná". Case report: Breast in the breast. Lesson 13: Pediatrics - childhood.
9. Pediatrics - infectious diseases, "children's speech" - diminutives. Pediatric communication, questions, instructions.
10. Lesson 14: Orthopedics - names of bones and body parts, diseases of the musculoskeletal system and bone diseases.
11. Patient communication training Lessons 12-14. Case report: Cyst in the uterus.
12. TEST 2.

13. Repetition for oral exam (topics + case studies).
German language:
1. Dermatologie
Aufbau der Haut
Grammatik: Personalpronomen
2. Dermatologie
Funktion der Haut
Grammatik: Reflexivpronomen
3. Hauterkrankungen
Hautkrebs
Neurodermitis
Grammatik: Relativpronomen
4. Hauterkrankungen
Neurodermitis
Grammatik: Personal-, Reflexiv- und Relativpronomen
5. Pädiatrie
Kinderheilkunde
Jugendmedizin
Grammatik: Nebensätze – Temporalsätze
6. Test I
7. Pädiatrie
Vorsorgeuntersuchungen für Kinder und Jugendliche
Jugendgesundheitsuntersuchung J1
Grammatik: Nebensätze – Temporalsätze
8. Kinderkrankheiten
Häufige Kinderkrankheiten (Mumps, Röteln, Scharlach, Windpocken)
Masern
Ein Besuch beim Kinderarzt
Grammatik: Nebensätze – Temporalsätze
9. Neurologie
Zentrales und peripheres Nervensystem
Das Gehirn und die Verknüpfungen im Gehirn
Grammatik: Konjunktiv II
10. Neurologie
Funktionen der Gehirnbereiche
Das Gehirn: Verschiedene Felder – verschiedene Funktionen
Grammatik: Konjunktiv II
11. Neurologische Erkrankungen
Erkrankungen des menschlichen Nervensystems
Vielfalt von Krankheitsbildern
Grammatik: Ratschläge für das Lösen eines Problems
12. Neurologische Erkrankungen
Alzheimer – Krankheit des Vergessens
Ratschläge für Alzheimer-Patienten
Grammatik: Ratschläge für das Lösen eines Problems
13. Neurologische Erkrankungen
Erkrankungen des menschlichen Nervensystems
Ratschläge für Alzheimer-Patienten
Grammatik: Ratschläge für das Lösen eines Problems

14. Test II

Recommended literature:

Slovak language:

Kolektív autorov (2020) Slovenčina pre zahraničných študentov. Bratislava: Vydavateľstvo UK.

Kolektív autorov (2013) Slovensko-anglický a anglicko-slovenský slovník pre zahraničných študentov. Bratislava: Vydavateľstvo UK.

Balková, D. a kol. (2020) Odborná slovenčina v medicínskej praxi – kazuistiky. Bratislava: Vydavateľstvo UK.

German language:

Bujalková, M., Barnau, A.: Fachdeutsch Medizin. Ein Lehrbuch für zukünftige Ärzte. Martin: Vydavateľstvo Osveta, 2018. 227 s., učebnica.

Džuganová, B. Barnau, A.: Nemčina pre lekárov a pracovníkov v zdravotníctve, Bratislava: Easton Books, 2017. 274s., učebnica.

Firnhaber-Sensen, U. - Rodi, M.: Deutsch im Krankenhaus Neu. Berlin: Langenscheidt 2009. 128 s.

Languages necessary to complete the course:

Slovak language

English language

German language

Notes:

Past grade distribution

Total number of evaluated students: 2

A	ABS0	B	C	D	E	FX
50,0	0,0	0,0	50,0	0,0	0,0	0,0

Lecturers: doc. Mgr. Erika Juríková, PhD., Mgr. Bojana Ladrová, PhD., Mgr. Anna Barnau, PhD.

Last change: 02.06.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚCJ/J-S-VL-651/26	Slovak Language and Culture

Educational activities:
Type of activities: practicals
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 5., 6..

Educational level: I.II.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 0

A	ABS0	B	C	D	E	FX
0,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: doc. Mgr. Erika Juríková, PhD., PhDr. Katarína Murčeková, PhD.

Last change:

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚCJ/J-S-VL-SJ648/25	Slovak language conversation (1)

Educational activities:
Type of activities: practicals
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Type, volume, methods and workload of the student - additional information
Obtional course - 12x90 min - active participation of the student in the seminar/conversation - dialogues - brain storming

Number of credits: 1

Recommended semester: 5.

Educational level: I.II.

Prerequisites: JLF.ÚCJ/J-S-VL-SJ4/16 - Slovak Language (4)/Foreign Language (4)

Recommended prerequisites:
Prerequisite - successful completion of the Slovak language course in four semesters - prerequisite: Sl4

Course requirements:
Conditions: participation: 80%, activity, course completion: patient history (dialogue with the teacher)
Scale of assessment (preliminary/final): Evaluation: passed (after meeting the course conditions)

Learning outcomes:
During the course and after its completion, the student in hospital practice should be more confident in using the Slovak language. He should overcome the language barrier. The acquired knowledge, which is targeted at hospital practice, should improve the ability to conduct a patient examination in Slovak. The student will gain an overview of individual thematic areas, which should bring him more valuable and adequate benefits from practice. By strengthening the student's language competencies, his skills in the medical field should also improve.

Class syllabus:
Human body – symptoms/diseases – instructions during examination – general anamnesis (formation of questions – correct pronunciation) – Internal Medicine Clinic – first part (selected departments: symptoms of hospitalized patients – most common diseases – questions and instructions for hospitalized patients, Gynecology and Obstetrics Clinic – first part (symptoms of hospitalized patients/reasons for hospitalization – most common diseases – questions and instructions for hospitalized patients) – Pediatric Clinic (symptoms of hospitalized patients/reasons for hospitalization – most common diseases – questions and instructions for a child patient/for a parent – informal and formal language expression)

Recommended literature:
Medical Slovak in medical practice – case reports

Materials provided by teachers during the semester

Languages necessary to complete the course:
English language and Slovak language

Notes:

Past grade distribution
Total number of evaluated students: 11

A	ABS0	B	C	D	E	FX
90,91	0,0	0,0	0,0	0,0	0,0	9,09

Lecturers: Mgr. Bojana Ladrová, PhD., doc. Mgr. Erika Juríková, PhD.

Last change: 29.09.2025

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚCJ/J-S-VL-SJ649/25	Slovak language conversation (2)

Educational activities:
Type of activities: practicals
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Type, volume, methods and workload of the student - additional information
Obtional course - 12x90 min - active participation of the student in the seminar/conversation - dialogues - brain storming

Number of credits: 1

Recommended semester: 6.

Educational level: I.II.

Prerequisites: JLF.ÚCJ/J-S-VL-SJ648/25 - Slovak language conversation (1)

Recommended prerequisites:
Prerequisite - successful completion of the Slovak language course in four semesters - prerequisite: Sj4, Conversation slovak language 1

Course requirements:
Conditions: participation: 80%, activity, course completion: patient history (dialogue with the teacher)
Scale of assessment (preliminary/final): Evaluation: passed (after meeting the course conditions)

Learning outcomes:
During the course and after its completion, the student in hospital practice should be more confident in using the Slovak language. He should overcome the language barrier. The acquired knowledge, which is targeted at hospital practice, should improve the ability to conduct a patient examination in Slovak. The student will gain an overview of individual thematic areas, which should bring him more valuable and adequate benefits from practice. By strengthening the student's language competencies, his skills in the medical field should also improve.

