

## Course descriptions

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## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-159/22	<b>Course title:</b> Advanced Technologies in Orthodontics
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 4s / 20s <b>Form of the course:</b> on-site learning	
<b>Type, volume, methods and workload of the student - additional information</b> COS	
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 5.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.KSMCh/L-S-ZL-078/17 - Preclinical Dentistry 3	
<b>Course requirements:</b> - 100% attendance at the practicals - on-line practice test successful at least 85% <b>Final exam:</b> - practical exam: patient examination and writing medical report - theoretical exam: 3 question (general examination, special systems, laboratory test) <b>Test evaluation:</b> A: 91 - 100 %, B: 81 – 90 %, C: 73 – 80 %, D: 66 – 72 %, E: 60 – 65 %, Fx: 59 % - 0%. The overall rating is determined from the average of the ratings obtained.	
<b>Learning outcomes:</b> Acquisition of new knowledge and skills in modern diagnostics using CBCT technologies and surface scanners. Creation and analysis of 3D facial scans, intraoral scans and 3D scans of dental models. Get acquainted with artificial intelligence technologies and master the capabilities of 3D cephalometric analysis, CBCT segmentation and software simulations. Procedures of software fusions of 3D objects - segmented CBCT and 3D model of teeth with 3D facial scan and virtual simulations of prediction of soft tissue reactions to surgery. 3D printing of segmented models and their simulated stages. Creating a face scan and analysing it. Modelling and segmentation training in Meshmixer and Anatomage programs. <b>Knowledge:</b> Understanding the concepts of basic diagnostic technologies, their outputs, their processing and clinical use (CBCT, CT, micro - CT, A.I., DICOM segmentation, optical scanning). <b>Skills:</b> The graduate of the course should be able to independently perform an intraoral scanning procedure under 5 minutes and its PLY / STL export followed by further 3D modelling or fusion with a segmented CBCT model, make a 3D facial scan, export it and implement e.g., merger with A.I. segmented CBCT surface. Basic work in the program Meshmixer resp. Blender (e.g., modelling of the surgical plate on IO tooth scans and the like).	
<b>Class syllabus:</b>	

**Syllabus:****1st block - General subject introduction & 3D printing**

- Modern diagnostic in dentistry
- Simulations in dentistry
- 3D printing in dentistry
- Bioprinting in dentistry
- Use of 3D printed models (patient, doctor, public, forensic/control aspects)
- Biocompatible materials in 3D printing in dentistry

**2nd block - CBCT, intraoral and face scanning**

- CBCT radiation dose,
- CBCT indications, risks
- CBCT, face and IO scan applications,
- make a good intraoral scan in 5 minutes,
- comparison of two CBCT,
- comparison two face scans – differential maps,
- comparison of two intra-oral scans,
- making of your own face scan

**3rd block - Software simulations and analyses**

- Software in dentistry for simulation and analyses
- Use and possibilities of software simulations
- 3D cephalometric analysis
- Use and possibilities of software analyses and 3D face scans
- Fusions of 3D models (CBCT, face & IO scans etc.)
- 3D analysis of own face scan
- Airway evaluation and software segmentation
- Editing of IO scan – creating model for 3D printing, Meshmixer
- Airway analysis and 3D STL/PLY export

**4th block - New technologies and future (VR, AR, DSD, mobile apps, predictability, acceleration)**

- Modern orthodontic therapy (TADs, invisible braces, acceleration, predictability)
- Individualisation of treatment – Power-Arm, Power-Cap, CAT
- Incoming technologies in dentistry (VR, AR, DSD, mobile apps)
- Possibilities of MADs in treatment of obstructive sleep apnoea
- Clinical use of simulators in treatment planning and patient education
- Modelling of simple surgical guide
- Comparing of two STL surfaces
- Model preparation for 3D printing (DLP/SLA)

**Recommended literature:**

MODERNÁ DIAGNOSTIKA, SIMULÁCIE A 3D TLAČ V ZUBNOM LEKÁRSTVE

autor: Andrej Thurzo a kol. ISBN 978-80-223-5211-6

DOI: <https://doi.org/10.6084/m9.figshare.16530990.v1>

Vydavateľ Univerzita Komenského v Bratislave, 2021 URL: [https://docs.google.com/document/d/1ijN4kPflo\\_AJpR7ZRWNr-yUZa0Qluy7IjqEbAGyX1d0/edit](https://docs.google.com/document/d/1ijN4kPflo_AJpR7ZRWNr-yUZa0Qluy7IjqEbAGyX1d0/edit)

MOŽNOSTI 3D TLAČE V MEDICÍNE

autor: Denisa Jurenová, Andrej Thurzo, Adriána Furdová, Alena Furdová rok vydania: 2020

**Languages necessary to complete the course:**

Slovak

**Notes:**

<b>Past grade distribution</b>					
Total number of evaluated students: 27					
A	B	C	D	E	FX
74,07	14,81	11,11	0,0	0,0	0,0
<b>Lecturers:</b> doc. MUDr. Andrej Thurzo, PhD., MPH, MHA					
<b>Last change:</b> 16.05.2025					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KAIM2/L-S-ZL-141/22	<b>Course title:</b> Anaesthesiology
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 6s / 6s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 1	
<b>Recommended semester:</b> 5.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.FyÚ/L-S-ZL-026/17 - Physiology 2	
<b>Course requirements:</b> - 100% attendance at the seminars - 50% attendance on the lectures <b>Final exam:</b> - seminar thesis: writing essay (medical report) - theoretical exam: 2 question <b>Test evaluation:</b> A: 91 - 100 %, B: 81 - 90 %, C: 73 - 80 %, D: 66 -72 %, E: 60 - 65 %, Fx: 59 % - 0%. The overall rating is determined from the average of the ratings obtained.	
<b>Learning outcomes:</b> <b>Knowledge:</b> After the course the student should know basic pharmacology of general and local anaesthetics, prepare of patient for anaesthesia. <b>Skills:</b> Airway management, oxygen therapy. Routes of administration of the aesthetic drugs, analgetics, practical management of allergic reaction and overdose, use of anti-dota. Provide the first aid.	
<b>Class syllabus:</b> Introduction, history, principles of general and locoregional anaesthesia. Preparing the patients for anaesthesia Patient's safety - Helsinki declaration Novel approach of anesthesia and locoregional anesthesia applying for dentistry	
<b>Recommended literature:</b> LARSEN , Anestézia , rok 2022, Praha - Grada. 2022, VYMAZAL T., Anesteziologie (nejen) k atestaci , Grada - Praha , 2022. ISBN	
<b>Languages necessary to complete the course:</b> Slovak	
<b>Notes:</b>	

<b>Past grade distribution</b>					
Total number of evaluated students: 122					
A	B	C	D	E	FX
64,75	26,23	9,02	0,0	0,0	0,0
<b>Lecturers:</b> doc. MUDr. Roman Záhorec, CSc., MUDr. Daniel Cintula, MUDr. Tomáš Veselovský					
<b>Last change:</b> 06.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					



## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KAIM2/L-S-ZL-142/22	<b>Course title:</b> Analgetics and Sedatives in Dentistry
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 4s / 4s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 1	
<b>Recommended semester:</b> 5.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.FyÚ/L-S-ZL-026/17 - Physiology 2	
<b>Course requirements:</b> - 100% attendance at the seminars - 50% attendance on the lectures - 1 written test (minimum 60% of correct answers) Final exam: - theoretical exam: 2 question Test evaluation: A: 91 - 100 %, B: 81 - 90 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 % - 0%. The overall rating is determined from the average of the ratings obtained.	
<b>Learning outcomes:</b> Management of allergic reaction, side effects of analgetics and sedatives. Knowledge: After the course the student should know basic pharmacology of general and local anesthetics, sedatives and analgetics, principles of procedural sedation and analgesia (PSA), administration of sedatives , side effects and its management. Skills: Routes of administration of analgetics and sedatives, practical management of complications, allergic reaction after sedatives and hypnotics , anti-dota. Provide first aid.	
<b>Class syllabus:</b> Introduction, applying for dentistry General and local anesthetics, pharmacology of sedatives and hypnotics, mechanisms of effect, routes of administration, premedication Procedural sedation and analgesia (PSA) in stomatology, algorithm and protocols. Analgetics and sedatives using for PSA, side effects, management of complications	
<b>Recommended literature:</b> LARSEN , Anestézia , rok 2022, Praha - Grada. 2022, VYMAZAL T., Anesteziologie nejen k atestaci , Grada - Praha , 2022.	
<b>Languages necessary to complete the course:</b>	

Slovak					
<b>Notes:</b>					
<b>Past grade distribution</b>					
Total number of evaluated students: 122					
A	B	C	D	E	FX
53,28	23,77	16,39	6,56	0,0	0,0
<b>Lecturers:</b> doc. MUDr. Roman Záhorec, CSc., MUDr. Daniel Cintula, MUDr. Tomáš Veselovský					
<b>Last change:</b> 06.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.AÚ/L-S-ZL-001/16	<b>Course title:</b> Anatomy 1
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 48s / 36s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 6	
<b>Recommended semester:</b> 1.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> - 100% participation on the practical exercises - Passing 1 written test with at least 60% points and 1 practical exam from the structures, organs and regions of the thorax and abdomen. - Written test with a minimum of 60% - Test evaluation: A: 91 - 100 %, B: 81 – 99 %, C: 73 – 80 %, D: 66 – 72 %, E: 60 – 65 %, Fx: 59 % and less - Practical exam evaluation: A: excellent, B: very good, C: good, D: satisfactory, E: sufficiently, Fx: failed. Final mark of the semester is determined from the average of received scores.	
<b>Learning outcomes:</b> <b>Knowledge:</b> - Know the architecture and structures of the human body in general. - Know the different parts of the musculoskeletal system. - Have knowledge of the morphological structure of the heart, arteries and veins of the systemic and pulmonary circulation. - Have knowledge of the basic concepts and structures of the central and peripheral nervous systems. - Learn and study the structures and organs of the respiratory system. - Understand and know the structures and organs of the digestive system. - Acquire knowledge about the organs of the urinary and genital systems. - To acquire knowledge about the projections of organs on the thoracic and abdominal wall. <b>Skills:</b> - Understand and use anatomical terminology. - Analyze the acquired knowledge from a morphological and clinical point of view. - Practical use of theoretical knowledge during dissection and practical exercises. - Recognize and describe radiological images depicting anatomical structures.	
<b>Class syllabus:</b> <b>Lectures:</b> - Introduction to anatomy (anatomical position, planes and directions, terminology).	

- General anatomy – bones, joints.
- General anatomy – muscles, fascia, fascial compartments, spaces.
- Cardiovascular system – heart, arteries, veins.
- Nervous system – basic concepts.
- Respiratory system – nasal cavity, paranasal sinuses, pharynx, larynx, trachea, bronchi, lungs, pleura.
- Digestive system - basic concepts, oral cavity, teeth, salivary glands, esophagus, stomach, small intestine, large intestine, liver, bile ducts, pancreas, peritoneum.
- Urinary system – kidney, ureter, urinary bladder, urethra.
- External and internal female genitalia.
- External and internal male genitalia.
- Radiological examination methods - chest and abdomen.

**Practical exercises:**

- Vertebrae, ribs, sternum.
- Joints of the vertebral column and thorax.
- Muscles and topographical regions of the thorax.
- Muscles and topographical regions of the abdomen, rectus sheath.
- Muscles and topographical regions of the back.

**Dissection exercises:**

- Thorax: Regions of the thorax. Identification points and lines on the thorax. Skeletotopy of lungs, pleura and heart and their surface projection onto the thoracic wall. Dissection of the intercostal space. Dissection of subcutaneous structures. Dissection of the mammary gland. Dissection of pectoral muscles, rami pectorales, nervi pectorales. Opening the thoracic cavity and study of localization of thoracic viscera. Dissection of anterior and superior mediastinum. Opening of the pericardium. Dissection of ascending aorta, arch of aorta, pulmonary trunk and pulmonary veins. Preparation of lung root (radix pulmonis). Study of external features of heart and lungs. Preparation of lung hilum (hilum pulmonis). Dissection of heart vessels. Incision and opening of heart chambers, study of heart interior. Dissection of the posterior mediastinum.

Abdomen: Regions of the abdomen. Identification points and lines on the abdomen. Surface projection of organs onto the abdominal wall. Preparation of the walls and content of the inguinal canal. Dissection of abdominal muscles. Opening of the abdominal cavity and study of abdominal viscera in situ. Peritoneal relations in the supramesocolic and inframesocolic compartment, lesser sac of peritoneum. Peritoneal folds. Dissection of vessels of the abdominal cavity. Study of macroscopic features of organs of the abdominal cavity. Dissection of retroperitoneal space. Topography of the retroperitoneal organs. Dissection of lumbar plexus. Dissection and study of organs in the lesser pelvis.

**Recommended literature:**

- MRÁZ, P., BÍNOVSKÝ, A., HOLOMÁŇOVÁ, A., OSVALDOVÁ, M., RUTTKAY-NEDECKÁ, E. *Anatómia ľudského tela. I. 4. vydanie.* Bratislava : SAP, 2021, 510 s. ISBN 9788089607891
- MRÁZ, P., BELEJ, K., BEŇUŠKA, J., HOLOMÁŇOVÁ, A., MACKOVÁ, M., ŠTEŇOVÁ, J. *Anatómia ľudského tela. II.* Bratislava : SAP, 2021, 496 s. ISBN 9788089607921
- KUBÍKOVÁ, E., EL FALOUGY, H. a Kolektív. *Klinická anatómia.* Bratislava: Univerzita Komenského, 2020, 330 s. ISBN 978-80-223-5103-4.
- NETTER, F. H. *Netterov anatomický atlas človeka. Preklad 7. vyd.* Bratislava: Lindeni, 2020. 792 s. ISBN 9788056617908

**Languages necessary to complete the course:**

Slovak

<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 366					
A	B	C	D	E	FX
49,73	34,97	10,93	3,55	0,82	0,0
<b>Lecturers:</b> doc. MUDr. Eliška Kubíková, PhD., MPH, doc. MUDr. Anna Holomáňová, CSc., doc. RNDr. Peter Weisman, PhD., Mgr. Katarína Bevízová, PhD., MUDr. Hisham El Falougy, PhD., RNDr. Petra Lukáčiková, PhD., MUDr. Tomáš Barczy, PhD., MUDr. Marta Masárová, Mgr. Silvia Mužiková, MUDr. Jana Bevilaqua, MUDr. Abdolreza Majidi, Mgr. Vladislava Zohdi, PhD., doc. RNDr. Ladislav Guller, CSc., MUDr. Andrej Mífkovič, PhD., MUDr. Daniela Dovalová, Mgr. Tomáš Havránek, PhD., prof. MUDr. Štefan Polák, CSc., MUDr. Osama Al - Khaldi, MDDr. Mária Talánová, Stanislav Malakhov, PhD., doc. MUDr. Zora Haviarová, PhD.					
<b>Last change:</b> 23.05.2024					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.AÚ/L-S-ZL-002/16	<b>Course title:</b> Anatomy 2
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 48s / 60s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 9	
<b>Recommended semester:</b> 2.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.AÚ/L-S-ZL-001/25 - Anatomy 1 or LF.AÚ/L-S-ZL-001/16 - Anatomy 1	
<b>Course requirements:</b> <ul style="list-style-type: none"> <li>- 100% participation on the practical exercises</li> <li>- Passing 1 written test with at least 60% points and 1 practical exam from the structures of the head and neck, upper and lower limbs, and the central nervous system.</li> <li>- Written test with a minimum of 60%</li> <li>- Test evaluation: A: 91 - 100 %, B: 81 – 99 %, C: 73 – 80 %, D: 66 – 72 %, E: 60 – 65 %, Fx: 59 % and less</li> <li>- Practical exam evaluation: A: excellent, B: very good, C: good, D: satisfactory, E: sufficiently, Fx: failed.</li> </ul> <b>Final exam:</b> <ul style="list-style-type: none"> <li>- Practical part</li> <li>- Oral part (3 questions), the student has 50 minutes to prepare.</li> <li>- The student must first be successful in the practical part before he can take part in the oral exam.</li> <li>- exam evaluation: A: excellent, B: very good, C: good, D: satisfactory, E: sufficiently, Fx: failed.</li> </ul>	
<b>Learning outcomes:</b> <p><b>Knowledge:</b></p> <ul style="list-style-type: none"> <li>- Acquire knowledge about endocrine glands.</li> <li>- Learn and study the structures and organs of the lymphatic system.</li> <li>- Acquire knowledge about the structures and organs of the central nervous system and the autonomic nervous system.</li> <li>- Acquire knowledge about the regions, organs, nerves and vessels of the head and neck.</li> <li>- Have knowledge about the skeleton and muscles of the head and neck.</li> <li>- To acquire and study anatomical structures and topographic-anatomical regions of the upper and lower limbs.</li> <li>- Gain knowledge about sense organs and skin.</li> </ul> <p><b>Skills:</b></p> <ul style="list-style-type: none"> <li>- Understand and use anatomical terminology.</li> <li>- Analyze the acquired knowledge from a morphological and clinical point of view.</li> <li>- Practical use of theoretical knowledge during dissection and practical exercises.</li> </ul>	

- Recognize and describe radiological images depicting anatomical structures.

### **Class syllabus:**

#### Lectures:

- Lymphatic system
- Endocrine glands
- Spinal cord
- Spinal nerves
- Medulla oblongata, pons.
- Mesencephalon, The fourth ventricle, reticular formation.
- nuclei of the cranial nerves, cranial nerves.
- Cerebellum.
- Telencephalon.
- Limbic lobe and olfactory pathways.
- Basal nuclei.
- Autonomic nervous system
- Sense organs
- Skin.

#### Practical exercises:

- Skull – viscerocranium.
- Skull – neurocranium.
- Joints of the bones of the skull.
- Muscles and topographical regions of the head and neck.
- Skeleton of the upper limb.
- Joints of the upper limb.
- Muscles of and topographical regions the upper limb.
- Skeleton of the lower limb.
- Joints of the lower limb.
- Muscles and topographical regions of the lower limb.

#### Dissection exercises:

Head and neck: Surface markings and regions. Dissection of cutaneous nerves and veins. Dissection of the parotid region. Dissection of the oral region, facial vessels. Dissection of the submandibular triangle. Dissection of the carotid triangle. Dissection of the frontal, infraorbital and mental regions. Dissection of the lateral cervical region. Dissection of the occipital and posterior cervical regions.

Upper limb: Landmarks and regions of the upper limb. Dissection of superficial veins and superficial nerves. Deltopectoral triangle. Dissection of the structures in the axillary fossa. Dissection of the structures in medial bicipital sulcus. Dissection of the structures in the cubital fossa. Dissection of the structures on the ventral side of the forearm. Dissection of the palm of the hand. Dissection of the structures on the dorsal side of the upper limb.

Lower limb: Landmarks and regions of the lower limb. Dissection of superficial veins and superficial nerves. Dissection of the structures in the femoral triangle and iliopectineal fossa. Dissection of the anterior crural region and the dorsum of the foot. Dissection of the medial retromalleolar region. Dissection of superficial veins and nerves on the dorsal side of the lower limb. Dissection of the structures in the suprapiriform and infrapiriform foramen. Dissection of structures in the popliteal fossa. Planta pedis dissection.

Central nervous system: Surface markings of the spinal medulla. Spinal nerve. Vertebral levels of the spinal cord segments. Removal of the brain from the skull. Cranial nerve projections from openings on the skull. Cranial meninges. Venous sinuses of the dura mater. Subarachnoid cisterns. Blood supply of the brain. Cranial nerve projections from the base of the brain. Surface features

of the cerebral haemispheres. Brain stem. Cerebellum. Fourth ventricle. Diencephalon. Third ventricle. Basal nuclei. White matter of the cerebral haemisphere. Lateral ventricles.					
<b>Recommended literature:</b> - MRÁZ, P., BÍNOVSKÝ, A., HOLOMÁŇOVÁ, A., OSVALDOVÁ, M., RUTTKAY-NEDECKÁ, E. Anatomia ľudského tela. I. 4. vydanie. Bratislava : SAP, 2021, 510 s. ISBN 9788089607891 - MRÁZ, P., BELEJ, K., BEŇUŠKA, J., HOLOMÁŇOVÁ, A., MACKOVÁ, M., ŠTEŇOVÁ, J. Anatomia ľudského tela. II. Bratislava : SAP, 2021, 496 s. ISBN 9788089607921 - KUBÍKOVÁ, E., EL FALOUGY, H. a Kolektív. Klinická anatomia. Bratislava: Univerzita Komenského, 2020, 330 s. ISBN 978-80-223-5103-4. - NETTER, F. H. Netterov anatomický atlas človeka. Preklad 7. vyd. Bratislava: Lindeni, 2020. 792 s. ISBN 9788056617908					
<b>Languages necessary to complete the course:</b> Slovak					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 366					
A	B	C	D	E	FX
43,72	26,78	15,85	7,65	4,1	1,91
<b>Lecturers:</b> MUDr. Hisham El Falougy, PhD., doc. MUDr. Zora Haviarová, PhD., RNDr. Petra Lukáčiková, PhD., Mgr. Vladislava Zohdi, PhD., Mgr. Katarína Bevízová, PhD., doc. RNDr. Ladislav Guller, CSc., doc. MUDr. Anna Holomáňová, CSc., doc. MUDr. Eliška Kubíková, PhD., MPH, doc. RNDr. Peter Weisman, PhD., MUDr. Andrej Mifkovič, PhD., prof. MUDr. Štefan Polák, CSc., MUDr. Olia El Hassoun Sečanská, PhD., Stanislav Malakhov, PhD.					
<b>Last change:</b> 24.05.2024					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					



## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-137/23	<b>Course title:</b> Augmentation and Augmentation Techniques
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 4s / 20s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 6.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.KSMCh/L-S-ZL-078/17 - Preclinical Dentistry 3	
<b>Course requirements:</b> - online practical test with at least 60% success <b>Final exam:</b> - practical part – the ability to independently perform one of the practical tasks, - theoretical part - 1 question (list of questions) <b>Test evaluation:</b> A: 91 - 100 %, B: 81 – 90 %, C: 73 – 80 %, D: 66 – 72 %, E: 60 – 65 %, Fx: 59 % - 0%. The overall rating is determined from the average of the ratings obtained.	
<b>Learning outcomes:</b> Acquiring knowledge, information and skills in the field of augmentation, augmentation techniques and the use of membranes in dentistry, materials used for the production of membranes, the use of PRP membrane, techniques of using augmentation materials, <b>Knowledge:</b> Knowledge of modern augmentation materials and their use techniques <b>Skills:</b> After completing the course, the student should be able to perform augmentation techniques and know how to work with the membrane	
<b>Class syllabus:</b> 1st block Introduction to the subject of augmentation and augmentation techniques <b>Theoretical</b> <ul style="list-style-type: none"> <li>• Materials used for augmentation</li> <li>• Treatment plan for the use of augmentation</li> <li>• Techniques used to apply augmentation</li> <li>• Indications for the use of augmentation</li> <li>• Use of auto-augmentation of demineralized dentin</li> </ul> <b>Practical</b> <ul style="list-style-type: none"> <li>• Skills for working with augmentation</li> <li>• Skills in processing teeth using the autoaugmentation technique</li> </ul> 2nd block – membranes <b>Theoretical</b>	

<ul style="list-style-type: none"> <li>• Membranes used in dentistry</li> <li>• Materials used for the production of membranes in dentistry</li> <li>• Indications for the use of the membrane</li> </ul> Practical <ul style="list-style-type: none"> <li>• Skills for working with the membrane</li> <li>• Skills in using PRP membrane in dentistry</li> </ul>					
<b>Recommended literature:</b> Essential Techniques of Alveolar Bone Augmentation in Implant Dentistry <ul style="list-style-type: none"> <li>• EAN: 9781119827320</li> <li>• ISBN: 1119827329</li> <li>• Release date: November 10, 2022</li> <li>• Uploader: John Wiley and Sons Ltd</li> </ul>					
<b>Languages necessary to complete the course:</b> Slovak					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 3					
A	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0
<b>Lecturers:</b> MUDr. Amir Amiry Manesh, PhD.					
<b>Last change:</b> 02.04.2025					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KPCh/L-S-ZL-134/18	<b>Course title:</b> Basic Principles of Surgical Procedures in Plastic Surgery
<b>Educational activities:</b> <b>Type of activities:</b> lecture <b>Number of hours:</b> <b>per week: per level/semester:</b> 24s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 5.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.AÚ/L-S-ZL-088/17 - Topographical Anatomy of the Head and LF.ÚHE/L-S-ZL-030/17 - Histology and Embryology 2	
<b>Course requirements:</b> 100% lectures attendance Minimal 60% in final test Test evaluation: A: 100-91%, B: 90-81%, C: 80-73%, D: 72-66%, E: 65-60%, Fx: 59 %-0%	
<b>Learning outcomes:</b> Knowledge: to gain teoretical knowledge about congenital facial defects, classification. Knowledge of basic reconstructive techniques. Principles of facial trauma injuries with loss of tissue and methods of reconstruction. Skills: Management patients with congenital facial defect or facial trauma injuries with loss of tissue. Basic principles of atraumatic operation techniques, use of specific materials	
<b>Class syllabus:</b> Basic principles of plastic and reconstructive surgery, management of loss of tissue facial injuries, congenital defects and reconstruction on face.	
<b>Recommended literature:</b> Palenčár D.: Základy plastickej chirurgie, časť I. Vydavateľstvo UK Bratislava 2018, ISBN 978-80-223-4574-3, s.71 ( <a href="https://www.fmed.uniba.sk/fileadmin/lf/sluzby/akademicka_kniznica/PDF/Elektronicke_knihy_LF_UK/Palencar_D_Zaklady_plastickej_chirurgie.pdf">https://www.fmed.uniba.sk/fileadmin/lf/sluzby/akademicka_kniznica/PDF/Elektronicke_knihy_LF_UK/Palencar_D_Zaklady_plastickej_chirurgie.pdf</a> ) Grabb and Smith's: Plastic Surgery, 8th edition, Lippincott Williams Wilkins, 2019, ISBN 978 - 1496388247. 1108p. Samuel Berkowitz Ed.: Cleft Lip and Palate: Diagnosis and Management, 3rd ed.2013, ISBN 978-3642307690 982p.	
<b>Languages necessary to complete the course:</b> Slovak	
<b>Notes:</b>	

<b>Past grade distribution</b>					
Total number of evaluated students: 82					
A	B	C	D	E	FX
82,93	17,07	0,0	0,0	0,0	0,0
<b>Lecturers:</b> doc. MUDr. Jozef Fedeľeš, CSc., MUDr. Drahomír Palenčár, PhD.					
<b>Last change:</b> 06.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.ÚLBG/L-S-ZL-003/16	<b>Course title:</b> Biology and Human Genetics 1
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 18s / 18s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 3	
<b>Recommended semester:</b> 1.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> 100% attendance at the practicals 1 seminar work 1 written test (minimum 60% of correct answers) Test evaluation: A: 91 - 100 %, B: 81 - 90 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 % - 0%.	
<b>Learning outcomes:</b> <b>Knowledge:</b> <ul style="list-style-type: none"> <li>- Morphology, physiology and genome of prokaryotic and eukaryotic cells</li> <li>- Morphology, function and biogenesis of cell organelles</li> <li>- Cell transport, intercellular spaces and intercellular communication, cell receptors</li> <li>- Reproduction and cell cycle of eukaryotic cells</li> <li>- Cell and tissue cultures</li> <li>- Infectious diseases caused by prokaryotic and single-cellular organisms, their life cycle</li> <li>- Types of microscopes, their design and usage possibilities</li> <li>- Basics of relation between micro- and macroorganisms</li> <li>- Viral genome characteristics and reproduction</li> <li>- Molecular biology: structure and function of DNA and RNA, DNA replication, transcription, translation and their regulation, the genetic code, the genes of prokaryotic and eukaryotic cells, gene expression, form of existence and entry of foreign DNA in a cell</li> <li>- Insertion sequences and transposons, antibiotic resistance (R plasmids, DNA recombination, recombinant techniques, vectors), gene therapy</li> <li>- Obtaining and material processing for the DNA analysis, isolation of nucleic acids</li> <li>- An overview of the basic methods used in molecular genetics and the possibilities of their usage</li> </ul> <b>Skills:</b> <ul style="list-style-type: none"> <li>- Enhancing the skills of the microscopic techniques (light microscopy)</li> <li>- Preparation of native and simple fixed microscopic specimens</li> <li>- Cultivation of eukaryotic cells and tissues in vitro</li> <li>- Morphological diagnosis of bacterial and some parasitic protozoa</li> <li>- Utilization of selected methods of molecular genetics - the obtaining, incubation and</li> </ul>	

storage of biological material, isolation of DNA from tissue, gel separation of DNA fragments, DNA quantitation, DNA denaturation and renaturation					
<b>Class syllabus:</b> The cell as the basic structural and functional unit: morphology, cell surfaces, nucleus, nucleolus, mitochondria, endoplasmic reticulum, ribosomes, Golgi apparatus, lysosomes, cytoskeleton. Intercellular spaces and intercellular communication. Transport of substances - glycocalix, membrane receptors. Cell and tissue culture. In vitro cell culture conditions, culture process, regenerative medicine. Cell cycle: amitosis, mitosis (mitotic apparatus, endomitosis). Viruses: genome, reproduction, mutations and recombinations, oncogenic viruses and acute transforming viruses. Prokaryotic cells - morphology, structure, genome. Parasexual process in bacteria and CRISPR/Cas system. Differences between prokaryotes and eukaryotes. Protista. Molecular biology: structure of DNA and RNA, denaturation and renaturation of DNA, replication of DNA, transcription, translation, regulation of proteosynthesis and post-translational modifications, genetic code. Genes of prokaryotic and eukaryotic cells, insertion sequences and transposons, resistance to antibiotics (plasmids, recombinant DNA technology, vectors). DNA analysis and application of molecular biology in medical practice.					
<b>Recommended literature:</b> Daniel Böhmer, Ľuboš Danišovič, Vanda Repiská: Lekárska biológia a genetika 1. Druhé doplnené vydanie. Bratislava: Univerzita Komenského v Bratislave, 2020. - 102 s. ISBN 978-80-223-4922-2 Böhmer Daniel, Danišovič Ľuboš, Repiská Vanda,: Príručka k praktickým cvičeniam z lekárskej biológie a humánnej genetiky 1. - 1. vyd. - Bratislava: Asklepios, 2009. - 90 s. ISBN 978-80-7167-142-8					
<b>Languages necessary to complete the course:</b> slovak					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 366					
A	B	C	D	E	FX
16,94	24,32	35,52	13,11	10,11	0,0
<b>Lecturers:</b> doc. MUDr. Daniel Böhmer, PhD., prof. RNDr. Vanda Repiská, PhD., MPH, prof. RNDr. Ján Vojtaššák, CSc., MUDr. Tatiana Braxatorisová, CSc., doc. RNDr. Ľuboš Danišovič, PhD., doc. Ing. Helena Gbelcová, PhD., RNDr. Ľubica Milošovičová, PhD., RNDr. Marcela Kuniaková, PhD., RNDr. Jana Malová, PhD., RNDr. Robert Petrovič, PhD., RNDr. Anna Totková, PhD., RNDr. Zuzana Varchulová Nováková, PhD., MUDr. Patrik Vítázka, PhD., prof. RNDr. Igor Tomo, CSc., doc. MUDr. Ján Chandoga, CSc., Mgr. Daniela Klimová, PhD.					
<b>Last change:</b> 01.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.ÚLBG/L-S-ZL-004/16	<b>Course title:</b> Biology and Human Genetics 2
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 20s / 20s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 4	
<b>Recommended semester:</b> 2.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.ÚLBG/L-S-ZL-003/16 - Biology and Human Genetics 1 or LF.ÚLBG/L-S-ZL-003/25 - Biology and Human Genetics 1	
<b>Course requirements:</b> 100% attendance at the practicals, 1 seminar work Final exam: a) test (minimum 60% of correct answers) b) theoretical exam: 3 questions (cytology,molecular genetics, human genetics)	
<b>Learning outcomes:</b> Knowledge: <ul style="list-style-type: none"> <li>- Organization of the human genome: types of DNA, gene structure, homeoboxes and homeodomain DNA - histone complex, the human genome project</li> <li>- Chromosomal inheritance, the structure of chromosomes, nomenclature, identification techniques</li> <li>- Meiosis, differences between spermatogenesis and oogenesis, disorders and their consequences</li> <li>- Cell cycle regulation – oncogenes and their function in the body</li> <li>- Molecular mechanisms of cell cycle deregulation</li> <li>- Molecular basis of carcinogenesis</li> <li>- Oncogenes mutations and their relation to malignancy</li> <li>- Tumor suppressor genes - their function and type of mutations</li> <li>- Cell death and apoptosis</li> <li>- Mutagenesis, distribution and mutagens basic characteristics, reparation mechanisms</li> <li>- Syndrome of increased spontaneous chromosomal instability</li> <li>- Malignant diseases associated with typical rearrangement of chromosomes</li> <li>- Basic methods of human genetics (twins studies, genealogical method, population genetics)</li> <li>- Monogenic disease (autosomal dominant and recessive inheritance, linked to X-linked dominant and recessive inheritance)</li> <li>- Multifactorial inheritance of quantitative and qualitative traits - normal variability</li> <li>- Congenital defects with multifactorial inheritance</li> <li>- Classical cytogenetics (interphase and mitosis)</li> </ul>	

- Chromosomal aberrations in humans (numeric, structural), the mechanism of their formation, frequency and the type of the most common chromosomal aberrations, the risk of recurrence

- Molecular basics of embryogenesis, the role of apoptosis

- Teratogenesis - basic characteristics, mechanism of action, possibilities of differential diagnosis

Skills:

- The ability to establish the proportion of hereditary and non-hereditary factors in the character development

- Design the standard family tree

- Hardy-Weinberg law application

- Cytogenetic analysis in interphase (X and Y chromatin)

- Cytogenetic analysis in metaphase

- Determination of the risk of the most common chromosomal aberrations according to their type, parents age, or by meiosis process

- Determination of the risk of transmission of structural chromosomal aberrations

- Mutagens testing evaluation

### **Class syllabus:**

Chromosomal base of inheritance: structure of chromosomes, nomenclature, methods of identification. Classification of inherited diseases. Single gene diseases in stomatology. Chromosomal aberrations. Stomatological aspects of syndromes caused by aberrations of chromosomes. Oncogenesis - molecular base of cancerogenesis, oncogenes and tumor-suppressor genes, their function. Gene therapy. Genetic base of regulation of maxillo-facial region development. Multifactorial and polygenic inheritance, pathological traits with multifactorial inheritance, malformations. Congenital defects. Threshold effect. Prenatal genetic diagnostic. Mutagenesis. Teratogenesis - basic characteristics, mechanisms of origin, possibilities of differential diagnosis.

### **Recommended literature:**

Repiská Vanda, Böhmer Daniel, Braxatorisová Tatiana, Malová Jana: Lekárska biológia a genetika 2. 1. vyd. Bratislava: Univerzita Komenského v Bratislave, 2020. - 135 s. ISBN 978-80-223-4929-1

Nečas, O. a kol.: Obecná biologie pro lékařské fakulty, 3. prepracované vydanie, vyd.

Jinočany: Nakladatelství a vydavatelství H a H, 2000. 554 s. ISBN 80-86022-46-3.

Sršeň, Š. - Sršňová, K.: Základy klinickej genetiky a jej molekulárna podstata, 3. prepracované vydanie, Osveta, Martin, 2000, 410 s. ISBN 80-8063-021-6.

### **Languages necessary to complete the course:**

slovak

### **Notes:**

### **Past grade distribution**

Total number of evaluated students: 366

A	B	C	D	E	FX
54,64	18,03	12,02	9,02	5,46	0,82

**Lecturers:** doc. MUDr. Daniel Böhmer, PhD., prof. RNDr. Vanda Repiská, PhD., MPH, MUDr. Tatiana Braxatorisová, CSc., prof. RNDr. Igor Tomo, CSc., doc. RNDr. Ľuboš Danišovič, PhD., doc. Ing. Helena Gbelcová, PhD., doc. MUDr. Ján Chandoga, CSc., RNDr. Ľubica Milošovičová, PhD., RNDr. Marcela Kuniaková, PhD., RNDr. Robert Petrovič, PhD.



<b>Last change:</b> 01.12.2022
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.

## STATE EXAM DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF/L-ZL-O-6/16	<b>Course title:</b> Defense of the Diploma Thesis
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 11., 12..	
<b>Educational level:</b> I.II.	
<b>State exam syllabus:</b>	
<b>Last change:</b>	
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.	

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025					
<b>University:</b> Comenius University Bratislava					
<b>Faculty:</b> Faculty of Medicine					
<b>Course ID:</b> LF.KSMCh/L-S-ZL-011/16		<b>Course title:</b> Dental Materials and Technologies 1			
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week:</b> <b>per level/semester:</b> 12s / 6s <b>Form of the course:</b> on-site learning					
<b>Number of credits:</b> 1					
<b>Recommended semester:</b> 2.					
<b>Educational level:</b> I.II.					
<b>Prerequisites:</b>					
<b>Course requirements:</b> 100 % attendance at practicals - one written test, - written test minimal level 60 % - evaluation of test: A: 91 - 100 %, B: 81 – 99 %, C: 73 – 80 %, D: 66 – 72 %, E: 60 – 65 %, Fx: 59 % and less					
<b>Learning outcomes:</b> Learning outcomes: Knowledge: Acquisition of basic materials in dental prosthetics, their composition, properties and use. Skills: Processing and use of basic materials in dental prosthetics.					
<b>Class syllabus:</b> Auxiliary materials – impression, cast, modelling, molding, grinding and polishing materials. Main materials – Metals, synthetic resins, ceramic materials – composition and usage.					
<b>Recommended literature:</b> Hubáľková H., Krňoulová J.: Materiály a technologie v protetickém zubním lékařství. Praha: Galén, 2009, 301 s. ISBN 978-80-7262-581-9 -Vacek, M. a kol.: Stomatologické materiály. Praha: Avicenum, 1980. 227 s.					
<b>Languages necessary to complete the course:</b> Slovak					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 365					
A	B	C	D	E	FX
33,42	55,07	10,68	0,82	0,0	0,0

<b>Lecturers:</b> doc. MUDr. Peter Plachý, CSc., MUDr. Lea Csicsayová, CSc., MUDr. Darina Gabániová, PhD., MUDr. Roman Pecháň, MUDr. Zita Kestlerová, PhD., MDDr. Alexandros Tzigeris
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<b>Last change:</b> 13.06.2024
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<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.
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## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025					
<b>University:</b> Comenius University Bratislava					
<b>Faculty:</b> Faculty of Medicine					
<b>Course ID:</b> LF.KÚČTCh/L-S-ZL-151/22		<b>Course title:</b> Dental Implantology			
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week:</b> <b>per level/semester:</b> 10s / 5s <b>Form of the course:</b> on-site learning					
<b>Number of credits:</b> 1					
<b>Recommended semester:</b> 11.					
<b>Educational level:</b> I.II.					
<b>Prerequisites:</b>					
<b>Course requirements:</b> - 100% attendance at the practicals - 1 written test (minimum 60% of correct answers) Test evaluation: A: 91 - 100 %, B: 81 - 90 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 % - 0%.					
<b>Learning outcomes:</b> Knowledge: principles bone healing and osseointegration. Cooperation with prosthodontist. Skills: insertion of the implant into a model					
<b>Class syllabus:</b> Evaluation of patient due to conditions for implantation. Implant types, instruments. Surgical procedure, complications (early, late).					
<b>Recommended literature:</b> Šimůnek A. a kol.: Dentální implantologie. Hradec Králové, Nucleus 2020, 495 s. ISBN 9788090679405 Satko, I. a kol. Orálna a maxilofaciálna chirurgia. 3.vyd., Bratislava: UK, 2013. 305 s. ISBN 978-80-223-3366-5					
<b>Languages necessary to complete the course:</b> slovak					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 114					
A	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0
<b>Lecturers:</b> doc. MUDr. Dušan Hirjak, PhD.					
<b>Last change:</b> 02.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-152/22	<b>Course title:</b> Dental Instruments and Equipment
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 10s / 10s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 1	
<b>Recommended semester:</b> 6.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.KSMCh/L-S-ZL-143/22 - Dental Materials and Technologies 3	
<b>Course requirements:</b> - 100% attendance at the practicals Final exam: - 1 written test (minimum 60% of correct answers) Test evaluation: A: 91 - 100 %, B: 81 - 90 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 - 0%. The overall rating is determined from the average of the ratings obtained.	
<b>Learning outcomes:</b> Knowledge: Knowledge of the basic and special equipment of the dental office with the equipment needed for operations in the oral cavity and for work in the dental office. Skills: Handling of a dental unit and chair, X-ray diagnostic devices, sterilization equipment and some special devices such as curing lamps, laser, ultrasound.	
<b>Class syllabus:</b> Basic equipment of a dental office - dental unit and dental chair. Dental instruments. Necessary equipment in restorative dentistry, endodontics, periodontics, dental prosthetics, maxillofacial surgery, orthodontics. X-ray diagnostic devices in dentistry. Equipment for disinfection and sterilization in the dental office. Special instrumentation - laser, ultrasound, operating microscope, ozone, 3D imaging methods, pre-operative planning in maxillofacial, computerized prosthetic work CAD-CAM.	
<b>Recommended literature:</b> Koval' A., Jordan D.: Základné vybavenie zubnej ambulancie - Nástroje a prístroje na ošetrovanie pacienta, Prešov, Prešovská univerzita 2007, 33 s. ISBN 978-80-8068-641-3 Katalógy a písomné podklady materiálov výrobcov a dodávateľských firiem	
<b>Languages necessary to complete the course:</b> Slovak	
<b>Notes:</b>	

<b>Past grade distribution</b>					
Total number of evaluated students: 122					
A	B	C	D	E	FX
56,56	27,05	10,66	3,28	2,46	0,0
<b>Lecturers:</b> MUDr. Bohuslav Novák, PhD., MUDr. Andrea Nováková, PhD., MDDr. Marek Matajs, PhD.					
<b>Last change:</b> 19.06.2024					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025					
<b>University:</b> Comenius University Bratislava					
<b>Faculty:</b> Faculty of Medicine					
<b>Course ID:</b> LF.KSMCh/L-S-ZL-012/17		<b>Course title:</b> Dental Materials and Technologies 2			
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week:</b> <b>per level/semester:</b> 12s / 6s <b>Form of the course:</b> on-site learning					
<b>Number of credits:</b> 1					
<b>Recommended semester:</b> 3.					
<b>Educational level:</b> I.II.					
<b>Prerequisites:</b> LF.KSMCh/L-S-ZL-011/16 - Dental Materials and Technologies 1					
<b>Course requirements:</b> 100 % attendance at practicals - one written test, - written test minimal level 60 % - evaluation of test: A: 91 - 100 %, B: 81 – 99 %, C: 73 – 80 %, D: 66 – 72 %, E: 60 – 65 %, Fx: 59 % and less					
<b>Learning outcomes:</b> Knowledge: Temporary and permanent filling materials. Amalgam and aesthetic filling materials. Skills: Preparing and usage of the materials.					
<b>Class syllabus:</b> Classification of dental filling materials, temporary and permanent filling materials. Dental cements –classification, composition, properties, indications of dental cements. Bases and liners. Amalgam in restorative dentistry, non gamma2 dental amalgams. Glassionomer cements, composites, compoionomers.					
<b>Recommended literature:</b> Hubáľková H., Krňoulová J.: Materiály a technologie v protetickém zubním lékařství. Praha: Galén, 2009, 301 s. ISBN 978-80-7262-581-9 -Vacek, M. a kol.: Stomatologické materiály. Praha: Avicenum, 1980. 227 s.					
<b>Languages necessary to complete the course:</b> Slovak					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 324					
A	B	C	D	E	FX
34,57	51,54	8,33	3,7	1,85	0,0



<b>Lecturers:</b> MUDr. Lea Csicsayová, CSc., MUDr. Zita Kestlerová, PhD., MDDr. Alexandros Tzigeris
<b>Last change:</b> 19.06.2024
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-143/22	<b>Course title:</b> Dental Materials and Technologies 3
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 10s / 6s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 5.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.KSMCh/L-S-ZL-012/17 - Dental Materials and Technologies 2 or LF.KSMCh/L-S-ZL-012/25 - Dental Materials and Technologies 2	
<b>Course requirements:</b> 100 % attendance at practicals Exam: a/ written part -written test minimal level 60 %. Evaluation of test: A: 91 - 100 %, B: 81 – 99 %, C: 73 – 80 %, D: 66 – 72 %, E: 60 – 65 %, Fx: 59 % and less b/ Oral part - 3 questions (temporary and permanent filling materials; prosthetic materials; materials in oral surgery and periodontology), student has for prepare 15 min.	
<b>Learning outcomes:</b> Knowledge: Materials in endodontics, oral surgery, implantology a periodontology. Skills: Preparing and usage of the materials.	
<b>Class syllabus:</b> Adhesion and adhesive systems in filling therapy. Materials and instruments in endodontics. Materials used in oral surgery, dental implantology and periodontology. Side effects of dental materialsv. Allergy to dental materials.	
<b>Recommended literature:</b> Hubáľková H., Krňoullová J.: Materiály a technologie v protetickém zubním lékařství. Praha: Galén, 2009, 301 s. ISBN 978-80-7262-581-9 -Vacek, M. a kol.: Stomatologické materiály. Praha: Avicenum, 1980. 227 s.	
<b>Languages necessary to complete the course:</b> Slovak	
<b>Notes:</b>	

<b>Past grade distribution</b>					
Total number of evaluated students: 122					
A	B	C	D	E	FX
71,31	13,93	9,02	4,1	1,64	0,0
<b>Lecturers:</b> MUDr. Lea Csicsayová, CSc., MUDr. Bohuslav Novák, PhD., MUDr. Andrea Nováková, PhD., MUDr. Zita Kestlerová, PhD., MUDr. Roman Pecháň, MUDr. Darina Gabániová, PhD., MDDr. Alexandros Tzigeris					
<b>Last change:</b> 19.06.2024					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-089/21	<b>Course title:</b> Dental Practice Management
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 18s / 7s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 1	
<b>Recommended semester:</b> 11.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> - 100% attendance at the practicals - performing the required amount of specified practical treatments - 1 written test (minimum 60% of correct answers) Final exam: - 3 questions (legislation, ergonomics, practice management) Test evaluation: A: 91 - 100 %, B: 81 - 90 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 - 0%. The overall rating is determined from the average of the ratings obtained.	
<b>Learning outcomes:</b> Knowledge: Establishment, operation and management of a dental practice. Laws, decrees and regulations in connection with the exercise of the medical profession and dental practice. Skills: Personnel, material, equipment and space requirements of the dental office. Ergonomics of work in the dental office. Maintaining the hygienic standard of the dental office.	
<b>Class syllabus:</b> Conditions for the establishment of a dental office and dental practice. Personnel, instruments and equipment of the dental office. Dental practice management. Ergonomics in the dental office. Hygiene of the dental office. X-ray equipment and operation in dental practice. Postgraduate education, lifelong continuing education. Professional organization and professional companies. Legislative issues of dental practice, relations with insurance companies, laws, decrees and regulations in connection with the exercise of the medical profession.	
<b>Recommended literature:</b> Kovaľová E. a kol. : Orálna hygiena II. a III. časť. Prešov Pavol Šidelský, Akcent print Zürich 2010, 667 s. ISBN 978-80-89295-24-1 -Aktuálne články a príspevky z odborných stomatologických periodík, legislatívne nariadenia v súvislosti s vykonávaním stomatologickej praxe.	
<b>Languages necessary to complete the course:</b> Slovak	

<b>Notes:</b>					
<b>Past grade distribution</b>					
Total number of evaluated students: 154					
A	B	C	D	E	FX
93,51	6,49	0,0	0,0	0,0	0,0
<b>Lecturers:</b> MUDr. Bohuslav Novák, PhD., doc. MUDr. Juraj Zajko, CSc.					
<b>Last change:</b> 17.06.2024					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-146/23	<b>Course title:</b> Dental Prosthetics 1
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 14s / 54s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 4	
<b>Recommended semester:</b> 7.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.KSMCh/L-S-ZL-145/22 - Gnathology and Basics of Prosthetics	
<b>Course requirements:</b> 100 % attendance at practicals - one written test, - written test minimal level 60 % - evaluation of test: A: 91 - 100 %, B: 81 – 99 %, C: 73 – 80 %, D: 66 – 72 %, E: 60 – 65 %, Fx: 59 % and less	
<b>Learning outcomes:</b> Knowledge: diagnostics of TMJ disorders, protection of teeth stumps, modern modes of fabrication of the fixed prosthetics. Division of fixed dentures Skills: functional evaluation of the TMJ, practical steps in fabrication of protection crowns, prepare of various types of fixation materials. Phases of crowns fabrication in dental office.	
<b>Class syllabus:</b> Lectures: Inlay, onlay, overlay. Basic types of crowns. Practicals: Full metallic crowns, aesthetic crowns, post crowns.	
<b>Recommended literature:</b> -Strub J.R., Kern M., Türp J.Ch., Witkowski S., Heydecke G., Wolfart S.: Protetika I. 4.vyd., Grada Publishing 2015, 360 s. ISBN 978-80-247-5260-0 -Tvrdoň, M. a kol.: Protetická stomatológia, liečba a prevencia. Science 2001, Bratislava 1999, 590 s. -Vaško,J. a kol.: Stomatológia. Osveta, 1994, 139 s.	
<b>Languages necessary to complete the course:</b> Slovak	
<b>Notes:</b>	