Class syllabus:
Consolidation and enrichment of knowledge from the winter semester – Communication with patients in various clinics - Clinic of Internal Medicine – second part (selected departments: symptoms of hospitalized patients – most common diseases – questions and instructions for hospitalized patients), Clinic of Gynecology and Obstetrics – second part (symptoms of hospitalized patients/reasons for hospitalization – most common diseases – questions and instructions for hospitalized patients) – Pediatric Clinic (symptoms of hospitalized patients/reasons for hospitalization – most common diseases – questions and instructions for a child patient/for a parent – informal and formal language) – Gastroenterology Clinic (symptoms – questions for hospitalized patients – examination methods – instructions for examining a patient in the room) – Neurology Clinic (symptoms – questions for hospitalized patients – examination methods – instructions for

examining a patient in the room) – Urology Clinic (symptoms – questions for hospitalized patients – examination methods – instructions for examining the patient in the room)

Recommended literature:
Medical Slovak in medical practice – case reports
Materials provided by teachers during the semester

Languages necessary to complete the course:
9) English language and Slovak language

Notes:

Past grade distribution
Total number of evaluated students: 5

A	ABS0	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: Mgr. Bojana Ladrová, PhD., doc. Mgr. Erika Juríková, PhD.

Last change: 08.10.2025

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚVZ/J-S-VL-614/19	Social and Ethical Aspects in Health Care

Educational activities:
Type of activities: practicals
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 9.

Educational level: I.II.

Prerequisites: JLF.ÚVZ/J-S-VL-617/19 - Public Health (1)

Recommended prerequisites:
Public Health 1

Course requirements:
ppt (max. 50 p.), test (max. 50 p.)
Evaluation: A: 91–100 %, B: 81–90 %, C: 73–80 %, D: 66–72 %, E: 60–65 %, FX: 59 % and less
Scale of assessment (preliminary/final): 0/100

Learning outcomes:
After completion of the subject the student is able to solve social and ethical problems related to health care providing. The student is able to apply social communication among health care workers and in physician-patient relations. The student understands the importance of respect of human life since conception to death.

Class syllabus:
Social and ethical problems of communication in health care providing. Social and ethical aspects of health care providing to woman, mother and child. Social and ethical aspects of health care providing in geriatrics. Social and ethical aspects of health care providing to handicapped patients. Social and ethical aspects of health care providing to dying patients. Social and ethical aspects of transplantations and blood donorship.

Recommended literature:
Recommended literature: VAJDA J.: Úvod do etiky, ENIGMA Nitra, 2004, s. 251, ISBN 80-89132-12-X MUNZAROVÁ M.: Lékařský výzkum a etika, GRADA Praha, 2005, s. 120, ISBN 80-247-0924-4 TATE P.: Komunikace pro lékaře, GRADA Praha, 2005, s. 164, ISBN 80-247-0911-2

Languages necessary to complete the course:
english

Notes:

Past grade distribution
Total number of evaluated students: 0

A	ABS0	B	C	D	E	FX
0,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: doc. PhDr. Simona Kelčíková, PhD.

Last change: 17.08.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KSM/J-S-VL-553/25	Sport Medicine

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 1 / 1 **per level/semester:** 14 / 14
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 8.

Educational level: I.II.

Prerequisites: JLF.IKG/J-S-VL-538/17 - Internal Medicine Propedeutics (2)

Course requirements:
Seminar work. Evaluation of students - test. Minimum for test attainment: 50 %. Grading: A: 90–100 %, B: 80 %, C: 70 %, D: 60 %, E: 50 %, FX: 0-40 %
Scale of assessment (preliminary/final): Final evaluation

Learning outcomes:
Completing of the subject also contributes to forming a holistic view of human health and disease in relation to physical and physical activity. The student understands the basics, functions of the organism during the exercise; can solve the basic situations concerning individual types of reactions of the organism during the exercise; can apply the knowledge of physical activity influence in healthy and diseased organism; can analyze the basic pathological organism reactions to physical exertion; can identify non-physiological body reactions in a healthy and diseased organism.

Class syllabus:
Practical teaching
1. Basic preventive medical examination of athletes (history, physical examination, laboratory techniques, anthropometry, dynamometry, examination of the cardiovascular system, physiological murmur, contraindication for sport).
2. Assessment of physical and functional capacity (bicycle and treadmill exercise testing, indication, contraindication, first aid, evaluation of findings). Chest radiographic and echocardiographic examination, computer assistance in evaluation of findings (athletic heart, physiological enlargement of the heart). Movement - the basis of life. Regeneration and relaxation.
3. Electrocardiographic examination of athlete at rest and during exercise, physiological abnormalities of ecg, signs of trainability on ecg.
4. System of rational lifestyle of athlete (nutritional systems, drinking regimens, macrobiotic and vegetarian feeding, microelements, vitamins). Increase and decrease of body weight.
5. Functional-diagnostic examination in some diseases, prescription of physical exercise in some diseases.
6. Functional testing of respiratory system. Telemetric examination, heart-rate variability, Holter monitoring, sport-tester, sport-medical observation of athlete in sports environment. Doping, sudden death in athlete.

7. The influence of the cold, heat, water and altitude environment on the body.
Lectures:
1. Nutrition and dietetics in life-style in healthy people and athletes (basic diet, demands on protein, fat, carbohydrates and energy, vitamins, minerals, nutrition during age periods, energy output) part I.
2. Nutrition and dietetics in healthy people and athletes (increase and decrease of body weight, saccharide loading, nutrition before/during/after competition, multisuplementation) part II. Exercise in the prevention and management of internal disease. Cardiovascular effects of sports activity and physiological response to sports activity.
3. Exercise electrocardiographic testing (indication, contraindication, methods, evaluation of findings). Environmental conditions and sport (heat, cold, altitude, water). Sudden death in athlete. Doping and doping control.
4. The impact of regular training on human biological systems (musculoskeletal system, cardiovascular and respiratory system, metabolic capacity, central nervous and endocrine system). Differential diagnosis between hypertrophic cardiomyopathy and athletes` heart. Cardiovascular diseases and physical activity.
5. Physical activity in asthma bronchiale, obesity and diabetes mellitus. Hypertension and physical activity.
6. Prevention and management of sport injuries (causes of injuries, diagnostic principles, diagnosis and management of overuse injuries, principles of rehabilitation after injuries, micro/macro-trauma).
7. Physical activity in elder people (maintenance of physical fitness, relation to chronic disease, osteoporosis in elderly). Overtraining. Abstinence syndrome of athlete.

Recommended literature:
Marček, T.: Sports Medicine (Manual of Practical Sports Medicine)
web pages -
www.medinfo.sk (basic educational resource) + http://www.sportsmedicine.com/

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 76

A	ABS0	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: prof. MUDr. Dušan Meško, PhD.

Last change: 10.07.2025

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚFa/J-S-VL-598/17	Student Scientific Activity (1)

Educational activities:
Type of activities: seminar
Number of hours:
per week: **per level/semester:** 50s
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 6.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
None.

Course requirements:
Laboratory or clinical work under supervision of tutor at departments. Presentation of results at conference or publication of paper in a scientific journal (optional).
Scale of assessment (preliminary/final): 100/0

Learning outcomes:
The students obtains skills (under supervision of his/her tutor) in laboratory work, using various scientific methods, statistical analysis and presentation of results at scientific conferences. He/she learns how to prepare a scientific publication.

Class syllabus:
Work at departments/clinics under supervision of a tutor. The selection of topic is individual based on an interest of the student and on yeary updated offer (list of topics). The preparation and presentation of results at Student Scientific Conferences. Preparation of scientific papers.

Recommended literature:
Hanacek J, Javorka K et al. Introduction to scientific work. Martin, 2011, Jessenius Faculty of Medicine, Comenius University. ISBN 978-80-88866-95-4. p. 196.

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 13

A	ABS0	B	C	D	E	FX
84,62	0,0	0,0	0,0	0,0	0,0	15,38

Lecturers: doc. RNDr. Michal Šimera, PhD.

Last change: 29.03.2022
Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚFa/J-S-VL-599/18	Student Scientific Activity (2)

Educational activities:
Type of activities: seminar
Number of hours:
per week: **per level/semester:** 50s
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 7.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
None

Course requirements:
Laboratory or clinical work under supervision of tutor at departments. Presentation of results at conference or publication of paper in a scientific journal (optional).
Scale of assessment (preliminary/final): 100/0

Learning outcomes:
The students obtains skills (under supervision of his/her tutor) in laboratory work, using various scientific methods, statistical analysis and presentation of results at scientific conferences. He/she learns how to prepare a scientific publication.

Class syllabus:
Work at departments/clinics under supervision of a tutor. The selection of topic is individual based on an interest of the student and on yeary updated offer (list of topics). The preparation and presentation of results at Student Scientific Conferences. Preparation of scientific papers.

Recommended literature:
Hanacek J, Javorka K et al. Introduction to scientific work. Martin, 2011, Jessenius Faculty of Medicine, Comenius University. ISBN 978-80-88866-95-4. p. 196.

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 8

A	ABS0	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: doc. RNDr. Michal Šimera, PhD.

Last change: 29.03.2022
Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚFa/J-S-VL-600/18	Student Scientific Activity (3)

Educational activities:
Type of activities: seminar
Number of hours:
per week: **per level/semester:** 50s
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 8.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
None

Course requirements:
Laboratory or clinical work under supervision of tutor at departments. Presentation of results at conference or publication of paper in a scientific journal (optional).
Scale of assessment (preliminary/final): 100/0

Learning outcomes:
The students obtains skills (under supervision of his/her tutor) in laboratory work, using various scientific methods, statistical analysis and presentation of results at scientific conferences. He/she learns how to prepare a scientific publication.

Class syllabus:
Work at departments/clinics under supervision of a tutor. The selection of topic is individual based on an interest of the student and on yeary updated offer (list of topics). The preparation and presentation of results at Student Scientific Conferences. Preparation of scientific papers.

Recommended literature:
Hanacek J, Javorka K et al. Introduction to scientific work. Martin, 2011, Jessenius Faculty of Medicine, Comenius University. ISBN 978-80-88866-95-4. p. 196.

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 5

A	ABS0	B	C	D	E	FX
80,0	0,0	0,0	0,0	0,0	0,0	20,0

Lecturers: doc. RNDr. Michal Šimera, PhD.

Last change: 29.03.2022
Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚFa/J-S-VL-601/19	Student Scientific Activity (4)

Educational activities:
Type of activities: seminar
Number of hours:
per week: **per level/semester:** 50s
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 9.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
None

Course requirements:
Práca pod dohľadom školiteľa na pracoviskách. Prezentácia výsledkov na konferencii alebo publikácia článku vo vedeckom/odbornom časopise (nepovinný výstup)!
Scale of assessment (preliminary/final): 100/0

Learning outcomes:
The students obtains skills (under supervision of his/her tutor) in laboratory work, using various scientific methods, statistical analysis and presentation of results at scientific conferences. He/she learns how to prepare a scientific publication.

Class syllabus:
Work at departments/clinics under supervision of a tutor. The selection of topic is individual based on an interest of the student and on yeary updated offer (list of topics). The preparation and presentation of results at Student Scientific Conferences. Preparation of scientific papers.

Recommended literature:
Hanacek J, Javorka K et al. Introduction to scientific work. Martin, 2011, Jessenius Faculty of Medicine, Comenius University. ISBN 978-80-88866-95-4. p. 196.

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 3

A	ABS0	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: doc. RNDr. Michal Šimera, PhD.

Last change: 29.03.2022
Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚFa/J-S-VL-602/19	Student Scientific Activity (5)

Educational activities:
Type of activities: seminar
Number of hours:
per week: **per level/semester:** 50s
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 10.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
None

Course requirements:
Laboratory or clinical work under supervision of tutor at departments. Presentation of results at conference or publication of paper in a scientific journal (optional).
Scale of assessment (preliminary/final): 100/0

Learning outcomes:
The students obtains skills (under supervision of his/her tutor) in laboratory work, using various scientific methods, statistical analysis and presentation of results at scientific conferences. He/she learns how to prepare a scientific publication.

Class syllabus:
Work at departments/clinics under supervision of a tutor. The selection of topic is individual based on an interest of the student and on yeary updated offer (list of topics). The preparation and presentation of results at Student Scientific Conferences. Preparation of scientific papers.

Recommended literature:
Hanacek J, Javorka K et al. Introduction to scientific work. Martin, 2011, Jessenius Faculty of Medicine, Comenius University. ISBN 978-80-88866-95-4. p. 196.

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 2

A	ABS0	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: doc. RNDr. Michal Šimera, PhD.

Last change: 29.03.2022
Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚO/J-S-VL-520/25	Summer Practice - Nursing Practice

Educational activities:
Type of activities: practice
Number of hours:
per week: **per level/semester:** 80s
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 4.

Educational level: I.II.

Prerequisites: JLF.ÚO/J-S-VL-634/22 - Basics of Nursing Techniques

Course requirements:
To complete the subject (ABS0) student must meet the following conditions:
completion of 80 hours of nursing practice under the supervision of a nurse in real conditions of clinical nursing practice (2 weeks, 8 hours per day)
submission of following documents to responsible teacher: confirmation about safety regulations and record of arrivals and departures to/from workplace, confirmed Allocation letter for Nursing Practice, List of Practical Outputs (for check) – student is obliged to perform each output at least 3 times during nursing practice.
Scale of assessment (preliminary/final): 0/100

Learning outcomes:
Within completion of the subject student will apply fundamental principles of nursing care provision and will respect standard procedures of selected nursing techniques and interventions while providing nursing care to the patients in real conditions of clinical nursing practice. Student will implement reliable evidence-based information for safe healthcare practice. Acquired clinical competences together with ability to argue for and justify the method / technique of the procedure chosen will be the basis for the ability to manage basic and frequently occurring clinical nursing situations and react to them
correctly in real clinical practice in the future.
After completion of this subject while performing nursing procedures student can:
- argue for and justify the method / technique of the procedure chosen,
- prepare equipment and supplies necessary to carry out the procedure,
- assess the patient in relation to the procedure,
- provide instructions and support the patient prior to the procedure,
- prepare the patient for the procedure from physical perspective,
- perform hand hygiene (hand washing and hygienic / surgical disinfection)
- carry out the procedure independently while following clinical standards and guidelines, respecting the principles of asepsis,
- communicate with the patient during the procedure, provide patient education / instruction after the procedure,

- record and document the procedure and value assessed,
- process all the equipment and items used.

Class syllabus:

Hand hygiene - hand washing, alcohol-based hand rub, donning and removing gloves (sterile, non-sterile).

Dressing technique – types of dressing material, principles and principles of dressing technique, basic dressing techniques, training of selected types of bandages (bandage of the hand, forearm, elbow, foot, high compression bandage of the lower limb).

Collection of biological material – blood collection – types of examinations, principles and principles of collection, prevention of puncture injuries with a used needle, training in venous blood collection (open and closed), capillary blood collection (ABR and blood glucose testing).

Parenteral drug administration – general principles of drug preparation and application, preparation of drugs from ampoule and vial, preparation and training application of intradermal, subcutaneous (LMWH, heparin, insulins), intramuscular and intravenous injection.

Gastric tube insertion and enteral nutrition - general principles of insertion and removal gastric tube and administration of enteral nutrition and drugs, training in the introduction and removal of gastric tube.

Vital functions – training in measuring and monitoring vital functions (blood pressure, pulse, breath, body temperature, measuring oxygen saturation with a pulse oximeter).

Bladder catheterization – Indications, types of urinary catheters, general principles catheterization of men and women, urine sampling, physical examination of urine, infection prevention urinary tract, practice of direct catheter urine sampling in women, introduction and removal of permanent urinary catheter in women.

Nursing techniques and procedures in surgery – principles of surgical asepsis, preparation of a sterile table, care of aseptic and septic wounds, types of dressing material, general principles of treatment and wound dressing; training in handling sterile aids, surgical instruments and packaging materials – dressing table, dressing of aseptic and septic wounds, treatment of the drain area, training in donning and undressing gloves (non-sterile, sterile).

Recommended literature:

Dingová, M., Lepiešová, M., Rosenberg, A. et al.: Basics of Nursing. Textbook for Medical and Nursing Students. Martin : Comenius University in Bratislava, Jessenius Faculty of Medicine in Martin, 2011.