<b>Past grade distribution</b>					
Total number of evaluated students: 82					
A	B	C	D	E	FX
45,12	29,27	14,63	8,54	2,44	0,0
<b>Lecturers:</b> prof. MUDr. Peter Stanko, PhD., MDDr. Nikos Leptos, MDDr. Michaela Lifková, PhD., MUDr. Michaela Apfellová, PhD., Halyna Pruts, PhD., MDDr. Anna Korpášová					
<b>Last change:</b> 01.07.2024					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025					
<b>University:</b> Comenius University Bratislava					
<b>Faculty:</b> Faculty of Medicine					
<b>Course ID:</b> LF.KSMCh/L-S-ZL-147/23		<b>Course title:</b> Dental Prosthetics 2			
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week:</b> <b>per level/semester:</b> 10s / 54s <b>Form of the course:</b> on-site learning					
<b>Number of credits:</b> 4					
<b>Recommended semester:</b> 8.					
<b>Educational level:</b> I.II.					
<b>Prerequisites:</b> LF.KSMCh/L-S-ZL-146/23 - Dental Prosthetics 1					
<b>Course requirements:</b> 100 % attendance at practicals - one written test, - written test minimal level 60 % - evaluation of test: A: 91 - 100 %, B: 81 – 99 %, C: 73 – 80 %, D: 66 – 72 %, E: 60 – 65 %, Fx: 59 % and less					
<b>Learning outcomes:</b> Knowledge: Fixed bridges, abutment teeth and bridge pontics. Protection of abutment teeth, temporary bridges. Adhesive bridges, bridges saving hard dental tissues. Skills: Preparation of abutment teeth, paralellity. Impression techniqe by fixed bridges.					
<b>Class syllabus:</b> Lectures: Fixed bridges, abutment teeth and bridge pontics. Protection of abutment teeth, temporary bridges. Adhesive bridges, bridges saving hard dental tissues. Practicals: Silicone impressions, wax bite by fixed bridges.					
<b>Recommended literature:</b> Strub J.R., Kern M., Türp J.Ch., Witkowski S., Heydecke G., Wolfart S.: Protetika II. 4.vyd., Grada Publishing 2016, 384 s. ISBN 978-80-247-5261-7 -Tvrdoň, M. a kol.: Protetická stomatológia, liečba a prevencia. Science 2001, Bratislava 1999, 590 s.					
<b>Languages necessary to complete the course:</b> Slovak					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 80					
A	B	C	D	E	FX
78,75	18,75	0,0	1,25	1,25	0,0



<b>Lecturers:</b> prof. MUDr. Peter Stanko, PhD., MDDr. Nikos Leptos, MDDr. Michaela Lifková, PhD., MUDr. Michaela Apfelová, PhD., Halyna Pruts, PhD., MDDr. Anna Korpášová
<b>Last change:</b> 01.07.2024
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-148/24	<b>Course title:</b> Dental Prosthetics 3
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 6s / 42s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 9.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.KSMCh/L-S-ZL-147/23 - Dental Prosthetics 2	
<b>Course requirements:</b> - 100 % attendance at practicals - one written test, - written test minimal level 60 % - evaluation of test: A: 91 - 100 %, B: 81 – 99 %, C: 73 – 80 %, D: 66 – 72 %, E: 60 – 65 %, Fx: 59 % and less	
<b>Learning outcomes:</b> Knowledge: Removable partial and total dentures. Steps by fabrication of denture – phases in office and dental laboratory. Artificial teeth arrangement in removable dentures. Skills: Impression making, wax trial of denture.	
<b>Class syllabus:</b> Lectures: Types of removable dentures, combined therapy with removable and fixed dentures. Conditions for fabrication of total denture, preprosthetic surgery. Practicals: Various impression techniques, information of patient at delivery of denture, practical steps by rebasis of removable dentures. Approach to children.	
<b>Recommended literature:</b> -Strub J.R., Kern M., Türp J.Ch., Witkowski S., Heydecke G., Wolfart S.: Protetika III. 4.vyd., Grada Publishing 2016, 384 s. ISBN 978-80-247-5262-4 -Tvrdoň, M. a kol.: Protetická stomatológia, liečba a prevencia. Science 2001, Bratislava 1999, 590 s.	
<b>Languages necessary to complete the course:</b> Slovak	
<b>Notes:</b>	

<b>Past grade distribution</b>					
Total number of evaluated students: 42					
A	B	C	D	E	FX
85,71	14,29	0,0	0,0	0,0	0,0
<b>Lecturers:</b> prof. MUDr. Peter Stanko, PhD., MUDr. Ľudmila Verešová, MUDr. Ľudmila Kučeráková, MDDr. Nikos Leptos, Halyna Pruts, PhD., MDDr. Michaela Lifková, PhD., MUDr. Peter Rendek, MDDr. Agnieszka Anna Gulińska					
<b>Last change:</b> 07.06.2024					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-149/24	<b>Course title:</b> Dental Prosthetics 4
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 12s / 24s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 10.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.KSMCh/L-S-ZL-148/24 - Dental Prosthetics 3 or LF.KSMCh/L-S-ZL-148/25 - Dental Prosthetics 3	
<b>Course requirements:</b> - 100 % attendance at practicals - Oral exam with 2 questions, student has 10 min. for prepare	
<b>Learning outcomes:</b> Knowledge: Functional anatomy of temporomandibular joint (TMJ), prosthetic aspects. Skills: Evaluation of patient with disorders in TMJ region.	
<b>Class syllabus:</b> Lectures: Differential diagnostics of extracapsular and intracapsular TMJ disorders. Effect of prosthetics on TMJ. Prosthetic therapy by disorders of TMJ. Treatment of congenital and acquired defects of jaws and face. Practicals: Occlusal splints, various types, impression technique. Follow-up of patients with TMJ disorders. Evaluation of patient with cleft.	
<b>Recommended literature:</b> Zajko J.: Temporomandibulárny kĺb – komplexná problematika, ochorenia a liečba. 1. vyd., Bratislava, Univerzita Komenského 2020, 113 s. ISBN 978-80-223-4832-4 -Strub J.R., Kern M., Türp J.Ch., Witkowski S., Heydecke G., Wolfart S.: Protetika III. 4.vyd., Grada Publishing 2016, 384 s. ISBN 978-80-247-5262-4 -Tvrdoň, M. a kol.: Protetická stomatológia, liečba a prevencia. Science 2001, Bratislava 1999, 590 s.	
<b>Languages necessary to complete the course:</b> Slovak	
<b>Notes:</b>	

<b>Past grade distribution</b>					
Total number of evaluated students: 42					
A	B	C	D	E	FX
59,52	30,95	4,76	2,38	2,38	0,0
<b>Lecturers:</b> prof. MUDr. Peter Stanko, PhD., MUDr. Ľudmila Kučeráková, MUDr. Ľudmila Verešová, MDDr. Nikos Leptos, Halyna Pruts, PhD., MDDr. Michaela Lifková, PhD., MUDr. Peter Rendek, MDDr. Agnieszka Anna Gulińska					
<b>Last change:</b> 07.06.2024					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.RK2/L-S-ZL-096/18	<b>Course title:</b> Dental Radiology
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 14s / 14s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 6.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.RK2/L-S-ZL-090/18 - General Radiology or LF.RK2/L-S-ZL-090/25 - General Radiology	
<b>Course requirements:</b> 100% presence at practicals Exam: written part: score at least 60% in test practical part: assessment of one intraoral and one panoramic X-ray theoretical part: 2 questions (according to the syllabus) Test assessment: A: 91 - 100 %, B: 81 - 99 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 % and less. Total grade will be calculated as an average of partial results.	
<b>Learning outcomes:</b> Knowledge: - basic principles of radiation protection for dentists - imaging methods used in dentistry - indications and contraindications of intraoral and extraoral X-rays - radiologic anatomy of maxillofacial region and dental tissues - pathological changes in maxillofacial region and dental tissues on X-rays Skills: - assessment of normal panoramic and intraoral X-rays - diagnosis of pathologies in maxillofacial region and dental pathologies based on X-rays - methods and techniques of intraoral and panoramic X-rays	
<b>Class syllabus:</b> Dental X-ray equipments. Technical requirements for dental X-ray station. Radiological anatomy of the facial skeleton. General characteristics and classification of pathologies in maxillofacial region (radiolucency/radioopacity), foreign bodies, infections, cysts. Radiology of orthodontic anomalies. Pathology of maxillary sinuses and salivary glands. Physics, Projection Geometry, Biologic Effects of Ionizing Radiation, Safety and Protection, Quality Assurance and Infection Control, Prescribing Diagnostic Imaging, Digital Imaging, Film Imaging Panoramic imaging	

Intraoral Projections, Intraoral Technique Exercises, Intraoral radiograph Interpretation CBCT, Volume Acquisitions, Volume Preparations, CBCT exercises Fractures in maxillofacial region, systemic disease. Tumors in maxillofacial region. Importance of radiology in reconstructive dentistry. Basic criteria for an X-ray image in periodontology. Radiology of temporomandibular joint. Radiology in pediatric dentistry.					
<b>Recommended literature:</b> Lehotská V., Kršáková A. Rádiológia pre stomatológov, časť Zubná rádiológia, VEDA, 2018					
<b>Languages necessary to complete the course:</b> slovak					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 276					
A	B	C	D	E	FX
58,7	28,62	12,68	0,0	0,0	0,0
<b>Lecturers:</b> prof. MUDr. Viera Lehotská, PhD., MUDr. Lucia Vanovčanová, PhD., MUDr. Katarína Rauová, PhD., MUDr. Maroš Rudnay, PhD.					
<b>Last change:</b> 30.05.2024					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.DK/L-S-ZL-018/20	<b>Course title:</b> Dermatovenerology
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 18s / 20s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 9.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.KORL/L-S-ZL-066/19 - Otorhinolaryngology	
<b>Course requirements:</b> 100% participation in practicals Exam: test – minimum of 60% success rate Practical part – writing of the medical record of one patient, including differential diagnosis, 1 question from practicals Theoretical part - 3 questions from dermatovenerology Evaluation of the test: A: 91 - 100 %, B: 81 - 99 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 % and less The final evaluation is calculated as the median of all received results.	
<b>Learning outcomes:</b> Theoretical knowledge: Etiopathogenesis, clinical picture, diagnostics, differential diagnoses and therapy of mucocutaneous diseases, sexually transmitted infections. Practical skills: laboratory methods in dermatovenerology: alergological and mycological examination, collecting of tissue for histological examination, microscopic examination of pathological materials. Differential diagnostics procedures. Proposals of medical examination and treatment recommendation for diseases in the oral cavity.	
<b>Class syllabus:</b> Anatomy, morphology and physiology of the skin and mucous membranes. Allergic eczema, toxic dermatitis, phototoxic and photoallergic reactions. Atopic dermatitis. Seborrheic dermatitis. Microbial eczema. Erythemasquamous dermatosis. Papular and pustular dermatosis. Bullous dermatosis. Medicamentous exanthema. Disorders of sebaceous glands. Alopecia. Viral dermatosis. Bacterial infections of skin and mucous membranes. Mycological infections. Epizoonosis. Parasitic diseases. Collagenosis. Precancerous lesions, tumors. Diseases of the oral cavity.	
<b>Recommended literature:</b> Buchvald, J.: Praktikum z dermatovenerológie pre štážujúcich. UK Bratislava, 1996. 72 s. Skriptá. Šimaljaková, M., Buchvald, D.: Dermatovenerológia, UK Bratislava, 2019, 543 s.. Buchvald, J., Sinka, L., Šimaljaková, M.: Dermatovenerológia pre stomatológov. UK Bratislava, 1997, 176 s. Skriptá.	



Švecová, D.: Dermatology for dentistry UK Bratislava 2010, 339s.					
Švecová, D.: Handbook of Dermatovenerology for Practical Lessons , UK Bratislava 2018, 274 s.					
<b>Languages necessary to complete the course:</b>					
Slovak					
<b>Notes:</b>					
<b>Past grade distribution</b>					
Total number of evaluated students: 195					
A	B	C	D	E	FX
32,82	32,31	20,0	6,67	8,21	0,0
<b>Lecturers:</b> prof. MUDr. Mária Šimaljaková, PhD., prof. MUDr. Danka Švecová, PhD.					
<b>Last change:</b> 27.05.2024					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF/L-S-ZL-098/19	<b>Course title:</b> Diploma Work 1
<b>Educational activities:</b> <b>Type of activities:</b> independent work <b>Number of hours:</b> <b>per week: per level/semester:</b> 50s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 7.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> communication with the final thesis supervisor presentation of agreed outcomes and their evaluation by the thesis supervisor	
<b>Learning outcomes:</b> - to elaborate the chosen topic at the level of a scientific study - appropriate choice of scientific literature - to apply an appropriate methodology and research methods	
<b>Class syllabus:</b> - topic selection and communication with the thesis supervisor - define the objectives of the final thesis - selection of bibliography	
<b>Recommended literature:</b> Internal Regulation No. 7/2018 Guideline of the Rector of Comenius University in Bratislava. The full text of Internal Regulation No. 12/2013 of the Guideline of the Rector of Comenius University in Bratislava on the Basic Requirements of Final Theses, Rigorous Theses, and Habilitation Theses, Originality Check, Storing and Accessibility at Comenius University in Bratislava as amended by Appendix No. 1 and Appendix No. 2 Internal Regulation No. 10/2020 Study Regulations Comenius University in Bratislava, Faculty of Medicine Bibliography according to the diploma thesis	
<b>Languages necessary to complete the course:</b> Slovak	
<b>Notes:</b>	

<b>Past grade distribution</b>					
Total number of evaluated students: 230					
A	B	C	D	E	FX
94,78	2,61	1,3	0,43	0,87	0,0
<b>Lecturers:</b>					
<b>Last change:</b> 06.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF/L-S-ZL-153/22	<b>Course title:</b> Diploma Work 2
<b>Educational activities:</b> <b>Type of activities:</b> independent work <b>Number of hours:</b> <b>per week:</b> <b>per level/semester:</b> 60s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 8.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF/L-S-ZL-098/19 - Diploma Work 1	
<b>Course requirements:</b> communication with the final thesis supervisor presentation of agreed outcomes and their evaluation by the thesis supervisor	
<b>Learning outcomes:</b> - to elaborate the chosen topic at the level of a scientific study - appropriate choice of scientific literature - to apply an appropriate methodology and research methods	
<b>Class syllabus:</b> - topic selection and communication with the thesis supervisor - define the objectives of the final thesis - selection of bibliography	
<b>Recommended literature:</b> Internal Regulation No. 7/2018 Guideline of the Rector of Comenius University in Bratislava. The full text of Internal Regulation No. 12/2013 of the Guideline of the Rector of Comenius University in Bratislava on the Basic Requirements of Final Theses, Rigorous Theses, and Habilitation Theses, Originality Check, Storing and Accessibility at Comenius University in Bratislava as amended by Appendix No. 1 and Appendix No. 2 Internal Regulation No. 10/2020 Study Regulations Comenius University in Bratislava, Faculty of Medicine Bibliography according to the diploma thesis	
<b>Languages necessary to complete the course:</b> Slovak	
<b>Notes:</b>	

<b>Past grade distribution</b>					
Total number of evaluated students: 108					
A	B	C	D	E	FX
94,44	0,93	4,63	0,0	0,0	0,0
<b>Lecturers:</b>					
<b>Last change:</b> 06.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025					
<b>University:</b> Comenius University Bratislava					
<b>Faculty:</b> Faculty of Medicine					
<b>Course ID:</b> LF/L-S-ZL-154/22		<b>Course title:</b> Diploma Work 3			
<b>Educational activities:</b> <b>Type of activities:</b> independent work <b>Number of hours:</b> <b>per week:</b> <b>per level/semester:</b> 60s <b>Form of the course:</b> on-site learning					
<b>Number of credits:</b> 2					
<b>Recommended semester:</b> 9.					
<b>Educational level:</b> I.II.					
<b>Prerequisites:</b> LF/L-S-ZL-153/22 - Diploma Work 2					
<b>Course requirements:</b> communication with the final thesis supervisor presentation of agreed outcomes and their evaluation by the thesis supervisor					
<b>Learning outcomes:</b> - to elaborate the chosen topic at the level of a scientific study - appropriate choice of scientific literature - to apply an appropriate methodology and research methods					
<b>Class syllabus:</b> - working on the core of the diploma thesis - division into chapters, subchapters					
<b>Recommended literature:</b> Internal Regulation No. 7/2018 Guideline of the Rector of Comenius University in Bratislava. The full text of Internal Regulation No. 12/2013 of the Guideline of the Rector of Comenius University in Bratislava on the Basic Requirements of Final Theses, Rigorous Theses, and Habilitation Theses, Originality Check, Storing and Accessibility at Comenius University in Bratislava as amended by Appendix No. 1 and Appendix No. 2 Internal Regulation No. 10/2020 Study Regulations Comenius University in Bratislava, Faculty of Medicine Bibliography according to the diploma thesis					
<b>Languages necessary to complete the course:</b> Slovak					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 110					
A	B	C	D	E	FX
88,18	6,36	3,64	0,0	1,82	0,0

<b>Lecturers:</b>
<b>Last change:</b> 06.12.2022
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF/L-S-ZL-101/20	<b>Course title:</b> Diploma Work 4
<b>Educational activities:</b> <b>Type of activities:</b> independent work <b>Number of hours:</b> <b>per week: per level/semester:</b> 100s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 4	
<b>Recommended semester:</b> 10.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF/L-S-ZL-154/22 - Diploma Work 3	
<b>Course requirements:</b> communication with the diploma thesis supervisor presentation of agreed outcomes and their evaluation by the thesis supervisor	
<b>Learning outcomes:</b> - finalisation of the chosen topic - control by the thesis supervisor - thesis submission in the AIS2 information system	
<b>Class syllabus:</b> - preparation of introduction - preparation of conclusion - bibliography	
<b>Recommended literature:</b> Internal Regulation No. 7/2018 Guideline of the Rector of Comenius University in Bratislava. The full text of Internal Regulation No. 12/2013 of the Guideline of the Rector of Comenius University in Bratislava on the Basic Requirements of Final Theses, Rigorous Theses, and Habilitation Theses, Originality Check, Storing and Accessibility at Comenius University in Bratislava as amended by Appendix No. 1 and Appendix No. 2 Internal Regulation No. 10/2020 Study Regulations Comenius University in Bratislava, Faculty of Medicine Bibliography according to the diploma thesis	
<b>Languages necessary to complete the course:</b> Slovak	
<b>Notes:</b>	



<b>Past grade distribution</b>					
Total number of evaluated students: 180					
A	B	C	D	E	FX
88,89	7,22	2,78	0,0	1,11	0,0
<b>Lecturers:</b>					
<b>Last change:</b> 06.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF/L-S-ZL-102/21	<b>Course title:</b> Diploma Work 5
<b>Educational activities:</b> <b>Type of activities:</b> independent work <b>Number of hours:</b> <b>per week:</b> <b>per level/semester:</b> 100s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 11.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF/L-S-ZL-101/20 - Diploma Work 4	
<b>Course requirements:</b> communication with the diploma thesis supervisor presentation of agreed outcomes and their evaluation by the thesis supervisor	
<b>Learning outcomes:</b> - finalisation of the chosen topic - control by the thesis supervisor - thesis submission in the AIS2 information system	
<b>Class syllabus:</b> - abstract in Slovak and English language - introduction - conclusion - bibliography	
<b>Recommended literature:</b> Internal Regulation No. 7/2018 Guideline of the Rector of Comenius University in Bratislava. The full text of Internal Regulation No. 12/2013 of the Guideline of the Rector of Comenius University in Bratislava on the Basic Requirements of Final Theses, Rigorous Theses, and Habilitation Theses, Originality Check, Storing and Accessibility at Comenius University in Bratislava as amended by Appendix No. 1 and Appendix No. 2 Internal Regulation No. 10/2020 Study Regulations Comenius University in Bratislava, Faculty of Medicine Bibliography according to the diploma thesis	
<b>Languages necessary to complete the course:</b> Slovak	
<b>Notes:</b>	

<b>Past grade distribution</b>					
Total number of evaluated students: 154					
A	B	C	D	E	FX
90,26	6,49	2,6	0,65	0,0	0,0
<b>Lecturers:</b>					
<b>Last change:</b> 06.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-021/19	<b>Course title:</b> Endodontics 2
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 12s / 72s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 6	
<b>Recommended semester:</b> 8.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.KSMCh/L-S-ZL-020/19 - Endodontics 1 or LF.KSMCh/L-S-ZL-020/25 - Endodontics 1	
<b>Course requirements:</b> - 100% attendance at the practicals - performing the required amount of specified practical treatments <b>Exam:</b> 1. practical part - root canal preparation on the model by a predetermined system of root canal instruments and its filling. Theoretical knowledge of the working procedure and anatomy of the root system are required. 2. theoretical part - written: passing the test at least 60% - oral: answering 2 questions (cariology and preparation of cavities, diagnostics and therapy in endodontics) Test evaluation: A: 91 - 100 %, B: 81 - 90 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 - 0%. The overall rating is determined from the average of the ratings obtained.	
<b>Learning outcomes:</b> <b>Knowledge:</b> Knowledge of the causes, diagnosis and therapy of periapical periodontal diseases and a comprehensive view of endodontic dental treatment. <b>Skills:</b> To determine the diagnosis and treatment of dental pulp diseases, infected root canal and periapical periodontitis and to perform it in practice. Diagnostically and therapeutically address the issue of pulpoperiodal lesions.	
<b>Class syllabus:</b> Etiology, pathology, clinic and therapy of periodontal inflammation. Determination of dg. and treatment of the infected root canal and periodontal complications. Acute and chronic apical periodontitis. Pulpoperiodontal complex - symptomatology, diff. diagnosis and therapy. Surgical procedures in addition to conservation treatment. Oral focal infection.	
<b>Recommended literature:</b> Stejskalová J. a kol. : Konzervační zubní lékařství. Grada Praha 2003. Peřinka L. a kol.: Základy klinické endodoncie. Quintessenz Praha 2003.	

Hellwig E. A kol. : Záchovná stomatologie a parodontologie, Grada Praha 2003.					
<b>Languages necessary to complete the course:</b> slovak					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 231					
A	B	C	D	E	FX
41,99	29,0	15,58	5,63	6,49	1,3
<b>Lecturers:</b> MUDr. Andrea Nováková, PhD., MDDr. Marek Matajs, PhD., MUDr. Bohuslav Novák, PhD., MUDr. Rastislav Edelstein, PhD., MDDr. Miroslav Marček, MDDr. Alessandro Emanuele Sangalli, MUDr. Amir Amiry Manesh, PhD.					
<b>Last change:</b> 05.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-020/19	<b>Course title:</b> Endodontics 1
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 12s / 60s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 3	
<b>Recommended semester:</b> 7.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.KSMCh/L-S-ZL-045/18 - Restorative Dentistry 1	
<b>Course requirements:</b> - 100% presence at the practicals - performing the required amount of specified practical treatments - written test (minimum 60% of correct answers) Test evaluation: A: 91 - 100 %, B: 81 - 90 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 - 0%. The overall rating is determined from the average of the ratings obtained.	
<b>Learning outcomes:</b> Knowledge: Knowledge of the causes, diagnosis and treatment of dental pulp diseases. Skills: Determine the diagnosis and method of treatment of reversible and irreversible dental pulp diseases and practically perform it.	
<b>Class syllabus:</b> Etiology, pathology, clinic and therapy of dental pulp diseases. Pulpes - dystrophic, degenerative and regressive changes of the dental pulp. Inflammatory conditions of the marrow - hyperemia, acute and chronic inflammation. Reversible and irreversible marrow conditions. Therapy of pathological conditions of the dental pulp. Vital and mortal methods of treatment of pathologically altered marrow. Dental pulp amputation. Dental pulp extirpation. Necrosis and gangrene pulp. Complications of treatment of pathological conditions of the marrow. Practical solution of marrow diseases.	
<b>Recommended literature:</b> Stejskalová J. a kol. : Konzervační zubní lékařství. Grada Praha 2003. Peřinka L. a kol.: Základy klinické endodoncie. Quintessenz Praha 2003. Hellwig E. A kol. : Záchovná stomatologie a parodontologie, Grada Praha 2003.	
<b>Languages necessary to complete the course:</b> slovak	
<b>Notes:</b>	

<b>Past grade distribution</b>					
Total number of evaluated students: 236					
A	B	C	D	E	FX
56,78	38,98	4,24	0,0	0,0	0,0
<b>Lecturers:</b> MDDr. Marek Matajs, PhD., MDDr. Miroslav Marček, MDDr. Alessandro Emanuele Sangalli, MUDr. Rastislav Edelstein, PhD.					
<b>Last change:</b> 05.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.ÚCJ/L-S-ZL-118/22	<b>Course title:</b> English Language 1
<b>Educational activities:</b> <b>Type of activities:</b> practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 36s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 3.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> 100% attendance at the practicals, 2 written tests: one midterm (50 points, makes 15% of the overall assessment) and one final test (100 points, makes 85% of the overall assessment). Test assessment: A: 91 - 100 %, B: 81 – 90 %, C: 73 – 80 %, D: 66 – 72 %, E: 60 – 65 %, Fx: 59 % - 0%. The overall grade (minimum of 60%) is determined by the grades obtained in the midterm (15%) and final (85%) test and is their weighted average.	
<b>Learning outcomes:</b> Knowledge: Acquisition of professional vocabulary from individual medical fields; deepening of knowledge in the field of morphology of a foreign language. Correct use of syntax when preparing lectures, papers and presentations. Skills: Language competence enabling the highest possible level of obtaining information and knowledge from foreign language sources; written and oral presentation of own knowledge and opinions in a foreign language; ability to communicate with the patient; ability to understand oral speech, lectures on professional medical topics.	
<b>Class syllabus:</b> Dentistry – basic terms, scope of work of dentists. Expressing opinions and assumptions. Dental fillings – types of dental fillings. Use of articles. Dental hygiene – proper dental hygiene and its significance. Modal verbs. Teeth in regenerative medicine – current status and prospects. Definite and indefinite articles. Tooth – structure, types, and functions of teeth, assessment of dental health. Present tenses. Maxillofacial surgery – types of procedures. Present perfect tense. Orthodontics – orthodontic appliances. Simple past tense. Gum diseases – dental scaling and root planing. Passive voice.	
<b>Recommended literature:</b> Bábelová, J., Hamar, T.: English in Dentistry. Bratislava: Univerzita Komenského 2024. 180 p. ISBN 978-80-223-5859-0	
<b>Languages necessary to complete the course:</b> English	



<b>Notes:</b>					
<b>Past grade distribution</b>					
Total number of evaluated students: 138					
A	B	C	D	E	FX
78,26	16,67	4,35	0,72	0,0	0,0
<b>Lecturers:</b> Ing. Janka Bábelová, PhD., Mgr. Radoslav Ďurajka, PhD., Mgr. Katarína Hromadová, PhD., PhDr. Valéria Jamrichová, Mgr. Marína Kšiňanová, PhD., PaedDr. Stanislav Kováč, PhD., Mgr. Zuzana Motešická, PhD., PaedDr. Zuzana Pekařová, Mgr. Ľubica Olejníková, PhDr. Tomáš Hamar, PhD.					
<b>Last change:</b> 05.09.2024					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.ÚCJ/L-S-ZL-119/22	<b>Course title:</b> English Language 2
<b>Educational activities:</b> <b>Type of activities:</b> practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 36s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 4.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.ÚCJ/L-S-ZL-118/25 - English Language 1 or LF.ÚCJ/L-S-ZL-118/22 - English Language 1	
<b>Course requirements:</b> 100% attendance at the practicals, 2 written tests: one midterm (50 points, makes 15% of the assessment of the written part of the exam) and one exam test (100 points, makes 85% of the assessment of the written part of the exam). Presentation on a medical topic. Oral part of the exam – discussion on a selected professional topic. Test assessment: A: 91 - 100 %, B: 81 – 90 %, C: 73 – 80 %, D: 66 – 72 %, E: 60 – 65 %, Fx: 59 % - 0%. The overall grade (minimum of 60%) is determined by the weighted average of the grades obtained in the midterm (15%) and exam test (85%), minimum of 60%, and the result of the oral part of the exam.	
<b>Learning outcomes:</b> Knowledge: Acquisition of professional vocabulary from individual medical fields; deepening of knowledge in the field of morphology of a foreign language. Correct use of syntax when preparing lectures, papers and presentations. Skills: Language competence enabling the highest possible level of obtaining information and knowledge from foreign language sources; written and oral presentation of own knowledge and opinions in a foreign language; ability to communicate with the patient; ability to understand oral speech, lectures on professional medical topics.	
<b>Class syllabus:</b> Dental radiology – methods, devices, radiology for implantology, three-dimensional imaging in dentistry. Modal verbs. Dental materials – advances in dental technology. Infinitive structures and gerund. Tooth decay - causes, symptoms, manifestations. Dental examination – procedure, communication with the patient. Future tenses. Tooth replacements and dental surgery – tooth extraction, removal of residual root. Conditional sentences. The future of dentistry – utilization of technologies and artificial intelligence AI. Student presentations - professional topics followed by discussion.	
<b>Recommended literature:</b>	

Bábelová, J., Hamar, T.: English in Dentistry. Bratislava: Univerzita Komenského 2024. 180 p.  
ISBN 978-80-223-5859-0

**Languages necessary to complete the course:**

English

**Notes:**

**Past grade distribution**

Total number of evaluated students: 135

A	B	C	D	E	FX
75,56	13,33	5,93	3,7	0,74	0,74

**Lecturers:** PhDr. Tomáš Hamar, PhD., Ing. Janka Bábelová, PhD., Mgr. Radoslav Ďurajka, PhD., Mgr. Katarína Hromadová, PhD., PhDr. Valéria Jamrichová, Mgr. Marína Kšiňanová, PhD., PaedDr. Stanislav Kováč, PhD., Mgr. Zuzana Motešická, PhD., PaedDr. Zuzana Pekařová, Mgr. Ľubica Olejníková

**Last change:** 05.09.2024

**Approved by:** prof. MUDr. Peter Stanko, PhD.

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.ÚE/L-S-ZL-022/20	<b>Course title:</b> Epidemiology
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 12s / 12s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 1	
<b>Recommended semester:</b> 9.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> 100% attendance at the practicals - 1 written test (minimum 70% of correct answers) Test evaluation: A: 91 - 100 %, B: 81 – 90 %, C: 73 – 80 %, D: 66 – 72 %, E: 60 – 65 %, Fx: 59 % - 0%. Final exam: oral - theoretical exam: 3 question (methods in epidemiology, epidemiology of communicable diseases, epidemiology of noncommunicable diseases) The overall rating is determined from the average of the ratings obtained.	
<b>Learning outcomes:</b> <b>Knowledge:</b> Ability to define and describe basic epidemiological methods and their use for monitoring disease occurrence. Understanding the use of epidemiological methods for monitoring population oral health. Ability to identify and locate sources of data on disease occurrence in Slovakia, Europe, and the world. Knowledge of the current epidemiological situation in Slovakia and the world (elimination and eradication of diseases) with a focus on the occurrence of oral diseases. Ability to interpret the principles of vaccinology. Knowledge of the prevalence of the most important determinants of disease in the population. Knowledge of the occurrence of nosocomial infections, the method of their monitoring, knowledge of the most common risk factors and preventive measures. Knowledge of the principles of disinfection and sterilization with a focus on dental practice and control of their effectiveness. Ability to define the strength of evidence from epidemiological studies and interpret its use in evidence-based medicine. <b>Skills:</b> Ability to search for current information on the occurrence of infectious and non-communicable diseases in national and international electronic databases and the Oral Health Database. Skill to calculate basic health status indicators of the population from the searched available data and the ability to correctly interpret the calculated values. Ability to define the principles of the spread of infectious diseases and the skill to design anti-epidemic measures in dental practice. Ability to	

critically read the outputs of epidemiological studies of oral health published in professional and scientific literature.

**Class syllabus:****Lectures:**

Use of epidemiology as a source of evidence for evidence-based preventive and clinical medicine. Epidemiologic situation of communicable and noncommunicable diseases in the world, Europe and in the Slovak Republic. Burden of diseases with a special emphasis on oral health. Epidemiology and prevention of nosocomial infections. Immunization programmes and vaccine effectiveness assessment.

**Practicals:**

Epidemiologic situation of communicable and noncommunicable diseases in the world, Europe and in the Slovak Republic with a special emphasis on oral health. Population health indicators. Epidemiologic methods - description and analysis for oral health surveillance. Data collection and processing. Epidemiologic studies. Epidemic process, classification and prevention of infectious diseases. Immunization and vaccine effectiveness assessment. Epidemiology and prevention of nosocomial infections. Risk factors and prevention of most frequent noncommunicable diseases. Importance of epidemiologic monitoring and assessment for evidence based medicine.

**Recommended literature:**

Bazovská, S. a kol.: Epidemiológia pre študentov zubného lekárstva. Bratislava 2010, vyd.

Univerzita Komenského, 135 s.

Bražinová A. Epidemiologické metódy a ich uplatnenie v epidemiológii vybraných ochorení.

Univerzita Komenského v Bratislave. ISBN 978-80-223-4982-6

Bražinová A. (ed) - Praktické cvičenia z epidemiológie. Univerzita Komenského v Bratislave.

ISBN 978-80-223-5404-2

Bražinová A. Epidemiológia neprenosných ochorení. Univerzita Komenského v Bratislave.

**Languages necessary to complete the course:**

Slovak

**Notes:****Past grade distribution**

Total number of evaluated students: 196

A	B	C	D	E	FX
69,39	22,96	7,65	0,0	0,0	0,0

**Lecturers:** prof. MUDr. Alexandra Bražinová, PhD., MPH, MUDr. Mgr. Miriam Fulová, PhD., MUDr. Vanda Výrosteková, CSc., Mgr. Martina Kotrbancová, PhD., Mgr. Dorota Nováková, PhD., RNDr. Jana Perželová, PhD.

**Last change:** 29.05.2024

**Approved by:** prof. MUDr. Peter Stanko, PhD.

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KAIM2/L-S-ZL-082/16	<b>Course title:</b> First Aid
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 6s / 12s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 1	
<b>Recommended semester:</b> 2.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> - 100% attendance at the practicals - more than 60 % attendance at the lectures - written test (minimum 60% of correct answers) <b>Final exam:</b> - practical exam: BLS providing on the manikin , AED , airway management, mouth- to mouth breathing, chest compressions, Fowler, position, asphyxia management. - theoretical exam: written test - FIRST AID , basic life support and emergencies ) <b>Test evaluation:</b> A: 91 - 100 % , B: 81 - 90 % , C: 73 - 80 % , D: 66 - 72 % , E: 60 - 65 % , Fx: 59 - 0% . The overall rating is determined from the average of the ratings obtained.	
<b>Learning outcomes:</b> Basic principles of First Aid. Ethical and legal background when providing first aid. Vital functions, evaluation of clinical state, recognition of the failure of vital functions. Cardiac arrest , recognition and basic life support. Defibrillation Understanding the pathophysiology, pharmacology and clinical importance of basic life support . Respiratory arrest, Airway management, Asphyxia, aspiration and its management, Coma, stable position, Thermal injury, Bleeding and shock, trauma, fractures, acute abdomen, acute coronary syndrome, acute stroke. Activation of emergency system – dispatch. <b>Knowledge:</b> theoretical knowledge - basics in first aid. Resuscitation principles of basic life support , according syllabus. Advanced life support according ERC Guidelines 2021. Defibrillation, intoxication inhaled, alimentary, emergencies and its management. <b>Skills:</b> Recognition of cardiac arrest. Evaluation of basic vital functions, Coma, apnoea, asphyxia, cardiovascular collapse , Airway management, double manouver, basics of respiratory management, mouth –to- mouth breathing, manual and artificial ventilation, management of respiratory failure, advanced life support training on the manikin , team work in simulation center. Principles of therapy of circulatory shock, antishock position, stable position. Stop bleeding, clinical monitoring	

of vital functions, communication and team , emergencies in acute stroke, acute coronary syndrome, bleeding and trauma. Thermal and electric injury. First aid in allergic reaction, anaphylaxis, intoxication.

**Class syllabus:**

1. RST AID - targets , ethical and legal principles , position in pre-hospital medicine .
2. Resuscitation and urgent medicine – pathophysiology and rationale background.
3. Vital functions - early recognition of cardiac arrest and respiratory arrest.
4. Basic life support - principles and algorithm.
5. Chest compressions , airway management. Mouth-to-mouth breathing
6. Basic Life support - use of automatic external defibrillation .
7. Asphyxia, Heimlich maneuver
8. Emergencies - acute stroke, acute coronary syndrome,
9. Coma - evaluation, Glasgow coma score, management and stable position
10. Intoxication, inhaled and alimentary. Diagnostics and management,
11. Advanced Life support - leader in team work. ERC guidelines 2021 .
12. Drowning , electric injury, thermal injury.

**Recommended literature:**

Dobiáš Viliam : Prednemocničná urgentná medicína , Obzor Martin 2012, 739 s.

ISBN 9788080633875

Minárik Milan : Praktické postupy pre zdravotníckych záchranárov , Osveta Martin 2022

**Languages necessary to complete the course:**

Slovak

**Notes:**

**Past grade distribution**

Total number of evaluated students: 366

A	B	C	D	E	FX
73,5	23,5	3,01	0,0	0,0	0,0

**Lecturers:** doc. MUDr. Roman Záhorec, CSc.

**Last change:** 13.06.2024

**Approved by:** prof. MUDr. Peter Stanko, PhD.

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.ÚSL/L-S-ZL-085/20	<b>Course title:</b> Forensic Medicine
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 12s / 12s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 1	
<b>Recommended semester:</b> 9.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> - 100% attendance at the interships <b>Final exam:</b> - theoretical exam: 2 questions Exam evaluation: A: 91 - 100 %, B: 81 - 90 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 - 0%. The overall rating is determined on the basis of the theoretical exam results.	
<b>Learning outcomes:</b> Knowledge and skills: To learn the basics of forensic medicine and orientation in criminal matters in medical practice. To learn the basics about external and internal examination of a dead body and about determination of the cause of death. To acquire the knowledge about the compilation of medical certificates and expert's opinions and about the process of their interpretation in front of the court. Examination of a dead body and filling in official documents. Participation in the process of identification of persons with undetected identity. Examination of an alleged assailant (principles, documentation). Examination of a victim (principles, documentation). Compilation of medical certificates.	
<b>Class syllabus:</b> Forensic medicine, its importance and role in medicine and society. Principles of criminal proceedings. Merits of selected crimes. Courts and prosecution offices. Doctor as a witness, doctor as an expert. Protective treatment. Bodily injury, severe bodily harm. Medical liability. Death and process of dying. Procedures taken after death. Categories and manners of death. Early and late postmortem changes. Sudden death in children and in adults. Abrasions, contusions. Lacerations, incised, slash, stab and chopping wounds. Firearm injuries – single projectile injuries, shot-gun pellets injuries, explosive injuries. Mechanical asphyxia and its forms - hanging, ligature strangulation, manual strangulation (throttling), smothering, postural asphyxia, and drowning. Fall from height. The effect of changes in atmospheric pressure and of elevated and reduced temperature. The effect of electricity and lightning. Forensic procedures to detect poisoning.	
<b>Recommended literature:</b>	



Šidlo, J.: Súdne lekárstvo: súdnolekárska tanatológia, súdnolekárska traumatológia. Univerzita Komenského, Bratislava, 2020  
 Šidlo, J.: Súdne lekárstvo: pitva. Univerzita Komenského, Bratislava, 2020  
 Šidlo, J.: Súdne lekárstvo: prehliadka mŕtveho tela. Univerzita Komenského, Bratislava, 2020  
 Hirt, M. et al.: Soudní lékařství I. díl, Grada, Praha, 2015  
 Hirt, M. et al.: Soudní lékařství II. díl, Grada, Praha, 2016

**Languages necessary to complete the course:**

slovak

**Notes:**

**Past grade distribution**

Total number of evaluated students: 196

A	B	C	D	E	FX
94,39	5,1	0,0	0,51	0,0	0,0

**Lecturers:** Dr.h.c. prof. MUDr. Štefan Galbavý, DrSc., prof. MUDr. Jozef Šidlo, CSc.

**Last change:** 05.12.2022

**Approved by:** prof. MUDr. Peter Stanko, PhD.

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.RK2/L-S-ZL-090/18	<b>Course title:</b> General Radiology
<b>Educational activities:</b> <b>Type of activities:</b> lecture <b>Number of hours:</b> <b>per week:</b> <b>per level/semester:</b> 12s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 1	
<b>Recommended semester:</b> 5.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> - 100% attendance at the practicals - ability to identify basic radiological modalities - know the basic indications of individual imaging methods, - theoretical exam: written test 20 multiple choice questions from radiology Test evaluation: A: 91 - 100 %, B: 81 - 90 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 - 0%.	
<b>Learning outcomes:</b> Skills: to know the basic examination methods in imaging of the respiratory system, basic examination methods in imaging of the cardiovascular system, basic examination methods in imaging of the uropoietic and reproductive system, basic examination methods in imaging of the nervous system,thological findings.	
<b>Class syllabus:</b> History of radiology in the world. X-ray, principle of radiation, properties of X-rays, radiation protection. Basic principles of ultrasonography, CT and MR. Basic examination methods and their indications in imaging of the respiratory system. Basic examination methods and their indications in imaging the cardiovascular system. Basic examination methods and their indications in imaging the gastrointestinal system. Basic examination methods and their indications in imaging the uropoietic and reproductive system. Basic examination methods and their indications in imaging the nervous system. Basic intervention methods in radiology, head and neck interventions	
<b>Recommended literature:</b> Lehotská Viera - Kršáková Alžbeta, Rádiológia pre stomatológov ISBN: 978-80-224-1644-3, VEDA, 2018 Bilický, J. a kol. Rádiológia I . Všeobecná časť. VEDA, 2011 Bilický J. a kol. Rádiológia. Špeciálna časť I-VII. VEDA, 2012	
<b>Languages necessary to complete the course:</b> slovak	
<b>Notes:</b>	

<b>Past grade distribution</b>					
Total number of evaluated students: 276					
A	B	C	D	E	FX
95,29	4,35	0,0	0,36	0,0	0,0
<b>Lecturers:</b> prof. MUDr. Viera Lehotská, PhD., MUDr. Lucia Vanovčanová, PhD., MUDr. Katarína Rauová, PhD.					
<b>Last change:</b> 30.05.2024					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025					
<b>University:</b> Comenius University Bratislava					
<b>Faculty:</b> Faculty of Medicine					
<b>Course ID:</b> LF.KSMCh/L-S-ZL-027/21		<b>Course title:</b> Gerontostomatology			
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week:</b> <b>per level/semester:</b> 12s / 13s <b>Form of the course:</b> on-site learning					
<b>Number of credits:</b> 1					
<b>Recommended semester:</b> 11.					
<b>Educational level:</b> I.II.					
<b>Prerequisites:</b>					
<b>Course requirements:</b> - 100% attendance at the practicals Final exam /oral, event. online/: - theoretical exam: 2 question					
<b>Learning outcomes:</b> Knowledge: specifics of erderly patients (polypharmacy, deficits in hearing and mobility, cognitive dysfunctions) Skills: communication with geriatric patients					
<b>Class syllabus:</b> Population ageing, theories of ageing. Influence of higher age on the general and oral health. Treatment planning regarding particular stomatological and medical specializations					
<b>Recommended literature:</b> Mersel A.: Oral Rehabilitation for Compromised and Elderly Patients. Springer 2019, 136 s. Lamster I.B.: Improving Oral Health for the Elderly. Springer 2008, 548 s.					
<b>Languages necessary to complete the course:</b> slovak					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 154					
A	B	C	D	E	FX
75,32	21,43	3,25	0,0	0,0	0,0
<b>Lecturers:</b> prof. MUDr. Peter Stanko, PhD., doc. MUDr. Peter Plachý, CSc.					
<b>Last change:</b> 05.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-145/22	<b>Course title:</b> Gnathology and Basics of Prosthetics
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 12s / 24s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 3	
<b>Recommended semester:</b> 6.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.KSMCh/L-S-ZL-079/17 - Preclinical Dentistry 4	
<b>Course requirements:</b> - 100% attendance at the practicals - 1 written test (minimum 60% of correct answers) Test evaluation: A: 91 - 100 %, B: 81 – 90 %, C: 73 – 80 %, D: 66 – 72 %, E: 60 – 65 %, Fx: 59 % - 0%.	
<b>Learning outcomes:</b> Knowledge: basis approach to intermaxillary relationships, properties of dental arches, positions of the teeth Skills: analysis of cast models, practical use of ocludors and articulators	
<b>Class syllabus:</b> Various theories of articulation. Differences between ocludors and articulators, technical types. Practical value of the gnathology knowledge	
<b>Recommended literature:</b> Strub J.R., Kern M., Türp J.C., Witkowski S., Heydecke G., Wolfart S.: Protetika I. Grada Publishing, 2015 Mazánek J. a kol.: Zubní lékařství. Propedeutika. Grada Publishing. Praha, 2014 Hubálková H., Krňoulová J.: Protetické materiály a technologie. Galén, Praha , 2009 Dostálová T.: Fixní a snímatelná protetika. Grada Publishing, 2004. Tvrdoň, M. a kol.: Protetická stomatológia, liečba a prevencia. Science 2001, Bratislava 1999, 590 s.	
<b>Languages necessary to complete the course:</b> slovak	
<b>Notes:</b>	

<b>Past grade distribution</b>					
Total number of evaluated students: 122					
A	B	C	D	E	FX
72,95	16,39	5,74	3,28	1,64	0,0
<b>Lecturers:</b> prof. MUDr. Peter Stanko, PhD., MDDr. Anna Korpášová, MDDr. Nikos Leptos, MDDr. Michaela Lifková, PhD.					
<b>Last change:</b> 05.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.GPK1/L-S-ZL-028/20	<b>Course title:</b> Gyneacology and Obstetrics
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 18s / 20s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 9.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> 100% attendance on practicals and seminars o written test – pass the test (minimum 60 %) Final exam: o theoretical exam: 2 questions (in diferent topics of gynaecology and obstetrics) Test evaluation: A: 91 - 100 %, B: 81 - 99 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 % - 0% The overall rating is determined from the average of the ratings obtained.	
<b>Learning outcomes:</b> Knowledge: o Anatomy and physiology of female genital tract o Gynaecological inflamation o Endometriosis o Bening and malignant tumors of female genital tract and breast o Physiology and pathology of pregnancy o Physiology and pathology of labour o Physiology and pathology of puerperium Skills o basic examination in gynaecology and obstetrics o asisstance by the gynaecological and obstetrical surgeries	
<b>Class syllabus:</b> o Anatomy and physiology of female genital tract o Gynaecological inflamation o Endometriosis o Bening and malignant tumors of female genital tract and breast o Physiology and pathology of pregnancy o Physiology and pathology of labour o Physiology and pathology of puerperium	

<b>Recommended literature:</b> Šuška, P. a kol.: Vybrané kapitoly z gynekológie. 3. preprac. a dopl. vyd. Bratislava: Univerzita Komenského, 2017. 314 s. ISBN 978-80-223-4279-7 Holomáň, K. a kol.: Vybrané kapitoly z pôrodnictva. 3. preprac. a dopl. vyd. Bratislava: Univerzita Komenského, 2014. 344 s. ISBN 978-80-223-3579-9					
<b>Languages necessary to complete the course:</b> Slovak					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 196					
A	B	C	D	E	FX
59,18	26,02	8,67	3,57	2,55	0,0
<b>Lecturers:</b> prof. MUDr. Miroslav Borovský, CSc., prof. MUDr. Kamil Pohlodek, PhD., MPH, doc. MUDr. Peter Štencl, CSc., prof. MUDr. Jozef Záhumenský, PhD., prof. MUDr. Vladimír Ferianec, PhD., doc. MUDr. Miroslav Korbel', CSc., doc. MUDr. Martin Redecha, PhD., doc. MUDr. Martin Šimko, PhD., doc. MUDr. Rastislav Sysák, PhD., MBA, MUDr. Zuzana Nižňanská, PhD., doc. MUDr. Alexandra Krištúfková, PhD.					
<b>Last change:</b> 28.05.2024					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					



## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.ÚHE/L-S-ZL-029/16	<b>Course title:</b> Histology and Embryology 1
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 24s / 32s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 4	
<b>Recommended semester:</b> 2.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> The student is evaluated on the basis of his/her academic performance during the semester (control questions, written partial tests, independent work tasks, drawing and description of observed histological specimens) and participation in obligatory forms of study. Attendance at lectures is recommended, as the partial tests also contain information from the lectures. Conditions for obtaining credits are successful completion of partial tests with an overall average of 70% (or, if necessary, passing a repeat full semester test with a minimum of 70%) and 100% attendance at the practical exercises (1 excused absence will be tolerated). If the student fails to meet the requirements, he/she may take an oral examination at a date set by the Head of the Institute during the examination period. Grade average of partial tests or repeat full semester test: A: 100 - 95 %, B: 94 - 88 %, C: 87 - 80 %, D: 79 - 75 %, E: 74 - 70 %, Fx: 69 % and less.	
<b>Learning outcomes:</b> Knowledge: At the end of the course students should be able to: <ol style="list-style-type: none"> <li>1. Define and use the terms necessary to describe tissues (i.e. cytology and general histology).</li> <li>2. Theoretically understand the basic steps of histological technique, from the collection of tissues to the fixation of tissues and the examination of histological specimens.</li> <li>3. Identify tissue types, cells and components of the extracellular matrix in various organs of the human body.</li> <li>4. Correlate the microscopic structure of tissues with their function.</li> <li>5. Describe and explain fertilisation, early embryonic development and the progression of embryogenesis from fertilisation to the end of week 8.</li> <li>6. Lead a discussion on these topics with regard to medical applications.</li> </ol> Skills: At the end of the course students should be able to: <ol style="list-style-type: none"> <li>1. Use the light microscope to identify and systematically describe various cell types and other microscopic structures within human tissues.</li> <li>2. Identify basic cellular and subcellular structures from electron micrographs.</li> </ol>	
<b>Class syllabus:</b> Lectures:	

1. Introduction to the study of histology. History and current status of histology in the curriculum of dental medical studies. Histological technique and its relevance to practice.
  2. Cytomorphology. Description of selected specialised cells. Introduction to the study of human tissues. Characteristics and origin of epithelial tissue.
  3. Classification of epithelial tissue. Covering and lining epithelia and glandular epithelia.
  4. Connective tissue: Connective tissue proper. Functional histology of connective tissue cells and their clinical significance. Classification of connective tissue proper types. Mononuclear phagocyte system.
  5. Connective tissue: Cartilage, bone and ossification. Microscopic structure of the joint, synovial membrane and articular cartilage.
  6. Connective tissue: Blood and hemopoiesis. Morphology of formed blood elements. Microscopic structure of bone marrow.
  7. Muscle tissue. Functional histology of skeletal, smooth and cardiac muscle.
  8. Nervous tissue. Morphology of neurons and neuroglial cells. Structure of the grey and white matter of the central nervous system.
  9. Introduction to the study of embryology. History and current status of embryology in the curriculum of dental medical studies. Fertilisation. Zygote cleavage and blastocyst development.
  10. Implantation of the blastocyst and decidual reaction of the uterine mucosa. Development of extraembryonic structures (development of the amniotic cavity, yolk sac, chorionic cavity and chorion). Multiple gestation and fetal membranes of twins. Clinical embryology and assisted reproduction. Teratology and teratogens. Current options for prenatal diagnosis.
  11. Embryogenesis (3rd and 4th week of development) and formation of the body of the embryo. Somites. Development of the notochord and neural tube. Overview of the derivatives of the germ layers.
  12. Development and functional morphology of the placenta. Placental barrier.
- Practical exercises:**
- Introduction to practical exercises from histology and embryology. Light and electron microscope. Principles of histological technique. Study of the cell by light and electron microscopy. Introduction to tissues. Covering and lining epithelia. Glandular epithelia. Connective tissues proper. Cartilage, bone and ossification. Blood. Blood elements, differential blood count. Blood smear stained by the Pappenheim method. Muscle tissue. Nervous tissue.