Lepiešová, M., Dingová, M., Nemcová, J., Ovšonková, A., Miertová, M., Tabaková, M., Tomagová, M.: Basics of nursing presentations. Martin : JLFUK – portal MEFANET, 2012, 419 p. [online] ISBN 1337-7396ISSN 1337-7396. Available on: http://portal.jfmed.uniba.sk/articles.php?aid=187https://stella.uniba.sk/epc/JL/2012/vtls000257495.pdf

Kozier, B., Berman, A., Erb, G., Snyder, S. J.: Fundamentals of Nursing: Concepts, Process and Practice. 7th ed. Pearson Prentice Hall, 2004.

Perry, A. G., Potter, P. A., Ostendorf W.: Clinical Nursing Skills & Techniques. 8th ed. St. Louis, Missouri: Mosby/Elsevier, 2013.

Languages necessary to complete the course:

English language

Notes:

Past grade distribution Total number of evaluated students: 61	
ABS0	M
100,0	0,0
Lecturers: Mgr. Michaela Miertová, PhD.	
Last change: 27.08.2026	
Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin	

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.GPK/J-S-VL-579/19	Summer Practice-Gynecology and Obstetrics

Educational activities:
Type of activities: practice
Number of hours:
per week: **per level/semester:** 80s
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 10.

Educational level: I.II.

Prerequisites: JLF.GPK/J-S-VL-562/19 - Gynecology and Obstetrics (1)

Course requirements:
Clinical practice at the department of gynecology and obstetrics at the hospital-type department as a secondary physician for 2 weeks (80 hours in total).
Scale of assessment (preliminary/final): Continuous.

Learning outcomes:
Credits

Class syllabus:
Clinical practice in the range of basic diagnostic and therapeutic procedures, assistance in childbirth, caesarean sections, and gynecological surgery.

Recommended literature:
Cunningham, F. et al.: Williams Obstetrics. Williams Obstetrics 26e. McGraw Hill / Medical; 26th edition, 2022, 1328 s., ISBN-13:ʃ978-1260462739.
Hoffman, B. et al.: Williams Gynecology. McGraw-Hill / Medical; 4th ed., 2020, 1328 s., ISBN-13: 978-1260456868.

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 625

ABS0	M
99,84	0,16

Lecturers: prof. MUDr. Kamil Biringer, PhD., prof. MUDr. Erik Kúdela, PhD.

Last change: 07.04.2022

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.IKG/J-S-VL-554/22	Summer Practice-Internal Medicine

Educational activities:
Type of activities: practice
Number of hours:
per week: **per level/semester:** 80s
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 8.

Educational level: I.II.

Prerequisites: JLF.IKG/J-S-VL-540/18 - Internal Medicine (2)

Course requirements:
Personal student daily record about activities done signed by head/subhead of the department.

Learning outcomes:

Class syllabus:
Summer practice :
1/ practice aj patient bed under supervision of assistant (tutorň, examination of patient, patient chart (record) preparation, proposal of diagnostic procedures, proper use of forms used at the department
2/ ward round attendance, disease dynamics observation, consultation activity and therapeutic procedures under assistant supervision (tutor), evaluation of auxiliary examinations, taking care of 4-5 patients at ward
3/ daily patient record, diagnostic results, suggestion of home care, patient discharge,
4/ sampling: blood, urine, sputum, stool. Application: intravenous injections, gastric/duodenal probe, bladder catheterization,
5/ assistantship at: pleural/ abdominal puncture, liver/kidney/lymphatic node/bone marrow biopsy, endoscopic examination, x-ray picture evaluation. Independent basci examination : urine, urine sediment, blood count/differential count, ecg examination, 6/ indication/diagnostic procedures and administration of blood transfusion, 7/ information about work at Intesive Care Unit,
8/ patient adminission procedures (in-patient) and out- patient health care,
9/ attendance at health care service (acute admission/examination/diagnostic procedures, therap),
10/ health care education at ward,
preparation and presentation of seminar- paper.

Recommended literature:

Languages necessary to complete the course:
english

Notes:

Past grade distribution Total number of evaluated students: 378	
ABS0	M
99,74	0,26
Lecturers: prof. MUDr. Rudolf Hyrdel, CSc.	
Last change: 06.04.2022	
Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin	

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KDD/J-S-VL-580/19	Summer Practice-Pediatrics

Educational activities:
Type of activities: practice
Number of hours:
per week: **per level/semester:** 80s
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 10.

Educational level: I.II.

Prerequisites: JLF.KDD/J-S-VL-571/19 - Pediatrics (1)

Course requirements:
activity evaluation, credit
Scale of assessment (preliminary/final): to master basic diagnostic and therapeutic procedures in pediarics, to become familiar with the administrative procedures in pediatric clinic

Learning outcomes:
to master basic diagnostic and therapeutic procedures in pediarics, to become familiar with the administrative procedures in pediatric clinic

Class syllabus:
dispenzarization, immunization, rutine preventive physical examinations, therapeutics, medical records

Recommended literature:
Behrman, R. E. Kliegman, R.M., Jenson, H.B. Nelson Textbook of Pediatrics. Philadelphia: W. B. Saunders Comp., 2011. ISBN 978143770755 Lissauer, T., Clayden, G. Illustrated textbook of Paediatrics. 2004. 410 s. ISBN 0-7234-3178-7 Behrman, R.E. Essentials of Pediatrics. Philadelphia: W.B.Saunders Comp., 2000. 795 pp. Allen, Hugh D. et al. Moss and Adams´ Heart Disease in Infants, Children and Adolescents, Including the Fetus and Young Adult. Philadelphia: Lippincott Williams & Wilkins, 2001. 1468 pp.

Languages necessary to complete the course:
English language

Notes:
VL students can have a summer practice: 1. at the Department of Children and Adolescents of JLF UK 2. at the Department of Pediatric Tuberculosis and Respiratory Diseases at ŠUDTaRCH in Dolný Smokovec 3. in hospitals with which JLF UK has a contract 4. Abroad, subject to prior agreement with subject guarantor

Past grade distribution Total number of evaluated students: 624	
ABS0	M
100,0	0,0
Lecturers: prof. MUDr. Peter Bánovčin, CSc., doc. MUDr. Ľubica Jakušová, PhD., prof. Mgr. MUDr. Miloš Jeseňák, PhD., MBA	
Last change: 07.04.2022	
Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin	

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KVVTCh/J-S-VL-554/22	Summer Practice-Surgery

Educational activities:
Type of activities: practice
Number of hours:
per week: **per level/semester:** 100s
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 8.

Educational level: I.II.

Prerequisites: JLF.KVVTCh/J-S-VL-524/22 - Surgery (2)

Course requirements:
ABSO - Positive evaluation of the head of the surgical department.

Learning outcomes:
Graduated know the work of secondary doctors in the surgical ward.

Class syllabus:
Students are acquainted with the work of secondary doctors in the surgical ward.

Recommended literature:

Languages necessary to complete the course:
english language

Notes:

Past grade distribution
Total number of evaluated students: 376

ABS0	M
100,0	0,0

Lecturers: doc. MUDr. Juraj Miklušica, PhD., doc. MUDr. Marek Smolár, PhD., MPH, MUDr. Lukáš Spevák, MUDr. Michal Hošala, PhD., MUDr. Ján Janík, PhD., MUDr. Peter Mikolajčík, PhD., MUDr. Tomáš Jesenský, MUDr. Paula Bojková, MUDr. Miloslav Mišánik, PhD.