#### **Recommended literature:**

- Balko J, Tonar Z, Varga I. Memorix histologie. 3. vydání. Praha: Triton, 2021. 555 s. ISBN 978-80-7553-874-1.
- Domoráková I. a kol. Základy histológie I. Učebnica a mikroskopický atlas buniek a tkanív. Košice: UPJŠ, 2023. 202 s. ISBN 978-80-574-0226-8. Online na <https://doi.org/10.33542/ZH1-0226-8>
- Mescher A. Junqueirovy základy histologie. 14. vydání, 1. české. Praha: Galén, 2018, 558 s. ISBN 978-80-7492-324-1.
- Mikušová R, Polák Š. Úvod do histológie a embryológie 1 pre študentov zubného a všeobecného lekárstva. UK Bratislava, 2022. 133 s. ISBN 978-80-223-5393-9.
- Varga I, Zbynek T. Klinicky orientovaná embryológia. S. 110 – 153. In: Záhumenský J (Ed). Pôrodnictvo. Bratislava: Amedi, 2022. 1246 s. ISBN 978-80-89797-72-1.
- Sadler TW. Langmannova lékařská embryologie. Preklad 10. vyd. Praha: Grada, 2011, 414 s. ISBN 978-80-2472-640-3.
- Kapeller K, Pospíšilová V. Embryológia človeka. Martin: Osveta, 2001, 370 s. ISBN 8080630720.

<b>Languages necessary to complete the course:</b> Slovak					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 363					
A	B	C	D	E	FX
37,74	25,9	20,66	7,99	7,71	0,0
<b>Lecturers:</b> prof. RNDr. Ivan Varga, PhD., doc. RNDr. Marianna Danková, PhD., MUDr. Paulína Gálfiová, PhD., MVDr. Ján Líška, CSc., MUDr. Mgr. Michal Miko, PhD., MUDr. Renáta Mikušová, PhD., MUDr. Simona Polakovičová, PhD., MUDr. Vanda Rísová, PhD., RNDr. Mária Kleinová, PhD., Mgr. Miroslava Juríková, PhD., MUDr. Martin Klein, PhD., MUDr. Mária Lorencová, PhD., MUDr. Mgr. Rami Saade, PhD.					
<b>Last change:</b> 27.05.2024					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.ÚHE/L-S-ZL-030/17	<b>Course title:</b> Histology and Embryology 2
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 24s / 32s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 5	
<b>Recommended semester:</b> 3.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.ÚHE/L-S-ZL-029/16 - Histology and Embryology 1 or LF.ÚHE/L-S-ZL-029/25 - Histology and Embryology 1 and LF.ÚLBG/L-S-ZL-004/16 - Biology and Human Genetics 2	
<b>Course requirements:</b> <p>The student is evaluated on the basis of his/her academic performance during the semester (control questions, written partial tests, independent work tasks, drawing and description of observed histological specimens) and participation in obligatory forms of study. Attendance at lectures is recommended, as the partial tests also contain information from the lectures.</p> <p>Conditions for obtaining credits are successful completion of partial tests with an overall average of 70% (or, if necessary, passing a repeat full semester test with a minimum of 70%) and 100% attendance at the practical exercises (1 excused absence will be tolerated). If the student fails to meet the requirements, he/she may take an oral examination at a date set by the Head of the Institute during the examination period.</p> <p>Grade average of partial tests or repeat full semester test: A: 100 - 95 %, B: 94 - 88 %, C: 87 - 80 %, D: 79 - 75 %, E: 74 - 70 %, Fx: 69 % and less.</p> <p>Final examination requires knowledge of Histology and Embryology 1 and Histology and Embryology 2 and consists of three parts:</p> <ul style="list-style-type: none"> <li>• Multiple choice test with a minimum of 70%.</li> <li>• Practical part consists of the evaluation of 10 histological slides, in which the student must correctly identify at least 7 organs and their staining.</li> <li>• Theoretical (oral) part in which the student has to answer one question from each of the following three sections 1) histological technique, cytomorphology and general histology (tissues); 2) development and microscopic structure of structures and organs of craniofacial region; 3) development and microscopic structure of structures and organs other than the craniofacial region; human embryology.</li> </ul> <p>Failure to pass any part of the final exam is graded Fx. If the student fails the test or the practical part of the exam on the third attempt, he/she has a chance to be admitted to the theoretical (oral) part of the exam.</p>	
<b>Learning outcomes:</b> Knowledge: At the end of the course students should be able to:	

1. Define and use terms necessary to describe the microscopic structure of human organs with a specific focus on the craniofacial region (i.e. special histology).
2. Correlate the microscopic structure of organs with their function with a specific focus on the craniofacial region.
3. Have basic knowledge of intrauterine development of the individual from fertilisation, through the formation of germ layers and organogenesis, to birth. The course provides valuable information on the mechanism of congenital developmental defects with a specific focus on the craniofacial region.
4. Describe and explain human organogenesis, with particular emphasis on the anatomical structure and variability of the organs of the human body from the perspective of their prenatal development.
5. Lead a discussion on these topics with regard to medical applications.

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

1. Use the light microscope to identify and systematically describe human organs with a specific focus on the craniofacial region.
2. Draw and describe simplified diagrams of the microscopic structure of organs.

### **Class syllabus:**

Lectures:

1. Microscopic structure of the heart and blood vessels. Types of capillaries. Development of the human cardiovascular system. Fetal blood circulation and its changes after birth.
2. Microscopic structure of the digestive tube - from the oral cavity to the rectum. Development of the primitive gut and its derivatives. Overview of the microscopic structure of the liver and pancreas.
3. Functional histology of lymphoid organs. Thymus, bone marrow, spleen, lymph nodes and tonsils. MALT (Mucosa associated lymphoid tissue).
4. Development and microscopic structure of the respiratory system. Self-cleaning of the respiratory system. Blood-air barrier.
5. Development and microscopic structure of the tooth 1 (developmental stages, hard and soft tissues of the tooth).
6. Development and microscopic structure of the tooth 2 (periodontium, gingiva, bony alveolus, tooth eruption, developmental anomalies).
7. Pharyngeal region of the embryo and its derivatives. Development of the face and anterior neck. Microscopic structure of endocrine organs.
8. Overview of the microscopic structure of the central nervous system. Structure of the cerebral cortex, cerebellum, spinal cord and peripheral nervous system. Neural tube and the development of the central and peripheral nervous system. Neural crest and its derivatives.
9. Overview of the microscopic structure and development of human sensory organs.
10. Development of the skin and skin appendages. Development of the skull, vertebral column and limbs. Overview of the microscopic structure of the skin.
11. Development of the urinary system. Microscopic structure of the kidney and the urinary tract.
12. Development of the male and female reproductive systems.

Practical exercises:

Microscopic structure of the heart and blood vessels. Types of capillaries Microscopic structure of lymphoid organs. Microscopic structure of endocrine glands, hypothalamo-hypophyseal system. Microscopic structure of the lip, oral cavity, tongue and gingiva, taste buds. Microscopic structure and development of the tooth. General microscopic structure of the wall of the digestive tract. Microscopic structure of the liver, pancreas and salivary glands. Ultrastructure of the hepatocyte. Dissé's space and sinusoids of the liver. Microscopic structure of the exocrine and endocrine parts of the pancreas. Microscopic structure of the respiratory system. Microscopic structure of the kidney and the urinary tract. Filtration barrier of the kidney, juxtaglomerular apparatus. Microscopic structure of the male and female reproductive system. Microscopic structure and development

of the placenta. Microscopic structure of the brain, spinal cord and peripheral nervous system. Microscopic structure of the sensory organs. Microscopic structure of the skin and its derivatives.

**Recommended literature:**

Balko J, Tonar Z, Varga I. Memorix histologie. 3. vydání. Praha: Triton, 2021. 555 s. ISBN 978-80-7553-874-1.

Domoráková I. a kol. Základy histologie II. Učebnica a atlas mikroskopické anatómie orgánov. Košice: UPJŠ, 2023. 433 s. ISBN 978-80-574-0226-8. Online <https://doi.org/10.33542/ZH2-0267-1>

Mescher A. Junqueirovy základy histologie. 14. vydání, 1. české. Praha: Galén, 2018, 558 s. ISBN 978-80-7492-324-1.

Mikušová R, Polák Š. Úvod do histologie a embryologie 1 pre študentov zubného a všeobecného lekárstva. UK Bratislava, 2022. 133 s. ISBN 978-80-223-5393-9.

Sadler TW. Langmannova lékařská embryologie. Preklad 10. vyd. Praha: Grada, 2011, 414 s. ISBN 978-80-2472-640-3.

Kapeller K, Pospíšilová V. Embryologie člověka. Martin: Osveta, 2001, 370 s. ISBN 8080630720.

**Languages necessary to complete the course:**

Slovak

**Notes:****Past grade distribution**

Total number of evaluated students: 323

A	B	C	D	E	FX
44,89	15,17	20,43	11,46	6,5	1,55

**Lecturers:** prof. RNDr. Ivan Varga, PhD., MUDr. Paulína Gálfiová, PhD., MVDr. Ján Líška, CSc., MUDr. Renáta Mikušová, PhD., MUDr. Simona Polakovičová, PhD., MUDr. Vanda Rísová, PhD., RNDr. Mária Kleinová, PhD., Mgr. Miroslava Juríková, PhD., MUDr. Martin Klein, PhD., MUDr. Mária Lorencová, PhD., MUDr. Mgr. Michal Miko, PhD., doc. RNDr. Marianna Danková, PhD., MUDr. Mgr. Rami Saade, PhD.

**Last change:** 27.05.2024

**Approved by:** prof. MUDr. Peter Stanko, PhD.

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.ÚH/L-S-ZL-031/20	<b>Course title:</b> Hygiene
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 10s / 15s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 1	
<b>Recommended semester:</b> 9.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> - 100% attendance at the practicals - 1 written test (minimum 60% of correct answers) <b>Final exam:</b> - theoretical exam: 3 questions (environmental factors and health, nutrition and primary prevention, occupational hygiene) <b>Test evaluation:</b> A: 91 - 100 %, B: 81 -90 %, C: 73 -80 %, D: 66 -72 %, E: 60 - 65 %, Fx: 59 - 0%. The overall rating is determined from the average of the ratings obtained.	
<b>Learning outcomes:</b> <b>Knowledge:</b> - on the environmental impact on the population health status - on the health protection and health promotion of the population and the individual - on the principles of disease prevention - on basic legislation in this area <b>Skills:</b> - to know the basic methods of monitoring of internal and external environmental factors and the health status of population groups - to assess the nutritional status and formulate the necessary corrections in order to protect the health and to prevent disease in individuals and population groups - to communicate with the public on environmental, behavioral and psychosocial factors and health at an appropriate level - to cooperate with public health managers - to work independently in the field of health counselling - ability to implement the obtained results into the dental practice	
<b>Class syllabus:</b> Living conditions and health. The environment and its risk factors. Water and morbidity. Nutritional health risks. Assessment of nutrition and nutritional status. Environmental factors and the problem of chronic diseases. Age and physiological peculiarities in primary prevention. Hygiene in common dental practice. The working environment of dentists. Dental surgery and its basic characteristics –	

spatial, microclimate, microbiological, visual, and acoustic. Dental laboratory. Dental radiography. Hygiene requirements for the use of X-rays in dental practice. Health risks of ionizing radiation. Personal protective equipment for patients and staff. Additional risk factors at the dentist's working place. Ergonomic principles during the patient's treatment. Dust in the working environment. Noise and vibrations, risk of health damage. Special risk of infection in the dental practice. Xenobiotics in the dental practice. Allergens. Heavy metals. Influence of the work environment on the health of dentists. Regimen of work and rest and prevention of occupational diseases. Nosocomial infections in dental practice and their prevention. Oral ecosystem. The process of spreading diseases in dentistry. Hygiene of service in the stomatological workplace. Disinfection and sterilization in the dental practice. Hygienic principles in the patient's treatment. Hygienic principles in the treatment of patients with infectious disease. Health risk assessment. Health impact assessment. Hygienic measures in emergencies (natural and technological disasters, war conflicts, epidemics), problems of alternative accommodation, water supply, and population nutrition.

Lectures: Introduction to Hygiene; Principles of Environmental Health, Risk Assessment; Preventive Occupational Health and Safety, Emergencies; Nutrition in Public Health and Food Safety, Hygiene of Children and Youth

Practicals: Principles of the Basic Environmental Factors; Nutrition; Hospital Hygiene; Radiation and Health Hazards, Evaluation of Hospital Hygiene; Evaluation of the Nutritional Status

#### **Recommended literature:**

Jurkovičová, J. a kol. Hygiena. Bratislava, UK, 2020. 481 s. ISBN 978-80-223-4905-5.

Jurkovičová, J. a kol.: Praktické cvičenia z hygieny. Bratislava: UK, 2010. 331 s. Skriptá. ISBN 978-80-223-2816-6.

Ševčíková Ľ. and contributors: Hygiene – Environmental Medicine. Bratislava: Comenius University, 2011. 322 s. ISBN 978-80-223-2900-2.

Ševčíková Ľ. and contributors: Environmental Health – Hygiene. Bratislava : Comenius University, 2015. 253 s. ISBN 978-80-223-3930-8

Babjaková J., Sekretár S. Nutrition and Food Safety in Public Health. Bratislava: Comenius University, 2015. 136 p. ISBN 978-80-223-3932-2

Fabiánová, E., Batora, I. Occupational Health and Toxicology. 1st Ed. Bratislava: Comenius University, 2015. 146 p. ISBN 978-80-223-3931-5.

#### **Languages necessary to complete the course:**

Slovak

#### **Notes:**

#### **Past grade distribution**

Total number of evaluated students: 196

A	B	C	D	E	FX
73,98	15,31	7,14	3,06	0,51	0,0

**Lecturers:** prof. MUDr. Ľubica Argalášová, PhD., prof. MUDr. Jana Jurkovičová, CSc., MUDr. Jana Babjaková, PhD., MPH

**Last change:** 31.05.2024

**Approved by:** prof. MUDr. Peter Stanko, PhD.



## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.IÚ/L-S-ZL-038/17	<b>Course title:</b> Immunology
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 24s / 18s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 4	
<b>Recommended semester:</b> 4.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.ÚLBG/L-S-ZL-004/16 - Biology and Human Genetics 2	
<b>Course requirements:</b> - 100% participation on practicals - to pass two written tests (each at least on 60%) Exam: written part: to pass the final test at minimally 60% Evaluation of the test: A: 91-100%, B: 81-99%, C: 73-80%, D: 66-72%, E: 60-65%, Fx: ≤ 59%. oral exam: 3 questions (2 from basic immunology + 1 question from clinical immunology)	
<b>Learning outcomes:</b> Knowledge: The students acquire: <ol style="list-style-type: none"> <li>1. knowledge of general and clinical immunology; knowledge of innate and adaptive T-cell and antibody immunity, inflammation, cytokines, the development of the immune response, and the fundamental role of cells and humoral immune factors in the immunopathogenesis of diseases.</li> <li>2. knowledge of transplant immunology, autoimmune diseases, hypersensitivity reactions, allergies, anti-infective immunity, vaccinations, immunodeficiencies, anti-tumor immunity, and pregnancy immunology.</li> <li>3. knowledge about the manifestations of immunodeficiencies, allergies (oral allergy syndrome), and autoimmune diseases in the oral cavity</li> <li>4. knowledge of emergencies in dentistry related to immune mechanisms (hereditary angioedema, anaphylactic and anaphylactoid shock)</li> <li>5. knowledge of the key role of inflammation and immunity in the pathogenesis of various diseases: e.g. periodontitis and from periodontitis to atherosclerosis</li> <li>6. knowledge of the collection of material for immunological examinations, will know the basic methods for examining the immune profile of an individual</li> <li>7. knowledge of the examination of the individual's immune profile</li> </ol> Skills: <ol style="list-style-type: none"> <li>1. The students recognize sudden conditions in dentistry that are related to immune mechanisms (hereditary angioedema, anaphylactic shock, anaphylactoid shock) as well as later treatment-related allergies (serum sickness).</li> </ol>	

2. They know what material, when to take it, and where to send it for immunological examination even in sudden conditions.
3. They know the manifestations of immunodeficient conditions, allergies, and auto-immune diseases in the oral cavity.
4. They should be able to interpret the results of immune profile tests.

### **Class syllabus:**

Lectures: Immunology, forms of immunity, tissues and organs of immune system. Antigen - complete, incomplete, immunogenicity, specificity and characteristics of antigen. Antibodies, their structure, function, biologic activities. Monoclonal antibodies. Complement system. Phagocytosis and killing mechanisms of phagocytes. Netosis. The origin and the biological role of macrophages. PRR receptors, alarmins, PAMPs and DAMPs. Local and systemic inflammation, acute phase proteins. From periodontitis to atherosclerosis. Non-infectious inflammation, sepsis, MODS and septic shock. Inflammatory biomarkers of systemic infection. The role of Neu/Ly ratio.

Membrane antigens. The most important membrane antigens of individual populations of immune system cells and their significance. T-lymphocytes, NK-, NKT-, ILC- and MAIT- cells. Origin, differentiation, characteristics and properties of T-lymphocytes and their subpopulations. T-cell antigen receptor. NK- and NKT -cells, and natural and induced regulatory T cells. HLA-complex, its gene map, and its biological and medical significance. Distribution, inheritance biochemical structure and biological function of HLA-molecules. HLA-G as an immune checkpoint molecule. Presentation of antigens. Endogenous and exogenous pathways of protein antigen presentation. Presentation of lipid antigens. Cell cooperation in the immune response. Apoptosis. Cytokines. General properties of cytokines, and their role in psycho-neuro-endocrine regulation. Cytokines regulating innate and adaptive immunity. Their role in the development and polarization of the immune response. Th1, Th2, Th5, Th9 and Th17 lymphocytes and their role in immunity. Pro-inflammatory cytokines and cytokines with anti-inflammatory and immunosuppressive activity. Cytokines stimulating hematopoiesis, chemokines. Immune tolerance. T-cell differentiation in the thymus; dominant and recessive tolerance. Breakdown of tolerance, autoimmunity - mechanisms of its development, symptoms (mainly in mouth cavity), diagnosis and therapy. Autoantigens. Genetic and hormonal predisposition to the development of autoimmune processes. Pathogenetic mechanisms of autoimmune processes. Diagnostic possibilities and immunotherapy. Autoinflammatory diseases. Hypersensitivity reactions types I-V. Immunopathogenesis of hypersensitivity conditions, classification. Type I of hypersensitivity reactions. Allergies, atopy, anaphylaxis. Oral allergic syndrome. Anaphylactic shock, anaphylactoid shock (pseudoallergy) and serum disease, their clinical symptoms and therapy. Diagnosis, therapy and prevention. Type II of hypersensitivity reactions. ABO incompatible blood transfusions, Rh-incompatibility, drug reactions. Type III of hypersensitivity reactions. Immune-complex inflammation. Serum sickness, Arthus reaction. Type IV of hypersensitivity reactions; tuberculin reaction, contact dermatitis in dental medicine, granulomas. Type V hypersensitivity reactions. Anti-infectious immunity. Primary and secondary immune deficiencies, their symptoms (also in mouth cavity) and therapy. AIDS. Immuno-suppression and immune-stimulation. Vaccination. Therapy with monoclonal antibodies and cytokines Anti-tumor immunity, mechanisms of the escape of malignant cells from the reach of effector mechanisms of the immune system. Metastatic process. Immunodiagnostics and immunotherapy of tumors. Tissue, organ and stem cells transplantation. Nomenclature of transplants. HvG, GvH, GvL reactions, selection of donor-recipient pairs, immunosuppression. Immunology of human reproduction. Immune response during physiological pregnancy. Embryo implantation. Immune system in fetal development. Immune system in the pathology of pregnancy. Immune system of the fetus, newborn and infant. Primary and secondary immunodeficiencies. General manifestations of immunodeficiencies, occurrence, division. Immunodeficient conditions with a predominance of antibody disorders, and cellular immunity. Autoimmune polyglandular

syndrome (APS). Combined immunodeficiencies. Deficiency of components of the complement system. Disorders of phagocytosis. AIDS. Immunotherapy and immunoprevention. Vaccination. Immunostimulants, immunosuppressants, monoclonal antibodies, cytokines, enzyme therapy, vaccines, stem cell therapy.

#### Practicals:

Specimen collection and delivery for immunology testing. Methods based on antigen-antibody interactions. Classical serological techniques: agglutination (blood group typing), precipitation, immune-electrophoresis, immunodiffusion techniques and nephelometry, turbidimetry. Progressive serological methods: ELISA, RIA, immunoblotting, immunofluorescence, chemiluminescence, immunochromatography (detection of antibodies against H. pylori, pregnancy rapid test). Laboratory diagnosis of SARS-CoV-2 infection – antigen and antibody tests, LAMP test. Evaluation of innate humoral immunity: total complement activity assays (CH50, AH50). Evaluation of individual complement components (RID, turbidimetry and nephelometry). Determination of acute phase proteins (CRP-determination from capillary blood by reflectometry). Case study – hereditary angioedema and anaphylactoid shock. Evaluation of innate cellular immunity components: Isolation of leukocytes from peripheral blood, enumeration of the number of neutrophils. Functional analysis of neutrophils - chemotactic activity, phagocytic activity and phagocytic index, microbicidal activity, metabolic activation (NBT test). Case study - chronic granulomatous disease. Evaluation of adaptive humoral and cellular immunity component: Isolation of lymphocytes. Separation of T cell subpopulations and evaluation of the number of T and B cells and their subsets (flow cytometry, FACS, MACS). Evaluation of the function of T and B cells (blastic transformation assay, determination of the levels of immunoglobulins and specific antibodies). Immuno-skin tests. Diagnostics of infectious diseases based on lymphocyte activation (IGRA – principle, case study of tuberculosis). Laboratory methods used in transplantation immunology – HLA-typing. Serologic methods: micro-lympho-cytotoxicity assay. Cellular methods: MLC (mixed lymphocyte culture). DNA-based methods: PCR –SSP. Video-presentation explaining DNA-based HLA-typing. Diagnostics of allergic diseases; atopy and anaphylaxis, clinical symptomatology. Anaphylactic shock – symptomatology and therapy, EpiPen demonstration. Skin tests: prick test, scarification test, intradermal skin test, epidermal test. Determination of total and allergen-specific IgE levels. Basophil-degranulation test, CD63 basophil counts. Case studies of allergic diseases, anaphylactic shock, Arthus reaction and a serum sickness. Laboratory methods used in the diagnostics of autoimmune disorders. Determination of acute phase proteins, levels of immunoglobulins, total complement level, C3, C4 complement levels, CD4/CD8 ratio, detection of autoantibodies, determination of circulating immune complexes. Case study: Autoimmune polyglandular syndromes (APSII and IV). Practical experiment - rheumatoid factor determination by latex agglutination. Diagnostics of tumor processes (CRP, onco-markers, immunophenotyping, immunohistochemistry). Laboratory diagnosis of HIV infection (ELISA, Western blot, CD4+ T cell counts, virus load). Laboratory assessment of the immune status – overview: evaluation of innate and acquired immunity - summary, differential blood cell counting, inflammatory markers, diagnostics of infectious diseases. Case studies, and how to solve the problem. Immunocompromised patient.

#### Recommended literature:

Buc, M. Základná a klinická imunológia pre študentov zubného lekárstva. Bratislava, ISBN 978-80-223-2312-3. Univerzita Komenského 2010, 342 s.

Buc, M., Bucová, M. Základná a klinická imunológia pre ošetrovateľstvo a iné nelekárske odbory: Bratislava, ISBN 80-223-2151-6, Univerzita Komenského 2006, 334 s.

Kolektív autorov: Vyšetrovacie metódy v imunológii. Bratislava: Univerzita Komenského 2014, ISBN 978-80-223-3739-7 190 s.

Video-prezentácie prednášajúcich.

<b>Languages necessary to complete the course:</b> Slovak					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 324					
A	B	C	D	E	FX
22,84	23,77	24,07	15,12	10,49	3,7
<b>Lecturers:</b> doc. MUDr. Mária Bucová, CSc., prof. MUDr. Milan Buc, DrSc., doc. RNDr. Vladimíra Ďurmanová, PhD., doc. Mgr. Ivana Shawkatová, PhD., MUDr. Monika Homolová, PhD., MUDr. Juraj Javor, PhD., MUDr. Zuzana Párnická, PhD., MUDr. Magda Suchánková, PhD.					
<b>Last change:</b> 06.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## STATE EXAM DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.IK4/L-ZL-ŠS-2/15	<b>Course title:</b> Internal Medicine
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 9., 10..	
<b>Educational level:</b> I.II.	
<b>State exam syllabus:</b>	
<b>Last change:</b>	
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.	

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.IK4/L-S-ZL-039/19	<b>Course title:</b> Internal Medicine 1
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 12s / 15s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 7.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.IK4/L-S-ZL-044/18 - Internal Propedeutics 2	
<b>Course requirements:</b> - 100% attendance at clinical trainings - written test (minimum 60% correct answers) Test evaluation: A: 91 - 100 %, B: 81 - 90 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 - 0%.	
<b>Learning outcomes:</b> Knowledge: Acute coronary syndrome, arrhythmias, valvular defects, heart failure, endocarditis, Arterial hypertension. Arterial obliteration and venous diseases on lower extremities, thromboembolic disease. Pathophysiology, clinical presentation, diagnostics (electrocardiography, echocardiography, 24-h ECG monitoring, coronarography, 24-h blood pressure monitoring), prevention and treatment. Skills: Cardiology - medical history, physical examination, ECG records evaluation, X-ray scans of thorax (lungs, heart) evaluation. Patient in intensive care unit.. Angiology - physical examination, duplex ultrasound.	
<b>Class syllabus:</b> Lectures and clinical trainings: Atherosclerosis. Ischemic heart disease. Myocardial infarction. Arrhythmias. Valvular defects. Cardiomyopathies. Acute heart failure. Chronic heart failure. Cardiogenic shock. Sudden cardiac death. Endocarditis. Ischemic disease of lower extremities. Phlebothrombosis. Thromboembolic disease, acute pulmonary heart. Arterial hypertension.	
<b>Recommended literature:</b> Kiňová S, Hulín I et al.: Interná medicína, ProLitera 2013.	
<b>Languages necessary to complete the course:</b> Slovak	
<b>Notes:</b>	

<b>Past grade distribution</b>					
Total number of evaluated students: 236					
A	B	C	D	E	FX
7,63	39,83	35,17	13,98	3,39	0,0
<b>Lecturers:</b> prof. MUDr. Peter Pont'uch, CSc.					
<b>Last change:</b> 06.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.IK4/L-S-ZL-040/19	<b>Course title:</b> Internal Medicine 2
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 12s / 15s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 8.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.IK4/L-S-ZL-039/19 - Internal Medicine 1	
<b>Course requirements:</b> - 100% attendance at clinical trainings - minimum 60% correct answers) Test evaluation: A: 91 - 100 %, B: 81 - 90 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 – 65 %, Fx: 59 - 0%.	
<b>Learning outcomes:</b> Knowledge: General overview of diagnosis, differential diagnosis, treatment and prevention of infectious diseases. Acquisition of knowledge about individual infectious diseases and syndromic units caused by infections. Explanation of the pathogenesis of individual infectious diseases. Anemias, hemorrhagical states, leukemias and lymphomas - incidence, pathological anatomy, pathophysiology, clinical presentation, diagnostics, prevention and treatment. Blood transfusion - laboratory examination and performance. Skills. The application of acquired knowledge from infectology. To compose an optimal algorithm for the diagnosis of infectious diseases. Indication of non-invasive and invasive examinations (e.g. lumbar puncture). To know the basics of antibiotic, antiviral and antiparasitic treatment. Hematological findings (blood count, hemocoagulation, microscopic examination of bone marrow, blood group examination. Practical performance of blood transfusion.	
<b>Class syllabus:</b> Within the subject, lectures and internships are divided in the ratio of 1/3 at the Department of Hematology and Transfusion and 2/3 at the Department of Infectology and Geographical Medicine. The final test is held at the Department of Infectology and Geographical Medicine after the end of all practicals and contains questions from hematology and infectology in the same proportion as the teaching is represented. Lectures: Imported diseases. HIV/AIDS. Infections in immunocompromised patients. Skin and soft tissue infections. Fever, fever of unknown origin. Neuroinfections. Anemias, hemorrhagical states, leukemias, lymphadenopathy, lymphomas - incidence, pathological anatomy, pathophysiology, clinical presentation, diagnostics, prevention and treatment. Blood transfusion - laboratory examination and performance. Practical: Hematological findings (blood count, hemocoagulation, microscopic examination of bone marrow,	



blood group examination. Practical performance of blood transfusion.					
<b>Recommended literature:</b> Kiňová S, Hulín I et al.: Interná medicína, ProLitera 2013 Hockicková I - Zahornacký O a kol.: Vybrané kapitoly z infektológie, ŠafárikPress 2024 Rozsypal, H.: Základy infekčného lékařství. Karolinum, 2015 Beneš, J. a spol.: Infekční lékařství. Praha: Galen, 2010 Bálint O et.al.: Infektológia a antiinfekčná terapia, Osveta 2007					
<b>Languages necessary to complete the course:</b> Slovak					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 234					
A	B	C	D	E	FX
76,5	17,52	2,99	2,99	0,0	0,0
<b>Lecturers:</b> doc. MUDr. Peter Sabaka, PhD., doc. MUDr. Igor Stankovič, CSc., MUDr. Matej Bendžala, PhD., MUDr. Pavlína Bukovinová, PhD., MPH, MUDr. Karol Laktiš, CSc., prof. MUDr. Angelika Bátorová, CSc., prof. MUDr. Peter Pont'uch, CSc., MUDr. Antónia Hatalová, PhD., MUDr. Denisa Jankovičová, PhD., MUDr. Katarína Slezáková, PhD., MUDr. Firas Farkaš, PhD.					
<b>Last change:</b> 05.06.2024					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.IK4/L-S-ZL-041/20	<b>Course title:</b> Internal Medicine 3
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 24s / 30s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 3	
<b>Recommended semester:</b> 9.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.IK4/L-S-ZL-040/19 - Internal Medicine 2	
<b>Course requirements:</b> - 100% attendance at clinical trainings - minimum 60% correct answers Test evaluation: A: 91 - 100 %, B: 81 - 90 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 - 0%.	
<b>Learning outcomes:</b> Knowledge: Výskyt, patofyziológia, klinický obraz, diagnostika, prevencia a liečba: a) akútnych a chronických pľúcnych chorôb, nádorov, tuberkulózy pľúc, b) chorôb gastrointestinálneho a hepatobiliárneho traktu a pankreasu, c) chorôb endokrinných žliaz, diabetes mellitus, d) obličkových chorôb, porúch vnútorného prostredia, d) chorôb spojivového tkaniva Skills: Klinická interpretácia laboratórných výsledkov pri chorobách rôznych orgánov. Oboznámiť sa s vykonávaním rôznych vyšetrovacích metód. Pneumológia - anamnéza, perkusia a auskultácia pľúc, opis RTG snímky hrudníka, klinická interpretácia nálezov CT pľúc, spirometrie, bronchoskopie, pleurálnej punkcie. Gastroenterológia, hepatológia - anamnéza, perkusia, palpácia a auskultácia brucha, abdominálna ultrasonografia, gastroskopia, kolonoskopia. Endokrinológia - anamnéza, fyzikálne vyšetrenie, koncentrácie hormónov v sére, zobrazovacie metódy. Nefrológia - anamnéza, biochemické vyšetrenie séra a moču, ultrasonografia, Reumatológia - anamnéza, aspeksia a palpácia, rádiodiagnostika.	
<b>Class syllabus:</b> Lectures and clinical trainings: Chronic obstructive bronchopulmonary disease. Chronic pulmonary heart. Chronic respiratory insufficiency. Pneumonia and pleurisy. Tumours of the lung. Pulmonary tuberculosis. Gastric ulcer. Duodenal ulcer. Malignant tumours of the gastrointestinal systém, precanceroses. Noninfectious inflammatory bowel diseases. Liver diseases. Liver cirrhosis. Diseases of the gallbladder, biliary tract and pancreas. Diseases of the hypophysis, thyroid and parathyroid glands, adrenals. Therapy with corticoids. Diabetes mellitus. Obesity. Dyslipoproteinemia. Acute and chronic renal failure. Glomerulonephritis. Urinary tract infections. Tubulointerstitial nephritis. Diabetic nephropathy. Disturbances of water, electrolytes and acid-base hemostasis.	

Arthritis. Connective tissue diseases. Arthrosis. Diseases of spine. Poisoning with medicaments, alcohol and opioid drugs.					
<b>Recommended literature:</b> Kiňová S, Hulín I et al. Interná medicína. Bratislava: ProLitera 2013.					
<b>Languages necessary to complete the course:</b> Slovak					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 196					
A	B	C	D	E	FX
95,41	4,59	0,0	0,0	0,0	0,0
<b>Lecturers:</b> prof. MUDr. Peter Pont'uch, CSc.					
<b>Last change:</b> 06.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.IK4/L-S-ZL-042/20	<b>Course title:</b> Internal Medicine 4
<b>Educational activities:</b> <b>Type of activities:</b> seminar / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 12s / 60s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 4	
<b>Recommended semester:</b> 10.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.IK4/L-S-ZL-041/20 - Internal Medicine 3	
<b>Course requirements:</b> 100% attendance at clinical trainings and seminars State examination: - patient examination and writing a medical report - oral examination	
<b>Learning outcomes:</b> Knowledge: The comprehensive study of internal medicine comprising diseases of different organs and systems and their interrelationships. Skills: Physical examination of hospitalized patients, indication of hematological, biochemical, microbiological, imaging and other examinations, differential diagnostics, establishing of diagnoses, treatment, health-care files and hospital information system. Intensive care unit. Internal examination before a stomatological procedure. Special problems in internal medicine from the aspect of a dentist.	
<b>Class syllabus:</b> During the clinical training prior to a state examination, the student takes part at physicians' morning session where diagnostic and therapeutical procedures are discussed and x-ray scans are demonstrated. The student takes medical history, performs physical examination, accompanies patients to ultrasonographic and endoscopic examinations and acquaints with electronic documentation. Topic on seminars: Chest pain. Sudden cardiac death. Cardiopulmonary resuscitation. Edemas. Internal examination before a stomatological procedure. Hemocogulation disorders. Antibiotic therapy. Focal infection. Prophylaxis of endocarditis. Abdominal pain. Icterus. Disorders of consciousness. Dyspnea. Allergic reactions. Acute and chronic renal failure. Glucocorticoid therapy. Symptoms and signs of internal diseases in oral cavity.	
<b>Recommended literature:</b> Kiňová S, Hulín I et al. Interná medicína. Bratislava: ProLitera 2013.	
<b>Languages necessary to complete the course:</b> Slovak	

<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 196					
A	B	C	D	E	FX
55,1	27,04	13,78	3,57	0,51	0,0
<b>Lecturers:</b> prof. MUDr. Peter Pontůch, CSc.					
<b>Last change:</b> 06.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.IK4/L-S-ZL-043/18	<b>Course title:</b> Internal Propedeutics 1
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 24s / 30s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 4	
<b>Recommended semester:</b> 5.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.FyÚ/L-S-ZL-026/17 - Physiology 2	
<b>Course requirements:</b> 100% attendance at clinical trainings Written test: Minimum 60% correct answers Test evaluation: A: 91 - 100 %, B: 81 - 90 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 - 0%.	
<b>Learning outcomes:</b> Knowledge: Principles of the approach to the patient a medical history taking. Typical symptoms in patients with cardiovascular, respiratory, hematologic, gastrointestinal, hepatobiliary, renal, endocrine and locomotory systems. Performance of essential examination methods: inspection, palpation, percussion and auscultation. Principles of diagnostic consideration based on medical history and physical examination. Skills: Direct medical history taking from patients while keeping ethical principles. Practical performing essential examination methods (inspection, palpation, percussion, auscultation) in hospitalized patients with internal diseases. Examination of head, oral cavity, neck, thorax, lungs, heart, abdomen, extremities and vertebral column. Measurement of blood pressure and body temperature.	
<b>Class syllabus:</b> Lectures and clinical trainings: Medical history, medical ethics. The symptoms of cardiovascular diseases. The symptoms of respiratory and hematologic diseases. The symptoms of gastrointestinal and hepatobiliary diseases. The symptoms of renal, endocrine locomotory systems. Status praesens generalis. Examination of head, oral cavity and neck. Examination of thorax, lungs and heart. Measurement of blood pressure and body temperature. Examination of abdomen. Examination of extremities and vertebral column.	
<b>Recommended literature:</b> Hrušovský Š et al: Internistická propedeutika. Bratislava: Herba 2013. Klener P et al. Propedeutika ve vnitřním lékařství. Praha: Karolinum, Galén 2009.	
<b>Languages necessary to complete the course:</b> Slovak	

<b>Notes:</b>					
<b>Past grade distribution</b>					
Total number of evaluated students: 276					
A	B	C	D	E	FX
36,96	43,12	13,77	4,35	1,81	0,0
<b>Lecturers:</b> prof. MUDr. Peter Pontuch, CSc., MUDr. Svetlana Bodíková, PhD., MPH, MUDr. Veronika Pokorná, PhD., MPH					
<b>Last change:</b> 06.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.IK4/L-S-ZL-044/18	<b>Course title:</b> Internal Propedeutics 2
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 12s / 25s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 5	
<b>Recommended semester:</b> 6.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.IK4/L-S-ZL-043/18 - Internal Propedeutics 1 or LF.IK4/L-S-ZL-043/25 - Internal Propedeutics 1	
<b>Course requirements:</b> 100% attendance at clinical trainings Written test – minimum 60 % correct answers Test evaluation: A: 91 - 100 %, B: 81 - 90 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 - 0%	
<b>Learning outcomes:</b> Knowledge: The use of basic radiodiagnostic methods and newer imaging techniques (CT, USG, MRI, angiography) in internal medicine. Clinical interpretation of results of different laboratory examinations (blood count, hemocoagulation tests, biochemical and microbiological analysis of serum, urine, stool, sputum). Basic electrocardiography. Monitoring of patient at intensive care unit. Blood transfusion. Basic diagnostic and therapeutical techniques. Endoscopy. Skills: Description of chest X-ray scan and abdominal native scan. Description of ECG re-cords. Clinical interpretation of hematologic, biochemical and microbiological examinations. Practical procedure in blood transfusion. Essential diagnostic and therapeutical methods.	
<b>Class syllabus:</b> Lectures and clinical trainings: Basic radiodiagnostic methods used in internal medicine.. Computed tomography, angiography, nuclear magnetic resonance. Ultrasonography. Laboratory tests (blood count, hemocoagulation tests, biochemical analysis of serum, urine, stool, sputum). Electrocardiography. Monitoring of patients at intensive care unit. Ambulatory ECG and blood pressure monitoring. Blood transfusion. Basic diagnostic and therapeutical techniques (injections, infusions, urinary bladder catheterisation, paracentesis, biopsies). Gastroscopy, colonoscopy, bronchoscopy.	
<b>Recommended literature:</b> Hrušovský Š et al: Internistická propedeutika. Bratislava: Herba 2013. Klener P et al. Propedeutika ve vnitřním lékařství. Praha: Karolinum, Galén 2009.	
<b>Languages necessary to complete the course:</b> Slovak	



<b>Notes:</b>					
<b>Past grade distribution</b>					
Total number of evaluated students: 276					
A	B	C	D	E	FX
64,86	19,57	10,51	3,62	1,09	0,36
<b>Lecturers:</b> prof. MUDr. Peter Pontuch, CSc., MUDr. Svetlana Bodíková, PhD., MPH, MUDr. Veronika Pokorná, PhD., MPH					
<b>Last change:</b> 06.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.ÚLTCJ/L-S-ZL-048/23	<b>Course title:</b> Latin Clinical Terminology for Dentistry
<b>Educational activities:</b> <b>Type of activities:</b> practicals <b>Number of hours:</b> <b>per week:</b> <b>per level/semester:</b> 24s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 6.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.ÚCJ/L-S-ZL-157/22 - Latin Medical Terminology 2	
<b>Course requirements:</b> 100% attendance at the practicals, 2 written tests: one midterm (50 points, makes 15% of the overall assessment) and one final test (100 points, makes 85% of the overall assessment). Test assessment: A: 94 – 100 %, B: 87 – 93 %, C: 80 – 86 %, D: 70 – 79 %, E: 60 – 69 %, Fx: 59 % – 0%. The overall grade (minimum of 60%) is determined by the grades obtained in the midterm (15%) and final (85%) test and is their weighted average.	
<b>Learning outcomes:</b> Knowledge: Deepening of acquired knowledge in the field of morphology and word formation. Expanding professional vocabulary from different areas. Acquiring knowledge from clinical terminology, formation of professional terms. Reading comprehension and text analysis. Skills: Ability to use professional terms with full range of understanding their meaning. The ability to navigate in texts with new and unknown professional terms. The ability to form systemically acceptable, usable and comprehensible technical terms by derivation and composition.	
<b>Class syllabus:</b> Revision and consolidation of declensions and word formation. Latin and Greek prefixes, suffixes and composites – expanding vocabulary. Basics of reading and analyzing medical reports. Reading and analysis of professional texts from several areas of medicine.	
<b>Recommended literature:</b> Kábrt, J., Kábrt J. jr.: Lecixon medicum. Praha: Galén 2015. 917 p. ISBN 978-80-749-2200-8	
<b>Languages necessary to complete the course:</b> Slovak	
<b>Notes:</b>	

<b>Past grade distribution</b>					
Total number of evaluated students: 4					
A	B	C	D	E	FX
75,0	25,0	0,0	0,0	0,0	0,0
<b>Lecturers:</b> PhDr. Tomáš Hamar, PhD., Mgr. Marek Šibal, PhD., Mgr. Mária Šibalová, PhD., Mgr. Angela Škovierová, PhD., Mgr. Oľga Vaneková, PhD., Mgr. Melinda Vasil'ová, PhD., Mgr. Lucia Lauková, PhD., Mgr. Ema Pavľáková, PhD.					
<b>Last change:</b> 22.05.2024					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.ÚCJ/L-S-ZL-156/22	<b>Course title:</b> Latin Medical Terminology 1
<b>Educational activities:</b> <b>Type of activities:</b> practicals <b>Number of hours:</b> <b>per week:</b> <b>per level/semester:</b> 25s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 1	
<b>Recommended semester:</b> 1.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> 100% attendance at the practicals, 2 written tests: one midterm (50 points, makes 15% of the overall assessment) and one final test (100 points, makes 85% of the overall assessment). Test assessment: A: 94 – 100 %, B: 87 – 93 %, C: 80 – 86 %, D: 70 – 79 %, E: 60 – 69 %, Fx: 59 % – 0%. The overall grade (minimum of 60%) is determined by the grades obtained in the midterm (15%) and final (85%) test and is their weighted average.	
<b>Learning outcomes:</b> Knowledge: Acquisition of basic medical terminology with an emphasis on anatomical nomenclature. Mastery of basic grammar to understand the structure of specialized anatomical terms. Knowledge of terms of Latin and Greek origin, which are the basis of professional medical terminology. Skills: Language competence enabling the highest possible level of obtaining information and knowledge from professional sources; the ability to understand the structure of Latin anatomical terms and to use them correctly; ability to use Latin medical terminology in oral speech or professional text.	
<b>Class syllabus:</b> Introduction to the study of Latin. Brief historical overview. Pronunciation, basic grammatical concepts, declension of nouns, overview of declensions, structure of multi-word terms. First Latin and Greek declension. Adjective of the first declension. Second Latin and Greek declension. Adjective of the second declension. Third declension – consonant stems. Third declension – vowel stems: masculine and feminine. Third declension - vowel stems: neuter. Fourth and fifth declination. Adjectives of the third declension. Comparison of adjectives. Third Greek declension – consonant and vowel. Formation of clinical terms with suffixes -itis, -osis, -oma.	
<b>Recommended literature:</b> Bujalková, M., Šimon, F.: Terminologia Medica Latina. Martin: Osveta 2019. 202 p. ISBN 978-80-8063-449-0	
<b>Languages necessary to complete the course:</b>	

Slovak					
<b>Notes:</b>					
<b>Past grade distribution</b>					
Total number of evaluated students: 118					
A	B	C	D	E	FX
61,02	16,1	11,02	10,17	1,69	0,0
<b>Lecturers:</b> PhDr. Tomáš Hamar, PhD., Ing. Janka Bábelová, PhD., Mgr. Radoslav Ďurajka, PhD., PhDr. Valéria Jamrichová, Mgr. Lucia Lauková, PhD., Mgr. Mária Šibalová, PhD., Mgr. Angela Škovierová, PhD., Mgr. Oľga Vaneková, PhD., Mgr. Ema Pavl'áková, PhD.					
<b>Last change:</b> 22.05.2024					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.ÚCJ/L-S-ZL-157/22	<b>Course title:</b> Latin Medical Terminology 2
<b>Educational activities:</b> <b>Type of activities:</b> practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 25s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 1	
<b>Recommended semester:</b> 2.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.ÚCJ/L-S-ZL-156/25 - Latin Medical Terminology 1 or LF.ÚCJ/L-S-ZL-156/22 - Latin Medical Terminology 1	
<b>Course requirements:</b> 100% attendance at the practicals, 2 written tests: one midterm (50 points, makes 15% of the overall assessment) and one exam test (200 points, makes 85% of the overall assessment). Test assessment: A: 94 – 100 %, B: 87 – 93 %, C: 80 – 86 %, D: 70 – 79 %, E: 60 – 69 %, Fx: 59 % – 0%. The overall grade (minimum of 60%) is determined by the grades obtained in the midterm (15%) and final (85%) test and is their weighted average.	
<b>Learning outcomes:</b> Knowledge: Acquisition of basic medical terminology with an emphasis on clinical nomenclature. Learning the basics of word formation. Acquiring knowledge from clinical terminology, creation of professional terms. Ability to read professional texts with understanding. Reading and analyzing medical reports. Knowledge of terms and phrases used in medical prescriptions. Skills: Language competence enabling the highest possible level of obtaining information and knowledge from professional sources; ability to understand the structure of Latin and Greek anatomical and clinical terms; ability to understand medical reports; competence to use professional terms correctly; ability to use Latin medical terminology in oral speech or professional text.	
<b>Class syllabus:</b> Anatomical nomenclature and clinical terminology (differences). Revision and consolidation of declensions. Numerals and verb forms in medical terminology. Recipe construction and recipe examples. Practicing writing recipes. Adverbs in medical terminology. Latin and Greek prefixes. Latin and Greek suffixes. Adaptation of Greek names of diseases. Compound words in medical terminology. Pathological-anatomical diagnosis, examples. Reading professional texts.	
<b>Recommended literature:</b> Rollerová A. et al.: Terminologia Medica Graeco-Latina. Učebnica grécko-latinskej klinickej terminológie pre zubné lekárstvo. Bratislava: UK 2018 216 p. ISBN 978-80-223-4641-2. Kábrt, J., Kábrt J. jr.: Lecixon medicum. Praha: Galén 2015. 917 p. ISBN 978-80-749-2200-8	
<b>Languages necessary to complete the course:</b>	

Slovak					
<b>Notes:</b>					
<b>Past grade distribution</b>					
Total number of evaluated students: 118					
A	B	C	D	E	FX
73,73	8,47	10,17	7,63	0,0	0,0
<b>Lecturers:</b> PhDr. Tomáš Hamar, PhD., Ing. Janka Bábelová, PhD., Mgr. Radoslav Ďurajka, PhD., PhDr. Valéria Jamrichová, Mgr. Lucia Lauková, PhD., Mgr. Mária Šibalová, PhD., Mgr. Angela Škovierová, PhD., Mgr. Oľga Vaneková, PhD., Mgr. Ema Pavl'áková, PhD.					
<b>Last change:</b> 23.05.2024					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025					
<b>University:</b> Comenius University Bratislava					
<b>Faculty:</b> Faculty of Medicine					
<b>Course ID:</b> LF.KSMCh/L-S-ZL-160/22		<b>Course title:</b> Legal and Forensic Aspects in Dentistry			
<b>Educational activities:</b> <b>Type of activities:</b> lecture <b>Number of hours:</b> <b>per week:</b> <b>per level/semester:</b> 24s <b>Form of the course:</b> on-site learning					
<b>Number of credits:</b> 2					
<b>Recommended semester:</b> 6.					
<b>Educational level:</b> I.II.					
<b>Prerequisites:</b> LF.KSMCh/L-S-ZL-078/17 - Preclinical Dentistry 3					
<b>Course requirements:</b>					
<b>Learning outcomes:</b>					
<b>Class syllabus:</b>					
<b>Recommended literature:</b>					
<b>Languages necessary to complete the course:</b>					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 20					
A	B	C	D	E	FX
90,0	10,0	0,0	0,0	0,0	0,0
<b>Lecturers:</b> doc. MUDr. Andrej Thurzo, PhD., MPH, MHA					
<b>Last change:</b> 16.05.2025					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					



## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-057/20	<b>Course title:</b> Maxillofacial Surgery 1
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 12s / 48s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 3	
<b>Recommended semester:</b> 9.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.KSMCh/L-S-ZL-017/19 - Oral Surgery 3	
<b>Course requirements:</b> - 100% attendance at the practicals - 1 written test (minimum 60% of correct answers) Test evaluation: A: 91 - 100 %, B: 81 - 90 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 - 0%.	
<b>Learning outcomes:</b> Knowledge: basics of orofacial oncology, cancer prevention Skills: oncologic vigilance by extraoral and intraoral evaluation of patient, systemic palpation of the lymphnodes	
<b>Class syllabus:</b> Aetiology of oncologic disorders and prevention of cancer. Clinical evaluation of a patient with tumour. Radiodiagnostics and histopathology. Complex treatment of cancer. Malignant epithelial tumours and TNM classification. Cancer of the lip, tongue and floor of the mouth, neck dissections. Sarcomas. Benign tumours of orofacial region, pseudo-tumours. Salivary gland tumours (classification, clinical picture, surgery)	
<b>Recommended literature:</b> Mazánek J.: Orofaciální onkologie. Praha, Triton 2018, 423 s. Satko I., Stanko P., Švidraň J.: Orálna a maxilofaciálna chirurgia. 3. vyd., Bratislava, Univerzita Komenského 2013, 308 s. Skriptá. ISBN 978-80-223-3366-5 Pazdera J.: Základy ústní a čelistní chirurgie. 3. vyd., Univerzita Palackého v Olomouci, Olomouc 2013, 309 s. ISBN 978-80-244-3466-7 Stárek I., Černý L., Simpson R.W.H a kol.: Choroby slinných žláz. Grada Avicenum Praha 2000, 266 s.	
<b>Languages necessary to complete the course:</b> slovak	
<b>Notes:</b>	

<b>Past grade distribution</b>					
Total number of evaluated students: 196					
A	B	C	D	E	FX
68,37	25,0	5,1	1,53	0,0	0,0
<b>Lecturers:</b> prof. MUDr. Peter Stanko, PhD., doc. MUDr. Dušan Hirjak, PhD., doc. MUDr. Ladislav Czakó, PhD., MPH					
<b>Last change:</b> 05.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-058/20	<b>Course title:</b> Maxillofacial Surgery 2
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 14s / 48s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 3	
<b>Recommended semester:</b> 10.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.KSMCh/L-S-ZL-057/20 - Maxillofacial Surgery 1	
<b>Course requirements:</b> - 100% attendance at the practicals - 1 written test (minimum 60% of correct answers) Test evaluation: A: 91 - 100 %, B: 81 - 90 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 - 0%.	
<b>Learning outcomes:</b> Knowledge: basics of maxillofacial traumatology Skills: first aid, coniotomy, fundula mandibulae	
<b>Class syllabus:</b> Symptoms and signs of jaw fractures (main, accessory). General complications of maxillofacial injuries, first aid. Healing of the fractures, dislocation of bone fragments, reduction, osteosynthesis (types), rehabilitation. Classification of mandibular and midface fractures. Soft tissue injuries, alimentation. Physical and chemical injury of face, war injuries	
<b>Recommended literature:</b> Hirjak D., Machoň V.: Traumatológia skeletu tváre. 1. vyd., Slovensk s.r.o., Bratislava pre LF UK v Bratislave 2013, 251 s. ISBN 978-80-971444-0-1 Hirjak, D. et al.: Zlomeniny kondylárneho výbežku sánky. - 1. vyd. - Bratislava, Univerzita Komenského v Bratislave, 2020. - 92 s. - ISBN 978-80-223-4942-0 Hirjak, D. et al.: Traumatológia skeletu tváre - In: Princípy chirurgie (5a) , 2019. ISBN 978-80-89017-10-2, s. 120-147 Satko I., Stanko P., Švidraň J.: Orálna a maxilofaciálna chirurgia. 3. vyd., Bratislava, Univerzita Komenského 2013, 308 s. ISBN 978-80-223-3366-5 Mazánek J.: Traumatologie orofaciální oblasti. 2. vyd., Avicenum Grada publ., Praha 2007, 200 s.	
<b>Languages necessary to complete the course:</b> slovak	
<b>Notes:</b>	

<b>Past grade distribution</b>					
Total number of evaluated students: 195					
A	B	C	D	E	FX
84,62	10,26	2,56	2,56	0,0	0,0
<b>Lecturers:</b> prof. MUDr. Peter Stanko, PhD., doc. MUDr. Juraj Zajko, CSc., doc. MUDr. Ladislav Czakó, PhD., MPH, doc. MUDr. Dušan Hirjak, PhD.					
<b>Last change:</b> 05.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-059/21	<b>Course title:</b> Maxillofacial Surgery 3
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 14s / 86s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 4	
<b>Recommended semester:</b> 11.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.KSMCh/L-S-ZL-058/20 - Maxillofacial Surgery 2	
<b>Course requirements:</b> - 100% attendance at the practicals - 1 written test (minimum 60% of correct answers) Test evaluation: A: 91 - 100 %, B: 81 - 90 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59- 0%.	
<b>Learning outcomes:</b> Knowledge: neurological problems in the mouth and face (neuralgia, paresis). Orthognathic surgery. Preprosthetic operations on the jaws. Generasl bone disorders and facial skeleton Skills: extension of the differential diagnostic thinking	
<b>Class syllabus:</b> Neuralgia n.V. (primary, secondary). Palsies of cranial nerves, paresis n.VII. Disorders of temporomandibular joint (TMJ), MPDS, osteoarthritis. Dentofacial anomalies (progeny, microgeny, laterogeny, open bite). Orofacial clefts. Preprosthetic surgery, relative and absolute augmentation. Systemic bone disorders, manifestation in orofacial region	
<b>Recommended literature:</b> Satko I., Stanko P., Švidraň J.: Orálna a maxilofaciálna chirurgia. 3. vyd., Bratislava, Univerzita Komenského 2013, 308 s. ISBN 978-80-223-3366-5 Zajko J.: Temporomandibulárny kĺb komplexná problematika, ochorenia a liečba. Vyd. Univerzity Komenského, Bratislava 2020, 113 s., ISBN 9788022348324 Machoň, V., Hirjak, D.: Atlas léčby onemocnění temporomandibulárního kloubu. 1 vyd. - Praha: Nakladatelství Triton, 2014. - 320 s. ISBN 978-80-7387-807-8 Malachovský I., Stelová D.: Diagnostika a liečba porúch temporomandibulárneho kĺbu. 1. vyd., Martin, Vydavateľstvo Martin 2011, 133 s. ISBN 978-80-970665-0-5	
<b>Languages necessary to complete the course:</b> slovak	
<b>Notes:</b>	

<b>Past grade distribution</b>					
Total number of evaluated students: 154					
A	B	C	D	E	FX
76,62	18,18	3,25	0,0	1,95	0,0
<b>Lecturers:</b> doc. MUDr. Dušan Hirjak, PhD., prof. MUDr. Peter Stanko, PhD., doc. MUDr. Juraj Zajko, CSc., doc. MUDr. Ladislav Czako, PhD., MPH					
<b>Last change:</b> 05.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.ÚLChB/L-S-ZL-051/17	<b>Course title:</b> Medical Biochemistry for Dentistry 1
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week:</b> <b>per level/semester:</b> 24s / 24s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 3	
<b>Recommended semester:</b> 3.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.ÚLChB/L-S-ZL-053/16 - Medical Chemistry for Dentistry	
<b>Course requirements:</b> 100% participation in practical exercises and seminars, elaboration of protocols Course evaluation: credit test - 24 questions 4 answers + 6 creative questions (achieve at least 80% points) Test rating: A: 97-100%, B: 93-96%, C: 89-92%, D: 85-88%, E: 80-84%, Fx: 79% and less	
<b>Learning outcomes:</b> Knowledge: - to acquire of basic knowledge about energy metabolism - basics of metabolic pathways in the cells of the human body as a basis for organ function -intermediary metabolism of essential nutrients Skills: - to acquire basic skills in laboratory practice - gaining the basis for understanding the molecular mechanisms that determine the function of organs and tissues of the human body	
<b>Class syllabus:</b> Oxidation of basic nutrients, energy production in the animal cell, compartmentalization of metabolism. Carbohydrate metabolism (glycolysis, gluconeogenesis, glycogen and pentose metabolism). Creation and use of major energy sources. Organ relationships, substrate and hormonal regulation. Hormonal regulation of glycemia. Lipid metabolism (FA synthesis, FA oxidation, TAG synthesis, lipolysis). Synthesis of complex lipids, metabolism and importance of lipoproteins. General reactions in amino acid metabolism, ammonia detoxification, urea formation. Kidney biochemistry and its role. Nucleotide metabolism and hyperuricemia. Connective tissue, its components and metabolism. Hard tissues, bones and teeth. Hard tissue mineralization.	
<b>Recommended literature:</b> Kolektív: Lekárska biochémia 1, UK Bratislava 2016 Kolektív: Lekárska biochémia. Praktická a seminárna časť, UK Bratislava 2016 Dobrota a kolektív: Lekárska biochémia, Osveta, 2016	
<b>Languages necessary to complete the course:</b>	

slovak					
<b>Notes:</b>					
<b>Past grade distribution</b>					
Total number of evaluated students: 327					
A	B	C	D	E	FX
6,12	27,22	24,46	21,1	18,35	2,75
<b>Lecturers:</b> prof. RNDr. Jana Muchová, PhD., doc. MUDr. Viera Rendeková, CSc., prof. MUDr. Ladislav Turecký, CSc., doc. RNDr. Eva Uhlíková, CSc., prof. Ing. Ingrid Žitňanová, PhD., RNDr. Milada Laššánová, CSc., Ing. Lucia Laubertová, PhD., doc. RNDr. Monika Ďurfínová, PhD., RNDr. Zuzana Országhová, PhD., Mgr. Martina Horváthová, PhD., doc. Ing. Mária Chomová, PhD., Mgr. Ľubomír Kuračka, PhD., RNDr. Mgr. Marián Koláček, PhD.					
<b>Last change:</b> 05.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					



## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.ÚLChB/L-S-ZL-052/17	<b>Course title:</b> Medical Biochemistry for Dentistry 2
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 24s / 36s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 5	
<b>Recommended semester:</b> 4.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.ÚLChB/L-S-ZL-051/17 - Medical Biochemistry for Dentistry 1 or LF.ÚLChB/L-S-ZL-051/25 - Medical Biochemistry for Dentistry 1	
<b>Course requirements:</b> 100% participation in practical exercises and seminars, elaboration of protocols Course evaluation: - written part - 50 questions (achieve at least 80% points) - oral part - 2 questions (metabolism + functional biochemistry) Test rating: A: 97-100%, B: 93-96%, C: 89-92%, D: 85-88%, E: 80-84%, Fx: 79% and less	
<b>Learning outcomes:</b> <b>Knowledge:</b> - to gain knowledge about metabolic processes in the cells of the human body as a basis for understanding the function of organs - to gain knowledge for understanding the biochemical basis of the function of tissues and organs of the human body - to gain knowledge about the molecular mechanisms of regulation of organ function from gene expression to the level of the whole organism - to gain basic knowledge about the biochemistry of the oral cavity and the pathobiochemical processes occurring in the oral cavity affecting the proper function of teeth <b>Skills:</b> - acquire basic laboratory skills for investigation by bed side methods and in a reference laboratory - the ability to understand the functioning of the tissues and organs of the human body at the molecular level - to acquire, on the basis of an understanding of the functioning of tissues and organs at the molecular level, the ability to understand changes in molecular processes in pathological circumstances as well as to understand the molecular mechanisms of action of drugs	
<b>Class syllabus:</b> Basics of genetic information transfer, chemistry of DNA, RNA and protein synthesis. Regulation of gene expression. Vitamins as an essential component of food. Gastrointestinal tract and digestion. Liver biochemistry. Synthesis and degradation of tetrapyrroles, bilirubin metabolism. Metabolism of water and minerals. Mechanisms of signal transmission into the cell. Biochemical	

basis of nervous activity. Vegetative nervous system. Hormones and regulatory functions. Internal environment of the organism, acid-base balance, the role of the kidneys in maintaining the homeostasis of the organism. Oral cavity as a part of the organism. Saliva, its secretion and importance for the oral cavity. Dental plaque, its formation. Tooth decay and the theory of its origin.					
<b>Recommended literature:</b> Kolektív: Lekárska biochémia 1, UK Bratislava 2016 Turecký L.: Lekárska biochémia 2, Asklepios Bratislava 2014 Kolektív: Lekárska biochémia. Praktická a seminárna časť, UK Bratislava 2016 Dobrota a kolektív: Lekárska biochémia, Osveta, 2016					
<b>Languages necessary to complete the course:</b> slovak					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 335					
A	B	C	D	E	FX
29,25	22,69	17,91	13,13	8,66	8,36
<b>Lecturers:</b> prof. MUDr. Ladislav Turecký, CSc., doc. RNDr. Monika Ďurfinová, PhD., doc. Ing. Mária Chomová, PhD., doc. MUDr. Viera Rendeková, CSc., RNDr. Milada Laššánová, CSc., doc. RNDr. Eva Uhlíková, CSc., Ing. Lucia Laubertová, PhD.					
<b>Last change:</b> 05.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.ÚLFB/L-S-ZL-050/16	<b>Course title:</b> Medical Biophysics
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 24s / 24s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 5	
<b>Recommended semester:</b> 1.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> - 100% attendance at the practicals - 2 written test (minimum 60% of correct answers) - 12 protocols from practicals must be measured Final exam: -written test (min. 60 %) Test evaluation: A: 91 - 100 %, B: 81 - 90 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 % - 0%. - oral theoretical exam: 2 question from theoretical and practical lessons	
<b>Learning outcomes:</b> 1. To provide the main knowledge about basic physical phenomenon occurring in human body under health and illness. 2. To teach the prevention from damage by physical factors and to study their targeted elimination 3. To gain the both theoretical and practical knowledge and skills in application of diagnostics and therapeutics methods in medicine.	
<b>Class syllabus:</b> Lectures: Biophysics of the cell. Active and passive transport through cell membrane. Diffusion, osmosis, medical application. Physical properties of cell membrane, organs and tissues. Registration and propagation of the signal. Resting membrane potential, action potential. Processing and diagnostic use of proper and induced biosignals. Biophysics of blood circulation. Heart as a pump. Blood flow. Blood pressure, principles of measurement. Thermal radiation. Thermography. Liquid crystals. Biophysics of breathing. External and internal breathing. Sound. Biophysics of sound analyser. Origin of human voice. Physical characteristic of human voice. Therapeutic use of interaction of physical factors with human body. Application of electrical impulses in medicine. Electrical safety. Physical ground and use of ultrasound in medicine. Doppler effect. Biophysical grounds of optical methods in medicine. Sources of light. Reflection, refraction and diffraction of light. Optical and electron microscope. Biophysics of eye. Concept of electric dipole and double-layer. Effect of electric current on human body. Alternating and direct electric current and their application. Biophysics of tissues and organs. Biophysics of locomotion system. Biophysics of	

bones, tendons and joints. Biophysics of muscles, muscle contraction. Biophysics of excitation processes. Electrical properties of cells, tissues and organs. Electric signals measured on the body surface (ECG, EEG, EMG, ERG). Structure of matter from biophysical point of view. Kinds of radioactive radiation. Radioactive decay. Interaction of ionising and non-ionising radiation with environment. Dosimetry. Medical use of radiation. Radiometry and photometry. Use of ionising radiation in medicine. Imaging methods using radionuclides. X-rays and imaging methods. Basics of thermodynamics. First, second and third thermodynamic law. Thermodynamics of biological systems. Thermodynamic properties of biological systems. Molecular biophysics. Interactions among particles (chemical bonds). Creation of molecules. Properties of water. Gases and condensed systems. Physical properties of biological liquids and gases. Fluids flow. Basic laws for gases.

Practical trainings:

Safety and health protection rules, physical quantities, conversion of physical units, measurement errors and uncertainties, tables and graphs, basic statistics, microclimatic factors, thermometry, illuminance, visual acuity, refractometry, spectrophotometry, stalagmometry, viscometry, ECG analysis, electrical heart axis, anthropometry, body composition, blood pressure measurement, ultrasonography imaging, blood flow velocity measurement, radiation absorption, dosimetry

#### **Recommended literature:**

Hrazdira I, Morstein V, Škorpíková J. Lekárska biofyzika a prístrojová technika. Brno, Neptun, 2006, ISBN 80-86850-01-3

Navrátil L, Rosina J. Medicínska biofyzika. Praha, Grada, 2019, ISBN 9788027102099

Kozlíková K, Trnka M. Úvod do spracovania a prezentovania dát v medicíne. Košice, Equilibria, 2018 ISBN 978-80-8142-234-7

#### **Languages necessary to complete the course:**

slovak

#### **Notes:**

#### **Past grade distribution**

Total number of evaluated students: 366

A	B	C	D	E	FX
23,22	41,26	29,51	5,19	0,82	0,0

**Lecturers:** doc. RNDr. Martin Kopáni, PhD., doc. RNDr. Mgr. Katarína Kozlíková, CSc., doc. RNDr. Pavol Vitovič, PhD., RNDr. Eva Kráľová, PhD., RNDr. Jaroslav Varchola, PhD., doc. RNDr. Beata Čunderlíková, PhD., doc. RNDr. Silvia Dulanská, PhD., PhDr. Michal Trnka, PhD.

**Last change:** 05.12.2022

**Approved by:** prof. MUDr. Peter Stanko, PhD.

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.ÚLChB/L-S-ZL-053/16	<b>Course title:</b> Medical Chemistry for Dentistry
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 24s / 24s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 5	
<b>Recommended semester:</b> 2.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> Conditions for practical education acceptance: - 100% attendance at the practicals - 10 written weekly tests (achieving at least 50 % total score of each test) Final exam: test Test evaluation: A: 91 - 100 %, B: 81 - 90 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 - 0%.	
<b>Learning outcomes:</b> <b>Knowledge:</b> - acquirement of knowledge about the structure, properties and functions of biologically important compounds (carbohydrates, lipids, proteins, nucleic acids, vitamins), which will enable effective study and comprehensive understanding of metabolic processes in the human body and some pathophysiological processes in the oral cavity - oxidative stress, glycation, glycoxidation and inflammation processes (gingivitis) - obtaining the knowledge of the structure and physico-chemical properties of dental materials <b>Skills:</b> - obtaining the practical experiences in a field of physico-chemical and biochemical methods used in laboratory and clinical practice - obtaining the ability to understand the basics of metabolism and molecular mechanisms of cellular processes	
<b>Class syllabus:</b> Lectures and seminars: Chemical composition of living systems and function of biogenic elements in organism. Bone and tooth mineralization. Disperse systems. Chemical equilibrium in the solutions. Energetics and kinetics of chemical processes. Acids and bases, pH, buffer systems, oral cavity and pH. Pathophysiology of chemical reactions in the oral cavity, theory of tooth decay formation. Structure and properties of substances used in dentistry. Classification of dental materials according to their chemical nature. Biochemically important reactions of organic compounds. The structure, properties and biochemically important reactions of natural compounds - saccharides, lipids, proteins and nucleic acids. Polysaccharides. Chemical composition and function of biological membranes. Steroids.	

<p>Reaction of amino acids. Peptide hormones and other biologically active peptides. Oxidative stress, oral cavity and antioxidative systems. Structure and biological functions of vitamins. Enzymes - their structure and biological function, mechanism of their action, the regulation of catalytical efficiency of enzymes in the organism. Enzymes in oral cavity. The importance and application of enzymes in medicine.</p> <p>Practicals: Principles of physico-chemical methods (spectrophotometry, potentiometry, chromatography) and their practical application in laboratory diagnostics. Determination of selected metal ions concentration in biological material. Determination of different factors effect on erythrocytes fragility. Preparation of solutions, measurement of body fluids pH. Qualitative and quantitative determination of important physiological and pathological metabolites (urea, glucose, ketone bodies, total lipids, malondialdehyde), Thin layer and gel chromatographies of amino acids and proteins. Determination and calculation of enzymes activities, study of effects of different factors on enzymatic activity.</p>																	
<p><b>Recommended literature:</b>  Muchová J. a kol.: Lekárska chémia, UK Bratislava, 2012, 295s. Vysokoškolská učebnica. ISBN 978-80-223-3199-9  Dobrota D. a kol.: Lekárska biochémia, Martin, Osveta, 2012, 723 s. Vysokoškolská učebnica. ISBN 978-80-806-3293-9</p>																	
<p><b>Languages necessary to complete the course:</b>  Slovak</p>																	
<p><b>Notes:</b></p>																	
<p><b>Past grade distribution</b>  Total number of evaluated students: 374</p> <table border="1"> <thead> <tr> <th>A</th><th>B</th><th>C</th><th>D</th><th>E</th><th>FX</th></tr> </thead> <tbody> <tr> <td>11,5</td><td>24,33</td><td>28,88</td><td>16,84</td><td>14,44</td><td>4,01</td></tr> </tbody> </table>						A	B	C	D	E	FX	11,5	24,33	28,88	16,84	14,44	4,01
A	B	C	D	E	FX												
11,5	24,33	28,88	16,84	14,44	4,01												
<p><b>Lecturers:</b> prof. RNDr. Jana Muchová, PhD., prof. Ing. Zdeňka Ďuračková, PhD., doc. PharmDr. Vladimír Jakuš, CSc., prof. Ing. Ingrid Žitňanová, PhD., RNDr. Lucia Andrežálová, PhD., Mgr. Monika Dvořáková, PhD., RNDr. Zuzana Országhová, PhD., doc. Ing. Mária Chomová, PhD., RNDr. Zuzana Paduchová, PhD., Ing. Katarína Koňariková, PhD., Mgr. Mária Janubová, PhD., Ing. Miriama Ježovičová, PhD.</p>																	
<p><b>Last change:</b> 17.06.2024</p>																	
<p><b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.</p>																	

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.ÚSLLE/L-S-ZL-060/17	<b>Course title:</b> Medical Ethics
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 12s / 18s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 4.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> 100% attendance at the practicals Students come prepared for the seminar. They complete assignments such as study of selected readings, written analysis, or argumentative essays. They actively participate in the learning activities. Written test (minimum 60%). Test evaluation: A: 91 - 100 %, B: 81 – 90 %, C: 73 – 80 %, D: 66 – 72 %, E: 60 – 65 %, Fx: 59 % - 0%. The overall rating is determined from the average of the ratings obtained.	
<b>Learning outcomes:</b> <b>Knowledge:</b> The student can: <ul style="list-style-type: none"> <li>- explain the basic concepts of ethics, medical ethics and philosophy of medicine;</li> <li>- explain the basic moral principles and requirements in the medical practice, the role of professionalism in medicine;</li> <li>- explain what is meant by a holistic view of the human person, respect for human dignity during human ontogeny and respect for patient autonomy;</li> <li>- identify current ethical problems in biomedicine and ways of addressing them;</li> <li>- identify key aspects of moral decision-making in clinical practice.</li> </ul> <b>Skills:</b> The student is able to: <ul style="list-style-type: none"> <li>- demonstrate critical thinking and basic moral reasoning necessary for decision-making in medical practice and in the practice of dentistry;</li> <li>- apply relevant scientific facts, and basic anthropological and moral theories relevant in the analysis of ethical issues in biomedicine;</li> <li>- identify and analyse an ethical problem in medical practice and justify their proposed solution;</li> <li>- apply basic moral principles and theories in solving selected case studies from medical practice and the practice of dentistry;</li> </ul>	

- demonstrate the ability to apply basic moral principles and requirements in simulation-based medical training.

**Class syllabus:**

Lectures: Medicine as a human practice at the intersection of the natural sciences and the humanities. The interconnectedness of philosophy, science and medicine. Ethics, morality and professionalism of the physician. Moral reasoning and decision making in medical and dental practice. Human rights and patients' rights. Ethical problems at the beginning of human life. Ethical issues at the end of life. Ethics and new technologies in medicine.

Practicals: The interconnectedness of philosophy and medicine. Medicine as science and art. The aims of medicine. The concept of health and disease. Models of moral reasoning in medicine. The relationship between the dentist and the patient. The central values of dentistry. The Hippocratic oath. Physician and professional duties. The ethos of the medical profession and the personality of the dentist. Informed consent. Confidentiality and medical records. The dentist and the patient with limited decision-making capacity. Communication, patient education and patient cooperation. The beginning of human life from the perspective of medical ethics. Ethics in reproductive medicine. Ethical issues related to the end of human life. Palliative care and hospice. Euthanasia and assisted suicide. Organ transplantation and ethics. Definitions, typology and history of organ transplantation. Organ procurement from living donors. Organ procurement from deceased donors. Commercialisation of the human body. Social justice and access to dental care. Basic needs and redistribution of resources. Dentistry and entrepreneurship. Biomedical research involving human subjects. Ethical codes, declarations, international conventions and protocols. Selected ethical aspects of medical care for vulnerable populations. Contemporary ethical issues in the provision of dental health care. HIV/AIDS patients and dentists. Unprofessionally conducted work. Teamwork.

**Recommended literature:**

Trizuljaková, J. et al. Medicínska etika: Vybrané kapitoly. Bratislava: Univerzita Komenského 2016. 229 s.

Williams, J.R. Príručka lekárskej etiky (z ang. prekladu World Medical Association Medical Ethics Manual). Preklad a odborná revízia Glasa, J. et al. Slovenská lekárska spoločnosť 2008. 132 s.

Brands, W. et al. J. Dental Ethics Manual2. FDI World Dental Federation 2018. 127 pp.

Ozar, D.T, Sokol, D.J. Dental Ethics at Chairside. Professional Principles and Practical Applications. 2nd ed. Washington, D.C.: Georgetown University Press 2002. 343 pp.

**Languages necessary to complete the course:**

Slovak

**Notes:****Past grade distribution**

Total number of evaluated students: 323

A	B	C	D	E	FX
93,81	4,64	1,55	0,0	0,0	0,0

**Lecturers:** Mgr. Mária Kolesárová, PhD., MUDr. Jana Trizuljaková, PhD., MUDr. Ján Štvrtina, PhD., MUDr. Lucia Urban, Jakub Betinský

**Last change:** 11.06.2024

**Approved by:** prof. MUDr. Peter Stanko, PhD.



## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.MÚ/L-S-ZL-140/22	<b>Course title:</b> Medical Microbiology
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 24s / 36s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 5	
<b>Recommended semester:</b> 4.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.ÚLBG/L-S-ZL-004/16 - Biology and Human Genetics 2	
<b>Course requirements:</b> - 100% attendance at the practicals - 100% attendance at the lectures if online - 2 written test (minimum 60% of correct answers) <b>Final exam:</b> - theoretical exam: 3 questions (general and special microbiology, clinical microbiology, microbiology of the oral cavity) <b>Test evaluation:</b> A: 91 - 100 %, B: 81 - 90 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 - 0%. The overall rating is determined from the average of the ratings obtained.	
<b>Learning outcomes:</b> <b>Knowledge:</b> Knowledge on the morphology, structure and physiology of microorganisms, their genetic processes important for human medicine, virulence factors, the relationship between microorganisms and humans, human microbiota, the pathogenicity of microorganisms to humans, the mechanisms of origin, development and consequences of diseases caused by microorganisms, interaction of microorganisms with the human immune system. Knowledge of the fight against microorganisms and prevention of infectious diseases (disinfection, sterilization, antimicrobial treatment, active and passive immunization, immunomodulators of microbial origin). Knowledge on the particular agents of infectious diseases in humans with emphasis on agents important in dentistry. Basic overview of knowledge on the infectious diseases causative agents of the particular organs and organ systems, ways of their transmission, the most important virulence factors that apply to individual types of infectious diseases and on the predisposing factors that support the emergence of these diseases; knowledge on the prevention and therapy options. Knowledge on the microbiota of the oral cavity and its role in the development of dental caries, endodontic infections, periodontal diseases, parotitis and soft tissue and bone diseases of the head and neck; knowledge on the causative agents of infections of the oral mucosa and labial commissures. Knowledge on prevention and therapy options of these diseases. Knowledge on the role of dental infections and infections in the oral cavity in the development of systemic infections. Knowledge on the collection and transport of material for microbiological diagnostics; the basics of microbiological diagnostics of infectious	

diseases and interpretation of microbiological examination results (with emphasis on infections important for dentistry).

**Skills:**

Collection of biological specimens for microbiological examination. Preparation and evaluation of microscopic preparations from biological specimens and from pure cultures of bacteria and fungi. Detection of microbial antigens in biological specimens by rapid diagnostic tests. Inoculation of biological specimens on culture media, evaluation of bacterial growth on selective and diagnostic culture media, isolation of bacteria in pure culture. Performing and evaluation of simple biochemical and serological identification tests. Performing, evaluation and interpretation of antimicrobial susceptibility tests. Evaluation and interpretation of serological tests for the detection of specific antibodies against infectious agents. Execution, evaluation and interpretation of selected tests for the detection and identification of bacteria, viruses and fungi. Evaluation and interpretation of microbiological tests used in the diagnostics of microbial diseases in dentistry and microbial diseases of individual organs and organ systems (on the example of model patients).

**Class syllabus:**

**Lectures:**

Basic characteristics of microorganisms. Interaction of microorganisms and humans. The human microbiota and its pathogenetic significance. Establishment and course of microbial diseases. Exogenous and endogenous infections. Nosocomial and community-acquired infections. Professional infections. Brief overview of anti-infective immunity. Anti-infective drugs - basic concepts and classification. Side effects of antimicrobial drugs. Taxonomy, morphology, structure, growth, reproduction, genetics, pathogenicity and virulence of bacteria. Biofilm and persistence of microorganisms. Bacteriophages and phage therapy. Antibacterial drugs. Mechanisms of bacterial resistance to anti-infective drugs. A brief overview of bacteria important for dentistry. Structure and classification of viruses, replication and genetics of viruses. Antivirals. Viral infection at the level of the cell and the organism. Pathogenesis of viral infections and basic information on the interaction of viruses with the human immune system. A brief overview of viruses important for dentistry. Prions. Basics of medical mycology. An overview of micromycetes important for dentistry. Antifungals. Brief basics of medical parasitology. Bacterial, viral and fungal infections of the oral cavity. Manifestations of systemic infections in the oral cavity. Principles of rational antibiotic treatment. Microbiological data for empirical and targeted antibiotic treatment. A brief overview of infections of the respiratory system, urogenital system, gastrointestinal tract, skin and subcutaneous tissue. Possibilities of their prevention and therapy. Physiological microbiota of the oral cavity. Oral carriage of pathogenic microorganisms. Development of dental plaque; dental caries; pulpitis. Microbial diseases of periodontium and periapical tissue. Periimplantitis. Periodontal diseases and pregnancy. Periodontal diseases and civilization diseases. Salivary gland infections. Soft-tissue infections, infections of jawbone, paranasal sinuses and orbit, associated with dental caries, periodontal diseases and other infections in the oral cavity. Systemic infections of odontogenic origin - oesophagitis, aspiration pneumonia, sepsis, cardiovascular infections, CNS infections. Nosocomial infections. Infections transmissible in the dental office. Oral immunity. Active and passive immunization. Immunomodulators of microbial origin.

**Practical exercises:**

Safety rules in the laboratory of clinical microbiology. Clinical microbiology laboratory equipment. Disinfection and sterilization in dentistry and methods of their control. Basic algorithm of direct and indirect microbiological diagnostics. Collection and transport of specimens for microbiological diagnostics with emphasis on the dental patient. Microscopic examination of samples; information provided by microscopic examination; the importance of microscopic examination of clinical specimens for the diagnosis and treatment of dental patients. Microbial antigens detection in clinical specimens. Infectious agents' genome detection in clinical specimens. Basic principles of culture

diagnostics in clinical microbiology laboratories. Evaluation of the culture results and information provided by the microbial culture techniques. Bacteria that are not cultivable on laboratory culture media. Identification of bacteria by microscopic examination and biochemical tests. Serotyping. Use of mass spectrometry (MALDI-TOF MS) in the identification of microorganisms. Identification of microorganisms by analysis of their genome. Antimicrobial susceptibility testing by disk diffusion test and dilution tests, interpretation of results. Detection of resistance mechanisms by phenotypic and genotypic methods. collection of specimens for antibody detection; detection of antibodies by immunochemical methods - agglutination, precipitation, immunochromatographic tests, ELISA and immunofluorescence tests; confirmation of results by Western blot. Antibody quantification. Interpretation of antibody tests results. Detection of cell-mediated immunity - IGRA tests.

Basics of microbiologic diagnostics of viral and fungal infections. The role of microbiology in the diagnostics of fungal and viral infections of oral cavity and systemic infections with manifestations in the oral cavity. Basic algorithms of microbiologic diagnostics of respiratory tract infections, urogenital and gastrointestinal tract and skin infections. Characterization of the oral microbiota by methods of clinical microbiology (microscopic and culture examination; methods for genome detection of dental plaque microorganisms). Visualization of dental plaque. Microbiologic methods for estimating the risk of cariogenic effect of oral microbiota. Microbiologic diagnostics of infectious diseases important for dentistry - gingivitis, periodontal diseases, infections with oral manifestations, head-and-neck soft-tissue infections, infections of jawbones and paranasal sinuses, systemic infections of odontogenic origin (endocarditis, sepsis and CSN infections) and other diseases connected to infections in oral cavity; infections acquired in dental office.

Microbiologic diagnostics of nosocomial infections with regard to head and neck surgery.

#### **Recommended literature:**

Liptáková, A. et al.: Lekárska mikrobiológia. - 1. vyd. - Bratislava : Herba, 2019. - 952 s.

Liptáková, A. et al.: Mikrobiologická diagnostika pôvodcov infekčných ochorení pre študentov medicíny. 1. vyd. Bratislava: Univerzita Komenského v Bratislave, 2018. - 256 s.

Samaranayake, L.: Essential Microbiology for Dentistry. 5th Ed. Elsevier ,2018, 400 pp.

#### **Languages necessary to complete the course:**

slovak

#### **Notes:**

#### **Past grade distribution**

Total number of evaluated students: 121

A	B	C	D	E	FX
33,06	25,62	20,66	9,92	9,09	1,65

**Lecturers:** doc. MUDr. Adriana Liptáková, PhD., MPH, doc. RNDr. Lívia Slobodníková, CSc., Mgr. Hana Dibalová, PhD., RNDr. Martina Dubinová, PhD., MUDr. Ján Koreň, PhD., Mgr. Marek Straka, PhD.

**Last change:** 05.12.2022

**Approved by:** prof. MUDr. Peter Stanko, PhD.

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.PK/L-S-ZL-056/18	<b>Course title:</b> Medical Psychology and Communication
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 12s / 10s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 5.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> - 100% completion of practicals Exam: - written exam (minimum 60%) Test results: A: 91 - 100 %, B: 81 - 90 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 % or less. The overall evaluation will be assigned based on the score on the written exam.	
<b>Learning outcomes:</b> Knowledge: Basics of general and developmental psychology. Psychology of personality and personality mechanisms. Psychology of patient, doctor, and healthcare environment. Psychological aspects of clinical examination and treatment, social communication, communication abilities, Assertivness. Skills: Being able to: Identify individual mental functions and the importance of their changes in disease states. Identify personality mechanisms important for communication with the patient. Apply general principles and techniques of communication in interaction with the patient and his close persons. Identify factors that determine the course of communication in clinical practice in relation to the individual characteristics of the patient. Use communication skills in the clinical examination of the patient and in solving difficult situations.	
<b>Class syllabus:</b> Medical psychology. Structure of psychic functions and personality – traditional and modern approaches. Developmental stages and their specifics. Psychological hygiene. Factors influencing patient's coping with illness. Model demonstrations of patient's attitudes towards disease and selected clinical and psychological problems. Psychological aspects of interviewing and treatment. Psychological aspect of healthcare environment. Communication in medicine, specific characteristics of communication in clinical practice. Practical training of techniques and principles of communication with patients – children and adults. Life events and coping.	
<b>Recommended literature:</b>	

Žucha, I. – Čaplová, T. a kol.: Lekárska psychológia. Bratislava: Univerzita Komenského, 2. vyd. 2012. 208 s. ISBN 978-80-223-3296-5.  
 Morovicsová, E. a kol.: Komunikácia v medicíne. Bratislava: Univerzita Komenského, 2. vyd. 2014. 212 s. ISBN 978-80-223-3620-8.

**Languages necessary to complete the course:**

Slovak

**Notes:**

**Past grade distribution**

Total number of evaluated students: 276

A	B	C	D	E	FX
32,97	43,48	16,67	4,71	2,17	0,0

**Lecturers:** doc. MUDr. Ľubomíra Izáková, PhD., doc. MUDr. Jana Trebatická, PhD., doc. PhDr. Eva Morovicsová, PhD., MPH, prof. MUDr. Ján Pečeňák, CSc., doc. MUDr. Tatiana Čaplová, CSc.

**Last change:** 06.12.2022

**Approved by:** prof. MUDr. Peter Stanko, PhD.

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-138/23	<b>Course title:</b> Navigated Implantation
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 4s / 20s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 5.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.KSMCh/L-S-ZL-078/17 - Preclinical Dentistry 3	
<b>Course requirements:</b> - online test with practical exercises with a minimum of 60% <b>Final exam:</b> - practical part – the ability to independently perform one of the practical tasks, - theoretical part - 1 question (list of questions) <b>Test evaluation:</b> A: 91 - 100 %, B: 81 – 90 %, C: 73 – 80 %, D: 66 – 72 %, E: 60 – 65 %, Fx: 59 % - 0%. The overall rating is determined from the average of the ratings obtained.	
<b>Learning outcomes:</b> Acquisition of knowledge, information and skills in the field of fully navigated implantology, treatment plan setting during navigated implantation, CBCT acquisition and analysis, CBCT error analysis, intraoral scan acquisition and analysis, navigated implantation planning, creation and export of 3D surgical template for implantation, surgical plan guided implantation, <b>Knowledge:</b> Knowledge in the field of navigated implantology, materials used in planned implantology, <b>Skills:</b> After completing the subject, the student should independently make a CBCT, an intraoral scan, individual steps in the program for planning 3D templates for guided implantation, creating templates in the program, its export and subsequent printing in a 3D printer.	
<b>Class syllabus:</b> 1st block Introduction to the subject of navigated implantology <b>Theoretical</b> <ul style="list-style-type: none"> <li>• Modern diagnostic procedures in implantology</li> <li>• Materials used in implantology</li> <li>• Treatment plan for guided implantation</li> <li>• Use of 3D surgical templates in implantology</li> <li>• Implantation techniques</li> </ul> <b>Practical</b> <ul style="list-style-type: none"> <li>• Information and skills for designing a treatment plan in implantology</li> </ul> 2nd block - CBCT, intraoral scans	

<p>Theoretical</p> <ul style="list-style-type: none"> <li>• CBCT indications and its use in implantology</li> <li>• Indications and use of the intraoral scanner</li> <li>• Analysis of CBCT and intraoral scan</li> </ul> <p>Practical</p> <ul style="list-style-type: none"> <li>• Making CBCT</li> <li>• Making an intraoral scan</li> <li>• Quality assessment of CBCT and intraoral scan</li> <li>• Making an intraoral scan</li> </ul> <p>3rd block – program planning of the navigated implantation</p> <p>Theoretical</p> <ul style="list-style-type: none"> <li>• Program for fully navigated implantation in dentistry</li> <li>• Program options for guided implantation</li> </ul> <p>Practical</p> <ul style="list-style-type: none"> <li>• Step-by-step planning of the guided implantation</li> <li>• Export and print of the 3D template for implantation</li> </ul>																	
<p><b>Recommended literature:</b></p> <p>Guided Implant Surgery</p> <ul style="list-style-type: none"> <li>• The author: Archana Nagpal, Geetanjali Singh</li> <li>• EAN: 9786205514474</li> <li>• ISBN: 6205514478</li> <li>• Release date: November 3, 2022</li> <li>• Uploader: LAP LAMBERT Academic Publishing</li> </ul> <p>Guided Implant Surgery - A Predictable And Safer Approach</p> <ul style="list-style-type: none"> <li>• EAN: 9786205491898</li> <li>• ISBN: 6205491893</li> <li>• Release date: August 22, 2022</li> <li>• Uploader: LAP LAMBERT Academic Publishing</li> </ul>																	
<p><b>Languages necessary to complete the course:</b></p> <p>Slovak</p>																	
<p><b>Notes:</b></p>																	
<p><b>Past grade distribution</b></p> <p>Total number of evaluated students: 12</p> <table border="1"> <thead> <tr> <th>A</th><th>B</th><th>C</th><th>D</th><th>E</th><th>FX</th></tr> </thead> <tbody> <tr> <td>100,0</td><td>0,0</td><td>0,0</td><td>0,0</td><td>0,0</td><td>0,0</td></tr> </tbody> </table>						A	B	C	D	E	FX	100,0	0,0	0,0	0,0	0,0	0,0
A	B	C	D	E	FX												
100,0	0,0	0,0	0,0	0,0	0,0												
<p><b>Lecturers:</b> MUDr. Amir Amiry Manesh, PhD.</p>																	
<p><b>Last change:</b> 03.07.2023</p>																	
<p><b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.</p>																	

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.NK1/L-S-ZL-061/19	<b>Course title:</b> Neurology
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 17s / 25s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 4	
<b>Recommended semester:</b> 7.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.ÚPA/L-S-ZL-072/18 - Pathological Anatomy 2 and LF.ÚPF/L-S-ZL-074/18 - Pathological Physiology 2	
<b>Course requirements:</b> 100 % attendance on practicals patient examination and elaboration of complete patient record, written test - minimum 70 % Test evaluation: A: 95 - 100 %, B: 89 - 94 %, C: 83 - 88 %, D: 77 - 82 %, E: 70 - 76 %, Fx: 0 - 69 % Oral examination (general neurology, special neurology) The overall rating is determined from the average of the ratings obtained.	
<b>Learning outcomes:</b> Knowledge: molecular mechanisms underlying nervous system activity, functional neuroanatomy, major neurologic syndromes, manifestation of nervous system disorders, principles and techniques of clinical and instrumental neurological examination, etiopathogenesis, clinical manifestation, diagnostic and therapy of common neurologic disorders Skills: mastering of technique and interpretation of clinical and instrumental neurological examination, identification of signs and symptoms of major neurological disorders, interpretation of laboratory findings in context of clinical picture, elaboration of diagnostic and therapeutic program in major neurological disorders	
<b>Class syllabus:</b> Signs and symptoms of nervous system disorders, major neurologic syndromes, clinical neurological examination - technique and interpretation, EEG, EP, EMG, USG, CT, MRI, lumbar puncture - principles, indications and interpretation, cerebrovascular diseases, epilepsy, headache and craniofacial pain, neurodegenerative diseases, vertebrogenic disorders, tumors of nervous system, infections of nervous system, demyelinating diseases, disorders of peripheral nervous system, disorders of neuromuscular transmission, disorders of skeletal muscles, trauma of nervous system, neurological complications of systemic disease	
<b>Recommended literature:</b>	



Kaňovský, P.: Obecná neurologie a vyšetřovací metody v neurologii, Univerzita Palackého v Olomouci, 2019  
 Biller J et al: The Neurological Examination, 7th ed., The McGraw-Hill Companies Inc, 2016,  
 Benarroch E et al: Mayo Clinic Medical Neurosciences, 6th ed., Mayo Clinic Scientific Press 2018  
 Kaňovský, P., Bartková, A.: Speciální neurologie, Univerzita Palackého v Olomouci, 2019  
 Ružička E. et al.: Neurologie (2. rozšířené vydání), vydavatelství Triton, 2021  
 Louis ED et al.: Merrit's Neurology, 14th ed., Wolters Kluwer, 2021  
 Newman NJ et al.: Bradley and Daroff's Neurology in Clinical Practice, 8th Edition, Elsevier, 2021  
 Ropper AH et al: Adams&Victor's Principles of Neurology, 11th ed, The McGraw-Hill Companies, Inc, 2019

**Languages necessary to complete the course:**

slovak

**Notes:**

**Past grade distribution**

Total number of evaluated students: 236

A	B	C	D	E	FX
14,41	41,1	29,66	11,44	3,39	0,0

**Lecturers:** prof. MUDr. Peter Turčáni, PhD., prof. MUDr. Branislav Kollár, PhD., MPH, doc. MUDr. Jaroslav Pancák, PhD., prof. MUDr. Marek Sýkora, PhD., prof. MUDr. Stanislav Šutovský, PhD., MUDr. Zoltán Goldenberg, PhD., MUDr. Marián Kondáš, PhD., doc. MUDr. Pavel Šiarnik, PhD., doc. MUDr. Katarína Klobučníková, PhD.