Last change: 06.04.2022

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

STATE EXAM DESCRIPTION

Academic year: 2026/2027	
University: Comenius University Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.KVVTCh/J-SVL-SS51/22	**Course title:** Surgery
Number of credits: 6	
Recommended semester: 11., 12..	
Educational level: I.II.	
Course requirements: Practical and theoretical state exam	
Learning outcomes: The graduate has a good knowledge of basic surgical diseases, knows the principles of daily care of the surgical patient, as well as the principles of work in the surgical ambulances and operating room. He can also apply the above knowledge to other surgical specialisations / orthopedics, traumatology, plastic surgery, pediatric surgery, anesthesiology and intensive care medicine /.	
State exam syllabus:	
Recommended literature: Fischer J. et al.: Fischer´s Mastery of Surgery,seventh edition, 2018, Volume 1,2 Sabiston, D.C.: Textbook of Surgery 21st edition. The biological Basic of Modern Surgical Practice. Philadelphia: W.B. Saunders Comp. 2021, 2176 pp. Liechty, D., Soper, R.T.: Fundamental of Surgery. Philadelphia: C.V.Mosby Comp., 1989, 646 pp. Way, L.W.: Current Surgical Diagnosis and Treatment. New York: Lange Medical Books, 2006. 1453 pp. Skinner, H.B.: Current Diagnosis and Treatment in Orthopedics. Norwalk: Appleton and Lange, 1995. 645 pp. Madani A., Ferri L., Seely A.: Pocket Manual of General Thoracic Surgery, Springer 2015, 274 pages. Chung CK: Grabb and Smith Plastic Surgery, 8th Edition, 2019. 1108s. Danovitch G.: Handbook of kidney transplantation, 6th edition 2017, 606pp.	
Languages necessary to complete the course: english language	
Last change: 15.03.2022	
Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin	

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KVVTCh/J-S-VL-523/22	Surgery (1)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 3 / 2 **per level/semester:** 42 / 28
Form of the course: on-site learning

Number of credits: 4

Recommended semester: 7.

Educational level: I.II.

Prerequisites: JLF.KVVTCh/J-S-VL-522/22 - Surgical Propedeutics (1)

Course requirements:
Continuous assessment of students takes place in the form of 2 tests - minimum passing score: 60%.
Assessment: TEST 1 and 2 A: 100-91% (19-20 points), B 90-81% (17-18 points), C 80-71% (15-16 points), D 70-61% (13-14 points) E 60% (12 points), Fx less than 60%
Attendance at 7 lectures
Final assessment: A 38-40 points B 34-37 points C 30-33 points D 26-29 points E 24-25 points Fx less than 24 points
Scale of assessment (preliminary/final): english language

Learning outcomes:
The graduate knows the issues of sudden abdominal events, the principles of their diagnosis and treatment in adults and children. He knows surgical diseases of the stomach, liver, gallbladder, biliary tract, pancreas, and the indications and principles of their surgical treatment. He knows surgical diseases of the small and large intestine and their surgical treatment. He is familiar with the principles of diagnosing and treating neuroendocrine tumors of the digestive tract and bariatric surgery. As part of simulation-based education, he/she gains practical experience in operating laparoscopic instruments and practicing basic mini-invasive surgery techniques on a laparoscopic simulator.

Class syllabus:
Abdominal emergencies - definition of the term. Classification of abdominal emergencies. Main errors in diagnosis, prevention. Principles of examination of patients with abdominal emergencies.
Intestinal obstruction (classification, pathophysiology of disorders, diagnostics, treatment).
Abdominal emergencies in children.
Inflammatory abdominal emergencies - classification, complications, diagnostics, treatment.
Intestinal fistulas. Disorders of the internal environment in peritonitis (diagnosis, differential diagnosis, treatment).
Bleeding from the upper and lower digestive tract
Precancerous diseases of the stomach. Malignant tumors of the stomach (diagnosis, surgical treatment). Gastric and duodenal ulcer disease (complications, indications for surgical treatment.)
Post-resection syndromes and their treatment.

Neuroendocrine tumors of the GI tract - surgical treatment.
Metabolic syndrome. Principles of bariatric surgery.
Surgical liver diseases. Liver abscess, liver cysts, benign and malignant liver tumors.
Non-neoplastic diseases of the gallbladder and biliary tract. Cholecystolithiasis and choledocholithiasis, cholecystitis, cholangitis. Benign and malignant tumors of the gallbladder and biliary tract.
Acute and chronic pancreatitis.
Exocrine and endocrine tumors of the pancreas.
Neoplastic diseases of the small intestine, large intestine and rectum.
Non-neoplastic surgical diseases of the small intestine, large intestine and rectum. Inflammatory bowel disease, diverticulosis and diverticulitis of the colon, hemorrhoids, perianal fistulas and abscesses.
Simulation-based education and practical training: fundamentals of minimally invasive surgery, manipulation of laparoscopic instruments on a simulator, practicing laparoscopic and open suturing and knotting techniques.

Recommended literature:

Fischer J. et al.: Fischer´s Mastery of Surgery,seventh edition, 2018, Volume 1,2
Sabiston, D.C.: Textbook of Surgery 21st edition. The biological Basic of Modern Surgical Practice. Philadelphia: W.B. Saunders Comp. 2021, 2176 pp.
Liechty, D., Soper, R.T.: Fundamental of Surgery. Philadelphia: C.V.Mosby Comp., 1989, 646 pp.
Way, L.W.: Current Surgical Diagnosis and Treatment. New York: Lange Medical Books, 2006. 1453 pp.
Madani A., Ferri L., Seely A.: Pocket Manual of General Thoracic Surgery, Springer 2015, 274 pages.

Languages necessary to complete the course:
english language

Notes:

Past grade distribution
Total number of evaluated students: 276

A	ABS0	B	C	D	E	FX
6,88	0,0	45,65	30,43	15,58	1,45	0,0

Lecturers: doc. MUDr. Juraj Miklušica, PhD., doc. MUDr. Marek Smolár, PhD., MPH, MUDr. Michal Hošala, PhD., MUDr. Peter Mikolajčík, PhD., MUDr. Lukáš Spevák, MUDr. Šimon Číčel, MUDr. Marián Molnár, PhD., MBA, doc. MUDr. Dalibor Murgaš, PhD., MUDr. Tomáš Jesenský, MUDr. Miroslav Slezák, PhD., MUDr. Paula Bojková, MUDr. Roman Tlacháč, MUDr. Miloslav Mišánik, PhD.

Last change: 19.08.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KVVTCh/J-S-VL-524/22	Surgery (2)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 3 / 2 **per level/semester:** 42 / 28
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 8.

Educational level: I.II.

Prerequisites: JLF.KVVTCh/J-S-VL-523/22 - Surgery (1) and JLF.KVVTCh/J-S-VL-522a/22 - Surgical Propedeutics (2)

Course requirements:
Continuous assessment of students takes place in the form of 2 tests - minimum passing score: 60%.
Assessment: TEST 1 and 2 A: 100-91% (19-20 points), B 90-81% (17-18 points), C 80-71% (15-16 points), D 70-61% (13-14 points) E 60% (12 points), Fx less than 60%
Attendance at 7 lectures
Final assessment: A 38-40 points B 34-37 points C 30-33 points D 26-29 points E 24-25 points Fx less than 24 points

Learning outcomes:
The graduate of the subject understands diseases of the mammary gland, diseases of the thoracic and mediastinal organs. He has knowledge of the basics of cardiac surgery, heart and vascular injuries. He masters the basic issues of vascular diseases and vascular approaches to hemodialysis. The graduate knows the concept, content and basics of plastic surgery, its surgical techniques, examination methods and therapeutic procedures. The graduate knows benign and malignant skin tumors, their division, diagnosis and surgical therapy. He has knowledge of the management of the burns, he knows the surgical therapy of the late consequences of burns.

Class syllabus:
Congenital defects of the digestive system and their surgical treatment.
Congenital defects of the respiratory system and their surgical treatment. Chest wall deformities.
Surgical diseases of the organs of the thoracic cavity.
Surgical diseases of the esophagus and mediastinum.
Fundamentals of cardiac surgery.
Heart and vascular injuries
Hemodialysis and vascular access for HD. Arteriovenous fistulas
Surgical diseases of the branches of the aortic arch. Steal syndrome, thoracic outlet syndrome.
Surgical diseases of the abdominal aorta and its branches.
Visceral ischemic syndrome, AAA.
Malignant melanoma and other skin malignancies.

Contents of plastic surgery. Skin flaps, transplants. External hernias - inguinal hernia, femoral hernia, umbilical hernia. Internal hernias - diaphragmatic and hiatal.