**Last change:** 05.12.2022

**Approved by:** prof. MUDr. Peter Stanko, PhD.

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KO/L-S-ZL-062/19	<b>Course title:</b> Ophthalmology
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 12s / 12s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 8.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> - 100% attendance at the practicals - 2 written test (minimum 60% of correct answers) Final exam: - theoretical exam: 3 questions (general examination, special systems, laboratory test) Test evaluation: A: 91 - 100 %, B: 81 – 90 %, C: 73 – 80 %, D: 66 – 72 %, E: 60 – 65 %, Fx: 59 % - 0%. The overall rating is determined from the average of the ratings obtained.	
<b>Learning outcomes:</b> Acquisition of basic, theoretical and practical knowledge and skills in the field of ophthalmology of children and adults. <b>Knowledge:</b> Basic problems of clinical morphology and physiology of vision. Diagnostic procedures in ophthalmology, treatment procedures. <b>Skills:</b> Day and side light examination. Eye biomicroscopy. Ophthalmoscopy direct and indirect. Examination of visual acuity, field of vision and color vision. Additional examinations in ophthalmology: ultrasound diagnostics, fluorescein angiography of retinal vessels, optical coherence tomography, basics of radiodiagnostics in ophthalmology. Problems of pedophthalmology, ophthalmogenetics, ophthalmooncology, ophthalmogerontology, ophthalmogeriatrics. Relationship between ophthalmology and other medical disciplines. General diseases and their manifestations in the eye. Screening in ophthalmology. Diseases of the auxiliary organs of the eye. Diseases of the anterior segment of the eye. Cataracts and modern cataract surgery. Diseases of the refractive system of the eye. Basics of refractive surgery. Vascular and degenerative diseases of the retina and vitreous. Basics of vitreous-retinal surgery. Glaucoma diseases. Eye traumatology. Basics of neuroophthalmology. Therapy of the eye diseases and orbital diseases. Problems of social inclusion in patients with visual impairment in the environment - assessment activity. First aid and emergencies in ophthalmology.	
<b>Class syllabus:</b>	

Diagnostic and therapeutic procedures in the field of ophthalmology					
<b>Recommended literature:</b> Krásnik, V., Furdová, A., Oláh, Z.: Príručka z oftalmológie 1 Univerzita Komenského v Bratislave, 2014, 170 s. Oláh, Z., Furdová, A., Krásnik, V., Štefaničková, J.: Príručka z oftalmológie 2 Univerzita Komenského v Bratislave, 2017, 120 s. Pavel Kuchynka a kol., Oční lékařství, Grada, 2016, <a href="https://www.martinus.sk/?uItem=239277">https://www.martinus.sk/?uItem=239277</a> Anton Gerinec, Encyklopédia oftalmológie, A-medi management, 2021 Tomčíková, D., Krásnik, V., Popov, I., Valášková, J.: Vybrané kapitoly z oftalmológie, ISBN 978-80-223-4979-6, 95 str., UK 2022, e-kniha, <a href="https://www.fmed.uniba.sk/fileadmin/lf/sluzby/akademicka_kniznica/PDF/Elektronicke_knihy_LF_UK/Vybrane_kapitoly_z_ofthalmologie.pdf">https://www.fmed.uniba.sk/fileadmin/lf/sluzby/akademicka_kniznica/PDF/Elektronicke_knihy_LF_UK/Vybrane_kapitoly_z_ofthalmologie.pdf</a>					
<b>Languages necessary to complete the course:</b> Slovak					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 234					
A	B	C	D	E	FX
53,85	21,37	20,09	2,56	2,14	0,0
<b>Lecturers:</b> doc. MUDr. Vladimír Krásnik, PhD., prof. MUDr. PhDr. Alena Furdová, PhD., MPH, prof. MUDr. Anton Gerinec, CSc., doc. MUDr. Dana Tomčíková, PhD., doc. MUDr. Jana Štefaničková, PhD.					
<b>Last change:</b> 27.05.2024					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-068/20	<b>Course title:</b> Oral Medicine
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 14s / 12s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 10.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.KSMCh/L-S-ZL-067/20 - Periodontology 1	
<b>Course requirements:</b> - 100% attendance at the practicals - Final Exam: - theoretical part - 2 questions from oral medicine	
<b>Learning outcomes:</b> Knowledge: the graduate has a comprehensive knowledge of the anatomy and physiology of the soft tissues of the oral cavity. The student is familiar with the clinical picture, diagnosis and therapy of inflammatory, infectious and general diseases of the oral cavity, as well as precancerous conditions, malignancies of the mucous membranes of the oral cavity and salivary glands. Skills: is able to expertly examine the patient and select the correct treatment on the basis of the patient's history, clinical examination and additional investigative methods.	
<b>Class syllabus:</b> Normal anatomical variations and developmental abnormalities in oral cavity. Depistage and dispensarization of precancerous conditions of oral mucosa. Invasive and non-invasive examination methods. White lesions in oral cavity. Red lesions in oral cavity. Oral lichen planus. Oral leucoplakia. Erythema multiforme. Manifestations of systemic diseases in oral cavity. Oral manifestations of blood disorders. Manifestations of vitamin disorders and endocrinopathies in oral cavity. Ulcerative gingivitis (ANUG), periodontitis and stomatitis and other bacterial infections of oral cavity. Diseases of tongue. Xerostomia, lip diseases. Foetor ex ore, Halitosis. Fungal diseases in oral cavity. Drug-induced changes in oral mucosa. Glossodynia a stomatodynia. Manifestations of autoimmune diseases in oral cavity. Aphthous lesion in oral cavity. Gingivitis desquamativa. Manifestations of allergic reactions in oral cavity. Viral diseases in oral cavity. Manifestations of HIV infection and AIDS in oral cavity.	
<b>Recommended literature:</b> ĎUROVIČ E. Atlas chorôb slizníc ústnej dutiny a jazyka, Vydavateľstvo P+M, 2021, 184 s., ISBN 9788089694853 V anglickom jazyku:	

BRUCH J.M. et al. Clinical Oral Medicine and Pathology, 2nd Edition, Springer, 2017, 207 s.  
ISBN 978-3319297675

**Languages necessary to complete the course:**

slovak

**Notes:**

**Past grade distribution**

Total number of evaluated students: 196

A	B	C	D	E	FX
16,33	28,57	32,14	16,33	6,63	0,0

**Lecturers:** MUDr. Amir Amiry Manesh, PhD., MUDr. Rastislav Edelstein, PhD.

**Last change:** 05.12.2022

**Approved by:** prof. MUDr. Peter Stanko, PhD.

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-144/22	<b>Course title:</b> Oral Surgery 1
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 10s / 24s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 6.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.KSMCh/L-S-ZL-079/17 - Preclinical Dentistry 4 and LF.AÚ/L-S-ZL-088/17 - Topographical Anatomy of the Head	
<b>Course requirements:</b> - 100 % attendance at practicals - one written test, - written test minimal level 60 % - evaluation of test: A: 91 - 100 %, B: 81 – 99 %, C: 73 – 80 %, D: 66 – 72 %, E: 60 – 65 %, Fx: 59 % and less	
<b>Learning outcomes:</b> Knowledge: Introduction into basic problems of oral and maxillofacial surgery. Skills: Evaluation of a patient before oral surgical procedure, description of dental x-rays (intraoral, panoramic, CBCT). Application of local anaesthesia.	
<b>Class syllabus:</b> History of OMF surgery, management of patient, radiography and radiology. Asepsis, viral infections. Local anaesthesia (LA), techniques of LA on the mandible and maxilla, complications. Overview of instruments, indications and contraindications of extractions. Local and general complications of extractions	
<b>Recommended literature:</b> Satko I., Stanko P., Švidraň J.: Orálna a maxilofaciálna chirurgia. Bratislava: Univerzita Komenského, 3. vyd., 2013, 290 s. Skriptá. -Czakó L., Vavro M., Šimko K.: Orálna a maxilofaciálna chirurgia – otázky a odpovede. 1. vyd., Bratislava, Herba 2022, 134 s. ISBN 978-80-8229-019-9.	
<b>Languages necessary to complete the course:</b> Slovak	
<b>Notes:</b>	

<b>Past grade distribution</b>					
Total number of evaluated students: 121					
A	B	C	D	E	FX
74,38	18,18	6,61	0,83	0,0	0,0
<b>Lecturers:</b> doc. MUDr. Dušan Hirjak, PhD., prof. MUDr. Peter Stanko, PhD., doc. MUDr. Juraj Zajko, CSc., doc. MUDr. Ladislav Czako, PhD., MPH					
<b>Last change:</b> 18.06.2024					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-016/19	<b>Course title:</b> Oral Surgery 2
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 12s / 60s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 3	
<b>Recommended semester:</b> 7.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.KSMCh/L-S-ZL-144/22 - Oral Surgery 1	
<b>Course requirements:</b> 100 % attendance at practicals - one written test, - written test minimal level 60 % - evaluation of test: A: 91 - 100 %, B: 81 – 99 %, C: 73 – 80 %, D: 66 – 72 %, E: 60 – 65 %, Fx: 59 % and less	
<b>Learning outcomes:</b> Knowledge: Principles of treatment of dentogenous inflammations. Types of xerostomia. Sinusitis maxillaris, oroantral communications. Skills: cope up with a simple tooth extracion (including instruction of patient). Assistance by surgical extraction, alveoloplasty.	
<b>Class syllabus:</b> Surgical extraction, its indications. Alveoloplasty types. Trismus (all types, differential diagnostics). Infections around the jaws (including specific infections). Disorders of salivary glands with exception of tumours. Pathology of maxillary sinus.	
<b>Recommended literature:</b> Satko I., Stanko P., Švidraň J.: Orálna a maxilofaciálna chirurgia. Bratislava: Univerzita Komenského, 3. vyd., 2013, 290 s. Skriptá. -Hirjak D., Machoň V.: Tretie moláre (M3). 1. vyd., Slovensk s.r.o., Bratislava 2016, 127 s. ISBN 978-80-971444489. -Czakó L., Vavro M., Šimko K.: Orálna a maxilofaciálna chirurgia – otázky a odpovede. 1. vyd., Bratislava, Herba 2022, 134 s. ISBN 978-80-8229-019-9.	
<b>Languages necessary to complete the course:</b> Slovak	
<b>Notes:</b>	



<b>Past grade distribution</b>					
Total number of evaluated students: 236					
A	B	C	D	E	FX
76,69	17,8	4,24	0,0	1,27	0,0
<b>Lecturers:</b> prof. MUDr. Peter Stanko, PhD., doc. MUDr. Dušan Hirjak, PhD., doc. MUDr. Juraj Zajko, CSc., doc. MUDr. Ladislav Czakó, PhD., MPH					
<b>Last change:</b> 18.06.2024					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025					
<b>University:</b> Comenius University Bratislava					
<b>Faculty:</b> Faculty of Medicine					
<b>Course ID:</b> LF.KSMCh/L-S-ZL-017/19		<b>Course title:</b> Oral Surgery 3			
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week:</b> <b>per level/semester:</b> 12s / 66s <b>Form of the course:</b> on-site learning					
<b>Number of credits:</b> 5					
<b>Recommended semester:</b> 8.					
<b>Educational level:</b> I.II.					
<b>Prerequisites:</b> LF.KSMCh/L-S-ZL-016/19 - Oral Surgery 2 or LF.KSMCh/L-S-ZL-016/25 - Oral Surgery 2					
<b>Course requirements:</b> 100 % attendance at practicals - Oral exam with 2 questions, student has 10 min. for prepare					
<b>Learning outcomes:</b> Knowledge: Indikácie RKH a periapikálnej kyretáže. Radikulárne a folikulárne cysty, mukokéla a ranula. Možnosti fixácie dentálnej traumy. Diferenciálna diagnostika leukoplakií a erytroplakií. Skills: evaluation of USG, CT a MRI findings. Assistance by apicectomy, cystectomy. Examination of lymphnodes in head and neck region.					
<b>Class syllabus:</b> Surgical procedures accomplishing endodontics. Cysts of orofacial region (bones, soft tissues). Node syndrome (lymphadenitis, lymphadenopatia maligna). Dental injuries (root fractures, subluxation and avulsion). Precancers of oral mucosa and skin.					
<b>Recommended literature:</b> Satko I., Stanko P., Švidraň J.: Orálna a maxilofaciálna chirurgia. Bratislava: Univerzita Komenského, 3. vyd., 2013, 290 s. Skriptá. -Czakó L., Vavro M., Šimko K.: Orálna a maxilofaciálna chirurgia – otázky a odpovede. 1. vyd., Bratislava, Herba 2022, 134 s. ISBN 978-80-8229-019-9.					
<b>Languages necessary to complete the course:</b> Slovak					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 234					
A	B	C	D	E	FX
41,88	31,2	19,23	6,41	1,28	0,0

<b>Lecturers:</b> prof. MUDr. Peter Stanko, PhD., doc. MUDr. Dušan Hirjak, PhD., doc. MUDr. Juraj Zajko, CSc., doc. MUDr. Ladislav Czakó, PhD., MPH
<b>Last change:</b> 18.06.2024
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-063/21	<b>Course title:</b> Oral and Maxillofacial Surgery
<b>Educational activities:</b> <b>Type of activities:</b> lecture / seminar / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 12s / 10s / 122s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 10	
<b>Recommended semester:</b> 12.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.KSMCh/L-S-ZL-059/21 - Maxillofacial Surgery 3	
<b>Course requirements:</b> - 100% attendance at the practicals and seminars Final State Exam: - 1 written test (minimum 60% of correct answers) Test evaluation: A: 91 - 100 %, B: 81 - 90 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 - 0%. - Practical exam: patient examination and writing medical report, surgical procedure, radiologic evaluation - Theoretical exam: 3 question The overall rating is determined from the average of the ratings obtained.	
<b>Learning outcomes:</b> Knowledge: repetition and joining all previous knowledge from dentoalveolar and maxillofacial surgery at the same time with other dental specializations and medical disciplines Skills: assembling of all surgical skills, realization personally or through assistance	
<b>Class syllabus:</b> Risk patients. Chosen topics by the students	
<b>Recommended literature:</b> Satko I., Stanko P., Švidraň J.: Orálna a maxilofaciálna chirurgia. Bratislava, UK 3.vydanie 2013, 308 s, ISBN 978-80-223-3366-5 Skriptá. Hirjak D. et al.: Tretie moláre (M3) /- 1. vyd. - Bratislava : 2016. - 127 s. ISBN 978-80-971444-4-9 Satko, Ivan; Hirjak, Dušan : Okoločelústne zápaly / In: Princípy chirurgie (2) , 1. vyd. Bratislava: SAP - Slovak Academic Press, 2010. - ISBN 978-80-8095-053-8, s. 482-485 Pazdera J.: Základy ústní a čelistní chirurgie. 3. vyd., Univerzita Palackého v Olomouci, Olomouc 2013, 309 s. ISBN 978-80-244-3466-7 Mazánek J. a kol.: Propedeutika zubního lékařství. 1. vyd., Grada, Praha 2014, 604 s. ISBN 978-80-247-3534-4 Lehotská V., Kršáková A.: Radiológia pre stomatológov. 1. vyd., Bratislava, Veda 2018, 274 s. ISBN 978-80-224164-4-3	

Mazánek J.: Orofaciální onkologie. Praha, Triton 2018, 423 s.  
 Hirjak D., Machoň V.: Traumatológia skeletu tváre. 1. vyd., Slovensk s.r.o., Bratislava pre LF UK v Bratislave 2013, 251 s. ISBN 978-80-971444-0-1  
 Mazánek J.: Traumatologie orofaciální oblasti. 2. vyd., Avicenum Grada publ., Praha 2007, 200 s.  
 Stárek I., Černý L., Simpson R.W.H a kol.: Choroby slinných žláz. Grada Avicenum Praha 2000, 266 s.  
 Zajko J.: Temporomandibulárny kĺb komplexná problematika, ochorenia a liečba. Vyd. erzity Komenského, Bratislava 2020, 113 s., ISBN 9788022348324  
 Machoň, V., Hirjak, D.: Atlas léčby onemocnění temporomandibulárního kloubu. 1 vyd.- Praha: Nakladatelství Triton, 2014. - 320 s. ISBN 978-80-7387-807-8  
 Malachovský I., Statelová D.: Diagnostika a liečba porúch temporomandibulárneho kĺbu. 1. vyd., Martin, Vydavateľstvo Martin 2011, 133 s. ISBN 978-80-970665-0-5

**Languages necessary to complete the course:**

slovak

**Notes:**

**Past grade distribution**

Total number of evaluated students: 154

A	B	C	D	E	FX
70,13	20,78	7,14	1,3	0,65	0,0

**Lecturers:** prof. MUDr. Peter Stanko, PhD., doc. MUDr. Dušan Hirjak, PhD., doc. MUDr. Juraj Zajko, CSc., doc. MUDr. Ladislav Czako, PhD., MPH

**Last change:** 05.12.2022

**Approved by:** prof. MUDr. Peter Stanko, PhD.

## STATE EXAM DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KÚČTCh/L-ZL-ŠS-3/16	<b>Course title:</b> Oral and Maxillofacial Surgery
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 11., 12..	
<b>Educational level:</b> I.II.	
<b>State exam syllabus:</b>	
<b>Last change:</b>	
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.	

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-005/19	<b>Course title:</b> Orthodontics 1
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 4s / 18s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 8.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> 100% participation on the practical exercises Final exam: evaluation of the patient's medical records, identification of orthodontic anomalies, determination of the patient's dental age. Passing 1 test with at least 60% Test evaluation: A: 91 - 100 %, B: 81 - 90 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 - 0 % The overall mark will be determined from the average of the marks obtained.	
<b>Learning outcomes:</b> Knowledge: morphology and function of the dentition. Anomalies of teeth, dental arches and intermaxillary relationship. Classification of orthodontic anomalies. Skills: Recognition of deciduous and permanent teeth and determination of basic orthodontic anomalies at intraoral examination and on study models.	
<b>Class syllabus:</b> Morphology and function of the dentition. Orthodontics, definition and classification of the field in health care. Classification of orthodontic anomalies. Development of the dentition, eruption of teeth.	
<b>Recommended literature:</b> Bachratý, A., Bachratá, L., Suchancová, B.: Čelústná ortopédia, 4. vyd. Bratislava: Vydavateľstvo UK, 2006 Kamínek, M. et al., Ortodoncie, 1. vyd. Praha: Galén, 2014	
<b>Languages necessary to complete the course:</b> slovak	
<b>Notes:</b>	

<b>Past grade distribution</b>					
Total number of evaluated students: 234					
A	B	C	D	E	FX
60,26	29,91	8,55	0,43	0,85	0,0
<b>Lecturers:</b> doc. MUDr. Andrej Thurzo, PhD., MPH, MHA, MDDr. Soňa Pintešová, PhD., MUDr. Juraj Lysý, PhD., MPH, MDDr. Nora Kelecsényiová, MDDr. Katarína Demeterová, MDDr. Patrik Juhás					
<b>Last change:</b> 05.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					



## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-006/20	<b>Course title:</b> Orthodontics 2
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 7s / 12s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 1	
<b>Recommended semester:</b> 9.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.KSMCh/L-S-ZL-005/19 - Orthodontics 1	
<b>Course requirements:</b> 100% participation on the practical exercises Final exam: measurements on the study model, evaluation of the cephalometric x-ray and interpretation of the results. Passing 1 test with at least 60% Test evaluation: A: 91 - 100 %, B: 81 - 90 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 - 0 % The overall mark will be determined from the average of the marks obtained.	
<b>Learning outcomes:</b> Knowledge: History, extraoral and intraoral examination of the patient. Classifications of orthodontic anomalies. Diagnostics. Cephalometrics. Skills. Complex orthodontic case evaluation. Determination of the orthodontic anomaly classification. Imaging techniques. Measurements on study models. Cephalometric analysis.	
<b>Class syllabus:</b> Splanchnocraniums growth and development. Timing of orthodontic treatment. Methods of determining skeletal age. Etiology of orthodontic anomalies. Examination of the patient in orthodontics. Cephalometrics.	
<b>Recommended literature:</b> Bachratý, A., Bachratá, L., Suchancová, B.: Čelústná ortopédia, 4. vyd. Bratislava: Vydavateľstvo UK, 2006 Kamínek, M. et al., Ortodoncie, 1. vyd. Praha: Galén, 2014	
<b>Languages necessary to complete the course:</b> slovak	
<b>Notes:</b>	

<b>Past grade distribution</b>					
Total number of evaluated students: 196					
A	B	C	D	E	FX
45,41	35,2	12,76	4,59	2,04	0,0
<b>Lecturers:</b> doc. MUDr. Andrej Thurzo, PhD., MPH, MHA, MUDr. Juraj Lysý, PhD., MPH, MDDr. Nora Kelecsényiová, MDDr. Soňa Pintešová, PhD., MDDr. Katarína Demeterová, MDDr. Patrik Juhás					
<b>Last change:</b> 05.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-007/20	<b>Course title:</b> Orthodontics 3
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 4s / 12s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 10.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.KSMCh/L-S-ZL-006/20 - Orthodontics 2 or LF.KSMCh/L-S-ZL-006/25 - Orthodontics 2	
<b>Course requirements:</b> 100% participation on the practical exercises Final exam: practical part - analysis of the study model, description and classification of the orthodontic anomaly, determination of dental age oral part - 1 question	
<b>Learning outcomes:</b> Knowledge: General principles of orthodontic therapy. Basic types of orthodontic appliances, their use, indications, contraindications. Skills: Design and modification of removable appliance in general.	
<b>Class syllabus:</b> Mechanisms of orthodontic therapy. The effect of mechanical force on teeth and structures of the splanchnocranium. The orthodontic plate, construction elements and methods of use. Functional appliances, construction elements and methods of use. Fixed appliances, construction elements and methods of use. Extraoral appliances. Thermoplastic foil appliances.	
<b>Recommended literature:</b> Bachratý, A., Bachratá, L., Suchancová, B.: Čelústná ortopédia, 4. vyd. Bratislava: Vydavateľstvo UK, 2006 Kamínek, M. et al., Ortodoncie, 1. vyd. Praha: Galén, 2014 P.Andrik, A.Bachratý, F.Dibelka, M.Kamínek : Čelústná ortopédia. Vydavateľstvo Osveta, Martin, 1981	
<b>Languages necessary to complete the course:</b> slovak	
<b>Notes:</b>	

<b>Past grade distribution</b>					
Total number of evaluated students: 195					
A	B	C	D	E	FX
81,03	11,28	5,64	1,54	0,51	0,0
<b>Lecturers:</b> doc. MUDr. Andrej Thurzo, PhD., MPH, MHA, MUDr. Juraj Lysý, PhD., MPH, MDDr. Nora Kelecsényiová, MDDr. Soňa Pintešová, PhD., MDDr. Katarína Demeterová, MDDr. Patrik Juhás					
<b>Last change:</b> 05.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-008/21	<b>Course title:</b> Orthodontics 4
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 7s / 18s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 1	
<b>Recommended semester:</b> 11.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.KSMCh/L-S-ZL-007/20 - Orthodontics 3	
<b>Course requirements:</b> 100% participation on the practical exercises Final exam: - analysis of the study model, description and classification of the orthodontic anomaly, determination of dental age, design of treatment with orthodontic appliance, description of appropriate elements according to the nature of the anomaly. Passing 1 test with at least 60% Test evaluation: A: 91 - 100 %, B: 81 - 90 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 - 0 % The overall mark will be determined from the average of the marks obtained.	
<b>Learning outcomes:</b> Knowledge: Diagnostic and therapeutic procedures in transverse and vertical anomalies, eruption disorders and Class II and III anomalies according to Angle's classification. Skills: Patient's indication for orthodontic treatment. Dental care in patients with fixed and removable appliances. Oral hygiene advice for patients with fixed and removable appliances.	
<b>Class syllabus:</b> Diagnosis and therapy of Class II anomalies according to Angle's classification. Diagnosis and therapy of Class III anomalies according to Angle's classification. Diagnosis and therapy of transverse anomalies. Diagnosis and therapy of vertical anomalies. Diagnosis and therapy of eruption disorders. Diagnosis and therapy of tooth anomalies.	
<b>Recommended literature:</b> Bachratý, A., Bachratá, L., Suchancová, B.: Čeľustná ortopédia, 4. vyd. Bratislava: Vydavateľstvo UK, 2006 Kamínek, M. et al., Ortodoncie, 1. vyd. Praha: Galén, 2014 P.Andrik, A.Bachratý, F.Dibelka, M.Kamínek : Čeľustná ortopédia. Vydavateľstvo Osveta, Martin, 1981	
<b>Languages necessary to complete the course:</b> slovak	

<b>Notes:</b>					
<b>Past grade distribution</b>					
Total number of evaluated students: 154					
A	B	C	D	E	FX
59,09	29,22	6,49	2,6	2,6	0,0
<b>Lecturers:</b> doc. MUDr. Andrej Thurzo, PhD., MPH, MHA, MUDr. Juraj Lysý, PhD., MPH, MDDr. Nora Kelecsényiová, MDDr. Soňa Pintešová, PhD., MDDr. Katarína Demeterová, MDDr. Patrik Juhás					
<b>Last change:</b> 05.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-009/21	<b>Course title:</b> Orthodontics 5
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 4s / 30s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 12.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.KSMCh/L-S-ZL-008/21 - Orthodontics 4	
<b>Course requirements:</b> 100% participation on the practical exercises Final exam: Analysis of the patient's documentation, description, classification and determination of the etiology of the orthodontic anomaly, determination of the dental age, orthodontic treatment plan, description of appropriate appliance and elements according to the nature of the anomaly.	
<b>Learning outcomes:</b> Knowledge: Special therapeutic procedures in orthodontics. Specifics of treatment in adult patient. Combined orthodontic-surgical treatment. The role of the orthodontist in treatment of cleft patients. Issues of retention and relapse after orthodontic treatment. Skills: Preparation of the patient for orthodontic treatment. Conservative treatment in patients with fixed and removable appliances. Interdisciplinary cooperation in orthodontic treatment.	
<b>Class syllabus:</b> Orthodontic treatment of the adult patient. Orthodontic treatment using orthognathic surgery. Retention/relapse after orthodontic treatment. Diagnosis and therapy of cleft patients from the orthodontist's perspective.	
<b>Recommended literature:</b> Bachratý, A., Bachratá, L., Suchancová, B.: Čelústná ortopédia, 4. vyd. Bratislava: Vydavateľstvo UK, 2006 Kamínek, M. et al., Ortodoncie, 1. vyd. Praha: Galén, 2014 P.Andrik, A.Bachratý, F.Dibelka, M.Kamínek : Čelústná ortopédia. Vydavateľstvo Osveta, Martin, 1981	
<b>Languages necessary to complete the course:</b> slovak	
<b>Notes:</b>	

<b>Past grade distribution</b>					
Total number of evaluated students: 154					
A	B	C	D	E	FX
85,71	10,39	3,9	0,0	0,0	0,0
<b>Lecturers:</b> doc. MUDr. Andrej Thurzo, PhD., MPH, MHA, MUDr. Juraj Lysý, PhD., MPH, MDDr. Nora Kelecsényiová, MDDr. Soňa Pintešová, PhD., MDDr. Katarína Demeterová, MDDr. Patrik Juhás					
<b>Last change:</b> 05.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					



## STATE EXAM DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-ZL-ŠS-4/16	<b>Course title:</b> Orthopaedic Dentistry
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 11., 12..	
<b>Educational level:</b> I.II.	
<b>State exam syllabus:</b>	
<b>Last change:</b>	
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.	

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-064/21	<b>Course title:</b> Orthopaedic Dentistry 1
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 18s / 72s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 4	
<b>Recommended semester:</b> 11.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> - 100% attendance at the practicals - 1 written test (minimum 60% of correct answers) Test evaluation: A: 91 - 100 %, B: 81 - 90 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 - 0%.	
<b>Learning outcomes:</b> Knowledge: prosthetic treatment of complicated cases, combined therapy, prosthetics in patients with periodontitis. Dental prosthetics in children, treatment of inborn and acquired defects of the jaws, hybrid dentures Skills: practical value of gnathology, strategy of planning in prosthodontics. Approach to pediatric patients	
<b>Class syllabus:</b> Implant-born prosthetics, cooperation of prosthodontist, oral surgeon and dental technician. Replacement of teeth by crowns and bridges. Problem of hybrid dentures, combined non-dental rehabilitation of defects (conventional and implant-born). Prosthetics in children	
<b>Recommended literature:</b> Strub J.R., Kern M., Türp J.C., Witkowski S., Heydecke G., Wolfart S.: Protetika II. Grada Publishing, máj 2016 Strub J.R., Kern M., Türp J.C., Witkowski S., Heydecke G., Wolfart S.: Protetika III. Grada Publishing, september 2016 Satko I., Stanko P., Švidraň J.: Orálna a maxilofaciálna chirurgia. 3. vyd., Bratislava, Univerzita Komenského 2013, 308 s. Skriptá. ISBN 978-80-223-3366-5 Weber T.: Memorix zubního lékařství. Grada Publishing, Praha, 2012	
<b>Languages necessary to complete the course:</b> Slovak	
<b>Notes:</b>	

<b>Past grade distribution</b>					
Total number of evaluated students: 154					
A	B	C	D	E	FX
82,47	9,09	7,79	0,0	0,65	0,0
<b>Lecturers:</b> prof. MUDr. Peter Stanko, PhD., MDDr. Anna Korpášová, MDDr. Nikos Leptos, Halyna Pruts, PhD., MDDr. Michaela Lifková, PhD.					
<b>Last change:</b> 06.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-065/21	<b>Course title:</b> Orthopaedic Dentistry 2
<b>Educational activities:</b> <b>Type of activities:</b> lecture / seminar / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 8s / 10s / 98s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 9	
<b>Recommended semester:</b> 12.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.KSMCh/L-S-ZL-064/21 - Orthopaedic Dentistry 1	
<b>Course requirements:</b> - 100% attendance at the practicals <b>Final State Exam:</b> - practical exam: treatment of prosthetic patient, complete documentation - theoretical exam: 3 question (fixed prosthetics, removable dentures, orthodontics) The overall rating is determined from the average of the ratings obtained.	
<b>Learning outcomes:</b> Knowledge: prevention and therapy of progressed atrophies of the upper and lower jaw, gerontoprosthodontics. Aesthetic aspects in dental prosthodontics Skills: orthodontic-prosthetic cooperation in practice, treatment of sequelae of incorrect prosthetic therapy Knowledge: prevention and therapy of progressed atrophies of the upper and lower jaw, gerontoprosthodontics. Aesthetic aspects in dental prosthodontics Skills: orthodontic-prosthetic cooperation in practice, treatment of sequelae of incorrect prosthetic therapy	
<b>Class syllabus:</b> Genesis of extreme senile and pathological atrophy of maxilla and mandible, changes of soft tissues of the oral cavity and face. Dysplastic teeth and options of improvement of the incorrect position (prosthetic and orthodontic means). Fissural granulomas, exostoses. Recapitulation of chosen topics by agreement within the teacher and students	
<b>Recommended literature:</b> Strub J.R., Kern M., Türp J.C., Witkowski S., Heydecke G., Wolfart S.: Protetika II. Grada Publishing, máj 2016 Strub J.R., Kern M., Türp J.C., Witkowski S., Heydecke G., Wolfart S.: Protetika III. Grada Publishing, september 2016 Satko I., Stanko P., Švidraň J.: Orálna a maxilofaciálna chirurgia. 3. vyd., Bratislava, Univerzita Komenského 2013, 308 s. Skriptá. ISBN 978-80-223-3366-5 Weber T.: Memorix zubního lékařství. Grada Publishing, Praha, 2012	

<b>Languages necessary to complete the course:</b> Slovak					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 154					
A	B	C	D	E	FX
94,81	4,55	0,65	0,0	0,0	0,0
<b>Lecturers:</b> prof. MUDr. Peter Stanko, PhD., MDDr. Anna Korpášová, MDDr. Nikos Leptos, Halyna Pruts, PhD., MDDr. Michaela Lifková, PhD.					
<b>Last change:</b> 06.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KORL/L-S-ZL-066/19	<b>Course title:</b> Otorhinolaryngology
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 18s / 25s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 7.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> All practicals need to be attended Ability to run patient's notes Test results need to reach 60% or more correct answers in order to pass (A: 91 - 100 %, B: 81 - 99 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 % and less) Practical exam Final evaluation takes into consideration all partial evaluations	
<b>Learning outcomes:</b> Knowledge: Profound theoretical knowledge in anatomy and physiology of ENT organs and neighboring areas. Knowledge on etiology, pathophysiology, diagnostics and treatment of ENT pathology. Basics of pharmacology in ENT, especially in infectious diseases. Theoretical knowledge on therapeutical approaches in ENT focused on oral cavity, nose, paranasal sinuses and the neck, principles of endoscopic diagnostic and surgical techniques in ENT. Principles of physiology and pathophysiology of hearing, basic knowledge of radiology in ENT. Basics of diagnostics and treatment in ENT oncology. Practical skills: History taking, physical examination of ENT organs, otoscopy, examination of the nose and nasal cavity including endoscopy, laryngoscopy including flexible laryngoscopy, epipharyngoscopy, examination of oral cavity and oropharynx, palpation of the neck. Reading and understanding of pure tone hearing test and tympanogram, principle of the neonatal hearing screening, evaluation of the CT and MRI of paranasal sinuses and the neck. Student must be able to make the provisional diagnosis including differential diagnoses, indicate appropriate examinations and therapeutically manage the patient.	
<b>Class syllabus:</b> Basics of anatomy and physiology of ENT organs. Standard examination methods including audiological diagnostics, neonatal screening of hearing. Symptoms of ENT diseases, diseases of ear, nose, sinuses, larynx, pharynx, oesophagus, thyroid and parathyroid glands, salivary glands and the neck. Tracheostomy, cricothyroidotomy, intubation. Tracheostomy care. Aspects of care after laryngectomy, tonsillectomy, ear and nose surgeries. ENT emergencies- choking, nose bleeds,	

bleeding from the mouth, management of inhaled and ingested foreign bodies. Management of the patient with head and neck cancer. Head and neck trauma.					
<b>Recommended literature:</b> Profant a kol.: Otorinolaryngológia (ARM333, 2000, 232s.), Kabátová a kol. Audiológia, (Grada, 2012, 360s), Jakubíková a kol.: Vrodené anomálie hlavy a krku (Grada, 2012, 244s)					
<b>Languages necessary to complete the course:</b> Slovak					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 236					
A	B	C	D	E	FX
52,97	38,56	5,93	1,69	0,85	0,0
<b>Lecturers:</b> prof. MUDr. Miroslav Tedla, PhD., MPH, prof. MUDr. Milan Profant, CSc., doc. MUDr. Zuzana Kabátová, CSc., MUDr. Irina Goljerová, CSc.					
<b>Last change:</b> 06.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-019/21	<b>Course title:</b> Paediatric Dentistry
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 12s / 30s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 11.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.KSMCh/L-S-ZL-047/20 - Restorative Dentistry 3 or LF.KSMCh/L-S-ZL-047/25 - Restorative Dentistry 3	
<b>Course requirements:</b> - 100% attendance at the practicals - performing the required amount of specified practical treatments - 1 written test (minimum 60% of correct answers) Final exam: - 2 questions (diagnosis and therapy of the diseases of the hard and soft tissues of the oral cavity in children and adolescents) Test evaluation: A: 91 - 100 %, B: 81 - 90 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 - 0%. The overall rating is determined from the average of the ratings obtained.	
<b>Learning outcomes:</b> Knowledge: Basics of diagnosis, prevention, and treatment of dental and oral diseases of children and adolescents. Skills: Treatment procedures adapted to childhood.	
<b>Class syllabus:</b> Developmental and preventive aspects of conservation and endodontic treatment in the oral cavity of children and adolescents. Manifestations of general diseases in the oral cavity of children and adolescents.	
<b>Recommended literature:</b> Ležovič J. a kol.: Detské zubné lekárstvo 2012	
<b>Languages necessary to complete the course:</b> Slovak	
<b>Notes:</b>	



<b>Past grade distribution</b>					
Total number of evaluated students: 154					
A	B	C	D	E	FX
67,53	22,08	7,14	2,6	0,65	0,0
<b>Lecturers:</b> MUDr. Andrea Nováková, PhD., MUDr. Amir Amiry Manesh, PhD., MDDr. Marek Matajs, PhD., MUDr. Bohuslav Novák, PhD.					
<b>Last change:</b> 06.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.D_K/L-S-ZL-075/20	<b>Course title:</b> Paediatrics
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 18s / 20s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 9.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.IK4/L-S-ZL-040/25 - Internal Medicine 2	
<b>Course requirements:</b> 1) 100% presence at practicals (20% can be excused) with documented presence 2) successful completion of 1 written or online-test at end of term (successful completion with 70% of total points), unsuccessful students may repeat max. twice Test assessment: unsuccessful Fx: $\leq 69\%$ points, successful $>70\%$ points; assessment of successful students based on percentiles as follows: A: $\geq 90\%$ of successful students; B: $\geq 75\%$ but $< 90\%$ of successful students; C: $\geq 25\%$ but $< 75\%$ of successful students; D: $\geq 10\%$ but $< 25\%$ of successful students; E: points $<$ than 10% of successful students. Test in 3 rounds: 1st obligatory for all, 2nd and 3rd according to results of 1st round	
<b>Learning outcomes:</b> <b>Knowledge:</b> The distribution of childhood age. Growth and development of the child. Congenital developmental heart defects and rhythm disorders. Natural nutrition, Nutritional disorders. Diseases of the blood and blood-forming organs. Disorders of immunity. Diabetes mellitus. Diseases of the thyroid gland. Urinary tract infections. Glomerulonephritis and nephrotic syndrome. Respiratory diseases. Allergies. Puberty. Hypertension. Acute and chronic diarrhoea. Dehydration. <b>Skills:</b> Obtaining medical history. Physical examination of the child. Practical approach to the diagnosis and treatment of the following conditions: Respiratory diseases. Diseases of the kidneys and urinary tract. Headache and abdominal pain. Diabetes mellitus Principles of antibiotic and antipyretic treatment in children. Problems of puberty. Assessment and interpretation of basic laboratory parameters (blood count, urinalysis, basic biochemical examination, acid-base balance). Fluid management in children.	
<b>Class syllabus:</b> Child Growth and Development, Nutrition. Neonatal period physiology and pathology, Heart diseases congenital and acquired, Heart failure. Hypertension in children. Respiratory diseases	

<p>congenital and acquired. Immune disorders. Diseases of the digestive system, congenital and acquired. Eating disorders. Diseases of the blood and blood-forming organs- anaemia, bleeding disorders. Kidney and urinary tract diseases, congenital and acquired. Endocrine diseases of childhood. Diabetes mellitus. Intoxications. Infectious exanthematous diseases. Vaccinations. Acute conditions in paediatrics - disturbances of consciousness, convulsions, intoxications, aspirations, drowning, burns, anaphylaxis, CPR, shock, sepsis</p> <p>Lectures:</p> <p>P1,2 Childhood age division. Growth and development of the child.</p> <p>P3,4 Congenital developmental heart defects and rhythm disorders.</p> <p>P5,6 Natural nutrition. Nutritional disorders.</p> <p>P7,8 Diseases of the blood and blood-forming organs. Immune disorders.</p> <p>P9,10 Diabetes mellitus. Thyroid diseases.</p> <p>P11,12 Urinary tract infections. Glomerulonephritis and nephrotic syndrome.</p> <p>P13,14 Respiratory diseases. Allergies.</p> <p>P15,16 Puberty. Hypertension.</p> <p>P17,18 Acute and chronic diarrhoea. Dehydration</p> <p>Practicals:</p> <p>1.) Medical history, physical examination. Examination of the infant and the older child (including measurement of weight, height, head and chest circumference, temperature, BP, number of pulses and respiration);</p> <p>2.) Febrile child and antipyretic treatment;</p> <p>3.) Pediatric screening and preventive pediatrics;</p> <p>4.) Acute and chronic nutritional disorders. Dehydration and fluid therapy; ABR assessment.</p> <p>5.) Respiratory diseases and principles of antibiotic therapy. Inhalation therapy and oxygen therapy.</p> <p>6.) Diseases of the blood and blood-forming organs. Malignant diseases in children. Interpretation of basic laboratory parameters (KO and leukogram, basic biochemical parameters);</p> <p>7.) Diseases of the kidneys and urinary tract. Urinalysis. Hypertension.</p> <p>8.) Headaches and abdominal pain. Imaging examinations in children.</p> <p>9.) Diabetes mellitus and metabolic syndrome in children.</p> <p>10.) Puberty problems, growth disorders.</p> <p>Methods of practical exercises: 20% simulation teaching (teaching on medical simulator), medical simulator, role-play)</p>
<p><b>Recommended literature:</b></p> <p>Červeňová O. a kol. Vybrané kapitoly z pediatrie pre študentov zubného lekárstva. Bratislava Univerzita Komenského, 2012. 124 s. ISBN 978 80 223 3206 4.</p> <p>Kovács L. a spoluautori: Pediatrická propedeutika, BUX, Bratislava, 2014, 150 s.</p> <p>Kovács L. a spoluautori: Pediatria. Arete, Bratislava, 2011, 402 s.</p> <p>Kovács L, Podracká Ľ. a kol. Pediatria - 1000 otázok a odpovedí. Osveta, Martin, 2004. 180 s.</p> <p>Muntau AC, Pediatria, Grada 2014, 608 s.</p> <p>Lissauer T, Carroll W. Illustrated Textbook of Paediatrics, 6th Edition, Elsevier, 2021</p>
<p><b>Languages necessary to complete the course:</b></p> <p>Slovak</p>
<p><b>Notes:</b></p>

<b>Past grade distribution</b>					
Total number of evaluated students: 196					
A	B	C	D	E	FX
36,22	24,49	22,45	12,24	4,59	0,0
<b>Lecturers:</b> prof. MUDr. Ingrid Brucknerová, PhD., prof. MUDr. Ľudmila Podracká, CSc.					
<b>Last change:</b> 19.08.2024					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.ÚPA/L-S-ZL-071/17	<b>Course title:</b> Pathological Anatomy 1
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 36s / 36s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 5	
<b>Recommended semester:</b> 4.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.AÚ/L-S-ZL-002/16 - Anatomy 2 and LF.ÚHE/L-S-ZL-030/17 - Histology and Embryology 2	
<b>Course requirements:</b> - 100% attendance at the histopathology seminars - 100% attendance at the autopsy - 2 written tests (minimum 60% of correct answers) Test evaluation: A: 91-100 %, B: 81-90 %, C: 73-80 %, D: 66-72 %, E: 60-65 %, Fx: <59 %. Autopsy - continuous oral testing of knowledge The overall rating is determined from the average of the ratings obtained.	
<b>Learning outcomes:</b> <b>Knowledge:</b> Etiology and pathogenesis of disease changes in tissues and organs. Correlation of clinical manifestation and pathologic-anatomical basis of diseases. Pathomorphological changes of tissues and organs in correlation with functional changes. <b>Skills:</b> Operation of light microscopy. Use of conventional and special histochemical methods in differential diagnostics of pathological processes. Gross description of pathologic-anatomical changes. Arrangement of diagnoses in the autopsy protocol.	
<b>Class syllabus:</b> General pathology: methods in pathology, pathology of the cell, regressive and progressive changes, necrosis, atrophy, metabolic disorders, disorders of blood and lymph circulation, inflammation - acute, chronic, granulomatous, developmental disorders, nutritional disorders, immunopathology, transplantation pathology, environmental pathology, molecular basis of diseases. General oncology: nomenclature and taxonomy of tumors, precancerosis, cancerogenesis, tumor growth and effect on the organism, benign and malignant tumors, histological diagnostics, grading, staging, invasion, metastasis, tumors of epithelia and mesenchyme, neuroectodermal tumors, mixed tumors, teratomas, germinative tumors, tumors of placenta, mesothelioma. Hemoblastoses, hemoblastomas, malignant lymphomas. Tumor markers, genetics, epigenetics.	

<b>Recommended literature:</b> Harsh Mohan: Patológia, Balneothermia s.r.o. 2011, 966 s. Zámečník J., ed.: PATOLOGIE, Vol 1-3, PRAGER PUBLISHING, 2019, 915s. Robbins and Cotran Pathologic Basis of Disease, 10th Edition, ELSEVIER 2020, 1392 s. Damjanov I.: Atlas of Histopathology, Jaypee Brothers Medical Publishers, 2012, 399s. Sapp P.J.: Contemporary Oral and Maxillofacial Pathology, 2 edition, MOSBY 2003, 450s.					
<b>Languages necessary to complete the course:</b> Slovak					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 321					
A	B	C	D	E	FX
37,07	42,68	10,59	9,03	0,62	0,0
<b>Lecturers:</b> prof. MUDr. Pavel Babál, CSc., prof. MUDr. Ľudovít Danihel, CSc., doc. MUDr. Zuzana Čierna, PhD., doc. MUDr. Pavol Janega, PhD., MUDr. Michal Palkovič, PhD., MPH, MUDr. Kristína Mosná, PhD., MUDr. Andrea Janegová, PhD., MUDr. Katarína Letkovská, PhD., MUDr. Kristína Mikuš Kuracinová, PhD., MUDr. Hedviga Štubňová, PhD., MUDr. Samuel Horák, PhD., MUDr. Mgr. Vladimír Šišovský, PhD.					
<b>Last change:</b> 06.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.ÚPA/L-S-ZL-072/18	<b>Course title:</b> Pathological Anatomy 2
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 32s / 32s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 6	
<b>Recommended semester:</b> 5.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.ÚPA/L-S-ZL-071/17 - Pathological Anatomy 1 or LF.ÚPA/L-S-ZL-071/25 - Pathological Anatomy 1	
<b>Course requirements:</b> - 100% attendance at the histopathology seminars - 100% attendance at the autopsy - 2 written tests (minimum 60% of correct answers) Test evaluation: A: 91-100 %, B: 81-90 %, C: 73-80 %, D: 66-72 %, E: 60-65 %, Fx: <59 %. Autopsy - continuous oral testing of knowledge Final examination: - Practical examination in Autopsy - oral form - Description of 1 histological slide - Final written multiple-choice test - minimal score - 75 % - Oral examination with 3 questions 1 - general pathology, oncology 1 - orofacial pathology 1 - special pathology The overall rating is determined from the average of the ratings obtained.	
<b>Learning outcomes:</b> Knowledge: Morphological changes of organs with neoplastic and non-neoplastic processes. Classification of tumors, grading, staging. Etiology, pathogenesis, complications and prognosis of disease changes in particular organs. Pathology of the orofacial area. Skills: Use of modern immunohistochemical, molecular-biology and ultrastructural methods in the diagnostics of disease processes. Basis of histological diagnostics. Conclusion of autopsy protocol based on gross and microscopic evaluation.	
<b>Class syllabus:</b> Special pathology of the orofacial area: Diseases of the oral cavity, teeth - developmental anomalies, caries, diseases of the pulp, acute and chronic inflammations, diseases of parodont, gums, bacterial and viral inflammation, hormonally conditioned changes and of systemic diseases, occlusion traumatism. Diseases of oral mucosa, tongue, lips, developmental disorders, inflammation, changes	

in systemic diseases, vitamin shortage. Diseases of temporomandibular joint. Pseudotumors of the oral cavity, hyperplasia, odontogenic cysts, benign and malignant tumors of the orofacial area - epithelial, mesenchymal. Odontogenic tumors. Diseases of salivary glands - sialoadenitis, sialolithiasis, Sjögren syndrome, salivary gland tumors - benign, malignant  
 Special systemic pathology: cardiovascular system - vascular diseases, atherosclerosis, diseases of the heart, respiratory system - inflammation, allergy, emphysema, tumors, hemopoietic system, pathology of lymph nodes, neuropathology - vascular diseases, glomerulonephritis, tumors, GIT - inflammation, tumors, metabolic disorders, endocrine system - syndromes, tumors, neuroendocrine system, skin - inflammation, tumors, genital organs - inflammation, STD, precanceroses, tumors, breast gland, pathology of pregnancy, trophoblast disease, nerve system - trauma, blood circulation disorder, inflammation, degenerative diseases, tumors, neonatal pathology.

**Recommended literature:**

Harsh Mohan: Patológia, Balneothermia s.r.o. 2011, 966 s.  
 Zámečník J., ed.: PATOLOGIE, Vol 1-3, PRAGER PUBLISHING, 2019, 915s.  
 Robbins and Cotran Pathologic Basis of Disease, 10th Edition, ELSEVIER 2020, 1392 s.  
 Damjanov I.: Atlas of Histopathology, Jaypee Brothers Medical Publishers, 2012, 399s.  
 Sapp P.J.: Contemporary Oral and Maxillofacial Pathology, 2 edition, MOSBY 2003, 450s.

**Languages necessary to complete the course:**

Slovak

**Notes:**

**Past grade distribution**

Total number of evaluated students: 278

A	B	C	D	E	FX
48,56	21,94	14,03	7,91	5,76	1,8

**Lecturers:** prof. MUDr. Ľudovít Danihel, CSc., prof. MUDr. Pavel Babál, CSc., doc. MUDr. Zuzana Čierna, PhD., doc. MUDr. Pavol Janega, PhD., MUDr. Andrea Janegová, PhD., MUDr. Kristína Mikuš Kuracinová, PhD., MUDr. Kristína Mosná, PhD., MUDr. Hedviga Štubňová, PhD., MUDr. Katarína Letkovská, PhD., MUDr. Michal Palkovič, PhD., MPH, MUDr. Mgr. Vladimír Šišovský, PhD., MUDr. Lucia Krivošíková, PhD., MUDr. Samuel Horák, PhD.

**Last change:** 06.12.2022

**Approved by:** prof. MUDr. Peter Stanko, PhD.



## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.ÚPF/L-S-ZL-073/17	<b>Course title:</b> Pathological Physiology 1
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 24s / 24s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 3	
<b>Recommended semester:</b> 4.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.FyÚ/L-S-ZL-026/17 - Physiology 2	
<b>Course requirements:</b> - a maximum of one absence is allowed for seminars and practicals. - two written tests (minimum 60% of correct answers) - the overall rating is determined from the average of the ratings obtained - grading scale: A: 91 - 100%, B: 81 – 90%, C: 73 – 80%, D: 66 – 72%, E: 60 – 65%, Fx: 59 - 0%	
<b>Learning outcomes:</b> <b>Knowledge:</b> - The student will acquire a summary of basic knowledge about the etiopathogenetic mechanisms of the origin and course of diseases and conditions, the basics of general pathophysiology and the pathophysiology of individual systems, - the student will be able to analyse the relationship between diseases and pathological conditions and their clinical manifestations, - Based on the understanding of causal relationships, the student will be able to explain the principles of therapeutic interventions. <b>Skills:</b> - The student is able to actively interfere with theoretical and practical models of the function of basic disease states and modify them by applying changed conditions as a result of therapeutic intervention, - the student is able to process the algorithm of the development and progression of basic diseases, - the student is able to integrate knowledge from all completed theoretical disciplines into a complex picture of the origin and development of basic diseases, - completing pathophysiology develops the student's cognitive skills towards the use of logical and creative thinking, - practical exercises develop the student's practical skills in using instruments for measuring basic clinical parameters, - the student is able to search for and assess the reliability of various sources of scientific and clinical research results.	
<b>Class syllabus:</b> Subject syllabus summary:	

Syllabus of the subject Pathological Physiology 1 and 2:

General principles and manifestations of diseases: Inflammation. Fever. Pain. Genetically determined alterations. Monogenic pathological states. Carcinogenesis. Immune disorders: immunodeficiencies, allergies, autoimmune disorders. Disorders of the internal environment: hydration, ions, acid-base balance. General adaptation syndrome - stress: benefit, pathology, civilization diseases. Bacteremia, sepsis. Pathophysiology of the respiratory system: Types of hypoxia. Ventilation, diffusion, perfusion disorders. Pneumonia. Bronchitis. Pulmonary emphysema. Bronchial asthma. Bronchiectasis. Cystic fibrosis. Interstitial lung diseases. Respiratory failure. Adult Respiratory Distress Syndrome (ARDS). Lung and bronchial tumors. Pleural diseases. Pneumothorax. Pathophysiology of blood and hematopoietic tissue: Anemia in general. Posthemorrhagic, hemolytic, sideropenic, megaloblastic anemias. Anemia in severe diseases. Platelet and hemocoagulation disorders. Leukocyte disorders - infectious and malignant diseases. Pathophysiology of the cardiovascular system: Contractile function of the myocardium and pumping function of the heart. Cardiac revolution. Metabolism of the heart muscle cell. Left and right heart failure. Pathogenesis of heart failure therapy. Cardiac hypertrophy - concentric, eccentric, physiological, remodeling. Congenital heart defects - non-cyanotic, with possible cyanosis, cyanotic. Valve defects of the aorta, mitral valve, right heart. Cardiomyopathies - primary, secondary. Infectious and bacterial endocarditis. Blood pressure and regulatory mechanisms. Systemic arterial hypertension - primary and secondary hypertension. Pathogenesis of hypertension therapy. Hypotension. Collapse. Shock - hypovolemic, cardiogenic, distributive, obstructive, septic. Coma - pathogenesis of differential diagnosis. Atherogenesis. Stable, unstable atherosclerotic plaque. Ischemic heart disease. Stable and unstable angina pectoris. Myocardial infarction. Pathophysiology of reperfusion injury to the heart - oxygen and calcium paradox. Sudden cardiac death, sudden non-cardiac death. Pathophysiology of pulmonary circulation. Pulmonary edema and its types. Pulmonary hypertension. Pulmonary embolism. Regulation of cerebral circulation, cerebral ischemia. Intracerebral and subarachnoid hemorrhage. Cardiac arrhythmias - supraventricular and ventricular, fibrillation and flutter of atria and ventricles, atrioventricular blocks. Rheumatic fever. Varicose veins. Phlebothrombosis. Chronic venous insufficiency. Pathophysiology of the uropoietic system: Physiological principles of kidney function. Changes in glomerular membrane permeability. Nephritic and nephrotic syndrome. Acute and chronic kidney failure. Glomerulopathies. Tubulointerstitial diseases. Vascular diseases of the kidneys. Urinary tract infections. Urolithiasis. Tumors of the urinary tract. Pathophysiology of the gastrointestinal system: Esophageal diseases. Gastritis. Peptic ulcer of the stomach and duodenum. Pancreatitis - acute and chronic. Cystic fibrosis of the pancreas. Maldigestion. Malabsorption. Diarrhea. Constipation. Irritable bowel syndrome. Intestinal obstruction - ileus. Ulcerative colitis. Crohn's disease. Ischemic colitis. Carcinoma of the esophagus, stomach, colon, liver and pancreas. Gastrointestinal bleeding. Abdominal pain. Pathophysiology of the hepatobiliary system: Hepatitis. Liver failure - acute and chronic. Liver cirrhosis. Portal hypertension. Ascites. Jaundice. Intrahepatic cholestasis. Cholelithiasis. Cholecystitis. Pathophysiology of the endocrine system: Mechanisms of hormone action on target cells and their disorders. Hypothalamic neuroendocrine disorders. Thyroid disorders - hyperthyroidism, hypothyroidism. Parathyroid disorders. Adrenal disorders - Cushing's syndrome, Addison's disease, Conn's syndrome, pheochromocytoma. Gonadal disorders. Diabetes mellitus - type 1 and 2, complications. Metabolic syndrome. Obesity. Gastrointestinal hormones, insulinoma. Pathophysiology of the nervous system: Neuronal damage. Cerebral edema. Intracranial hypertension. Demyelinating diseases. Degenerative diseases of the central nervous system. Epilepsy. Stroke - ischemia, hemorrhage. Encephalitis, meningitis. Myasthenia gravis. Dopaminergic system. Pathophysiology of the autonomic nervous system. Pathogenesis of mental disorders, neuroses. Pathophysiology of the sensory system: Hearing

<p>disorders. Visual disorders. Pathophysiology of the skeletal system: Regulation of calcium metabolism, osteoporosis. Rheumatoid arthritis. Alterations in hyperuricemia.</p> <p>Lectures of the subject Pathological Physiology 1:</p> <p>Haemodynamics of the circulation, valvular disorders. Risk factors of cardiovascular system and their modification. Blood pressure regulation. Cardiac rhythm disorders, sudden cardiac death. Collapse. Shock. Disorders of microcirculation. Heart failure, pathogenesis of therapy. Pulmonary embolism, pulmonary hypertension. Cor pulmonale. Right-sided heart failure. Metabolic syndrome. Obesity and its modification. Obstructive and restrictive pulmonary diseases. Pneumonia. Respiratory insufficiency. Carcinogenesis. Pathophysiology of tumors. Adaptation, general adaptation syndrome-stress. Molecular medicine. Intracellular signalizations.</p> <p>Seminars and practicals of the subject Pathological Physiology 1:</p> <p>Pathophysiology as a pre-clinical subject. Pathogenesis of inflammation, fever, pain. Disorders of water, Na<sup>+</sup>, and K<sup>+</sup> metabolism. Disorders of acid-base balance. Blood pressure regulation. Hypertension. Heart electrical activity. Dysrhythmias. Collapse, shock, and disorders of microcirculation. Endothelial dysfunction. Atherosclerosis. Stable and unstable plaque. Complications of AS. Coronary heart disease, myocardial infarction. Acquired valvular heart disease. Congenital heart defects. General adaptation syndrome – stress. Anemic syndrome and white blood cell disorders. Pulmonary embolism. Pulmonary hypertension. Cor pulmonale.</p>																	
<p><b>Recommended literature:</b></p> <ul style="list-style-type: none"> <li>- Hulín : Patofyziológia. 6. vydanie, Bratislava, SAP 2002, 1397 s.</li> <li>- Nečas, E. et al. Obecná patologická fyziologie. Praha: Karolinum 2021, 312 s. ISBN 9788024646336.</li> <li>- Nečas, E. et al.: Patologická fyziologie orgánových systémů. 1. Praha: Karolinum, 2006, 380 s. ISBN 80-246-0615-1.</li> <li>- Nečas, E. et al.: Patologická fyziologie orgánových systémů. 2. Praha: Karolinum, 2006, 396 s. ISBN 80-246-0674-7.</li> <li>- Pávková Goldbergová, M. et al. Patofyziologie v obrazech. 1. vyd. Brno: Masarykova univerzita, Lékařská fakulta, 2016. 186 s. ISBN 978-80-210-8323-3.</li> <li>- Silbernagel, S., Lang, F.: Atlas patofyziologie člověka. Praha: Grada, 2001, 404 s. ISBN 80-7169-968-3.</li> </ul>																	
<p><b>Languages necessary to complete the course:</b></p> <p>Slovak</p>																	
<p><b>Notes:</b></p>																	
<p><b>Past grade distribution</b></p> <p>Total number of evaluated students: 321</p> <table border="1"> <thead> <tr> <th>A</th><th>B</th><th>C</th><th>D</th><th>E</th><th>FX</th></tr> </thead> <tbody> <tr> <td>57,94</td><td>41,43</td><td>0,62</td><td>0,0</td><td>0,0</td><td>0,0</td></tr> </tbody> </table>						A	B	C	D	E	FX	57,94	41,43	0,62	0,0	0,0	0,0
A	B	C	D	E	FX												
57,94	41,43	0,62	0,0	0,0	0,0												
<p><b>Lecturers:</b> prof. MUDr. Fedor Šimko, CSc., prof. MUDr. Marián Bernadič, CSc., prof. MUDr. Beáta Mladosičiová, CSc., doc. MUDr. Ing. Peter Celec, DrSc., prof. MUDr. Barbara Ukropcová, PhD., MUDr. RNDr. Ľudovít Paulis, PhD., Mgr. Silvia Aziriová, PhD.</p>																	
<p><b>Last change:</b> 04.06.2024</p>																	
<p><b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.</p>																	

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.ÚPF/L-S-ZL-074/18	<b>Course title:</b> Pathological Physiology 2
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 24s / 26s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 5	
<b>Recommended semester:</b> 5.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.ÚPF/L-S-ZL-073/17 - Pathological Physiology 1 or LF.ÚPF/L-S-ZL-073/25 - Pathological Physiology 1 and LF.ÚLChB/L-S-ZL-052/17 - Medical Biochemistry for Dentistry 2	
<b>Course requirements:</b> - a maximum of one absence is allowed for seminars and practicals. - two written tests (minimum 60% of correct answers) - grading scale: A: 91 - 100%, B: 81 – 90%, C: 73 – 80%, D: 66 – 72%, E: 60 – 65%, Fx: 59 - 0% <b>Final exam:</b> - meeting all the subject requirements - final exam: 3 questions (general pathophysiology, pathophysiology of the cardiovascular system, pathophysiology of other systems). The question on pathophysiology of the cardiovascular system is answered in writing; questions on general pathophysiology and pathophysiology of other systems are answered orally.	
<b>Learning outcomes:</b> <b>Knowledge:</b> - The student will acquire a summary of basic knowledge about the etiopathogenetic mechanisms of the origin and course of diseases and conditions, the basics of general pathophysiology and the pathophysiology of individual systems, - the student will be able to analyse the relationship between diseases and pathological conditions and their clinical manifestations, - Based on the understanding of causal relationships, the student will be able to explain the principles of therapeutic interventions. <b>Skills:</b> - The student is able to actively interfere with theoretical and practical models of the function of basic disease states and modify them by applying changed conditions as a result of therapeutic intervention, - the student is able to process the algorithm of the development and progression of basic diseases, - the student is able to integrate knowledge from all completed theoretical disciplines into a complex picture of the origin and development of basic diseases, - completing pathophysiology develops the student's cognitive skills towards the use of logical and creative thinking,	

- practical exercises develop the student's practical skills in using instruments for measuring basic clinical parameters,
- the student is able to search for and assess the reliability of various sources of scientific and clinical research results.

### **Class syllabus:**

Syllabus of the subject Pathological Physiology 1 and 2:

General principles and manifestations of diseases: Inflammation. Fever. Pain. Genetically determined alterations. Monogenic pathological states. Carcinogenesis. Immune disorders: immunodeficiencies, allergies, autoimmune disorders. Disorders of the internal environment: hydration, ions, acid-base balance. General adaptation syndrome - stress: benefit, pathology, civilization diseases. Bacteremia, sepsis. Pathophysiology of the respiratory system: Types of hypoxia. Ventilation, diffusion, perfusion disorders. Pneumonia. Bronchitis. Pulmonary emphysema. Bronchial asthma. Bronchiectasis. Cystic fibrosis. Interstitial lung diseases. Respiratory failure. Adult Respiratory Distress Syndrome (ARDS). Lung and bronchial tumors. Pleural diseases. Pneumothorax. Pathophysiology of blood and hematopoietic tissue: Anemia in general. Posthemorrhagic, hemolytic, sideropenic, megaloblastic anemias. Anemia in severe diseases. Platelet and hemocoagulation disorders. Leukocyte disorders - infectious and malignant diseases. Pathophysiology of the cardiovascular system: Contractile function of the myocardium and pumping function of the heart. Cardiac revolution. Metabolism of the heart muscle cell. Left and right heart failure. Pathogenesis of heart failure therapy. Cardiac hypertrophy - concentric, eccentric, physiological, remodeling. Congenital heart defects - non-cyanotic, with possible cyanosis, cyanotic. Valve defects of the aorta, mitral valve, right heart. Cardiomyopathies - primary, secondary. Infectious and bacterial endocarditis. Blood pressure and regulatory mechanisms. Systemic arterial hypertension - primary and secondary hypertension. Pathogenesis of hypertension therapy. Hypotension. Collapse. Shock - hypovolemic, cardiogenic, distributive, obstructive, septic. Coma - pathogenesis of differential diagnosis. Atherogenesis. Stable, unstable atherosclerotic plaque. Ischemic heart disease. Stable and unstable angina pectoris. Myocardial infarction. Pathophysiology of reperfusion injury to the heart - oxygen and calcium paradox. Sudden cardiac death, sudden non-cardiac death. Pathophysiology of pulmonary circulation. Pulmonary edema and its types. Pulmonary hypertension. Pulmonary embolism. Regulation of cerebral circulation, cerebral ischemia. Intracerebral and subarachnoid hemorrhage. Cardiac arrhythmias - supraventricular and ventricular, fibrillation and flutter of atria and ventricles, atrioventricular blocks. Rheumatic fever. Varicose veins. Phlebothrombosis. Chronic venous insufficiency. Pathophysiology of the uropoietic system: Physiological principles of kidney function. Changes in glomerular membrane permeability. Nephritic and nephrotic syndrome. Acute and chronic kidney failure. Glomerulopathies. Tubulointerstitial diseases. Vascular diseases of the kidneys. Urinary tract infections. Urolithiasis. Tumors of the urinary tract. Pathophysiology of the gastrointestinal system: Esophageal diseases. Gastritis. Peptic ulcer of the stomach and duodenum. Pancreatitis - acute and chronic. Cystic fibrosis of the pancreas. Maldigestion. Malabsorption. Diarrhea. Constipation. Irritable bowel syndrome. Intestinal obstruction - ileus. Ulcerative colitis. Crohn's disease. Ischemic colitis. Carcinoma of the esophagus, stomach, colon, liver and pancreas. Gastrointestinal bleeding. Abdominal pain. Pathophysiology of the hepatobiliary system: Hepatitis. Liver failure - acute and chronic. Liver cirrhosis. Portal hypertension. Ascites. Jaundice. Intrahepatic cholestasis. Cholelithiasis. Cholecystitis. Pathophysiology of the endocrine system: Mechanisms of hormone action on target cells and their disorders. Hypothalamic neuroendocrine disorders. Thyroid disorders - hyperthyroidism, hypothyroidism. Parathyroid disorders. Adrenal disorders - Cushing's syndrome, Addison's disease, Conn's syndrome, pheochromocytoma. Gonadal disorders. Diabetes mellitus - type 1 and 2, complications. Metabolic syndrome. Obesity. Gastrointestinal hormones, insulinoma. Pathophysiology of the nervous system: Neuronal damage.

Cerebral edema. Intracranial hypertension. Demyelinating diseases. Degenerative diseases of the central nervous system. Epilepsy. Stroke - ischemia, hemorrhage. Encephalitis, meningitis. Myasthenia gravis. Dopaminergic system. Pathophysiology of the autonomic nervous system. Pathogenesis of mental disorders, neuroses. Pathophysiology of the sensory system: Hearing disorders. Visual disorders. Pathophysiology of the skeletal system: Regulation of calcium metabolism, osteoporosis. Rheumatoid arthritis. Alterations in hyperuricemia.

Lectures of the subject Pathological Physiology 2:

Ischemic heart disease. Myocardial infarction. Reperfusion syndrome of the heart. Calcium and oxygen paradox. Duodenal and gastric ulcer. Pancreatitis. Ileus. Liver cirrhosis. Liver failure. Proteinuria. Hematuria. Nephrotic and nephritic syndrome. Acute and chronic renal failure. Anemic syndrome. Anemias. Diseases of suprarenal gland, hypothalamus, and hypophysis. Diseases of thyroid gland, parathyroid glands. Calcium regulation. Insulin resistance. Diabetes mellitus and its complications. Diseases of leukocytes and thrombocytes. Disorders of coagulation. Stroke. Intracranial hypertension and edema.

Seminars and practicals of the subject Pathological Physiology 2:

Heart failure. Principles of therapy. Stroke. Intracranial hypertension and cerebral edema. Restrictive and obstructive respiratory disorders. Pneumonia. Respiratory insufficiency. Gastric and duodenal ulcer. Pancreatitis. Ileus. Cirrhosis. Hepatic failure. Proteinuria, hematuria, nephritic and nephrotic syndrome, urine investigation. Acute and chronic renal failure. Hyper- and hypothyroidism. Disorders of parathyroid glands. Metabolic syndrome, obesity. Diabetes mellitus, insulin resistance. Pathophysiology of malignant tumors. Carcinogenesis. Hemostasis and bleeding disorders.

#### **Recommended literature:**

- Hulín : Patofyziológia. 6. vydanie, Bratislava, SAP 2002, 1397 s.
- Nečas, E. et al. Obecná patologická fyziologie. Praha: Karolinum 2021, 312 s. ISBN 9788024646336.
- Nečas, E. et al.: Patologická fyziologie orgánových systémů. 1. Praha: Karolinum, 2006, 380 s. ISBN 80-246-0615-1.
- Nečas, E. et al.: Patologická fyziologie orgánových systémů. 2. Praha: Karolinum, 2006, 396 s. ISBN 80-246-0674-7.
- Pávková Goldbergová, M. et al. Patofyziologie v obrazech. 1. vyd. Brno: Masarykova univerzita, Lékařská fakulta, 2016. 186 s. ISBN 978-80-210-8323-3.
- Silbernagel, S., Lang, F.: Atlas patofyziologie člověka. Praha: Grada, 2001, 404 s. ISBN 80-7169-968-3.

#### **Languages necessary to complete the course:**

Slovak

#### **Notes:**

#### **Past grade distribution**

Total number of evaluated students: 276

A	B	C	D	E	FX
27,9	25,36	22,46	12,32	10,51	1,45

**Lecturers:** prof. MUDr. Fedor Šimko, CSc., prof. MUDr. Marián Bernadič, CSc., prof. MUDr. Beáta Mladosičiová, CSc., doc. MUDr. Ing. Peter Celec, DrSc., prof. MUDr. Barbara Ukropcová, PhD., doc. MUDr. Tomáš Baka, PhD., MUDr. RNDr. Ľudovít Paulis, PhD., doc. MUDr. RNDr. Roman Gardlík, PhD., MUDr. Kristína Repová, PhD., doc. RNDr. Oľga Pechánová, DrSc., MUDr. Peter Stanko, PhD.

<b>Last change:</b> 04.06.2024
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-067/20	<b>Course title:</b> Periodontology 1
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 14s / 12s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 1	
<b>Recommended semester:</b> 9.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> - 100% attendance at the practicals - 1 written test at the end of semester (minimum 60% of correct answers) Test evaluation: A: 91 - 100 %, B: 81 - 90 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 - 0%. The overall rating is determined from the average of the ratings obtained.	
<b>Learning outcomes:</b> Knowledge: the student has a basic knowledge of the anatomy and histology of the perio-dontium, the influence of local and general factors, as well as bacteria on the development of periodontal diseases. The student is familiar with the prevention, classification, therapy of periodontal disease (conservative and surgical) and the follow-up (recall) system. Skills: is able to examine a patient at a basic level using periodontal indices, clinically establish a diagnosis.	
<b>Class syllabus:</b> Anatomy and histology of periodontal tissues. Gingivitis - division, clinical picture, general principles of therapy. Dental microbial plaque and calculus in the etiology of periodontal diseases. Oral hygiene and home care in the treatment of periodontal diseases. Types of periodontal pockets, periodontal abcess. General and local factors in periodontology. Professional calculus and plaque (pigment) removal, methods and techniques. Periodontal documentation. Radiographic methods in periodontology. Basic periodontal instruments. Traumatic occlusion. Treatment plan of periodontal diseases. Principles of prosthetic treatment of teeth with affected periodontium, splinting of teeth. Recessus and bone resorption. Fundamentals of mucogingival surgery. Periodontal flaps. Suturing material and suturing techniques. Classification of augmentation materials and membranes. GTR, principles and classification. Classification of periodontal diseases.	
<b>Recommended literature:</b> Kovaľová E. Orálna hygiena VI - Parodontológia, Akcent Print, 2015, 264 s., ISBN 9788089295647 Kovaľová E. Orálna hygiena VII - Parodontológia II (Mechanická liečba parodontu), Vydavateľstvo Michala Vaška, 2017, 468 s., ISBN 9788081980053	



<p>Kovaľová E. Orálna hygiena VIII - Parodontológia III (Chemická liečba parodontu), Vydavateľstvo Michala Vaška, 2017, 348 s., ISBN 9788081980077</p> <p>Alternatívne:</p> <p>Siebert T. Parodontológia I, 2020, Univerzita Komenského Bratislava, 2020, 196 s., ISBN 9788081870774</p> <p>Siebert T. Parodontológia II, 2021, Univerzita Komenského Bratislava, 2021, 240 s., ISBN 9788081870989</p> <p>V anglickom jazyku:</p> <p>Newman, M. et al. Newman and Carranza's Clinical periodontology, 13th Edition, 2018, Elsevier Books, 944 s. ISBN 9780323523004</p>																	
<p><b>Languages necessary to complete the course:</b></p> <p>Slovak</p>																	
<p><b>Notes:</b></p>																	
<p><b>Past grade distribution</b></p> <p>Total number of evaluated students: 196</p> <table> <tr> <th>A</th><th>B</th><th>C</th><th>D</th><th>E</th><th>FX</th></tr> <tr> <td>30,61</td><td>57,14</td><td>8,16</td><td>3,57</td><td>0,51</td><td>0,0</td></tr> </table>						A	B	C	D	E	FX	30,61	57,14	8,16	3,57	0,51	0,0
A	B	C	D	E	FX												
30,61	57,14	8,16	3,57	0,51	0,0												
<p><b>Lecturers:</b> MUDr. Rastislav Edelstein, PhD., MUDr. Amir Amiry Manesh, PhD.</p>																	
<p><b>Last change:</b> 06.12.2022</p>																	
<p><b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.</p>																	

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-069/21	<b>Course title:</b> Periodontology 2
<b>Educational activities:</b> <b>Type of activities:</b> practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 18s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 1	
<b>Recommended semester:</b> 11.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.KSMCh/L-S-ZL-068/20 - Oral Medicine	
<b>Course requirements:</b> - 100% attendance at the practicals <b>Final Exam:</b> - theoretical part - 2 questions from periodontology	
<b>Learning outcomes:</b> Knowledge: the student has a advanced knowledge of the anatomy and histology of the periodontium, the influence of local and general factors, as well as bacteria on the development of periodontal diseases. The student is familiar with the prevention, classification, therapy of periodontal disease (conservative and surgical) and the follow-up (recall) system. Skills: is able to examine a patient at advanced level using periodontal indices, clinically establish a diagnosis.	
<b>Class syllabus:</b> The student has advanced knowledge of the anatomy and histology of the periodontium, the influence of local and general factors, as well as bacteria on the development of periodontal diseases. The student is familiar with the prevention, classification, therapy of periodontal disease (conservative and surgical) and the follow-up (recall) system. He/she is able to examine the patient, make a diagnosis, select and perform the correct therapy.	
<b>Recommended literature:</b> Kovaľová E. Orálna hygiena VI - Parodontológia, Akcent Print, 2015, 264 s., ISBN 9788089295647 Kovaľová E. Orálna hygiena VII - Parodontológia II (Mechanická liečba parodontu), Vydavateľstvo Michala Vaška, 2017, 468 s., ISBN 9788081980053 Kovaľová E. Orálna hygiena VIII - Parodontológia III (Chemická liečba parodontu), Vydavateľstvo Michala Vaška, 2017, 348 s., ISBN 9788081980077 Alternatívne: Siebert T. Parodontológia I, 2020, Univerzita Komenského Bratislava, 2020, 196 s., ISBN 9788081870774	

Siebert T. Parodontológia II, 2021, Univerzita Komenského Bratislava, 2021, 240 s., ISBN 9788081870989  
 V anglickom jazyku:  
 Newman, M. et al. Newman and Carranza's Clinical periodontology, 13th Edition, 2018, Elsevier Books, 944 s. ISBN 9780323523004

**Languages necessary to complete the course:**

Slovak

**Notes:**

**Past grade distribution**

Total number of evaluated students: 154

A	B	C	D	E	FX
19,48	25,97	33,12	17,53	3,9	0,0

**Lecturers:** MUDr. Rastislav Edelstein, PhD., MUDr. Amir Amiry Manesh, PhD., doc. MUDr. Peter Plachý, CSc.

**Last change:** 06.12.2022

**Approved by:** prof. MUDr. Peter Stanko, PhD.

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-097/21	<b>Course title:</b> Periodontology 3
<b>Educational activities:</b> <b>Type of activities:</b> practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 30s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 12.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.KSMCh/L-S-ZL-069/21 - Periodontology 2	
<b>Course requirements:</b> - 100% attendance at the practicals <b>Final exam:</b> - practical part - standalone examination of the patient, establishment of a treatment plan - theoretical part - 1 question from periodontology or oral medicine	
<b>Learning outcomes:</b> Knowledge: The graduate of the course has a comprehensive knowledge of conservative therapy of periodontal diseases with a focus on individual diagnoses. He/she is also familiar with surgical therapeutic procedures focusing on the most common diseases. Skills: The graduate is able to comprehensively examine a patient, establish a diagnosis and therapeutic plan, and perform basic therapy (professional dental hygiene).	
<b>Class syllabus:</b> The graduate has a complete knowledge of conservative therapy of periodontal diseases with a focus on individual diagnoses. He/she is also proficient in surgical therapeutic procedures with a focus on the most commonly encountered diseases. He is able to expertly examine the patient, make a diagnosis, select and perform the correct therapy.	
<b>Recommended literature:</b> Kovaľová E. Orálna hygiena VI - Parodontológia, Akcent Print, 2015, 264 s., ISBN 9788089295647 Kovaľová E. Orálna hygiena VII - Parodontológia II (Mechanická liečba parodontu), Vydavateľstvo Michala Vaška, 2017, 468 s., ISBN 9788081980053 Kovaľová E. Orálna hygiena VIII - Parodontológia III (Chemická liečba parodontu), Vydavateľstvo Michala Vaška, 2017, 348 s., ISBN 9788081980077 Alternatívne: Siebert T. Parodontológia I, 2020, Univerzita Komenského Bratislava, 2020, 196 s., ISBN 9788081870774 Siebert T. Parodontológia II, 2021, Univerzita Komenského Bratislava, 2021, 240 s., ISBN 9788081870989	

V anglickom jazyku: Newman, M. et al. Newman and Carranza's Clinical periodontology, 13th Edition, 2018, Elsevier Books, 944 s. ISBN 9780323523004					
<b>Languages necessary to complete the course:</b> Slovak					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 154					
A	B	C	D	E	FX
22,73	33,77	23,38	18,18	1,95	0,0
<b>Lecturers:</b> MUDr. Rastislav Edelstein, PhD., MUDr. Amir Amiry Manesh, PhD.					
<b>Last change:</b> 06.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.ÚFKF/L-S-ZL-023/18	<b>Course title:</b> Pharmacology 1
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 24s / 18s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 3	
<b>Recommended semester:</b> 5.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.ÚPF/L-S-ZL-073/17 - Pathological Physiology 1	
<b>Course requirements:</b> - 100% attendance at the practicals, - 2 written test (minimum 60% of correct answers), - elaboration and presentation of the seminar essay. Test evaluation: A: 91 - 100 %, B: 81 - 90 %, C: 73 -80 %, D: 66 -2 %, E: 60 - 65 %, Fx: 59 - 0 %. The overall rating is determined from the average of the ratings obtained.	
<b>Learning outcomes:</b> Knowledge: Gain general knowledge about: - mechanisms of drug actions, - fate of drugs in organisms, - adverse drug reactions and other possible risks during therapy, - preclinical and clinical evaluation of drugs. To acquire knowledge about drugs of selected pharmacodynamic classes with focus on: mechanisms of drug action, characteristic pharmacokinetic properties, typical adverse drug reactions, indications, contraindications and clinically significant interactions. Skills: Learn how to apply knowledge from general pharmacology in special pharmacology and therapy of selected disorders, with emphasis on drug administration in dentistry.	
<b>Class syllabus:</b> Medicines and society. Drug information sources. Nomenclature. Principles of drug prescription. Types of drug actions. Mechanism of drug actions on molecular level. Receptors. Basic principles of drug movement in the body. Basic pharmacokinetic concepts. Pharmacogenetics. Pharmacoepidemiology. Pharmacoeconomics. Pharmacovigilance. Adverse drug reactions. Clinical and preclinical drug evaluation. GLP. GCP. Pharmacology of autonomic nervous system. Sympathetic nervous system. Parasympathetic nervous system. Local and general anesthetics. Types of local anesthesia. Pharmacotherapy of pain in dentistry. Non-opioid and opioid analgesics. Co-analgesics. Pharmacotherapy of inflammation. Autacoids. Non-steroidal anti-inflammatory drugs. Antirheumatics. Immunopharmacons. Biological drugs. Cytostatics. Pharmacology of the	

respiratory system. Antiasthmatic agents. Drugs used in the treatment of allergic diseases. Drugs used in the treatment of anaphylactic shock. Drugs affecting GIT. Antiulcer substances. Prokinetics. Antiemetics. Toxicology. Principles of antidote therapy.					
<b>Recommended literature:</b> Mirossay L., Mojžiš J. a kol.: Základná farmakológia a farmakoterapia I + II. 2. prepracované vydanie. Košice: EQUILIBRIA, 2021, 1162 s. Švihovec J. a kol.: Farmakologie. 1. vydanie. Praha: Grada, 2018. 1008 s. Gažová A., Kyselovič J.: Princípy receptúrnej propedeutiky [elektronický dokument]. Bratislava: Berlina, 2020, 114 s.					
<b>Languages necessary to complete the course:</b> Slovak					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 276					
A	B	C	D	E	FX
80,43	16,3	3,26	0,0	0,0	0,0
<b>Lecturers:</b> prof. MUDr. Viera Kristová, CSc., prof. MUDr. Milan Kriška, DrSc., prof. MUDr. Martin Wawruch, PhD., doc. PharmDr. Andrea Gažová, PhD., MUDr. Kristína Hudecová, PhD., MUDr. Miriam Petrová, PhD., MUDr. Vasil Hricák, doc. MUDr. Monika Laššánová, PhD., MUDr. Andrea Raganová, PhD., doc. MUDr. Jana Tisoňová, PhD., MUDr. Róbert Vojtko, PhD.					
<b>Last change:</b> 31.05.2024					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.ÚFKF/L-S-ZL-024/18	<b>Course title:</b> Pharmacology 2
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 24s / 18s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 4	
<b>Recommended semester:</b> 6.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.ÚFKF/L-S-ZL-023/18 - Pharmacology 1 or LF.ÚFKF/L-S-ZL-023/25 - Pharmacology 1 and LF.ÚPF/L-S-ZL-074/18 - Pathological Physiology 2	
<b>Course requirements:</b> - 100% attendance at the practicals, - 2 written test (minimum 60% of correct answers), - elaboration and presentation of the seminar essay. <b>Final exam:</b> - written part of exam (minimum 60% of correct answers), - oral part of exam: 3 questions (basic pharmacology, special pharmacology, selected drugs). <b>Test evaluation:</b> A: 91 - 100 %, B: 81 - 90 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 - 0 %. The overall rating is determined from the average of the ratings obtained.	
<b>Learning outcomes:</b> <b>Knowledge:</b> Gain knowledge about drugs within specific pharmacodynamic groups (emphasis on the medical use in dentistry) with a focus on: - mechanism of action, - pharmacokinetic properties, - clinical use, contraindications, - adverse effects, - interactions with drugs, OTC products and other substances. <b>Skills:</b> Learn how to apply knowledge of pharmacology in clinical disciplines. Learn to assess the risk-benefit ratio of drugs in individual patient with emphasis on medical pharmacology in dentistry.	
<b>Class syllabus:</b> Pharmacology of cardiovascular system. Antihypertensives. Vasodilators. Drugs used in the therapy of heart failure. Cardiotonics. Antidysrhythmics. Drugs used in the therapy of ischemic heart disease. Antianginal drugs. Hypolipidemics. Antithrombotic agents in relation to dentistry. CNS drugs. Neurotransmitters in the CNS. Antidepressants. Antipsychotics. Anxiolytics and hypnotics. Antiepileptics. Antiparkinson agents. Cognitive enhancers. Pharmacology of the endocrine system.	



Antidiabetics. Drugs used in the treatment of hypoglycaemia. Pituitary hormones as drugs. Thyroid hormones. Glucocorticoids. Female and male hormones. Contraceptives. Hormone replacement therapy. Drugs used in the treatment of osteoporosis. Antimicrobials used in dentistry. Beta-lactam antibiotics, macrolides, tetracyclines, quinolones and lincosamides. Antituberculous. Antivirals. Drugs used in the therapy of HIV infection. Antifungals. Antiparasitics. Principles of drug effect evaluation in individualized therapy. Interactions of drugs most commonly used in dentistry and their clinical significance.					
<b>Recommended literature:</b> Mirossay L., Mojžiš J. a kol.: Základná farmakológia a farmakoterapia I + II. 2. prepracované vydanie. Košice: EQUILIBRIA, 2021, 1162 s. Švihovec J. a kol.: Farmakologie. 1. vydanie. Praha: Grada, 2018. 1008 s. Kristová, V., Wawruch, M., Tisoňová, J. a kol. Kardiovaskulárne liečivá. 2. doplnené vydanie. Bratislava: Univerzita Komenského, 2019. 302 s.					
<b>Languages necessary to complete the course:</b> Slovak					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 275					
A	B	C	D	E	FX
61,82	16,36	14,91	2,91	2,91	1,09
<b>Lecturers:</b> prof. MUDr. Viera Kristová, CSc., prof. MUDr. Milan Kriška, DrSc., prof. MUDr. Martin Wawruch, PhD., doc. PharmDr. Andrea Gažová, PhD., MUDr. Kristína Hudecová, PhD., MUDr. Miriam Petrová, PhD., doc. MUDr. Jana Tisoňová, PhD., MUDr. Róbert Vojtko, PhD., doc. MUDr. Monika Laššánová, PhD.					
<b>Last change:</b> 31.05.2024					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.ÚTVŠ/L-S-ZL-103/16	<b>Course title:</b> Physical Training 1
<b>Educational activities:</b> <b>Type of activities:</b> practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 25s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 1	
<b>Recommended semester:</b> 1.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> 100% participation in seminars	
<b>Learning outcomes:</b> Universal development of upcoming physician. Interdisciplinary connection between physical education, utilizing of physical education and sports in physical practice as one of the main resources to prevent illness and adopting importance of physical activity for personal development.	
<b>Class syllabus:</b> Teaching theory, methodology, and practical application of the following sports: basketball, volleyball, football/soccer, interior football/soccer, floorball, tennis, table tennis, badminton, swimming, aerobics, Zumba, hiking (fitness, recreational, water, cycling), and winter sports based on students' interests (skiing, snowboarding, skialp). Basics and theory of weightlifting. In team sports, training and understanding of basics game requirements for the individual and basic combinations of game possibilities. Basics of rules, strategies, and tactics for the chosen sport. The best performing students have the opportunity to participate in representing faculty in the University League in volleyball, indoor football/soccer, floorball, basketball, and swimming. Exercises for the physically disabled or injured – weight room, gym, swimming pool. Optional winter training camp.	
<b>Recommended literature:</b> ARGAJ, G. a kol. Pohybové hry pre telesnú a športovú výchovu. Univerzita Komenského, Bratislava. 2009. 83 s. ISBN: 80-223-2602-5 Core Tréning. 2014. Slovart, 224s. ISBN 978-80-556-1183-9 Stowasser, J. a kolektív: Vodná turistika, Učebné texty pre školenie cvičiteľov. Bratislava: Šport, 1988. 204 s. Valjent, Z. Aktivní životní styl vysokoškoláků (studentů Fakulty elektrotechnické ČVUT v Praze). Disertační práce. Praha: České vysoké učení technické v Praze, 2010	
<b>Languages necessary to complete the course:</b> Slovak	
<b>Notes:</b>	

<b>Past grade distribution</b>
Total number of evaluated students: 365
ABS0
100,0
<b>Lecturers:</b> PaedDr. Róbert Važan, PhD., Mgr. Ján Beracka, Mgr. Barbora Kociánová, PhD., Mgr. Michal Korman, Mgr. Henrich Krč, PhD., Mgr. Veronika Lovášová, PhD.
<b>Last change:</b> 30.05.2024
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.ÚTVŠ/L-S-ZL-104/16	<b>Course title:</b> Physical Training 2
<b>Educational activities:</b> <b>Type of activities:</b> practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 25s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 1	
<b>Recommended semester:</b> 2.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> 100% participation in seminars	
<b>Learning outcomes:</b> Universal development of upcoming physician. Interdisciplinary connection between physical education, utilizing of physical education and sports in physical practice as one of the main resources to prevent illness and adopting importance of physical activity for personal development.	
<b>Class syllabus:</b> Teaching theory, methodology, and practical application of the following sports: basketball, volleyball, football/soccer, interior football/soccer, floorball, tennis, table tennis, badminton, swimming, aerobics, Zumba, hiking (fitness, recreational, water, cycling), and winter sports based on students' interests (skiing, snowboarding, skialp). Basics and theory of weightlifting. In team sports, training and understanding of basics game requirements for the individual and basic combinations of game possibilities. Basics of rules, strategies, and tactics for the chosen sport. The best performing students have the opportunity to participate in representing faculty in the University League in volleyball, indoor football/soccer, floorball, basketball, and swimming. Exercises for the physically disabled or injured – weight room, gym, swimming pool. Optional winter training camp.	
<b>Recommended literature:</b> ARGAJ, G. a kol. Pohybové hry pre telesnú a športovú výchovu. Univerzita Komenského, Bratislava. 2009. 83 s. ISBN: 80-223-2602-5 Core Tréning. 2014. Slovart, 224s. ISBN 978-80-556-1183-9 Stowasser, J. a kolektív: Vodná turistika, Učebné texty pre školenie cvičiteľov. Bratislava: Šport, 1988. 204 s. Valjent, Z. Aktivní životní styl vysokoškoláků (studentů Fakulty elektrotechnické ČVUT v Praze). Disertační práce. Praha: České vysoké učení technické v Praze, 2010	
<b>Languages necessary to complete the course:</b> Slovak	
<b>Notes:</b>	

<b>Past grade distribution</b>
Total number of evaluated students: 364
ABS0
100,0
<b>Lecturers:</b> PaedDr. Róbert Vážan, PhD., Mgr. Ján Beracka, Mgr. Barbora Kociánová, PhD., Mgr. Michal Korman, Mgr. Henrich Krč, PhD., Mgr. Veronika Lovášová, PhD.
<b>Last change:</b> 30.05.2024
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.ÚTVŠ/L-S-ZL-105/17	<b>Course title:</b> Physical Training 3
<b>Educational activities:</b> <b>Type of activities:</b> practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 25s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 1	
<b>Recommended semester:</b> 3.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> 100% participation in seminars	
<b>Learning outcomes:</b> Universal development of upcoming physician. Interdisciplinary connection between physical education, utilizing of physical education and sports in physical practice as one of the main resources to prevent illness and adopting importance of physical activity for personal development.	
<b>Class syllabus:</b> Teaching theory, methodology, and practical application of the following sports: basketball, volleyball, football/soccer, interior football/soccer, floorball, tennis, table tennis, badminton, swimming, aerobics, Zumba, hiking (fitness, recreational, water, cycling), and winter sports based on students' interests (skiing, snowboarding, skialp). Basics and theory of weightlifting. In team sports, training and understanding of basics game requirements for the individual and basic combinations of game possibilities. Basics of rules, strategies, and tactics for the chosen sport. The best performing students have the opportunity to participate in representing faculty in the University League in volleyball, indoor football/soccer, floorball, basketball, and swimming. Exercises for the physically disabled or injured – weight room, gym, swimming pool. Optional winter training camp.	
<b>Recommended literature:</b> Argaj, G. a kol. Pohybové hry pre telesnú a športovú výchovu. Univerzita Komenského, Bratislava. 2009. 83 s. ISBN: 80-223-2602-5 Core Tréning. 2014. Slovart, 224s. ISBN 978-80-556-1183-9 Stowasser, J. a kolektív: Vodná turistika, Učebné texty pre školenie cvičiteľov. Bratislava: Šport, 1988. 204 s. Valjent, Z. Aktivní životní styl vysokoškoláků (studentů Fakulty elektrotechnické ČVUT v Praze). Disertační práce. Praha: České vysoké učení technické v Praze, 2010	
<b>Languages necessary to complete the course:</b> Slovak	
<b>Notes:</b>	

<b>Past grade distribution</b>
Total number of evaluated students: 324
ABS0
100,0
<b>Lecturers:</b> PaedDr. Róbert Važan, PhD., Mgr. Ján Beracka, Mgr. Barbora Kociánová, PhD., Mgr. Michal Korman, Mgr. Henrich Krč, PhD., Mgr. Veronika Lovásová, PhD.
<b>Last change:</b> 30.05.2024
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.ÚTVŠ/L-S-ZL-106/17	<b>Course title:</b> Physical Training 4
<b>Educational activities:</b> <b>Type of activities:</b> practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 25s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 1	
<b>Recommended semester:</b> 4.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> 100% participation in seminars	
<b>Learning outcomes:</b> Universal development of upcoming physician. Interdisciplinary connection between physical education, utilizing of physical education and sports in physical practice as one of the main resources to prevent illness and adopting importance of physical activity for personal development.	
<b>Class syllabus:</b> Teaching theory, methodology, and practical application of the following sports: basketball, volleyball, football/soccer, interior football/soccer, floorball, tennis, table tennis, badminton, swimming, aerobics, Zumba, hiking (fitness, recreational, water, cycling), and winter sports based on students' interests (skiing, snowboarding, skialp). Basics and theory of weightlifting. In team sports, training and understanding of basics game requirements for the individual and basic combinations of game possibilities. Basics of rules, strategies, and tactics for the chosen sport. The best performing students have the opportunity to participate in representing faculty in the University League in volleyball, indoor football/soccer, floorball, basketball, and swimming. Exercises for the physically disabled or injured - weight room, gym, swimming pool. Optional winter training camp.	
<b>Recommended literature:</b> Argaj, G. a kol. Pohybové hry pre telesnú a športovú výchovu. Univerzita Komenského, Bratislava. 2009. 83 s. ISBN: 80-223-2602-5 Core Tréning. 2014. Slovart, 224s. ISBN 978-80-556-1183-9 Stowasser, J. a kolektív: Vodná turistika, Učebné texty pre školenie cvičiteľov. Bratislava: Šport, 1988. 204 s. Valjent, Z. Aktivní životní styl vysokoškoláků (studentů Fakulty elektrotechnické ČVUT v Praze). Disertační práce. Praha: České vysoké učení technické v Praze, 2010	
<b>Languages necessary to complete the course:</b> Slovak	
<b>Notes:</b>	



<b>Past grade distribution</b>
Total number of evaluated students: 322
ABS0
100,0
<b>Lecturers:</b> PaedDr. Róbert Vážan, PhD., Mgr. Michal Korman, Mgr. Barbora Kociánová, PhD., Mgr. Henrich Krč, PhD., Mgr. Veronika Lovásová, PhD.
<b>Last change:</b> 30.05.2024
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.ÚTVŠ/L-S-ZL-107/18	<b>Course title:</b> Physical Training 5
<b>Educational activities:</b> <b>Type of activities:</b> practicals <b>Number of hours:</b> <b>per week:</b> <b>per level/semester:</b> 25s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 1	
<b>Recommended semester:</b> 5.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> 100% participation in seminars	
<b>Learning outcomes:</b> Universal development of upcoming physician. Interdisciplinary connection between physical education, utilizing of physical education and sports in physical practice as one of the main resources to prevent illness and adopting importance of physical activity for personal development.	
<b>Class syllabus:</b> Teaching theory, methodology, and practical application of the following sports: basketball, volleyball, football/soccer, interior football/soccer, floorball, tennis, table tennis, badminton, swimming, aerobics, Zumba, hiking (fitness, recreational, water, cycling), and winter sports based on students' interests (skiing, snowboarding, skialp). Basics and theory of weightlifting. In team sports, training and understanding of basics game requirements for the individual and basic combinations of game possibilities. Basics of rules, strategies, and tactics for the chosen sport. The best performing students have the opportunity to participate in representing faculty in the University League in volleyball, indoor football/soccer, floorball, basketball, and swimming. Exercises for the physically disabled or injured - weight room, gym, swimming pool. Optional winter training camp.	
<b>Recommended literature:</b> Argaj, G. a kol. Pohybové hry pre telesnú a športovú výchovu. Univerzita Komenského, Bratislava. 2009. 83 s. ISBN: 80-223-2602-5 Core Tréning. 2014. Slovart, 224s. ISBN 978-80-556-1183-9 Stowasser, J. a kolektív: Vodná turistika, Učebné texty pre školenie cvičiteľov. Bratislava: Šport, 1988. 204 s. Valjent, Z. Aktivní životní styl vysokoškoláků (studentů Fakulty elektrotechnické ČVUT v Praze). Disertační práce. Praha: České vysoké učení technické v Praze, 2010	
<b>Languages necessary to complete the course:</b> Slovak	
<b>Notes:</b>	

<b>Past grade distribution</b>
Total number of evaluated students: 274
ABS0
100,0
<b>Lecturers:</b> PaedDr. Róbert Važan, PhD., Mgr. Ján Beracka, Mgr. Barbora Kociánová, PhD., Mgr. Michal Korman, Mgr. Henrich Krč, PhD., Mgr. Veronika Lovášová, PhD.
<b>Last change:</b> 30.05.2024
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.ÚTVŠ/L-S-ZL-108/18	<b>Course title:</b> Physical Training 6
<b>Educational activities:</b> <b>Type of activities:</b> practicals <b>Number of hours:</b> <b>per week:</b> <b>per level/semester:</b> 25s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 1	
<b>Recommended semester:</b> 6.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> 100% participation in seminars	
<b>Learning outcomes:</b> Universal development of upcoming physician. Interdisciplinary connection between physical education, utilizing of physical education and sports in physical practice as one of the main resources to prevent illness and adopting importance of physical activity for personal development.	
<b>Class syllabus:</b> Teaching theory, methodology, and practical application of the following sports: basketball, volleyball, football/soccer, interior football/soccer, floorball, tennis, table tennis, badminton, swimming, aerobics, Zumba, hiking (fitness, recreational, water, cycling), and winter sports based on students' interests (skiing, snowboarding, skialp). Basics and theory of weightlifting. In team sports, training and understanding of basics game requirements for the individual and basic combinations of game possibilities. Basics of rules, strategies, and tactics for the chosen sport. The best performing students have the opportunity to participate in representing faculty in the University League in volleyball, indoor football/soccer, floorball, basketball, and swimming. Exercises for the physically disabled or injured – weight room, gym, swimming pool. Optional winter training camp.	
<b>Recommended literature:</b> Argaj, G. a kol. Pohybové hry pre telesnú a športovú výchovu. Univerzita Komenského, Bratislava. 2009. 83 s. ISBN: 80-223-2602-5 Core Tréning. 2014. Slovart, 224s. ISBN 978-80-556-1183-9 Stowasser, J. a kolektív: Vodná turistika, Učebné texty pre školenie cvičiteľov. Bratislava: Šport, 1988. 204 s. Valjent, Z. Aktivní životní styl vysokoškoláků (studentů Fakulty elektrotechnické ČVUT v Praze). Disertační práce. Praha: České vysoké učení technické v Praze, 2010	
<b>Languages necessary to complete the course:</b> Slovak	
<b>Notes:</b>	

<b>Past grade distribution</b>
Total number of evaluated students: 273
ABS0
100,0
<b>Lecturers:</b> PaedDr. Róbert Vážan, PhD., Mgr. Ján Beracka, Mgr. Barbora Kociánová, PhD., Mgr. Michal Korman, Mgr. Henrich Krč, PhD., Mgr. Veronika Lovášová, PhD.
<b>Last change:</b> 30.05.2024
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.FyÚ/L-S-ZL-025/16	<b>Course title:</b> Physiology 1
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 36s / 36s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 6	
<b>Recommended semester:</b> 2.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> - 100% attendance at the practicals, seminars, TBL - to complete all written assignments and presentations - to pass successfully 3 written credit tests after each chapter (in each test - max. 40 points, minimum for successful passing – 70%, i.e. 28 points in each test) Overall evaluation: based on sum of points from 3 successfully passed tests: A: 120 - 114, B: 113 - 106, C: 105 - 98, D: 97 - 90, E: 89 - 84, Fx: 83 and less.	
<b>Learning outcomes:</b> Knowledge: To obtain the knowledge of facts and to understand their relationships in the topic of blood physiology, physiology of the excitable tissues, physiology of respiration and metabolism. To gain basic knowledge about diseases prevention and healthy lifestyle. Skills: To acquire skills in recording, evaluation and interpretation of results of selected blood examinations, examinations of the respiratory system and metabolism. To gain basic laboratory skills (use of microscope, pipette), basic medical examinations and measurements (determination of hematocrit, blood groups, haemoglobin concentration, count of blood elements, leukogram, metabolic rate, basics of spirometry, etc.). Ability to apply physiological principles in solving simulated clinical problems and cases.	
<b>Class syllabus:</b> Blood - blood plasma, blood elements, osmotic and oncotic pressure, blood groups, haemostasis, erythropoiesis. Excitable tissues - receptors, resting membrane potential, nerve excitability and action potential, synapses, functional properties of nerves, skeletal and smooth muscle. Respiration - functions of airways, ventilation and exchange of respiratory gases, the lung volumes and capacities, transport of O <sub>2</sub> and CO <sub>2</sub> , breathing and regulation of the blood pH, influence of changes in atmospheric pressure, regulation of breathing. Metabolism - energy intake and expenditure, basal and total metabolic rate, energy value of nutrients, energy equivalent and respiratory quotient, oxygen debt, metabolism of carbohydrates, fats, proteins and its regulation.	