Recommended literature:

Fischer J. et al.: Fischer´s Mastery of Surgery,seventh edition, 2018, Volume 1,2
Sabiston, D.C.: Textbook of Surgery 21st edition. The biological Basic of Modern Surgical Practice. Philadelphia: W.B. Saunders Comp. 2021, 2176 pp.
Liechty, D., Soper, R.T.: Fundamental of Surgery. Philadelphia: C.V.Mosby Comp., 1989, 646 pp.
Way, L.W.: Current Surgical Diagnosis and Treatment. New York: Lange Medical Books, 2006. 1453 pp.
Skinner, H.B.: Current Diagnosis and Treatment in Orthopedics. Norwalk: Appleton and Lange, 1995. 645 pp.
Madani A., Ferri L., Seely A.: Pocket Manual of General Thoracic Surgery, Springer 2015, 274 pages.
Chung CK: Grabb and Smith Plastic Surgery, 8th Edition, 2019. 1108s.

Languages necessary to complete the course:
english language

Notes:

Past grade distribution
Total number of evaluated students: 379

A	ABS0	B	C	D	E	FX
2,64	0,0	35,62	43,27	16,36	1,32	0,79

Lecturers: doc. MUDr. Juraj Miklušica, PhD., MUDr. Šimon Číčel, MUDr. Marián Molnár, PhD., MBA, doc. MUDr. Dalibor Murgaš, PhD., MUDr. Marek Malík, PhD., MUDr. Vladimír Svitek, PhD., MUDr. Tomáš Jesenský, prof. MUDr. Anton Dzian, PhD., MUDr. Igor Homola, PhD., doc. MUDr. Marek Smolár, PhD., MPH, MUDr. Michal Hošala, PhD., MUDr. Ján Janík, PhD., MUDr. Peter Mikolajčík, PhD., MUDr. Lukáš Spevák, MUDr. Roman Tlacháč, MUDr. Miloslav Mišánik, PhD.

Last change: 18.08.2025

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KVVTCh/J-S-VL-528/26	Surgery (3)

Educational activities:
Type of activities: practicals
Number of hours:
per week: **per level/semester:** 320s
Form of the course: on-site learning

Number of credits: 10

Recommended semester: 11., 12..

Educational level: I.II.

Prerequisites: JLF.KVVTCh/J-S-VL-524/22 - Surgery (2) and JLF.KVVTCh/J-S-VL-054/22 - Summer Practice-Surgery and JLF.NchK/J-S-VL-619/22 - Neurosurgery and JLF.OTK/J-S-VL-570/22 - Ortopedics and JLF.UK/J-S-VL-578/22 - Urology

Course requirements:
Completition of practice before state board exam

Learning outcomes:
Studnet can complete knowledge of surgical diseases, can enhance the practical skills of surgical propedeutics principles, knows the principles of daily care of the surgical patient,
knows the principles of work at the surgical ambulance and operating room. Listed knowledge can applicate to other surgical fields / orthopedics, traumatology, plastic surgery, pediatric surgery, anaesthesiology and intensive medicine

Class syllabus:
Daily participation in the work at the surgical ward, ambulance and operating room under the supervision of the designated doctor. Write daily records of treatment of a patient, perform small surgery / removal of stitches, wound dressing, assisting in simple surgeries.

Recommended literature:
Fischer J. et al.: Fischer´s Mastery of Surgery,seventh edition, 2018, Volume 1,2
Sabiston, D.C.: Textbook of Surgery 21st edition. The biological Basic of Modern Surgical Practice. Philadelphia: W.B. Saunders Comp. 2021, 2176 pp.
Liechty, D., Soper, R.T.: Fundamental of Surgery. Philadelphia: C.V.Mosby Comp., 1989, 646 pp.
Way, L.W.: Current Surgical Diagnosis and Treatment. New York: Lange Medical Books, 2006. 1453 pp.
Skinner, H.B.: Current Diagnosis and Treatment in Orthopedics. Norwalk: Appleton and Lange, 1995. 645 pp.
Madani A., Ferri L., Seely A.: Pocket Manual of General Thoracic Surgery, Springer 2015, 274 pages.
Chung CK: Grabb and Smith Plastic Surgery, 8th Edition, 2019. 1108s.
Danovitch G.: Handbook of kidney transplantation, 6th edition 2017, 606pp.

Languages necessary to complete the course:

english language

Notes:

Past grade distribution
Total number of evaluated students: 15

A	ABS0	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: doc. MUDr. Juraj Miklušica, PhD., prof. MUDr. Anton Dzian, PhD., doc. MUDr. Marek Smolár, PhD., MPH, MUDr. Lukáš Spevák, MUDr. Michal Hošala, PhD., MUDr. Peter Mikolajčík, PhD., MUDr. Tomáš Jesenský, MUDr. Ján Janík, PhD., MUDr. Paula Bojková, MUDr. Roman Tlacháč, MUDr. Miloslav Mišánik, PhD.

Last change: 04.06.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KVVTCh/J-S-VL-522/22	Surgical Propedeutics (1)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 2 / 2 **per level/semester:** 28 / 28
Form of the course: on-site learning

Number of credits: 4

Recommended semester: 5.

Educational level: I.II.

Prerequisites: JLF.ÚA/J-S-VL-502/24 - Anatomy (2)

Course requirements:
Continuous assessment of students takes place in the form of 2 tests - minimum passing score: 60%.
Assessment: TEST 1 and 2 A: 100-91% (19-20 points), B 90-81% (17-18 points), C 80-71% (15-16 points), D 70-61% (13-14 points) E 60% (12 points), Fx less than 60%
Attendance at 7 lectures
Final assessment: A 38-40 points B 34-37 points C 30-33 points D 26-29 points E 24-25 points Fx less than 24 points

Learning outcomes:
The graduate is familiar with the content in the field of surgery, from historical aspects to the present. He knows the basic surgical techniques and procedures for adhering to the principles of asepsis and antiseptis. He knows the indications for surgical treatment, can determine the operational risk and specify the principles of preoperative, perioperative and postoperative care. He has imoprtant knowledge about the diagnosis and treatment of shock and life-threatening conditions in surgery. He knows the principles of diagnosis and treatment of surgical infections. He is acquainted with the principles of diagnosis and surgical treatment of malignant diseases and acute abdominal emergencies.

Class syllabus:
Anamnesis and physical examination of a surgical patient, Invasive and non-invasive diagnostic methods in the examination of a surgical patient, Operative risk, Principles of preoperative preparation.
Principles of surgical treatment, indications for surgical treatment. Basic surgical procedures (resection, non-resection, ablation, shunting operations, stomas). Types of surgical procedures (urgent, acute, elective).
Asepsis, antisepsis, sterilization, disinfection. Nosocomial infections.
Enteral and parenteral nutrition. Nutritional disorders in surgical patients. Diagnosis of nutritional disorders - clinical, laboratory. Infusion therapy.
Peculiarities of physical examination in pediatric patients. Invasive and non-invasive diagnostic methods in the examination of a pediatric surgical patient.