**Recommended literature:**

- Ostatníková, D. a kol. Základy lekárskej fyziológie. 4. doplnené vyd. Bratislava: Univerzita Komenského v Bratislave, 2022. 370 s. ISBN 978-80-223-5458-5
- Javorka, K. a kol. Lekárska fyziológia: učebnica pre lekárske fakulty. 5. preprac. a dopl. vyd. Martin: Osveta, 2021. 769 s. ISBN 978-80-8063-496-4
- Ostatníková, D. a kol. Fyziologické praktikum. 1. vyd. Bratislava: Univerzita Komenského, 2021. 236 s. ISBN 978-80-223-5171-3

**Languages necessary to complete the course:**

Slovak

**Notes:****Past grade distribution**

Total number of evaluated students: 365

A	B	C	D	E	FX
27,67	38,63	19,45	11,78	2,19	0,27

**Lecturers:** prof. MUDr. Daniela Ostatníková, PhD., prof. MUDr. Katarína Babinská, PhD., prof. MUDr. Jana Radošinská, PhD., prof. MUDr. Boris Mravec, DrSc., doc. Dr. Aleksandra Sashova Tomova, PhD., doc. PharmDr. Zdenko Pirník, PhD., doc. RNDr. Ján Bakoš, PhD., MUDr. Rastislav Važan, PhD.

**Last change:** 06.06.2024

**Approved by:** prof. MUDr. Peter Stanko, PhD.

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.FyÚ/L-S-ZL-026/17	<b>Course title:</b> Physiology 2
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 36s / 36s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 7	
<b>Recommended semester:</b> 3.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.AÚ/L-S-ZL-002/16 - Anatomy 2 and LF.FyÚ/L-S-ZL-025/16 - Physiology 1 or LF.FyÚ/L-S-ZL-025/25 - Physiology 1	
<b>Course requirements:</b> - 100% attendance at the practicals, seminars, TBL - to complete all written assignments and presentations - to pass successfully 4 written credit tests after each chapter (in each test - max. 40 points, minimum for successful passing – 70%, i.e. 28 points in each test) Evaluation of tests: based on sum of points from 4 successfully passed tests: A: 160 - 151, B: 150 - 141, C: 140 - 131, D: 130 - 121, E: 120 - 112, Fx: 111 and less. Final examination: - complex written test (10 questions, max. 40 points, minimum for successful passing – 70%, i.e. 28 points) - oral part of the examination: 2 questions on medical physiology The overall rating is determined from the average of the ratings obtained.	
<b>Learning outcomes:</b> <b>Knowledge:</b> To obtain the knowledge of facts and to understand their relationships in the topic of the digestive system and nutrition, cardiovascular physiology, thermoregulation, excretory system, endocrine system and reproduction, senses and central nervous system. To gain basic knowledge about diseases prevention and healthy lifestyle. <b>Skills:</b> To acquire skills in recording, evaluation and interpretation of results of selected examinations of dietary habits and nutritional status, of the cardiovascular system, sensory organs and central nervous system. To gain skills in basic medical examinations and measurements (assessment of nutritional status, examination of the arterial pulse, blood pressure, ECG, visual acuity, eyeground, visual field, otoscopy and audiometry, examination of basic reflexes). To get skills in presentation of scientific information and information about diseases prevention and healthy lifestyle in form of short lecture and discussion. Ability to apply physiological principles in solving simulated clinical problems and cases.	
<b>Class syllabus:</b>	



Digestive system and nutrition - mastication, swallowing, gastric motility, the small and large intestine motility, the function of digestive juices and their secretion, digestion and absorption of nutrients, the function of liver, importance of nutrition and principles of balanced diet.

Cardiovascular system - physiological properties of the cardiac muscle, cardiac cycle, heart sounds, arterial pulse, electrocardiography, blood flow in vessels, blood pressure, transcapillary exchange, lymph circulation, regional blood circulations.

Thermoregulation - body temperature and its biorhythms, heat production and losses, mechanisms of thermoregulation.

Kidneys - body fluids and their ion-structure, glomerular filtration and tubular processes, acid-base balance, formation and excretion of urine, regulation of renal functions.

Endocrine glands and reproduction - mechanisms of hormonal action, functions of the hypothalamus - pituitary system, functions of other endocrine glands and their hormones.

Senses - classification and function, vision, hearing, taste, olfaction, sense of balance, mechanoreception, thermoreception, nociception, proprioception.

Central nervous system – reflex, reflex arch, sensation and perception, regulation of movements and muscle tone, higher nervous functions - memory, emotions, learning, speech.

#### **Recommended literature:**

- Ostatníková, D. a kol. Základy lékařské fyziologie. 4. doplnené vyd. Bratislava: Univerzita Komenského v Bratislave, 2022. 370 s. ISBN 978-80-223-5458-5
- Javorka, K. a kol. Lékařská fyziologie: učebnice pro lékařské fakulty. 5. preprac. a dopl. vyd. Martin: Osveta, 2021. 769 s. ISBN 978-80-8063-496-4
- Ostatníková, D. a kol. Fyziologické praktikum. 1. vyd. Bratislava: Univerzita Komenského, 2021. 236 s. ISBN 978-80-223-5171-3

#### **Languages necessary to complete the course:**

Slovak

#### **Notes:**

#### **Past grade distribution**

Total number of evaluated students: 327

A	B	C	D	E	FX
34,56	22,63	22,94	11,62	5,5	2,75

**Lecturers:** prof. MUDr. Daniela Ostatníková, PhD., prof. MUDr. Boris Mravec, DrSc., prof. MUDr. Katarína Babinská, PhD., doc. RNDr. Monika Barteková, PhD., prof. MUDr. Jana Radošinská, PhD., doc. RNDr. Ján Bakoš, PhD., doc. Dr. Aleksandra Sashova Tomova, PhD., MUDr. Rastislav Važan, PhD., doc. MUDr. Richard Imrich, DrSc., doc. PharmDr. Zdenko Pírník, PhD.

**Last change:** 06.06.2024

**Approved by:** prof. MUDr. Peter Stanko, PhD.

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.ChK2/L-S-ZL-120/19	<b>Course title:</b> Practice - Surgery
<b>Educational activities:</b> <b>Type of activities:</b> practice <b>Number of hours:</b> <b>per week: per level/semester:</b> 40s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 8.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.ChK2/L-S-ZL-033/25 - Surgery 2 or LF.ChK2/L-S-ZL-033/19 - Surgery 2	
<b>Course requirements:</b> no absence at practicals	
<b>Learning outcomes:</b> Knowledge: improving theoretical knowledge in general surgery and at the surgical de-partment. Skills: practical skills, bandages, wound cleaning, stoma corrections, venepunctions, blood samples, intramuscular injections, assistance by the surgical procedures. .Diagnostic procedures and laparoscopic skill on the trainer. Simulation workplace.	
<b>Class syllabus:</b> Working as a young secondary doctor at the ward, practical skills in the operation room (hand cleaning, operation field preparation, assistance during the operation, bandages), minor surgical procedures (incisions, excisions, sutures of wounds ect.). Application of local anesthesia (infiltrative, block ect.), drainages in minor surgery. Practical performance of bandage techniques (Dessault, spica, testudo ect.). Examination of the surgical patient, patients file documentation, preoperative examination and preoperative preparation (medicaments, dietetic, psychologic). At the ward: administering of intramuscular injections, venous injections, assisting during administering of the transfusions. Bandages of the operation wounds. Two night shifts.	
<b>Recommended literature:</b> Breza, J a kol.: Princípy chirurgie, Slovak Academic Press, 2016, 4.diel série Cameron, J.: Current Surgical Therapy. 8th ed. London: Churchill Livingstone, 2004, Coran G. Arnold at all.: Pediatric Surgery, Vol. 1, 2, Elsevier 2012, Černý, J. (ed.): Chirurgia tráviacej rúry. 4 zv. Martin: Osveta, 1988 Černý, J. (ed.): Špeciálna chirurgia 2. Chirurgia brušných orgánov a retroperitonea, Martin: Osveta, 1992 Černý, J. (ed.): Špeciálna chirurgia. 4 zv. Martin: Osveta, 1988-1995. Durdík, Š.: Vybrané kapitoly z onkologickej chirurgie. Bratislava: WillArt, 2009, 304s. Ferko, A., Vobořil, Z. (ed.): Chirurgie v kostce. Praha: Grada, 2002. 596 s. Haruštiak, S. a kol.: Princípy chirurgie, Slovak Academic Press, 2010, 2.diel série Kaušitz, J. a kol.: Onkológia. VEDA, 663 s.	

Kaušitz, J. a kol.: Špeciálna onkológia. Solen, 2020 692 s.

Kirk, R.M.: General Surgical Operations. 5th ed. London: Churchill Livingstone, 2006

Marek, V., Durdík, Š.: Akútna apendicitída - Včasná diagnostika a predoperačná rozvaha, 2021, 120s.

Olejník, J. (ed.): Perioperačný manuál chirurga. Bratislava: Ebner, 2002, 388 s.

Olejník, J. (ed.): Akútna pankreatitída. Bratislava: Ebner, 2002, 68 s.

Pechan, J.: Princípy chirurgie, PRIMA - PRINT, 2013, 3.diel série

Pokorný, V. (ed.): Traumatologie. Praha: Triton, 2002, 307 s.

Sabiston Textbook of Surgery 20th Edition, Elsevier 2016

Siman, J. a kol.: Princípy chirurgie, Slovak Academic Press, 2007, 1.diel série

Šimko, P. a kol.: Princípy chirurgie, PRIMA - PRINT, 2019, 5.diel série A

Šimko, P. a kol.: Princípy chirurgie, PRIMA - PRINT, 2019, 5.diel série B

Škultéty, J. : Špeciálna chirurgia I., Univerzita Komenského v Bratislave, 2014

Štencl, J., Holéczy, P.: Základné laparoskopické operácie v chirurgii. Martin: Osveta, 2001. 131 s.

Vidiščák, M. a kol.: Novorodenecká chirurgia I, M-Servis 2008

Vrtík, L. a kol.: Základy chirurgie, Univerzita Komenského v Bratislave, 2019

Way, L.W. (ed.): Současná chirurgická diagnostika a léčba. Praha: Grada, 2000, 1660 s.

Zacharias Zachariou: Pediatric Surgery Digest, Springer 2009

Zeman, M. (ed.): Chirurgická propedeutika. 2. vyd. Praha: Grada, 2003. 524 s.

**Languages necessary to complete the course:**

Slovak

**Notes:**

**Past grade distribution**

Total number of evaluated students: 203

ABS0

100,0

**Lecturers:** MUDr. Peter Štefánik, MUDr. Ivan Majeský, PhD.

**Last change:** 06.12.2022

**Approved by:** prof. MUDr. Peter Stanko, PhD.

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-124/18	<b>Course title:</b> Practice in an Out-Patient Dental Clinic and Laboratory
<b>Educational activities:</b> <b>Type of activities:</b> practice <b>Number of hours:</b> <b>per week:</b> <b>per level/semester:</b> 80s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 4	
<b>Recommended semester:</b> 6.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> - 100% attendance at the practice in an Out-Patient Dental Clinic and Laboratory, 80 hours Final evaluation: Written evaluation of the head of the workplace, where the practice practice was performed. Evaluation by the subject guarantor.	
<b>Learning outcomes:</b> Knowledge: Deepening the acquired knowledge of dentistry in daily clinical practice in the dental clinic and dental laboratory. The graduate of the course acquires a comprehensive view of work in a dental clinic from the perspective of a dental assistant. They will learn the principles of the hygienic regime of the dental clinic, practically participate in the disinfection and sterilization of instruments. Understand the principles of keeping medical records. The graduate of the course will gain a comprehensive view of the continuity of work procedures in dental office and dental laboratory. Skills: The graduate acquires skills in the implementation of all assistantships in the dental clinic. Masters all procedures related to the processing of all dental materials.	
<b>Class syllabus:</b> Dental clinic work: Preparation of dental clinic for daily operation, preparation of instruments and materials. Hygienic and disinfection regime in the dental clinic. Disinfection and sterilization of instruments. Protective equipment at work. Storage and preparation of dental fillings materials and other materials. Dental instruments. Preparation of impression materials and handling of impression materials. Practical implementation of all dental assistant services in the dental clinic. Basics of keeping medical records. Dental laboratory work: Dental laboratory work, equipment, protective equipment. Taking impressions, casting, making all kinds of models. Repair of prosthetic prostheses. Familiarization with laboratory technological procedures with emphasis on their connection between the dental office and the dental laboratory.	
<b>Recommended literature:</b>	
<b>Languages necessary to complete the course:</b> Slovak	

<b>Notes:</b>
<b>Past grade distribution</b> Total number of evaluated students: 247
ABS0
100,0
<b>Lecturers:</b> prof. MUDr. Peter Stanko, PhD., MUDr. Bohuslav Novák, PhD.
<b>Last change:</b> 17.06.2024
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-122/19	<b>Course title:</b> Practice in an Out-patient Dental Clinic 1
<b>Educational activities:</b> <b>Type of activities:</b> practice <b>Number of hours:</b> <b>per week:</b> <b>per level/semester:</b> 80s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 4	
<b>Recommended semester:</b> 8.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> - 100% attendance at the practice in an Out -Patient Dental Clinic, 80 hours Final evaluation: Written evaluation of the head of the workplace, where the practice practice was performed. Evaluation by the subject guarantor.	
<b>Learning outcomes:</b> Knowledge: Deepening the acquired knowledge of dentistry in daily clinical practice in the dental clinic and dental laboratory. The graduate of the course acquires a comprehensive view of work in a dental clinic from the point of view of a dentist. He or she is able to deter-mine the treatment plan and perform basic therapeutic procedures in preventive dentistry and restorative dentistry in the patient's mouth. Skills: The graduate acquires skills to perform basic therapeutic procedures in preventive dentistry and restorative dentistry in the patient's mouth. He or she also acquires skills in the implementation of procedures for fixed prosthetic prostheses and total removable prostheses. The graduate of the course will gain a comprehensive view of the continuity of work procedures in the dental clinic and dental technology.	
<b>Class syllabus:</b> Dental clinic work: Preparation of dental clinic for daily operation, preparation of instruments and materials. Hygienic and disinfection regime in the dental clinic. Disinfection and sterilization of instruments. Protective equipment at work. Storage and preparation of dental fillings materials and other materials. Dental instruments. Preparation of impression materials and handling of impression materials. Medical documentation management. Work in the patient's mouth under the supervision of a dentist. Determination Com-prehensive treatment plan. Evaluation of indications for individual treatment procedures. Treatment in preventive dentistry, restorative dentistry and dental prosthetics. Periodontal examination, tartar removal and soft plaque removal. Motivation and instruction about correct oral hygiene and diet.	
<b>Recommended literature:</b>	
<b>Languages necessary to complete the course:</b>	

Slovak
<b>Notes:</b>
<b>Past grade distribution</b> Total number of evaluated students: 200
ABS0
100,0
<b>Lecturers:</b> MUDr. Bohuslav Novák, PhD., prof. MUDr. Peter Stanko, PhD.
<b>Last change:</b> 17.06.2024
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-123/20	<b>Course title:</b> Practice in an Out-patient Dental Clinic 2
<b>Educational activities:</b> <b>Type of activities:</b> practice <b>Number of hours:</b> <b>per week:</b> <b>per level/semester:</b> 160s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 6	
<b>Recommended semester:</b> 10.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> - 100% attendance at the practice in an Out-Patient Dental Clinic, 160 hours Final evaluation: Written evaluation of the head of the workplace, where the practice practice was performed. Evaluation by the subject guarantor.	
<b>Learning outcomes:</b> Knowledge: Deepening the acquired knowledge of dentistry in daily clinical practice in the dental clinic and dental laboratory. They will understand the techniques of application of local anesthesia in the oromaxillofacial area. Can analyze and deal with complications arising from application of local anesthesia in the oromaxilofacial area. By completing the course, he or she will gain a comprehensive view of the issues and complications of tooth extraction. Skills: The graduate of the course acquires skills in the implementation of procedures in restorative dentistry, endodontics, dental prosthetics in the dental clinic. He or she is able to implement methods of primary prevention of dental caries and periodontal diseases in the patient's mouth. They will learn the basic procedures for simple tooth extraction in the patient's mouth.	
<b>Class syllabus:</b> Dental clinic work: Preparation of dental clinic for daily operation, preparation of instruments and materials. Hygienic and disinfection regime in the dental clinic. Disinfection and sterilization of instruments. Protective equipment at work. Implementation of basic services in conservation dentistry, endodontics, dental prosthetics, and dentoalveolar surgery in a dental clinic. Application of methods of primary prevention of dental caries and periodontal diseases. Treatment of dental caries and dental pulp in an adult patient - indication and diagnosis. Prosthetic dental treatment with fixed bridges, partial and total removable prostheses. Application of topical, infiltration and nerve block local anesthesia. Indications of tooth extraction. Easy tooth extractions. Diagnosis and therapy of complications during and after tooth extraction. Conservative treatment of dentitio difficilis. Extension of practical experience and basic performances in the practice of a general dentist, including practice management, reporting and health insurance companies.	
<b>Recommended literature:</b>	
<b>Languages necessary to complete the course:</b>	



Slovak
<b>Notes:</b>
<b>Past grade distribution</b> Total number of evaluated students: 156
ABS0
100,0
<b>Lecturers:</b> prof. MUDr. Peter Stanko, PhD., MUDr. Bohuslav Novák, PhD.
<b>Last change:</b> 17.06.2024
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.IK4/L-S-ZL-121/19	<b>Course title:</b> Practice-Internal Medicine
<b>Educational activities:</b> <b>Type of activities:</b> practice <b>Number of hours:</b> <b>per week:</b> <b>per level/semester:</b> 40s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 8.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.IK4/L-S-ZL-040/25 - Internal Medicine 2	
<b>Course requirements:</b> 100% attendance at a practice	
<b>Learning outcomes:</b> The aim of continuous 5-day clinical practice in a department of internal medicine is to acquire practical skills in the health-care of hospitalized patients.	
<b>Class syllabus:</b> Participation on physicians' morning sessions and daily rounds, examination of patients, to gain basics of diagnostic and therapeutical procedures.	
<b>Recommended literature:</b>	
<b>Languages necessary to complete the course:</b> Slovak	
<b>Notes:</b>	
<b>Past grade distribution</b> Total number of evaluated students: 196	
ABS0	
100,0	
<b>Lecturers:</b> prof. MUDr. Peter Pont'uch, CSc.	
<b>Last change:</b> 06.12.2022	
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.	

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-076/16	<b>Course title:</b> Preclinical Dentistry 1
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 14s / 72s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 6	
<b>Recommended semester:</b> 1.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> - 100% attendance at the practicals - 1 written test (minimum 60% of correct answers) <b>Final exam:</b> - practical exam: Evaluation of teeth modelation, evaluation of finished metal and resin crowns, identification of extracted teeth Test evaluation: A: 91 - 100 %, B: 81 - 90 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 - 0%. The overall rating is determined from the average of the ratings obtained.	
<b>Learning outcomes:</b> Knowledge: Acquirement of terminology, morphology of teeth, basic devices, materials and technology and work processes in fixed prosthodontics Skills: Development of psychomotor skills needed for clinical practice	
<b>Class syllabus:</b> Anatomical terms of formations, planes, directions and surfaces of teeth, detailed morphology of permanent and milk teeth. Teeth defects and defect of dental arch, preparation of teeth in fixed prosthetics - instruments, materials and procedures. Types of fixed replacements ( crowns and bridges). Metal and resin crown – work process. Veneer crown, ceramic crown and fixed bridge.	
<b>Recommended literature:</b> Duránik, V., Holomáňová, A., Gabániová, D.: Detailná anatómia zubov. Návod na modelovanie zubov. UK Bratislava 2002	
<b>Languages necessary to complete the course:</b> Slovak	
<b>Notes:</b>	

<b>Past grade distribution</b>					
Total number of evaluated students: 366					
A	B	C	D	E	FX
35,25	47,27	10,66	3,28	3,55	0,0
<b>Lecturers:</b> doc. MUDr. Peter Plachý, CSc., MUDr. Lea Csicsayová, CSc., MUDr. Darina Gabániová, PhD., MUDr. Roman Pecháň, MUDr. Zita Kestlerová, PhD., MDDr. Alexandros Tzigeris					
<b>Last change:</b> 06.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-077/16	<b>Course title:</b> Preclinical Dentistry 2
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 14s / 72s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 6	
<b>Recommended semester:</b> 2.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.KSMCh/L-S-ZL-076/16 - Preclinical Dentistry 1	
<b>Course requirements:</b> - 100% attendance at the practicals - continuous verification of knowledge - work activity evaluation Evaluation of subject: - practical : evaluation of complete removable denture fabrication - theoretical : 1 written test (minimum 60% of correct answers) Test evaluation: A: 91 - 100 %, B: 81 - 90 %, C: 73 -80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 - 0%. The overall rating is determined from the average of the ratings obtained.	
<b>Learning outcomes:</b> Knowledge: Acquirement of terminology, basic devices, materials and technology used in removable prosthodontics Skills: Acquisition of basic skills in work processes of removable prosthodontics, clinically and in laboratory / recognition of important places in the oral cavity from a prosthetic point of view, borders of denture, taking impression, manufacturing of model, reconstruction of intermaxillary relations, position of teeth in denture, model analysis, wire work.	
<b>Class syllabus:</b> Classification of dental arch defects, types of dentures according to mastication forces. Materials, instruments and working process of finishing a complete denture in the dental office and laboratory. Partial removable denture with metal construction, model analysis, basic types of clasps, demonstration of the manufacturing process of partial removable dentures	
<b>Recommended literature:</b> Mazánek, J. a kol.: Zubní lékařství Propedeutika. Grada Publishing 2014, 569 s. ISBN 978-80-247-3534-4 Hubálková, H., Krňoulová, J.: Materiály a technologie v protetickém zubním lékařství. Praha, Galón, 2009, 301 s.	
<b>Languages necessary to complete the course:</b> Slovak	

<b>Notes:</b>					
<b>Past grade distribution</b>					
Total number of evaluated students: 366					
A	B	C	D	E	FX
66,94	28,96	3,28	0,55	0,27	0,0
<b>Lecturers:</b> doc. MUDr. Peter Plachý, CSc., MUDr. Lea Csicsayová, CSc., MUDr. Darina Gabániová, PhD., MUDr. Zita Kestlerová, PhD., MUDr. Roman Pecháň, MDDr. Alexandros Tzigeris					
<b>Last change:</b> 06.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-078/17	<b>Course title:</b> Preclinical Dentistry 3
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 14s / 72s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 5	
<b>Recommended semester:</b> 3.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.KSMCh/L-S-ZL-077/16 - Preclinical Dentistry 2	
<b>Course requirements:</b> - 100% attendance at the practicals - continuous verification of knowledge Evaluation of subject: - practical: Fantom patient treatment ( cavity preparation and filling ), root canal treatment - theoretical: -1 written test (minimum 60% of correct answers) Test evaluation: A: 91 - 100 %, B: 81 - 90 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 - 0%. The overall rating is determined from the average of the ratings obtained.	
<b>Learning outcomes:</b> Knowledge: Acquisition of knowledge of basic therapeutical preparations procedures, usage of instruments and materials in conservative dentistry. Skills: Acquisition of basic skills for preparation of Black I. to V. cavities, basics of root canal treatment, preparation and use of filling materials.	
<b>Class syllabus:</b> Cariology: Division of caries lesions, instruments in conservative dentistry, cavity preparation, filling materials - composition, properties and application Endodontics: root canal treatment principle, technology, instruments and materials. Radiography in endodontics	
<b>Recommended literature:</b> Duránik, V. a kol.: Praktické cvičenia z predklinickej stomatológie I., UK Bratislava, I. vydanie 1993 Stejskalová, J. a kol.: Konzervační zubní lékařství. Praha: Grada, 2003 235 s. Hellwig, E., Klimek, J., Attin, T.: Záchovná stomatologie a parodontologie. Praha: Grada, 2003, 332 s.	

Peřinka, L., Bartúřková, ř., Záhlavová, E.: Základy klinické endodoncie. Praha, Quintessenz, 2003 Mazánek, J. a kol. Zubní lékařství Propedeutika, Grada Publishing a.s. Praha 2014, 569 s.					
<b>Languages necessary to complete the course:</b> Slovak					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 324					
A	B	C	D	E	FX
57,41	33,64	5,86	2,16	0,93	0,0
<b>Lecturers:</b> MUDr. Lea Csicsayová, CSc., doc. MUDr. Peter Plachý, CSc., MUDr. Darina Gabániová, PhD., MUDr. Roman Pecháň, MUDr. Zita Kestlerová, PhD., MDDr. Alexandros Tzigeris					
<b>Last change:</b> 06.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					



## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-079/17	<b>Course title:</b> Preclinical Dentistry 4
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 14s / 72s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 6	
<b>Recommended semester:</b> 4.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.KSMCh/L-S-ZL-078/17 - Preclinical Dentistry 3 or LF.KSMCh/L-S-ZL-078/25 - Preclinical Dentistry 3	
<b>Course requirements:</b> - 100% attendance at the practicals - 1 written test (minimum 60% of correct answers) Final exam: - practical exam: rated A-Fx - identification of extracted teeth, description of X-rays, preparation of cavity and filling, partial performance from prosthetics (eg impression ..), tooth extraction with anesthesia on a phantom patient, tooth modeling from wax, - theoretical exam: 4 question (Dental prosthetics, oral surgery, dental radiology, conservative dentistry, ) rated A-Fx Test evaluation: A: 91 - 100 %, B: 81 - 90 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 - 0%. The overall rating is determined from the average of the ratings obtained.	
<b>Learning outcomes:</b> Knowledge: Basic of dental treatment in the dental clinic, documentation, principles of prosthetic treatment, basic of conservative treatment of dental surgery, usage of radio-graphy in dentistry, x-ray image, principle of isometric image Skills: Mastering the technique of patient treatment in the dental chair in the field of conservative dentistry, prosthodontic, mastering the basics of teeth extraction and dental anesthesia, use of instruments in dental office and use of materials, identification and reading of x-ray images.	
<b>Class syllabus:</b> Basic of dental surgery, dental anesthesia, disinfection and sterilization principle, basic of radiology, equipment of dental office and laboratory, documentation in dentistry, basic of work ergonomics summary of basic knowledge from conservative dentistry and prosthetics.	
<b>Recommended literature:</b> Satko,I., Stanko,P., Švidraň,J.: Orálna a maxilofaciálna chirurgia. Univerzita Komenského Bratislava 2013, 308 s. ISBN 978-80-223-3366-5	

Kizek,P.et al. Propedeutika ústnej, čeľustnej a tvárovej chirurgie. 1.vyd.Košice UPJŠ, 2017.191 s. ISBN 978-80-972772-9-1

Šestáková,M. Propedeutika: Protetické zubné lekárstvo a čeľustná ortopédia. 1. vyd. Košice Rotaprint, 2016. 205 s. ISBN 978-80972254-9-0.

Andrik,P. a kol. : Stomatologická protetika, Martin: Osveta, 1983, 222 s.

Duránik,V., Javorka,V. a kol.: Praktické cvičenia z predklinickej stomatológie. 2. upravené vyd. Bratislava: Univerzita Komenského, 1999, 63 s. ISBN 80-223-1361-0

Kovaľová, E. a kol.: Orálna hygiena II, Prešov 2010, 667 s. ISBN 978-80-89295-24-1

Mazánek,J. akol.: Zubní lékařství Propedeutika Grada Publishing Praha 2014. 569s. + príloha ISBN 978-80-247-3534-4

**Languages necessary to complete the course:**

Slovak

**Notes:**

**Past grade distribution**

Total number of evaluated students: 324

A	B	C	D	E	FX
32,41	27,47	22,53	8,95	6,79	1,85

**Lecturers:** MUDr. Lea Csicsayová, CSc., doc. MUDr. Peter Plachý, CSc., MUDr. Darina Gabániová, PhD., MUDr. Roman Pecháň, MUDr. Zita Kestlerová, PhD., MDDr. Alexandros Tzigeris

**Last change:** 06.12.2022

**Approved by:** prof. MUDr. Peter Stanko, PhD.

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-080/18	<b>Course title:</b> Preventive Dentistry 1
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 24s / 36s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 3	
<b>Recommended semester:</b> 6.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.KSMCh/L-S-ZL-079/17 - Preclinical Dentistry 4	
<b>Course requirements:</b> - 100% attendance at the practicals - performing the required amount of specified practical treatments - 1 written test (minimum 60% of correct answers) Test evaluation: A: 91 - 100 %, B: 81 - 90 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 - 0%. The overall rating is determined from the average of the ratings obtained.	
<b>Learning outcomes:</b> Knowledge: Basics of prevention in dentistry and clinical examination of the patient. The main methods of prevention in dentistry. Plaque disease. Prevention of dental caries and diseases of the gingiva and the periodontium. Skills: Clinical examination of the patient. Evaluation of the level of oral hygiene by plaque indices. Diagnosis of initial lesions of hard dental tissues with emphasis on tooth decay.	
<b>Class syllabus:</b> Basics of etiology and pathogenesis of the most common oral diseases. Prevention in dentistry and its main methods. Patient documentation and examination. Dental microbial plaque, monitoring the level of oral hygiene. Examination of the gingiva. Basic criteria of periodontitis. Occlusion diagnostics. Diagnosis of dental caries. Indices of caries, bleeding of the interdental papilla, plaque indices. Determination of caries activity. Oral hygiene.	
<b>Recommended literature:</b> Javorka, V. a kol. : Praktické cvičenia z preventívnej stomatológie. Bratislava UK, 1995 Kilian, J. a kol. : Prevence ve stomatologii. Galén a Karolinum UK Praha, 1999.	
<b>Languages necessary to complete the course:</b> Slovak	
<b>Notes:</b>	

<b>Past grade distribution</b>					
Total number of evaluated students: 276					
A	B	C	D	E	FX
44,57	36,23	15,94	2,9	0,36	0,0
<b>Lecturers:</b> MUDr. Bohuslav Novák, PhD.					
<b>Last change:</b> 06.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-081/21	<b>Course title:</b> Preventive Dentistry 2
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 14s / 30s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 11.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> - 100% attendance at the practicals - performing the required amount of specified practical treatments - 1 written test (minimum 60% of correct answers) <b>Final exam:</b> - 3 questions (diagnosis of initial pathological changes in the oral cavity, preventive anticaries methods, preventive methods in periodontology and other fields) Test evaluation: A: 91 - 100 %, B: 81 - 90 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 - 0%. The overall rating is determined from the average of the ratings obtained.	
<b>Learning outcomes:</b> Knowledge: Preventive methods in various fields of dentistry. Prevention in restorative, pediatric and adolescent dentistry, periodontology, orthodontics, dental prosthetics and dentoalveolar and maxillofacial surgery. Dental treatment of medically compromised patients. Skills: Determining an individual's caries activity. Adjustment of dietary habits. Topical fluoridation methods. Oral hygiene methodology. Fissure sealing.	
<b>Class syllabus:</b> Prevention in dentistry and its tasks set by the WHO. Primary, secondary, and tertiary prevention. Dental microbial plaque in the etiology of caries and periodontal diseases. Anticaries prevention - use of fluorides, oral hygiene, nutritional adjustments and systematic dental care. Fissure sealing. Systemic and local application of fluorides. Teeth cleaning methodologies. Intensive hygiene program. Recall - maintaining a hygienic standard. Possibilities of periodontal prevention. Prevention in restorative dentistry, prosthetic dentistry, orthodontics, dental surgery. Prevention and dental treatment of patients with general diseases. Prevention of general complications in dentistry. Oncological prevention in dentistry.	
<b>Recommended literature:</b> Javorka, V. a kol. : Praktické cvičenia z preventívnej stomatológie. Bratislava UK, 1995 Kilian, J. a kol. : Prevence ve stomatologii. Galén a Karolinum UK Praha, 1999. Kovaľová E. a kol. : Orálna hygiena 1. - IV. Prešov 1994, 2010, 2012	

<b>Languages necessary to complete the course:</b> Slovak					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 154					
A	B	C	D	E	FX
84,42	11,69	3,25	0,65	0,0	0,0
<b>Lecturers:</b> MUDr. Bohuslav Novák, PhD., MUDr. Amir Amiry Manesh, PhD., MDDr. Marek Matajs, PhD., MUDr. Andrea Nováková, PhD.					
<b>Last change:</b> 06.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.PK/L-S-ZL-083/19	<b>Course title:</b> Psychiatry
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 12s / 12s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 7.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.PK/L-S-ZL-056/18 - Medical Psychology and Communication	
<b>Course requirements:</b> 100 % practicals completion Exam: 1) Written test (minimally for 60 %). Evaluation of the test: A: 91 - 100 %, B: 81 - 99 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 % and less 2) Oral exam: 2 questions (1 from general and 1 from special psychiatry). Overall evaluation will be assigned according to the average of obtained partial evaluations.	
<b>Learning outcomes:</b> <b>Knowledge:</b> - Understanding the etiology, pathogenesis, epidemiology, clinical manifestations of mental disorders. - Learning the investigational procedures, principles of treatment and rehabilitation in psychiatry, legal status and assessment of persons with mental disorders in childhood and adulthood. - Understanding the causes, clinical, diagnostic and therapeutic procedures of emergency conditions in psychiatry. - Understanding the psychopathological symptoms and the classification of mental disorders according to ICD-10 and ICD-11. <b>Skills:</b> - Mastering the general principles of communication with patients suffering mental disorder in childhood and adulthood. - Ability to identify psychopathological symptoms within clinical psychiatric examination of persons with psychiatric disorders in childhood and adulthood. - Identification of relevant data from medical history and assessing their potential relationship to psychopathological symptoms, using the diagnostic workup procedures.	
<b>Class syllabus:</b> Causes, mechanisms and epidemiology of mental disorders. Psychopathology, classification, diagnostics, differential diagnosis, treatment, rehabilitation, assessment of psychiatric disorders in children and adults. First aid in psychiatry. Practicing of clinical examination, identification of symptoms, diagnostic conclusion and differential diagnosis, preparation of draft plan of further	

investigations and treatment of mental disorders. Training the use of screening and assessment scales.					
<b>Recommended literature:</b> Kolibáš, E. a kol.: Všeobecná psychiatria. Bratislava: Univerzita Komenského, 2011, 184 s. ISBN 9788022329859 Novotný, V. a kol.: Špeciálna psychiatria. Bratislava: Univerzita Komenského, 2010, 248 s. ISBN 9788022326247 Trebatická, J.: Depresívna porucha v detskom a adolescentnom veku. Bratislava: Univerzita Komenského, 2017, 70 s. ISBN 9788022344289					
<b>Languages necessary to complete the course:</b> Slovak					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 235					
A	B	C	D	E	FX
33,19	34,47	18,3	11,49	2,13	0,43
<b>Lecturers:</b> prof. MUDr. Ján Pečeňák, CSc., doc. MUDr. Tatiana Čaplová, CSc., doc. MUDr. Ľubomíra Izáková, PhD., doc. MUDr. Jana Trebatická, PhD., doc. MUDr. Mária Kráľová, CSc., MUDr. Dana Krajčovičová, PhD., MUDr. Viktor Segeda, PhD., MUDr. Michal Turček, PhD.					
<b>Last change:</b> 06.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					



## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KORFS/L-S-ZL-155/23	<b>Course title:</b> Regenerative Dentistry
<b>Educational activities:</b> <b>Type of activities:</b> lecture <b>Number of hours:</b> <b>per week:</b> <b>per level/semester:</b> 24s <b>Form of the course:</b> on-site learning	
<b>Type, volume, methods and workload of the student - additional information</b> COS	
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 6.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> 100% attendance 1 written test – minimal 60% of correct answers Test evaluation: A: 91 - 100 %, B: 81 – 99 %, C: 73 – 80 %, D: 66 – 72 %, E: 60 – 65 %, Fx: 59 % Oral examination – 1 question	
<b>Learning outcomes:</b> <b>Knowledge:</b> This course is an important component of contemporary dental care and can contribute to better treatment outcomes for patients with oral tissue disorders. Students will increase their knowledge in the areas of physiological processes in the oral cavity including regenerative mechanisms and techniques using the patient's own cells, 3D modeling of personalized scaphoids and their 3D printing followed by bio-colonization. <b>Skills:</b> The aim of the training is also skills in 3D organic modelling and 3D printing of scaffolds or bioprinting.	
<b>Class syllabus:</b> This course deals with the study and application of methods and procedures that allow the restoration and regeneration of tissues in the oral cavity. It may include: 1. Regenerative processes and biological materials at the cellular level: students should learn the principles of oral tissue regeneration, deepen their understanding of pathological and physiological processes in head and neck sites down to the cellular level, and understand the applications of biological materials to promote healing and tissue repair in the oral cavity, including the harvesting, culturing, and application of MSCs. 2. Regenerative Techniques and Procedures: Students should study and master a variety of regenerative techniques and procedures such as tissue transplantation, application of growth factors, use of stem cells, and other methods to promote tissue regeneration.	

3. Clinical Applications. This may include diagnosis and treatment planning for patients with oral tissue disorders and the use of regenerative techniques to treat them. 4. Ethical and Legal Aspects: Students should be informed about the ethical and legal aspects related to regenerative dentistry, including the proper use of biological materials and the legal limitations in the treatment of patients.					
<b>Recommended literature:</b> Regenerative Approaches in Dentistry, Sepanta Hosseinpour, Laurence J. Walsh, Keyvan Moharamzadeh, Springer Nature Switzerland AG, 2022 Advanced Technologies in Orthodontics, © 2023, doc.Thurzo et al., <a href="https://docs.google.com/document/d/1SCYjsUeHjQXXau5euXExDOO81UH_mdWYasCxG8bEqgE/">https://docs.google.com/document/d/1SCYjsUeHjQXXau5euXExDOO81UH_mdWYasCxG8bEqgE/</a>					
<b>Languages necessary to complete the course:</b> Slovak					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 15					
A	B	C	D	E	FX
93,33	0,0	0,0	6,67	0,0	0,0
<b>Lecturers:</b> doc. RNDr. Ľuboš Danišovič, PhD., doc. MUDr. Andrej Thurzo, PhD., MPH, MHA, MDDr. Petra Jungová					
<b>Last change:</b> 16.05.2025					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-045/18	<b>Course title:</b> Restorative Dentistry 1
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 12s / 24s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 6.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.KSMCh/L-S-ZL-079/17 - Preclinical Dentistry 4	
<b>Course requirements:</b> - 100% attendance at the practicals - performing the required amount of specified practical treatments - 1 written test (minimum 60% of correct answers) Test evaluation: A: 91 - 100 %, B: 81 - 90 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 - 0%. The overall rating is determined from the average of the ratings obtained.	
<b>Learning outcomes:</b> Knowledge: Developmental and acquired defects of hard dental tissues. Basics of caries diagnostics and therapy. Non-invasive and mini-invasive caries therapy. Skills: To be able to examine and diagnose hard dental tissue diseases with an emphasis on carious lesions. Ability to diagnose and treat pulp -periodontal lesions.	
<b>Class syllabus:</b> Pathology of hard dental tissues. Developmental and congenital disorders and acquired changes of hard dental tissues. Tooth decay: etiology, theory of origin, pathogenesis, prevention. Dental caries classification, basic caries indices. Examination in restorative dentistry. Patient treatment plan. Dental caries treatment - clinical principles of preparation. Classification of caries lesions and preparation cavities. Preparation procedures in the treatment of cavities Black I.-V. class. Treatment of cavities with filling therapy. Indications for filling materials. Indirect and direct pulp capping. Dentinal hyperesthesia. Non-carious lesions of hard dental tissues. Erosions, attritions, abrasions.	
<b>Recommended literature:</b> Duránik V., Javorka V. a kol.: Praktické cvičenia z predklinickej stomatológie I.UK 1999. Stejskalová J. a kol. : Konzervační zubní lékařství. Grada Praha 2003. Hellwig E. A kol. : Záchovná stomatologie a parodontologie, Grada Praha 2003.	
<b>Languages necessary to complete the course:</b> Slovak	
<b>Notes:</b>	

<b>Past grade distribution</b>					
Total number of evaluated students: 276					
A	B	C	D	E	FX
62,32	23,91	9,42	3,26	1,09	0,0
<b>Lecturers:</b> MUDr. Bohuslav Novák, PhD.					
<b>Last change:</b> 06.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-046/20	<b>Course title:</b> Restorative Dentistry 2
<b>Educational activities:</b> <b>Type of activities:</b> practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 42s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 3	
<b>Recommended semester:</b> 9.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.KSMCh/L-S-ZL-021/19 - Endodontics 2	
<b>Course requirements:</b> - 100% attendance at the practicals - performing the required amount of specified practical treatments - 1 written test (minimum 60% of correct answers) Test evaluation: A: 91 - 100 %, B: 81 - 90 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 - 0%. The overall rating is determined from the average of the ratings obtained.	
<b>Learning outcomes:</b> Knowledge: Diagnosis and therapy of diseases of dental hard tissues, tooth decay and its consequences by the dental pulp and periodontium. Pulpoperiodontal complex. Oral focal infection. Skills: Mastering the basic preparation techniques and filling therapy in caries and non-carious lesions of dental hard tissues. Ability to diagnose and treat pulpoperiodontal lesions. Diagnosis of oral focal infection.	
<b>Class syllabus:</b> As part of the clinical practicals, performing all prescribed diagnostic and therapeutic procedures and operations in the field of treatment of lesions and defects of dental hard tissues, tooth decay, pulp diseases and periodontal disease.	
<b>Recommended literature:</b> Stejskalová J. a kol. : Konzervační zubní lékařství. Grada Praha 2003. Peřinka L. a kol.: Základy klinické endodoncie. Quintessenz Praha 2003. Hellwig E. A kol. : Záchovná stomatologie a parodontologie, Grada Praha 2003.	
<b>Languages necessary to complete the course:</b> Slovak	
<b>Notes:</b>	

<b>Past grade distribution</b>					
Total number of evaluated students: 194					
A	B	C	D	E	FX
65,46	27,84	6,7	0,0	0,0	0,0
<b>Lecturers:</b> MUDr. Bohuslav Novák, PhD.					
<b>Last change:</b> 06.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-047/20	<b>Course title:</b> Restorative Dentistry 3
<b>Educational activities:</b> <b>Type of activities:</b> practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 24s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 1	
<b>Recommended semester:</b> 10.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.KSMCh/L-S-ZL-046/20 - Restorative Dentistry 2	
<b>Course requirements:</b> - 100% attendance at the practicals - performing the required amount of specified practical treatments - 1 written test (minimum 60% of correct answers) Test evaluation: A: 91 - 100 %, B: 81 - 90 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 - 0%. The overall rating is determined from the average of the ratings obtained.	
<b>Learning outcomes:</b> Knowledge: Diagnosis and therapy of diseases of dental hard tissues, tooth decay and its consequences by the dental pulp and periodontium. Pulpoperiodontal complex. Oral focal infection. Skills: Non-invasive treatment of initial caries. All preparation techniques and filling therapies for caries and non-caries lesions of dental hard tissues. Ability to diagnose and treat pulpoperiodontal lesions. Diagnosis of dental focal infection.	
<b>Class syllabus:</b> As part of the clinical practicals, performing all prescribed diagnostic and therapeutic procedures and operations in the field of treatment of lesions and defects of dental hard tissues, tooth decay, pulp diseases and periodontal disease.	
<b>Recommended literature:</b> Stejskalová J. a kol. : Konzervační zubní lékařství. Grada Praha 2003. Peřinka L. a kol.: Základy klinické endodoncie. Quintessenz Praha 2003. Hellwig E. A kol. : Záchovná stomatologie a parodontologie, Grada Praha 2003.	
<b>Languages necessary to complete the course:</b> Slovak	
<b>Notes:</b>	

<b>Past grade distribution</b>					
Total number of evaluated students: 154					
A	B	C	D	E	FX
81,17	16,88	1,95	0,0	0,0	0,0
<b>Lecturers:</b> MUDr. Bohuslav Novák, PhD.					
<b>Last change:</b> 06.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					



## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.ÚCJ/L-S-ZL-109/16	<b>Course title:</b> Slovak Language 1
<b>Educational activities:</b> <b>Type of activities:</b> practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 48s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 1	
<b>Recommended semester:</b> 1.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> 100% attendance at the practicals, 2 written tests: one midterm (50 points, makes 15% of the overall assessment) and one final test (100 points, makes 85% of the overall assessment). Test assessment: A: 91 - 100 %, B: 81 – 90 %, C: 73 – 80 %, D: 66 – 72 %, E: 60 – 65 %, Fx: 59 % – 0%. The overall grade (minimum of 60%) is determined by the grades obtained in the midterm (15%) and final (85%) test and is their weighted average.	
<b>Learning outcomes:</b> Knowledge: Acquisition of professional vocabulary from individual medical fields; deepening of knowledge in the field of morphology of a foreign language. Correct use of syntax when preparing lectures, papers and presentations. Skills: Language competence enabling the highest possible level of obtaining information and knowledge from foreign language sources; written and oral presentation of own knowledge and opinions in a foreign language; ability to communicate with the patient; ability to understand oral speech, lectures on professional medical topics.	
<b>Class syllabus:</b> Introduction to medical terminology. Anatomy of the human body - vocabulary. Sensory organs and senses. Diseases and health problems – basic and extended terminology, oral speech aimed at describing basic medical procedures in professional and layman's style. Pharmacy – role-playing games. Introduction to medical history taking – communication skills training. Reading comprehension and formal-content analysis and interpretation of a selected professional text with a focus on linguistic means (lexical-grammatical and semantic). Practicing listening comprehension in exercises (determine true and false statements with justification, summarize text content, fill in missing parts in dialogues from a medical environment, etc.).	
<b>Recommended literature:</b> Bábelová, J., Hromadová, K.: Slovenský jazyk 4. Bratislava: Univerzita Komenského v Bratislave 2024. 137 p. ISBN 978-80-223-5640-4	

Bábelová, J., Hromadová, K.: Slovenský jazyk 5. Bratislava: Univerzita Komenského v Bratislave 2024. 78 p. ISBN 978-80-223-5669-5					
<b>Languages necessary to complete the course:</b> Slovak					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 7					
A	B	C	D	E	FX
42,86	14,29	28,57	14,29	0,0	0,0
<b>Lecturers:</b> Ing. Janka Bábelová, PhD., Mgr. Radoslav Ďurajka, PhD., PhDr. Valéria Jamrichová, PhDr. Tomáš Hamar, PhD., Mgr. Petra Červeňová, Mgr. Mária Šibalová, PhD., Mgr. Katarína Hromadová, PhD.					
<b>Last change:</b> 22.05.2024					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.ÚCJ/L-S-ZL-110/16	<b>Course title:</b> Slovak Language 2
<b>Educational activities:</b> <b>Type of activities:</b> practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 48s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 1	
<b>Recommended semester:</b> 2.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.ÚCJ/L-S-ZL-109/25 - Slovak Language 1 or LF.ÚCJ/L-S-ZL-109/16 - Slovak Language 1	
<b>Course requirements:</b> 100% attendance at the practicals, 2 written tests: one midterm (50 points, makes 15% of the overall assessment) and one final test (100 points, makes 85% of the overall assessment). Presentation on a professional topic. Oral part of the exam - discussion on a given topic. Test assessment: A: 91 - 100 %, B: 81 – 90 %, C: 73 – 80 %, D: 66 – 72 %, E: 60 – 65 %, Fx: 59 % - 0%. The overall grade (minimum of 60%) is determined by the grades obtained in the midterm (15%) and final (85%) test and is their weighted average.	
<b>Learning outcomes:</b> Knowledge: Acquisition of professional vocabulary from individual medical fields; deepening of knowledge in the field of morphology of a foreign language. Correct use of syntax when preparing lectures, papers, and presentations. Skills: Language competence enabling the highest possible level of obtaining information and knowledge from foreign language sources; written and oral presentation of own knowledge and opinions in a foreign language; ability to communicate with the patient; ability to understand oral speech, lectures on professional medical topics.	
<b>Class syllabus:</b> Medical history taking – basic types of medical history, anamnestic questions. Cardiology – characteristics of the clinic, case study, anatomical and clinical nomenclature. Gastroenterology – characteristics of the clinic, case study, anatomical and clinical nomenclature. Neurology – characteristics of the clinic, case study, anatomical and clinical nomenclature. Surgery – characteristics of the clinic, case study, anatomical and clinical nomenclature. Gynecology – characteristics of the clinic, case study, anatomical and clinical nomenclature. Urology – characteristics of the clinic, case study, anatomical and clinical nomenclature. Psychiatry – characteristics of the clinic, case study, anatomical and clinical nomenclature. Pediatrics – characteristics of the clinic, case study, anatomical and clinical nomenclature. Geriatrics – characteristics of the clinic, case study, anatomical and clinical nomenclature. Dentistry – characteristics of the clinic, case study, anatomical and clinical nomenclature.	