Changes in the homeostasis of the organism after injury and surgery. Perioperative and postoperative care of the surgical patient. The most common postoperative complications (cardiovascular system, respiratory system, renal system, digestive system, bleeding, dehiscence of the surgical wound).
Shock - definition, classification and pathophysiology of shock. Monitoring. Prevention and treatment of shock. Water and electrolyte balance. Acid-base balance disorders in the surgical patient.
Soft tissue injuries - mechanisms of injury, wound distribution, wound healing, healing of individual tissue structures. Principles of wound care. Factors affecting wound healing. Suture material, sutures. Pressure ulcers (causes of occurrence, prevention, treatment)
Blood transfusion, blood derivatives, replacement solutions. Indications, risks and complications of transfusion and blood derivatives.
Hemostasis disorders in the surgical patient (congenital, acquired). Preoperative preparation. Antiplatelet, anticoagulant and fibrinolytic therapy.
Infections in surgery. Bacteremia, SIRS, sepsis. SOFA score, qSOFA score. Factors influencing the onset and course of infection. Prevention, diagnosis and treatment of surgical infection. Bacteriological monitoring.
Inflammatory diseases of the fingers and hand. Pyogenic wound infections, lymphangitis, lymphadenitis, hidradenitis, phlegmon, abscess, osteomyelitis, folliculitis, furuncle, carbuncle, cheilitis. Anaerobic infections, tetanus.
Basics of oncological surgery. Benign and malignant tumors, precancerous lesions. Diagnosis and treatment of malignant tumors, TNM classification of malignant tumors, grading, staging. Primary and secondary prevention of tumors.
Life-threatening conditions in surgery. Basics of CPR. Principles of diagnostic and treatment procedures.
Airway management (intubation, coniotomy, tracheostomy)

Recommended literature:

Fischer J. et al.: Fischer´s Mastery of Surgery,seventh edition, 2018, Volume 1,2
Sabiston, D.C.: Textbook of Surgery 21st edition. The biological Basic of Modern Surgical Practice. Philadelphia: W.B. Saunders Comp. 2021, 2176 pp.
Liechty, D., Soper, R.T.: Fundamental of Surgery. Philadelphia: C.V.Mosby Comp., 1989, 646 pp.
Way, L.W.: Current Surgical Diagnosis and Treatment. New York: Lange Medical Books, 2006. 1453 pp.
Madani A., Ferri L., Seely A.: Pocket Manual of General Thoracic Surgery, Springer 2015, 274 pages.
Chung CK: Grabb and Smith Plastic Surgery, 8th Edition, 2019. 1108s.

Languages necessary to complete the course:

english language

Notes:

Past grade distribution

Total number of evaluated students: 397

A	ABS0	B	C	D	E	FX
6,3	0,0	36,27	38,29	17,13	1,51	0,5

Lecturers: doc. MUDr. Juraj Miklušica, PhD., doc. MUDr. Marek Smolár, PhD., MPH, MUDr. Michal Hošala, PhD., MUDr. Peter Mikolajčík, PhD., MUDr. Šimon Číčel, MUDr. Lukáš Spevák, MUDr. Marián Molnár, PhD., MBA, doc. MUDr. Dalibor Murgaš, PhD., MUDr. Tomáš Jesenský,

MUDr. Ján Janík, PhD., MUDr. Paula Bojková, MUDr. Roman Tlacháč, MUDr. Miloslav Mišánik, PhD.
Last change: 18.08.2025
Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KVVTCh/J-S-VL-522a/22	Surgical Propedeutics (2)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 3 / 2 **per level/semester:** 42 / 28
Form of the course: on-site learning

Number of credits: 6

Recommended semester: 6.

Educational level: I.II.

Prerequisites: JLF.ÚA/J-S-VL-502/24 - Anatomy (2) and JLF.KVVTCh/J-S-VL-522/22 - Surgical Propedeutics (1)

Course requirements:
Continuous assessment of students takes place in the form of 2 tests - minimum passing score: 60%.
Assessment: TEST 1 and 2 A: 100-91% (19-20 points), B 90-81% (17-18 points), C 80-71% (15-16 points), D 70-61% (13-14 points) E 60% (12 points), Fx less than 60%
Participation in 7 lectures, successful completion of practical and theoretical exams - theoretical exam consists of 2 questions
Final assessment: A, B, C, D, Fx

Learning outcomes:
The graduate of the course knows the basic algorithm of diagnostic and treatment procedures in patients with chest and abdominal injuries with polytrauma and burns. He knows the specifics of pediatric traumatology. He has good knowledge of minimally invasive surgery. He is familiar with the diagnosis and treatment of acute limb ischemia, diabetic foot and the issues of chronic wound care, as well as the basics of palliative medicine and surgery in the elderly.

Class syllabus:
Polytrauma, diagnostic and therapeutic procedures.
Injuries of intra-abdominal organs and retroperitoneum.
Injuries of the chest and intrathoracic organs.
Hypothermia and frostbite. Electric and lightning injuries. Crush and blast syndrome.
Peculiarities of pediatric traumatology.
Local anesthesia (types, indications, complications). Pain management in a surgical patient.
New technologies in surgery. Minimally invasive and robotic surgery.
Criteria for clinical, biological and brain death. Organ and tissue transplantation. Donor program.
Acute and chronic ischemic limb syndrome. Peripheral vascular injuries.
Surgical aspects of diabetes mellitus. Diabetic foot (Wagner classification). Amputations (indications, types)
Surgical diseases of the venous and lymphatic system. Thromboembolic disease. Air and fat embolism. Anticoagulation and thrombolytic therapy.
Management of chronic wounds.

Polymorbidity. Surgical problems of old age. Palliative medicine.
Burns, burn shock.

Recommended literature:

Fischer J. et al.: Fischer´s Mastery of Surgery,seventh edition, 2018, Volume 1,2
Sabiston, D.C.: Textbook of Surgery 21st edition. The biological Basic of Modern Surgical Practice. Philadelphia: W.B. Saunders Comp. 2021, 2176 pp.
Liechty, D., Soper, R.T.: Fundamental of Surgery. Philadelphia: C.V.Mosby Comp., 1989, 646 pp.
Way, L.W.: Current Surgical Diagnosis and Treatment. New York: Lange Medical Books, 2006. 1453 pp.
Skinner, H.B.: Current Diagnosis and Treatment in Orthopedics. Norwalk: Appleton and Lange, 1995. 645 pp.
Madani A., Ferri L., Seely A.: Pocket Manual of General Thoracic Surgery, Springer 2015, 274 pages.
Chung CK: Grabb and Smith Plastic Surgery, 8th Edition, 2019. 1108s.
Danovitch G.: Handbook of kidney transplantation, 6th edition 2017, 606pp.

Languages necessary to complete the course:
english language

Notes:

Past grade distribution
Total number of evaluated students: 379

A	ABS0	B	C	D	E	FX
34,56	0,0	24,01	20,32	8,71	8,97	3,43

Lecturers: doc. MUDr. Juraj Miklušica, PhD., doc. MUDr. Marek Smolár, PhD., MPH, MUDr. Michal Hošala, PhD., MUDr. Peter Mikolajčík, PhD., MUDr. Šimon Číčel, MUDr. Marián Molnár, PhD., MBA, doc. MUDr. Dalibor Murgaš, PhD., MUDr. Lukáš Spevák, MUDr. Marek Malík, PhD., MUDr. Tomáš Jesenský, prof. MUDr. Anton Dzian, PhD., MUDr. Ján Janík, PhD., MUDr. Paula Bojková, MUDr. Zoltán Cibula, PhD., MHA, doc. MUDr. Maroš Hrubina, PhD., MUDr. Miloslav Mišánik, PhD.

Last change: 18.08.2025

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KDD/J-S-VL-643/24	Transplant Medicine

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: ,5 / ,5 **per level/semester:** 7 / 7
Form of the course: on-site learning

Type, volume, methods and workload of the student - additional information
Teaching format: Combination of seminars and practical sessions
Recommended teaching load (hours): 0.5 / 0.5 per week
Total teaching load over the study period: 7.5 / 7.5 hours
Mode of study: Face-to-face / hybrid
Number of credits: 1
Recommended semester/trimester: 9th semester
Level of study: First and Second Cycle
Prerequisite courses: None

Number of credits: 1

Recommended semester: 10.

Educational level: I.II.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 0

A	ABS0	B	C	D	E	FX
0,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: prof. Mgr. MUDr. Miloš Jeseňák, PhD., MBA, MUDr. Anna Ružinák Bobčáková, PhD., Mgr. Andrej Čereš, prof. MUDr. Ivana Dedinská, PhD., MUDr. Karol Graňák, PhD., doc. MUDr. Matej Vnučák, PhD., MUDr. Lenka Lisá, PhD., MUDr. Ivana Plameňová, PhD., MBA, doc. MUDr. Juraj Sokol, PhD., MBA, MUDr. Martin Vojtko, doc. MUDr. Juraj Miklušica, PhD., MUDr. Otília Petrovičová, PhD.

Last change: 10.08.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚVZ/J-S-VL-589/19	Tropical Medicine

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 1 / 1 **per level/semester:** 14 / 14
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 10.