<b>Recommended literature:</b> Bábelová, J., Hromadová, K.: Slovenský jazyk 4. Bratislava: Univerzita Komenského v Bratislave 2024. 137 p. ISBN 978-80-223-5640-4 Bábelová, J., Hromadová, K.: Slovenský jazyk 5. Bratislava: Univerzita Komenského v Bratislave 2024. 78 p. ISBN 978-80-223-5669-5					
<b>Languages necessary to complete the course:</b> Slovak					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 7					
A	B	C	D	E	FX
71,43	28,57	0,0	0,0	0,0	0,0
<b>Lecturers:</b> PhDr. Tomáš Hamar, PhD., Ing. Janka Bábelová, PhD., Mgr. Radoslav Ďurajka, PhD., PhDr. Valéria Jamrichová, Mgr. Katarína Hromadová, PhD., Mgr. Mária Šibalová, PhD.					
<b>Last change:</b> 22.05.2024					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.ÚSLLE/L-S-ZL-150/22	<b>Course title:</b> Social Medicine and Legislation in Dentistry
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 12s / 12s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 1	
<b>Recommended semester:</b> 10.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> - 100% attendance at the practicals <b>Final exam:</b> - written test - oral exam: 2 questions, 15 minutes for preparation <b>Test evaluation:</b> A: 91 - 100 %, B: 81 – 90 %, C: 73 – 80 %, D: 66 – 72 %, E: 60 – 65 %, Fx: 59 % - 0%. The overall rating is determined from the average of the ratings obtained.	
<b>Learning outcomes:</b> <b>Knowledge:</b> After successful completion of the course student will be able to: - Understand the content, mission, scope of social medicine. - Describe the methods of population health assessment. - Describe the models and theories of health and disease, their determinants with the focus on oral health. - Describe the role of social determinants in shaping the oral health of individuals and populations. - Understand the basic principles of health financing. - Know the basics of medical law and basic legal obligations of dentist, understand role of law and human rights in addressing oral health needs - Understand the principles of quality improvement and patient safety in health care and dental care. - Understand the concept of vulnerability and principles how to address the specific health care needs of vulnerable groups of population. - Describe the main principles and steps in evidence-based dental care. <b>Skills:</b> After successful completion of the course student will be able to: - Measure and assess the health status and oral health of the population. - Analyze the oral health inequities in relation to social determinants. - Compare and analyze different types of health systems.	

- Discuss and apply the health legislation and principles of medical law in dental care to avoid medical malpractice.
- Discuss the role of international organizations in promotion and protection of oral health and in strengthening of health systems.
- Address the dental care needs of vulnerable groups of population.
- Apply the principles of quality improvement and patient safety in dental practice.

### **Class syllabus:**

Health and Disease: concepts, models, determinants, classification systems. Social determinants of oral health. Oral health and human rights. Legal aspects of health care and health records in dentistry. Legal liability and medical malpractice in health care. Health systems and health financing. Study of population health: sources of information, measures, methods of assessment with a focus on oral health. International Red Cross: mission, principles, tasks. World Health Organization: structure, mission, tasks, programs, strategies. Human resources in health care. Evidence-based dental care: definition, principles, steps. Health of vulnerable groups of population. Quality in health and dental care: definitions, dimensions, quality management models in health care.

Lectures:

Measures of population health

Healthcare workforce

Healthcare for vulnerable population groups

World Health Organization. International Red Cross.

Health financing and typology of health systems.

Quality in health and dental care.

Practicals/Seminars:

Health and human rights

Basic concepts in medical law.

Evidence-based dental care.

Social determinants of oral health.

### **Recommended literature:**

OZOROVSKÝ, V. et al. Sociálne lekárstvo. Druhé aktualiz. a dopl. vyd. Bratislava: SAP, 2018. 226 s. ISBN 978-80-89607-68-6.

### **Languages necessary to complete the course:**

Slovak

### **Notes:**

### **Past grade distribution**

Total number of evaluated students: 119

A	B	C	D	E	FX
94,12	5,04	0,84	0,0	0,0	0,0

**Lecturers:** doc. MUDr. Michaela Kostířová, PhD., MPH, doc. MUDr. Vojtech Ozorovský, CSc., Mgr. Matej Gogola, PhD., Mgr. et Mgr. Silvia Capíková, PhD.

**Last change:** 11.06.2024

**Approved by:** prof. MUDr. Peter Stanko, PhD.

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.ÚSLLE/L-S-ZL-161/24	<b>Course title:</b> Spiritual Aspects of Caring for the Patients
<b>Educational activities:</b> <b>Type of activities:</b> lecture <b>Number of hours:</b> <b>per week: per level/semester:</b> 24s <b>Form of the course:</b> on-site learning	
<b>Type, volume, methods and workload of the student - additional information</b> COS	
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 5.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.ÚSLLE/L-S-ZL-060/17 - Medical Ethics or LF.ÚSLLE/L-S-ZL-060/25 - Medical Ethics and LF.PK/L-S-ZL-056/18 - Medical Psychology and Communication	
<b>Course requirements:</b> 90% participation in exercises/training sessions Final exam: oral exam - 2 questions.	
<b>Learning outcomes:</b> In the context of a holistic approach to the patient, providing spiritual care to the sick belongs to the basic equipment of the physician and his/her human relationship with the patient. The aim of the course is to draw the attention of the audience to the spiritual dimension and spiritual needs of the sick person as well as the spirituality of the physician himself. Knowledge: Student <ul style="list-style-type: none"> <li>- is able to reflect on pain, suffering and attitudes towards suffering, distinguish between physical, social, psychological and spiritual needs, knows the pathophysiological and psychological aspects of spiritual care;</li> <li>- can distinguish between spiritual and psychological care;</li> <li>- can justify the validity and importance of spiritual care and knows its basic characteristics;</li> <li>- understands the approach to the provision of spiritual care to patients with and without religion and the ways in which it is provided in the health care system;</li> <li>- understands the cultural and religious changes in society and their impact on the perception of the spiritual needs of the sick; knows the history of the provision of spiritual care for the sick;</li> <li>- knows the institutions, professional associations, associations in charge of spiritual ministry, the code of ethics of persons performing spiritual ministry in the hospital;</li> <li>- understands the content and meaning of selected rituals and acts provided in the context of spiritual ministry by persons in charge of the relevant religious denominations.</li> </ul> Skills: student <ul style="list-style-type: none"> <li>- The student knows the characteristics of healthy spirituality and can distinguish between religious and non-religious spirituality;</li> <li>- Knows how to help develop spirituality in a patient;</li> </ul>	

- Knows how to identify the spiritual needs of the sick;
- Knows how to communicate and take a spiritual history;
- knows how to effectively apply the knowledge gained in the context of complex health care management and integrate it into a therapeutic plan to address the spiritual needs of the patient, taking into account the patient's preferences and values.

#### **Class syllabus:**

Basic concepts - spirituality, religiosity, spiritual care, pastoral care, spiritual ministry, spiritual needs, pathophysiology of spiritual needs. Body and soul. Who is man - Human person and philosophical anthropology. Pain and suffering in philosophy and culture. Spiritual pain and its manifestations. The importance of spirituality in medicine. Socio-cultural changes through the ages and their impact on contemporary perceptions of spirituality. Spirituality and religions. Spirituality and non-religious people. Basic characteristics of spiritual care of the sick. Psychological, legal, ethical and practical aspects of the provision of spiritual care. Spiritual and pastoral care in hospitals - organisation, content, form, capacity, limits. The health worker, the spiritual person and the volunteer as an accompanying person. The clergy person as part of a multidisciplinary team - qualifications, credentials, competencies. Comprehensive health care management of the sick person with regard to his/her preferences and values, including the integration of spiritual needs. Religious needs, acts and rituals. Communication - conducting the pastoral conversation.

#### **Recommended literature:**

TRIZULJAKOVÁ, J., MEGO, M. a kol. Duchovné aspekty starostlivosti o chorých. Bratislava: Univerzita Komenského 2024. 94 strán. ISBN 978-80-223-5907-8. ISBN 978-80-223-5908-5 (online). [https://stella.uniba.sk/texty/LF\\_kol\\_starostlivost\\_o\\_chorych-duchovne\\_aspekty.pdf](https://stella.uniba.sk/texty/LF_kol_starostlivost_o_chorych-duchovne_aspekty.pdf)

#### **Languages necessary to complete the course:**

Slovak

#### **Notes:**

The course has a limited capacity of 15 students/ together. Dentistry - 5 students

#### **Past grade distribution**

Total number of evaluated students: 1

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

**Lecturers:** MUDr. Jana Trizuljaková, PhD., prof. MUDr. Michal Mego, DrSc., prof. MUDr. Beáta Mladosičová, CSc., prof. MUDr. Alexandra Kolenová, PhD., MUDr. Andrea Škripeková, PhD., Jakub Betinský

**Last change:** 19.05.2025

**Approved by:** prof. MUDr. Peter Stanko, PhD.



## STATE EXAM DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.ChK2/L-ZL-ŠS-1/15	<b>Course title:</b> Surgery
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 9., 10..	
<b>Educational level:</b> I.II.	
<b>State exam syllabus:</b>	
<b>Last change:</b>	
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.	

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.ChK2/L-S-ZL-032/19	<b>Course title:</b> Surgery 1
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 22s / 35s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 4	
<b>Recommended semester:</b> 7.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.ChK2/L-S-ZL-037/18 - Surgical Propedeutics 2	
<b>Course requirements:</b> no absence at practicals	
<b>Learning outcomes:</b> Knowledge: basic knowlege of general surgery, traumatology, orthopaedics, urology, burns, neurosurgery, paediatric surgery. Skills: wound bandages, venepunction, assistance by minor surgical procedures. Planing of differential diagnosis in surgical diseases. Diagnostic procedures and laparoscopic skill on the trainer. Simulation workplace.	
<b>Class syllabus:</b> Management of the patient with the trauma of the musculoskeletal system, management of the patient withintracranial injury, basics of orthopaedics, basics of urology, basic management of the patients with burns.	
<b>Recommended literature:</b> Breza, J a kol.: Princípy chirurgie, Slovak Academic Press, 2016, 4.diel série Cameron, J.: Current Surgical Therapy. 8th ed. London: Churchill Livingstone, 2004, Coran G. Arnold at all.: Pediatric Surgery, Vol. 1, 2, Elsevier 2012, Černý, J. (ed.): Chirurgia tráviacej rúry. 4 zv. Martin: Osveta, 1988 Černý, J. (ed.): Špeciálna chirurgia 2. Chirurgia brušných orgánov a retroperitonea, Martin: Osveta, 1992 Černý, J. (ed.): Špeciálna chirurgia. 4 zv. Martin: Osveta, 1988-1995. Durdík, Š.: Vybrané kapitoly z onkologickej chirurgie. Bratislava: WillArt, 2009, 304s. Ferko, A., Vobořil, Z. (ed.): Chirurgie v kostce. Praha: Grada, 2002. 596 s. Haruštiak, S. a kol.: Princípy chirugie, Slovak Academic Press, 2010, 2.diel série Kaušitz, J. a kol.: Onkológia. VEDA, 663 s. Kaušitz, J. a kol.: Špeciálna onkológia. Solen, 2020 692 s. Kirk, R.M.: General Surgical Operations. 5th ed. London: Churchill Livingstone, 2006 Marek, V., Durdík, Š.: Akútna apendicitída – Včasná diagnostika a predoperačná rozvaha, 2021, 120s.	

<p>Olejník, J. (ed.): Perioperačný manuál chirurga. Bratislava: Ebner, 2002, 388 s.</p> <p>Olejník, J. (ed.): Akútna pankreatitída. Bratislava: Ebner, 2002, 68 s.</p> <p>Pechan, J.: Princípy chirurgie, PRIMA –PRINT, 2013, 3.diel série</p> <p>Pokorný, V. (ed.): Traumatologie. Praha: Triton, 2002, 307 s.</p> <p>Sabiston Textbook of Surgery 20th Edition, Elsevier 2016</p> <p>Siman, J. a kol.: Princípy chirurgie, Slovak Academic Press, 2007, 1.diel série</p> <p>Šimko, P. a kol.: Princípy chirurgie, PRIMA –PRINT, 2019, 5.diel série A</p> <p>Šimko, P. a kol.: Princípy chirurgie, PRIMA –PRINT, 2019, 5.diel série B</p> <p>Škultéty, J. : Špeciálna chirurgia I., Univerzita Komenského v Bratislave, 2014</p> <p>Štencl, J., Holéczy, P.: Základné laparoskopické operácie v chirurgii. Martin: Osveta, 2001. 131 s.</p> <p>Vidiščák, M. a kol.: Novorodenecká chirurgia I, M-Servis 2008</p> <p>Vrtík, L. a kol.: Základy chirurgie, Univerzita Komenského v Bratislave, 2019</p> <p>Way, L.W. (ed.): Současná chirurgická diagnostika a léčba. Praha: Grada, 2000, 1660 s.</p> <p>Zacharias Zachariou: Pediatric Surgery Digest, Springer 2009</p> <p>Zeman, M. (ed.): Chirurgická propedeutika. 2. vyd. Praha: Grada, 2003. 524 s.</p>																	
<p><b>Languages necessary to complete the course:</b></p> <p>Slovak</p>																	
<p><b>Notes:</b></p>																	
<p><b>Past grade distribution</b></p> <p>Total number of evaluated students: 236</p> <table> <tr> <th>A</th><th>B</th><th>C</th><th>D</th><th>E</th><th>FX</th></tr> <tr> <td>81,36</td><td>16,95</td><td>1,69</td><td>0,0</td><td>0,0</td><td>0,0</td></tr> </table>						A	B	C	D	E	FX	81,36	16,95	1,69	0,0	0,0	0,0
A	B	C	D	E	FX												
81,36	16,95	1,69	0,0	0,0	0,0												
<p><b>Lecturers:</b> doc. MUDr. Augustín Prochotský, CSc., MUDr. Pavol Mazalán, MUDr. Ivan Majeský, PhD., MUDr. Regina Muranská</p>																	
<p><b>Last change:</b> 18.06.2024</p>																	
<p><b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.</p>																	

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.ChK2/L-S-ZL-033/19	<b>Course title:</b> Surgery 2
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 18s / 35s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 3	
<b>Recommended semester:</b> 8.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.ChK2/L-S-ZL-032/19 - Surgery 1	
<b>Course requirements:</b> no absence at practicals	
<b>Learning outcomes:</b> Knowledge: improving knowledge in surgical subspecialisations - general surgery, traumatology, orthopaedics, urology, burns, neurosurgery and paediatrics surgery. Skills: ability to examine the patient with planing of the diagnostic and therapeutic algorithm. Diagnostic procedures and laparoscopic skill on the trainer. Simulation workplace.	
<b>Class syllabus:</b> Diagnostics and surgical treatment of urologic diseases, neurosurgical interventions, surgery of arterial and venous system, breast surgery.	
<b>Recommended literature:</b> Breza, J a kol.: Princípy chirurgie, Slovak Academic Press, 2016, 4.diel série Cameron, J.: Current Surgical Therapy. 8th ed. London: Churchill Livingstone, 2004, Coran G. Arnold at all.: Pediatric Surgery, Vol. 1, 2, Elsevier 2012, Černý, J. (ed.): Chirurgia tráviacej rúry. 4 zv. Martin: Osveta, 1988 Černý, J. (ed.): Špeciálna chirurgia 2. Chirurgia brušných orgánov a retroperitonea, Martin: Osveta, 1992 Černý, J. (ed.): Špeciálna chirurgia. 4 zv. Martin: Osveta, 1988-1995. Durdík, Š.: Vybrané kapitoly z onkologickej chirurgie. Bratislava: WillArt, 2009, 304s. Ferko, A., Vobořil, Z. (ed.): Chirurgie v kostce. Praha: Grada, 2002. 596 s. Haruštiak, S. a kol.: Princípy chirurgie, Slovak Academic Press, 2010, 2.diel série Kaušitz, J. a kol.: Onkológia. VEDA, 663 s. Kaušitz, J. a kol.: Špeciálna onkológia. Solen, 2020 692 s. Kirk, R.M.: General Surgical Operations. 5th ed. London: Churchill Livingstone, 2006 Marek, V., Durdík, Š.: Akútna apendicitída - Včasná diagnostika a predoperačná rozvaha, 2021, 120s. Olejník, J. (ed.): Perioperačný manuál chirurga. Bratislava: Ebner, 2002, 388 s. Olejník, J. (ed.): Akútna pankreatitída. Bratislava: Ebner, 2002, 68 s.	

<p>Pechan, J.: Princípy chirurgie, PRIMA –PRINT, 2013, 3.diel série  Pokorný, V. (ed.): Traumatologie. Praha: Triton, 2002, 307 s.  Sabiston Textbook of Surgery 20th Edition, Elsevier 2016  Šiman, J. a kol.: Princípy chirurgie, Slovak Academic Press, 2007, 1.diel série  Šimko, P. a kol.: Princípy chirurgie, PRIMA –PRINT, 2019, 5.diel série A  Šimko, P. a kol.: Princípy chirurgie, PRIMA - PRINT, 2019, 5.diel série B  Škultéty, J. : Špeciálna chirurgia I., Univerzita Komenského v Bratislave, 2014  Štencl, J., Holéczy, P.: Základné laparoskopické operácie v chirurgii. Martin: Osveta, 2001, 131 s.  Vidiščák, M. a kol.: Novorodenecká chirurgia I, M-Servis 2008  Vrtík, L. a kol.: Základy chirurgie, Univerzita Komenského v Bratislave, 2019  Way, L.W. (ed.): Současná chirurgická diagnostika a léčba. Praha: Grada, 2000, 1660 s.  Zacharias Zachariou: Pediatric Surgery Digest, Springer 2009  Zeman, M. (ed.): Chirurgická propedeutika. 2. vyd. Praha: Grada, 2003. 524 s.</p>					
<b>Languages necessary to complete the course:</b> Slovak					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 236					
A	B	C	D	E	FX
87,29	12,71	0,0	0,0	0,0	0,0
<b>Lecturers:</b> doc. MUDr. Augustín Prochotský, CSc., MUDr. Ivan Majeský, PhD., MUDr. Pavol Mazalán, MUDr. Júlia Bujňáková, MUDr. Martin Ježovít, MUDr. Ivana Majeská, MUDr. Peter Levčík, MUDr. Jaroslav Sekáč, PhD., MUDr. Peter Štefánik					
<b>Last change:</b> 18.06.2024					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.ChK2/L-S-ZL-034/20	<b>Course title:</b> Surgery 3
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 24s / 30s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 3	
<b>Recommended semester:</b> 9.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.ChK2/L-S-ZL-033/19 - Surgery 2	
<b>Course requirements:</b> no absence at practicals,	
<b>Learning outcomes:</b> Knowledge: improving of the knowlege - esophageal surgery, stomach, small and large intestine, anus, liver, pancreas, gallblader and biliary tree, angiosurgery, operations of acute abdomen, paediatric orthopaedy. Skills: cognitive skills in differential diagnostics and therapy of surgical diseases. Diagnostic procedures and laparoscopic skill on the trainer. Simulation workplace.	
<b>Class syllabus:</b> Surgery of esophagus, stomach, small and large intestine, anus, liver, pancreas, gallblader and biliary tree, angiosurgical procedures, operations in acute abdomen patients, paediatric orthopaedy.	
<b>Recommended literature:</b> Breza, J a kol.: Princípy chirurgie, Slovak Academic Press, 2016, 4.diel série Cameron, J.: Current Surgical Therapy. 8th ed. London: Churchill Livingstone, 2004, Coran G. Arnold at all.: Pediatric Surgery, Vol. 1, 2, Elsevier 2012, Černý, J. (ed.): Chirurgia tráviacej rúry. 4 zv. Martin: Osveta, 1988 Černý, J. (ed.): Špeciálna chirurgia 2. Chirurgia brušných orgánov a retroperitonea, Martin: Osveta, 1992 Černý, J. (ed.): Špeciálna chirurgia. 4 zv. Martin: Osveta, 1988-1995. Durdík, Š.: Vybrané kapitoly z onkologickej chirurgie. Bratislava: WillArt, 2009, 304s. Ferko, A., Vobořil, Z. (ed.): Chirurgie v kostce. Praha: Grada, 2002. 596 s. Haruštiak, S. a kol.: Princípy chirurgie, Slovak Academic Press, 2010, 2.diel série Kaušitz, J. a kol.: Onkológia. VEDA, 663 s. Kaušitz, J. a kol.: Špeciálna onkológia. Solen, 2020 692 s. Kirk, R.M.: General Surgical Operations. 5th ed. London: Churchill Livingstone, 2006 Marek, V., Durdík, Š.: Akútna apendicitída - Včasná diagnostika a predoperačná rozvaha, 2021, 120s. Olejník, J. (ed.): Perioperačný manuál chirurga. Bratislava: Ebner, 2002, 388 s.	

Olejník, J. (ed.): Akútna pankreatitída. Bratislava: Ebner, 2002, 68 s.  
Pechan, J.: Princípy chirurgie, PRIMA - PRINT, 2013, 3.diel série  
Pokorný, V. (ed.): Traumatologie. Praha: Triton, 2002, 307 s.  
Sabiston Textbook of Surgery 20th Edition, Elsevier 2016  
Šiman, J. a kol.: Princípy chirurgie, Slovak Academic Press, 2007, 1.diel série  
Šimko, P. a kol.: Princípy chirurgie, PRIMA - PRINT, 2019, 5.diel série A  
Šimko, P. a kol.: Princípy chirurgie, PRIMA - PRINT, 2019, 5.diel série B  
Škultéty, J. : Špeciálna chirurgia I., Univerzita Komenského v Bratislave, 2014  
Štencl, J., Holéczy, P.: Základné laparoskopické operácie v chirurgii. Martin: Osveta, 2001, 131 s.  
Vidiščák, M. a kol.: Novorodenecká chirurgia I, M-Servis 2008  
Vrtík, L. a kol.: Základy chirurgie, Univerzita Komenského v Bratislave, 2019  
Way, L.W. (ed.): Současná chirurgická diagnostika a léčba. Praha: Grada, 2000, 1660 s.  
Zacharias Zachariou: Pediatric Surgery Digest, Springer 2009  
Zeman, M. (ed.): Chirurgická propedeutika. 2. vyd. Praha: Grada, 2003. 524 s.

**Languages necessary to complete the course:**

Slovak

**Notes:**

**Past grade distribution**

Total number of evaluated students: 196

A	B	C	D	E	FX
97,45	2,55	0,0	0,0	0,0	0,0

**Lecturers:** doc. MUDr. Augustín Prochotský, CSc., doc. MUDr. Eliška Kubíková, PhD., MPH, MUDr. Júlia Bujňáková, MUDr. Martin Ježovít, MUDr. Ivana Majeská, MUDr. Peter Levčík, MUDr. Jaroslav Sekáč, PhD., MUDr. Peter Štefánik, MUDr. Ivan Majeský, PhD.

**Last change:** 18.06.2024

**Approved by:** prof. MUDr. Peter Stanko, PhD.

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.ChK2/L-S-ZL-035/20	<b>Course title:</b> Surgery 4
<b>Educational activities:</b> <b>Type of activities:</b> seminar / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 10s / 50s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 4	
<b>Recommended semester:</b> 10.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.ChK2/L-S-ZL-034/20 - Surgery 3	
<b>Course requirements:</b> - no absence at practicals State exam:- result of the test minimum 60 % - practical part - oral part The global evaluation we create from the average of the recieved parts.	
<b>Learning outcomes:</b> Knowledge: Completion of knowledge of the general surgery and surgical subspecialisations. Skills:cognitive skills, student is able to create the surgical algorithm of differential diagnostics and treatment of an surgical patient. Diagnostic procedures and laparoscopic skill on the trainer. Simulation workplace.	
<b>Class syllabus:</b> During the 2-week praxis a student works in the out-patient clinic, operating rooms and at the department as young secondary doctor. The students attend the ward rounds, seminars, assisting operations and minor surgical diagnostic and therapeutic interventions with supervision of a doctor.	
<b>Recommended literature:</b> Breza, J a kol.: Princípy chirurgie, Slovak Academic Press, 2016, 4.diel série Cameron, J.: Current Surgical Therapy. 8th ed. London: Churchill Livingstone, 2004, Coran G. Arnold at all.: Pediatric Surgery, Vol. 1, 2, Elsevier 2012, Černý, J. (ed.): Chirurgia tráviacej rúry. 4 zv. Martin: Osveta, 1988 Černý, J. (ed.): Špeciálna chirurgia 2. Chirurgia brušných orgánov a retroperitonea, Martin: Osveta, 1992 Černý, J. (ed.): Špeciálna chirurgia. 4 zv. Martin: Osveta, 1988-1995. Durdík, Š.: Vybrané kapitoly z onkologickej chirurgie. Bratislava: WillArt, 2009, 304s. Ferko, A., Vobořil, Z. (ed.): Chirurgie v kostce. Praha: Grada, 2002. 596 s. Haruštiak, S. a kol.: Princípy chirurgie, Slovak Academic Press, 2010, 2.diel série Kaušitz, J. a kol.: Onkológia. VEDA, 663 s. Kaušitz, J. a kol.: Špeciálna onkológia. Solen, 2020 692 s.	



Kirk, R.M.: General Surgical Operations. 5th ed. London: Churchill Livingstone, 2006

Marek, V., Durdík, Š.: Akútna apendicitída - Včasná diagnostika a predoperačná rozvaha, 2021, 120s.

Olejník, J. (ed.): Perioperačný manuál chirurga. Bratislava: Ebner, 2002, 388 s.

Olejník, J. (ed.): Akútna pankreatitída. Bratislava: Ebner, 2002, 68 s.

Pechan, J.: Princípy chirurgie, PRIMA - PRINT, 2013, 3.diel série

Pokorný, V. (ed.): Traumatologie. Praha: Triton, 2002, 307 s.

Sabiston Textbook of Surgery 20th Edition, Elsevier 2016

Siman, J. a kol.: Princípy chirurgie, Slovak Academic Press, 2007, 1.diel série

Šimko, P. a kol.: Princípy chirurgie, PRIMA - PRINT, 2019, 5.diel série A

Šimko, P. a kol.: Princípy chirurgie, PRIMA - PRINT, 2019, 5.diel série B

Škultéty, J. : Špeciálna chirurgia I., Univerzita Komenského v Bratislave, 2014

Štencl, J., Holéczy, P.: Základné laparoskopické operácie v chirurgii. Martin: Osveta, 2001. 131 s.

Vidiščák, M. a kol.: Novorodenecká chirurgia I, M-Servis 2008

Vrtík, L. a kol.: Základy chirurgie, Univerzita Komenského v Bratislave, 2019

Way, L.W. (ed.): Současná chirurgická diagnostika a léčba. Praha: Grada, 2000, 1660 s.

Zacharias Zachariou: Pediatric Surgery Digest, Springer 2009

Zeman, M. (ed.): Chirurgická propedeutika. 2. vyd. Praha: Grada, 2003. 524 s.

**Languages necessary to complete the course:**

Slovak

**Notes:**

**Past grade distribution**

Total number of evaluated students: 196

A	B	C	D	E	FX
91,33	7,65	1,02	0,0	0,0	0,0

**Lecturers:** prof. MUDr. Peter Labaš, CSc., doc. MUDr. Eliška Kubíková, PhD., MPH, doc. MUDr. Augustín Prochotský, CSc., MUDr. Júlia Bujňáková, MUDr. Martin Ježovít, MUDr. Ivana Majeská, MUDr. Peter Levčík, MUDr. Jaroslav Sekáč, PhD., MUDr. Peter Štefánik, MUDr. Ivan Majeský, PhD., doc. MUDr. Marek Čambal, PhD.

**Last change:** 18.06.2024

**Approved by:** prof. MUDr. Peter Stanko, PhD.

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.ChK2/L-S-ZL-036/18	<b>Course title:</b> Surgical Propedeutics 1
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 12s / 16s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 5.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> zero absence at practicals	
<b>Learning outcomes:</b> Knowledge: Theoretical knowledge of the surgical examination (basics) Skills: Cognitive skills in the basics of surgery, history of the patient, examination of the patient. Diagnostic procedures and laparoscopic skill on the trainer. Simulation workplace	
<b>Class syllabus:</b> Medical history of a patient, physical examination, paraclinical examinations, anti-sepsis, asepsis, wound surgery, tetanus, shock, transfusions, nutrition.	
<b>Recommended literature:</b> Odporúčaná literatúra: Breza, J a kol.: Princípy chirurgie, Slovak Academic Press, 2016, 4.diel série Cameron, J.: Current Surgical Therapy. 8th ed. London: Churchill Livingstone, 2004, Coran G. Arnold at all.: Pediatric Surgery, Vol. 1, 2, Elsevier 2012, Černý, J. (ed.): Chirurgia tráviacej rúry. 4 zv. Martin: Osveta, 1988 Černý, J. (ed.): Špeciálna chirurgia 2. Chirurgia brušných orgánov a retroperitonea, Martin: Osveta, 1992 Černý, J. (ed.): Špeciálna chirurgia. 4 zv. Martin: Osveta, 1988-1995. Durdík, Š.: Vybrané kapitoly z onkologickej chirurgie. Bratislava: WillArt, 2009, 304s. Ferko, A., Vobořil, Z. (ed.): Chirurgie v kostce. Praha: Grada, 2002. 596 s. Haruštiak, S. a kol.: Princípy chirurgie, Slovak Academic Press, 2010, 2.diel série Kaušitz, J. a kol.: Onkológia. VEDA, 663 s. Kaušitz, J. a kol.: Špeciálna onkológia. Solen, 2020 692 s. Kirk, R.M.: General Surgical Operations. 5th ed. London: Churchill Livingstone, 2006 Marek, V., Durdík, Š.: Akútna apendicitída – Včasná diagnostika a predoperačná rozvaha, 2021, 120s. Olejník, J. (ed.): Perioperačný manuál chirurga. Bratislava: Ebner, 2002, 388 s. Olejník, J. (ed.): Akútna pankreatitída. Bratislava: Ebner, 2002, 68 s.	

<p>Pechan, J.: Princípy chirurgie, PRIMA –PRINT, 2013, 3.diel série  Pokorný, V. (ed.): Traumatologie. Praha: Triton, 2002, 307 s.  Sabiston Textbook of Surgery 20th Edition, Elsevier 2016  Šiman, J. a kol.: Princípy chirurgie, Slovak Academic Press, 2007, 1.diel série  Šimko, P. a kol.: Princípy chirurgie, PRIMA –PRINT, 2019, 5.diel série A  Šimko, P. a kol.: Princípy chirurgie, PRIMA –PRINT, 2019, 5.diel série B  Škultéty, J. : Špeciálna chirurgia I., Univerzita Komenského v Bratislave, 2014  Štencl, J., Holéczy, P.: Základné laparoskopické operácie v chirurgii. Martin: Osveta, 2001. 131 s.  Vidiščák, M. a kol.: Novorodenecká chirurgia I, M-Servis 2008  Vrtík, L. a kol.: Základy chirurgie, Univerzita Komenského v Bratislave, 2019  Way, L.W. (ed.): Současná chirurgická diagnostika a léčba. Praha: Grada, 2000, 1660 s.  Zacharias Zachariou: Pediatric Surgery Digest, Springer 2009  Zeman, M. (ed.): Chirurgická propedeutika. 2. vyd. Praha: Grada, 2003. 524 s.</p>					
<b>Languages necessary to complete the course:</b> Slovak					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 276					
A	B	C	D	E	FX
92,75	4,35	2,17	0,72	0,0	0,0
<b>Lecturers:</b> doc. MUDr. Augustín Prochotský, CSc., MUDr. Ivan Majeský, PhD., MUDr. Júlia Bujňáková, MUDr. Ivana Majeská, MUDr. Peter Levčík, MUDr. Jaroslav Sekáč, PhD., MUDr. Martin Nemček					
<b>Last change:</b> 17.06.2024					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.ChK2/L-S-ZL-037/18	<b>Course title:</b> Surgical Propedeutics 2
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 24s / 24s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 3	
<b>Recommended semester:</b> 6.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.ChK2/L-S-ZL-036/18 - Surgical Propedeutics 1	
<b>Course requirements:</b> - zero absence at the practicals	
<b>Learning outcomes:</b> Knowledge: theoretical knowledge of the basic aspects of surgical preoperative, perioperative and postoperative care, theory and basics of burn injuries and other injuries. Skills: complex surgical examination of the patient, establishing of the working diagnosis. Diagnostic procedures and laparoscopic skill on the trainer. Simulation workplace.	
<b>Class syllabus:</b> burn injury, surgical management of fractures, joints, peri- and postoperative complications, resuscitation, thromboembolic disease, abscess, transfusion and nutrition.	
<b>Recommended literature:</b> Breza, J a kol.: Princípy chirurgie, Slovak Academic Press, 2016, 4.diel série Cameron, J.: Current Surgical Therapy. 8th ed. London: Churchill Livingstone, 2004, Coran G. Arnold at all.: Pediatric Surgery, Vol. 1, 2, Elsevier 2012, Černý, J. (ed.): Chirurgia tráviacej rúry. 4 zv. Martin: Osveta, 1988 Černý, J. (ed.): Špeciálna chirurgia 2. Chirurgia brušných orgánov a retroperitonea, Martin: Osveta, 1992 Černý, J. (ed.): Špeciálna chirurgia. 4 zv. Martin: Osveta, 1988-1995. Durdík, Š.: Vybrané kapitoly z onkologickej chirurgie. Bratislava: WillArt, 2009, 304s. Ferko, A., Vobořil, Z. (ed.): Chirurgie v kostce. Praha: Grada, 2002. 596 s. Haruštiak, S. a kol.: Princípy chirurgie, Slovak Academic Press, 2010, 2.diel série Kaušitz, J. a kol.: Onkológia. VEDA, 663 s. Kaušitz, J. a kol.: Špeciálna onkológia. Solen, 2020 692 s. Kirk, R.M.: General Surgical Operations. 5th ed. London: Churchill Livingstone, 2006 Marek, V., Durdík, Š.: Akútna apendicitída - Včasná diagnostika a predoperačná rozvaha, 2021, 120s. Olejník, J. (ed.): Perioperačný manuál chirurga. Bratislava: Ebner, 2002, 388 s. Olejník, J. (ed.): Akútna pankreatitída. Bratislava: Ebner, 2002, 68 s.	

<p>Pechan, J.: Princípy chirurgie, PRIMA –PRINT, 2013, 3.diel série  Pokorný, V. (ed.): Traumatologie. Praha: Triton, 2002, 307 s.  Sabiston Textbook of Surgery 20th Edition, Elsevier 2016  Šiman, J. a kol.: Princípy chirurgie, Slovak Academic Press, 2007, 1.diel série  Šimko, P. a kol.: Princípy chirurgie, PRIMA - PRINT, 2019, 5.diel série A  Šimko, P. a kol.: Princípy chirurgie, PRIMA - PRINT, 2019, 5.diel série B  Škultéty, J. : Špeciálna chirurgia I., Univerzita Komenského v Bratislave, 2014  Štencl, J., Holéczy, P.: Základné laparoskopické operácie v chirurgii. Martin: Osveta, 2001. 131 s.  Vidiščák, M. a kol.: Novorodenecká chirurgia I, M-Servis 2008  Vrtík, L. a kol.: Základy chirurgie, Univerzita Komenského v Bratislave, 2019  Way, L.W. (ed.): Současná chirurgická diagnostika a léčba. Praha: Grada, 2000, 1660 s.  Zacharias Zachariou: Pediatric Surgery Digest, Springer 2009  Zeman, M. (ed.): Chirurgická propedeutika. 2. vyd. Praha: Grada, 2003. 524 s.</p>					
<b>Languages necessary to complete the course:</b> Slovak					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 276					
A	B	C	D	E	FX
64,86	23,55	9,78	1,81	0,0	0,0
<b>Lecturers:</b> doc. MUDr. Augustín Prochotský, CSc., MUDr. Ivan Majeský, PhD., MUDr. Pavol Mazalán, MUDr. Júlia Bujňáková, MUDr. Martin Ježovít, MUDr. Ivana Majeská, MUDr. Peter Levčík, MUDr. Jaroslav Sekáč, PhD., MUDr. Peter Štefánik					
<b>Last change:</b> 17.06.2024					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## STATE EXAM DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-ZL-ŠS-5/16	<b>Course title:</b> Therapeutic Dentistry
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 11., 12..	
<b>Educational level:</b> I.II.	
<b>State exam syllabus:</b>	
<b>Last change:</b>	
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.	

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-086/21	<b>Course title:</b> Therapeutic Dentistry 1
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 10s / 30s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 2	
<b>Recommended semester:</b> 11.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.KSMCh/L-S-ZL-047/20 - Restorative Dentistry 3	
<b>Course requirements:</b> - 100% attendance at the practicals - performing the required amount of specified practical treatments - 1 written test (minimum 60% of correct answers) Test evaluation: A: 91 - 100 %, B: 81 - 90 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 - 0%. The overall rating is determined from the average of the ratings obtained.	
<b>Learning outcomes:</b> Knowledge: Prevention, diagnosis, and therapy of oral diseases. A comprehensive understanding of dental and oral care in relation to the whole organism. Dental treatment of medically compromised patients. Skills: Determining an individual's caries activity. Adjustment of dietary habits. Local fluoridation methods. Oral hygiene methodology. Fissure sealing. Methods of treatment of the periodontal pocket.	
<b>Class syllabus:</b> Endodontic diagnostics and its therapeutic possibilities. Preventive and therapeutic programs in the field of oral health. Relationship between oral diseases and general diseases. Contexts of diseases of hard dental tissues, dental pulp and periodontium. The unity of the tooth and the periodontal apparatus. Preventive and therapeutic aspects in restorative dentistry (non-invasive and mini-invasive treatment of dental caries and non-carious defects of dental hard tissues, Mount's classification of caries lesions and methods of their treatment). Possibilities of prevention and therapy of periodontal diseases and diseases of the oral mucosa. Relationship of the ortodontics with other departments. Dental treatment and prevention of complications in patients with general diseases.	
<b>Recommended literature:</b> Stejskalová J. a kol. : Konzervační zubní lékařství. Grada Praha 2003. Peřinka L. a kol.: Základy klinické endodoncie. Quintessenz Praha 2003. Kilian J. a kol.: Prevence ve stomatologii. Galen, Karolinum, 1999 Hellwig E. A kol. : Záchovná stomatologie a parodontologie, Grada Praha 2003.	

<b>Languages necessary to complete the course:</b> Slovak					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 154					
A	B	C	D	E	FX
59,09	34,42	6,49	0,0	0,0	0,0
<b>Lecturers:</b> MUDr. Bohuslav Novák, PhD.					
<b>Last change:</b> 06.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					



## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.KSMCh/L-S-ZL-087/21	<b>Course title:</b> Therapeutic Dentistry 2
<b>Educational activities:</b> <b>Type of activities:</b> lecture / seminar / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 12s / 10s / 104s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 8	
<b>Recommended semester:</b> 12.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.KSMCh/L-S-ZL-086/21 - Therapeutic Dentistry 1	
<b>Course requirements:</b> - 100% attendance at the practicals - performing the required amount of specified practical treatments - 1 written test (minimum 60% of correct answers) State exam: -practical part: examination of patient, practical procedure from the field of therapeutic dentistry, evaluation of intraoral radiograph and OPG, writing medical record -theoretical part: 4 questions Test evaluation: A: 91 - 100 %, B: 81 - 90 %, C: 73 - 80 %, D: 66 - 72 %, E: 60 - 65 %, Fx: 59 - 0%. The overall rating is determined from the average of the ratings obtained.	
<b>Learning outcomes:</b> Knowledge: Prevention, diagnosis, and therapy of oral diseases. A comprehensive understanding of dental and oral care in relation to the whole organism. Dental treatment of medically compromised patients. Skills: Examination and treatment plan for the dental patient. Diagnosis of painful feelings in the orofacial area. Therapeutic plan of a dental patient with general diseases. Diagnosis of oral focal infection. External and internal teeth whitening. Therapeutic treatment of pulpoperiodontal lesions.	
<b>Class syllabus:</b> Examination and treatment plan for the dental patient. X-ray examination in therapeutic dentistry. Radiovisiography and 3D examination. Orofacial pain symptom. Problems of filling therapy. Modern endodontic diagnostic and therapeutic procedures. Enamel, dentin and pulp defence mechanisms. Discoloration of dental crown and hard dental tissues. Teeth whitening. Preventive and therapeutic aspects in therapeutic dentistry. Relationship between oral diseases and general diseases. Treatment of compromised patients. ATB in the prophylaxis of transient bacteremia.	
<b>Recommended literature:</b> Stejskalová J. a kol. : Konzervační zubní lékařství. Grada Praha 2003. Peřinka L. a kol.: Základy klinické endodoncie. Quintessenz Praha 2003. Kilian J. a kol.: Prevence ve stomatologii. Galen, Karolinum, 1999	

Hellwig E. A kol. : Záchovná stomatologie a parodontologie, Grada Praha 2003.					
<b>Languages necessary to complete the course:</b> Slovak					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 154					
A	B	C	D	E	FX
32,47	45,45	18,83	1,3	1,95	0,0
<b>Lecturers:</b> MUDr. Andrea Nováková, PhD.					
<b>Last change:</b> 06.12.2022					
<b>Approved by:</b> prof. MUDr. Peter Stanko, PhD.					

## COURSE DESCRIPTION

<b>Academic year:</b> 2024/2025	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> LF.AÚ/L-S-ZL-088/17	<b>Course title:</b> Topographical Anatomy of the Head
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: per level/semester:</b> 14s / 14s <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 3	
<b>Recommended semester:</b> 3.	
<b>Educational level:</b> I.II.	
<b>Prerequisites:</b> LF.AÚ/L-S-ZL-002/16 - Anatomy 2	
<b>Course requirements:</b> - 100% participation on the practical exercises. - Passing 1 practical exam. - Practical exam evaluation: A: excellent, B: very good, C: good, D: satisfactory, E: sufficiently, Fx: failed. Final exam: - Oral exam (2 questions), the student has 20 minutes to prepare. Exam evaluation: A: excellent, B: very good, C: good, D: satisfactory, E: sufficiently, Fx: failed.	
<b>Learning outcomes:</b> Knowledge: - Knowledge synthesis of systematic and topographical anatomy of the head and neck. Skills: - Analyzing of the gained knowledge from the morphological and clinical point of views. - Clinical application of the achieved theoretical knowledge (anatomical aspect of coniotomy and tracheotomy, regional and distant spreading of dentogenic inflammations) - Handling radio-diagnostic correlation.	
<b>Class syllabus:</b> Lectures: Topographical regions of the head. Topographical regions of the neck. Salivary glands. Temporomandibular joint. Muscles of mastication. Muscles of facial expression. Sensory and motor innervation of the head and neck. Roentgenological anatomy. Masticatory muscles and their influence on dislocations of fragments in orofacial bone fractures. Topography of lymphatic system, salivary glands and the temporomandibular joint. Clinical application of anatomical knowledge in coniotomy and tracheotomy. Topographical anatomy of mouth floor and act of swallowing. Practicals: Topographic regions of the head - dissection. Topographic regions of the neck - dissection. Cavitas oris: vestibulum oris, lingua, soft palate, hard palate, floor of the mouth, swallowing, topographic anatomy of teeth, caries, gangrene, tooth pulp inflammation, local spread of the dentogenic inflammations. Radiographic correlation.	

**Recommended literature:**

- MRÁZ, P., BÍNOVSKÝ, A., HOLOMÁŇOVÁ, A., OSVALDOVÁ, M., RUTTKAY-NEDECKÁ, E. Anatomia ľudského tela. I. 4. vydanie. Bratislava : SAP, 2021, 510 s. ISBN 9788089607891
- MRÁZ, P., BELEJ, K., BEŇUŠKA, J., HOLOMÁŇOVÁ, A., MACKOVÁ, M., ŠTEŇOVÁ, J. Anatomia ľudského tela. II. Bratislava : SAP, 2021, 496 s. ISBN 9788089607921
- KUBÍKOVÁ, E., EL FALOUGY, H. a Kolektív. Klinická anatomia. Bratislava: Univerzita Komenského, 2020, 330 s. ISBN 978-80-223-5103-4.
- LIEBGOTT, B. The Anatomical Basis of Dentistry. 5th edition. St. Louis: Elsevier, 2023, 496p. ISBN 9780323824057

**Languages necessary to complete the course:**

Slovak

**Notes:****Past grade distribution**

Total number of evaluated students: 324

A	B	C	D	E	FX
85,49	10,49	2,78	0,62	0,31	0,31

**Lecturers:** prof. MUDr. Peter Stanko, PhD., doc. MUDr. Eliška Kubíková, PhD., MPH, prof. MUDr. Štefan Polák, CSc.

**Last change:** 24.05.2024

**Approved by:** prof. MUDr. Peter Stanko, PhD.