Educational level: I.II.

Prerequisites: JLF.ÚVZ/J-S-VL-617/19 - Public Health (1)

Recommended prerequisites:
Public Health 1

Course requirements:
Evaluation of the course
• Active attendance at the practicals: 3 points for each session (max. 24 points)
• Compilation of health-travel characteristics of a country of student's choice situated in Africa, Asia or Latin America (max. 38 points) until end of the 7th week of the semester
The characteristics in extend of 1-2 pages should contain items as follows:
o general characteristics of the country (climate, cultural, economic and political characteristics)
o specific health-related risks
o recommended and required vaccinations
o malaria (risk, possibly areas under risk and seasons, effective chemoprophylaxis)
o other health-related risks
• Written test: 19 questions – 2 points each (max. 38 points)
Final evaluation (max. 100 points):
Achieved points Evaluation
100 – 91 A (excellent - 1)
90 – 81 B (very good – 1.5)
80 – 73 C (good - 2)
72 – 66 D (satisfactory – 2.5)
65 – 60 E (sufficient - 3)
59 and less Fx (fail - 4)
For successful completion of the course, at least 60 points in final evaluation are needed.
Scale of assessment (preliminary/final): 0/100

Learning outcomes:
After completion of the subject the student understands of tropical medicine, specific features of epidemiology and management of communicable and non-communicable diseases in conditions of tropical and subtropical zones, health aspects of travelling

Class syllabus:

Definitions of terms and classification
Specific features of epidemiology and management of communicable and non-communicable diseases in tropical and subtropical zones
Intestinal infections in the tropics and subtropics
Respiratory infections (airborne infections) in the tropics and subtropics
Skin and external mucosae diseases in the tropics and subtropics
Blood infections in the tropics and subtropics
The most important parasitic diseases and tropic and subtropical zones
Health disorders caused by heat and sun radiation
Nutrition associated diseases in developing countries
Essentials of travel medicine – vaccination of travellers, recommendations and counselling, topical information resources, international regulations (International Health Regulations - IHR).

Recommended literature:

OBLIGATORY LITERATURE
https://moodle.uniba.sk/
CDC. Traveller's health. https://wwwnc.cdc.gov/travel/
WHO Travel Advice: https://www.who.int/travel-advice
RECOMMENDED LITETATURE
WHO Neglected tropical diseases: https://www.who.int/health-topics/neglected-tropical-

Languages necessary to complete the course:

english

Notes:

Past grade distribution

Total number of evaluated students: 7

A	ABS0	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: prof. MUDr. Tibor Baška, PhD.

Last change: 17.08.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.UK/J-S-VL-578/22	Urology

Educational activities:
Type of activities: practicals
Number of hours:
per week: 4,5 **per level/semester:** 63
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 9.

Educational level: I.II.

Prerequisites: JLF.KVVTCh/J-S-VL-523/22 - Surgery (1)

Course requirements:
Test

Learning outcomes:
Basic knowledge of urology: embryology, anatomy, physiology, pathology, pathophysiology, etiology, pathogenesis, diagnosis and treatment of urogenital diseases

Class syllabus:
Examination of urological patient, symptoms of urogenital disorders, urine sampling and analysis Instrumentation in urology, acute urinary retention, basic andrology (infertility, erectile dysfunction, sperm bank) Radiological, ultrasonographic and radionuclide examination in urology. Basic urodynamic investigation. Differential diagnosis of hematuria Differential diagnosis of urological disorders. Emergency in urology. Treatment of urinary tract infection. Cadaverous program, hemodialysis and kidney transplantation

Recommended literature:

Languages necessary to complete the course:
English Language

Notes:

Past grade distribution
Total number of evaluated students: 392

A	ABS0	B	C	D	E	FX
40,82	0,0	32,91	15,31	7,4	3,57	0,0

Lecturers: doc. MUDr. Ján Ľupták, PhD., MUDr. Róbert Dušenka, PhD., MBA, prof. MUDr. Ján Švihra, PhD., MUDr. Ján Švihra, PhD., MUDr. Kamil Javorka, PhD., MUDr. Ján Kliment, PhD.

Last change: 20.08.2025

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚVZ/J-S-VL-610/19	Vaccinology

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: ,5 / ,5 **per level/semester:** 7 / 7
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 10.

Educational level: I.II.

Prerequisites: JLF.ÚVZ/J-S-VL-617/19 - Public Health (1)

Recommended prerequisites:
Public Health 1

Course requirements:
EVALUATION OF THE COURSE
Requirements to successfully complete the course:
To compete the course, three basic conditions should be fulfilled:
1. active attendance in seminars: compulsory attendance in seminars – in case of absence, the student should substitute the missing seminars through consultation with the respective teacher 7x4 (28 points)
2. well arranged preparation of the 1st theme in a form of an ppt presentation (max. 36 points) until mid of the semseter
3. well arranged preparation of the 2nd theme in a form of an ppt presentation (max. 36 points) until end of the semester
Final evaluation (max. 100 points):
Achieved points
Evaluation
100 – 91 A (excellent - 1)
90 – 81 B (very good – 1.5)
80 – 73 C (good - 2)
72 – 66 D (satisfactory – 2.5)
65 – 60 E (sufficient - 3)
59 and less Fx (fail - 4)
At least 60 points in total evaluation are needed to compete the course.
Scale of assessment (preliminary/final): 0/100

Learning outcomes:
After completion of the subject the student understands basic principles of prevention by vaccination, the effect of vaccines in individuals on herd immunity, public health significance of vaccination strategies and their implication in the society.

Class syllabus:

Public Health importance of vaccination in Slovakia. Legislation related to vaccination in Slovakia, the National Immunization Program. Composition, types and kinds of vaccines. The principles of appropriate immunization and appropriate vaccination techniques. Management of vaccination. Management of vaccines. Post vaccination reactions and contraindications. Vaccination of specific population groups. Current trends in vaccinology. Evaluation of immunization strategies, monitoring and control of vaccination.

Recommended literature:

OBLIGATORY LITERATURE

PLOTKIN, S.A et al. Plotkin's Vaccines. 7th Ed. 2018, Elsevier, .1690 pp. ISBN: 978-0-323-35761-6 (https://www.sciencedirect.com/book/9780323357616/plotkins-vaccines)

World Health Organization www.who.int

http://www.ecdc.europa.eu

RECOMMENDED LITERATURE

HUDEČKOVÁ, H., ŠVIHROVÁ, V.: Očkovanie. Martin, Osveta, 2013, 221 s. ISBN 978-80-80633-96-7

CDC. Epidemiology and Prevention of Vaccine-Preventable Diseases. The Pink Book. https://www.cdc.gov/vaccines/pubs/pinkbook/index.html

Languages necessary to complete the course:

english

Notes:

Past grade distribution

Total number of evaluated students: 13

A	ABS0	B	C	D	E	FX
92,31	0,0	7,69	0,0	0,0	0,0	0,0

Lecturers: prof. MUDr. Henrieta Hudečková, PhD., MPH, PhDr. Mgr. Martin Novák, PhD.

Last change: 17.08.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin

COURSE DESCRIPTION

Academic year: 2026/2027

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚTV/J-S-VL-TV5/26	Winter Practice in Physical Education

Educational activities:
Type of activities: training session
Number of hours:
per week: **per level/semester:** 10d
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 1.

Educational level: I.II.

Prerequisites:

Course requirements:
presence

Learning outcomes:
The graduate of this subject personify his attitude to the necessity of healthy life style. He will understand the health sense of active movement for the human health. He will bring into his attitude and conviction the role of active movement, sport as a effective prevention against civilization illnesses of today as a part of therapy to improve the state of health of the whole population. He will become own surely about the importance of sport and motion activities by harmonic young human character progress.

Class syllabus:

Recommended literature:
Sjezdové lyžování Příbramský M., Maršík J

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 0

ABS0	M
0,0	0,0

Lecturers: PaedDr. Jozef Šimeček

Last change: 25.06.2026

Approved by: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin