CONTENT

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ AL-GMp/23	**Course name:** Algesiology

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 0 / 1 **Per study period:** 0 / 14
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 9.

Course level: I.II.

Prerequisities: MI-Pr/PM-GM1p/23 and MI-Pr/S-GM1p/23

Conditions for course completion:
1. 100% participation on the practical exercises
2. Test - minimum percentage of 60%.

Learning outcomes:
Basic knowledge about the treatment of acute postoperative and post-traumatic pain, methods of obstetric analgesia.
Basic knowledge about methods of the treatment of chronic cancer and non-cancer pain.

Brief outline of the course:
History of pain therapy
Pain - definition, pathophysiology, psychological aspects of pain, classification
Therapy of pain – multidisciplinary approach, rational pharmacotherapy of acute and chronic pain, regional anaesthetic technics - their role in pain therapy
Opioids in the pain treatment – good clinical practice
Pain in children, pain in geriatric patients
Chronic postsurgical pain
Labor analgesia
Cancer pain and paliative care
Chronic non-cancer pain (low back pain, myofascial pain, neuropatic pain states...)
Invasive technics in the treatment of low back pain
Interventional pain management – diagnostic procedures
Interventional pain management – therapeutic procedures

Recommended literature:
1. Adams A. P., Cashman J. N.: Anaesthesia, Analgesia and Intensive care, 1991
2. www.postoppain.org
3. http://www.iasp-pain.org

Course language:
English language

Notes:

Course assessment Total number of assessed students: 0					
A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0
Provides:					
Date of last modification: 12.05.2022					
Approved:					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ AIM-GMp/23	**Course name:** Anaesthesiology and Intensive Medicine

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 2 / 2 **Per study period:** 28 / 28
Course method: present

Number of ECTS credits: 3

Recommended semester/trimester of the course: 10.

Course level: I.II.

Prerequisities: MI-Pr/IM-GM3p/23 and MI-Pr/NL-GM1p/23 and MI-Pr/PM-GM1p/23

Conditions for course completion:
1. 100% participation on the practical exercises
2. Practical examination of cardiopulmonary resuscitation - that at least the 75% criteria
3. Test - minimum percentage of 60%.
4. Oral exam

Learning outcomes:
General Principles of General Anaesthesia and Regional Anaesthesia, perioperative patient management
General Principles of Care about Critically ill Patients
CPR-Basic life support

Brief outline of the course:
Introduction to Anaesthesiology & Resuscitation. General preoperative preparation. Monitoring in Anaesthesiology & ICU. General anaesthesia. Regional anaesthesia. Acute and chronic pain management. Respiratory failure. Basic of Artificial ventilation. Enteral and parenteral nutrition. Shock. Multiorgan failure. General and specific treatment of intoxications. Life support and adwanced life support.

Recommended literature:
1. Critical Care Medicine at a Glance, 3rd Edition Autor: Richard Leach 2014
2. Anaesthesia at a Glance by Julian Stone, William Fawcett 2014,,
3. C.Spoors, K.Kiff: Training in anaesthesia, 2010

Course language:
English language

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:
Date of last modification: 12.05.2022
Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ A-GM1p/23	**Course name:** Anatomy 1

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 4 / 5 **Per study period:** 56 / 70
Course method: present

Number of ECTS credits: 10

Recommended semester/trimester of the course: 1.

Course level: I.II.

Prerequisities:

Conditions for course completion:
In order to successfully complete the subject and obtain credits, it is necessary to:
- Active participation in lectures (three absences without giving a reason are allowed).
- 100% active mandatory participation in practical lessons. If a student misses a practical lesson (maximum 3 times) due to serious health or family reasons, his/her absence must be excused by the teacher and the compensation of the missing practical lesson completed at the Department of Anatomy within ongoing practical lessons/seminars of other groups until the end of winter term. Compensation is not allowed one week before the practical test.
- Theoretical and methodical mastery of practical tasks.
The student:
- is required to pass all theoretical (written) and practical tests
- must reach at least 60% i.e. 72 points from 120 points obtained by the sum of 3 theoretical tests
-must reach at least 60% i.e. 36 points from 60 points obtained by the sum of 3 practical tests
- is entitled to participate in retaken tests in the examination period of the WT from the curriculum of the entire semester under the condition that: he/she has achieved min. 30% of 120 points i.e. 36 points obtained by the sum of 3 theoretical tests and at the same time 30% of 60 points i.e. 18 points obtained by the sum of 3 practical tests.
Other conditions:
- A student who does not justify his non-participation in writing the tests in accordance with the established rules, does not achieve at least 60% of the theoretical and practical tests and does not succeed even in the retaken term, will be automatically evaluated with the grade Fx - "failed".
- Continuous control tests are evaluated based on the number of points achieved (%) with evaluation according to the Study Regulations of the UPJŠ in Košice, Faculty of Medicine, II. part, Art. 13, paragraph 4.
- Final credit rating "passed A to E"
- The final assessment takes into account the results of the continuous assessment

Learning outcomes:
The aim of this subject is to use anatomical nomenclature, to know the structure of upper and lower limbs – bones, joints, muscles, vessels, and nerves, the thorax and abdomen – comprising bones, joints, muscles, vessels, and nerves, including the heart and organs of respiratory, digestive system, and peritoneum as well. Study of anatomical structures location in individual regions of upper and

lower limbs, thorax, and abdomen in mutual topographical relationships with the ability to apply it in practical medicine. Knowledge gained from the study of both systemic and regional anatomy of upper and lower limbs, respiratory and digestive systems, thorax, and abdomen should be used for application from the functional anatomy point of view.

Brief outline of the course:
Ethical principles in teaching of anatomy, introduction to anatomy. Knowledge of anatomical nomenclature and their using during the study of anatomy and in practical medicine. Become familiar with general knowledge of bones, joints, muscles, vessels, and nerves. Study of the skeleton, joints, and muscles of upper and lower limbs, thorax and abdomen including organs, blood and lymphatic systems and innervation. Superficial and deep structures in individual regions of limbs, thorax, and abdomen with emphasis on their topographical relationships and practical application.

Recommended literature:
Povinná literatúra:
PLATZER, W.: Color Atlas of Human Anatomy: Locomotor System. Thieme, 2014
FRITSCH, H., KUEHNEL, W.: Color Atlas of Human Anatomy: Internal organs. Thieme, 2014
KAHLE, W., FROTSCHER, M.: Color Atlas of Human Anatomy: Nervous system and Sensory organs. Thieme, 2015
Odporúčaná literatúra:
DRAKE, R., VOGL, A., MITCHELL, A.: Gray's Anatomy for students. Elsevier, 2019
HUDÁK, R., KACHLÍK, D. et al.: Memorix of Anatomy, Triton, 2015
MOORE, K.L. et al.: Clinically Oriented Anatomy. Wolters Kluwer Health, 2022
NETTER, F.H.: Atlas of Human Anatomy. Elsevier Science, 2018
PAULSEN, F., WASCHKE, J.: Sobotta Atlas of Human Anatomy: General Anatomy and Musculoskeletal System. Elsevier, 2013
PAULSEN, F., WASCHKE, J.: Sobotta Atlas of Human Anatomy: Internal Organs. Elsevier, 2013
PAULSEN, F., WASCHKE, J.: Sobotta Atlas of Human Anatomy: Head, Neck, and Neuroanatomy. Elsevier, 2013
ROHEN, J.W, YOKOSHI, CH., LŰTJEN-DRECOLL, E.: Photographic Atlas of Anatomy. Wolters Kluwer Health, 2021

Course language:
English

Notes:

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 31.10.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ A-GM2p/23	**Course name:** Anatomy 2

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 4 / 5 **Per study period:** 56 / 70
Course method: present

Number of ECTS credits: 11

Recommended semester/trimester of the course: 2.

Course level: I.II.

Prerequisities: MI-Pr/A-GM1p/23

Conditions for course completion:
In order to successfully complete the subject and obtain credits, it is necessary to:
- Active participation in lectures (three absences without giving a reason are allowed).
- 100% active mandatory participation in practical lessons. If a student misses a practical lesson (maximum 3 times) due to serious health or family reasons, his/her absence must be excused by the teacher and the compensation of the missing practical lesson completed at the Department of Anatomy within ongoing practical lessons/seminars of other groups until the end of summer term. Compensation is not allowed one week before the practical test.
- Theoretical and methodical mastery of practical tasks.
The student:
• is required to pass all theoretical (written) and practical tests
• must reach at least 60% i.e., 72 points from 120 points obtained by the sum of 3 theoretical tests
• must reach at least 60% i.e., 36 points from 60 points obtained by the sum of 3 practical tests
• is entitled to participate in retaken tests in the examination period of the ST from the curriculum of the entire semester under the condition that: he/she has achieved min. 30% of 120 points i.e., 36 points obtained by the sum of 3 theoretical tests and at the same time 30% of 60 points i.e., 18 points obtained by the sum of 3 practical tests.
Other conditions:
- student who does not justify his/her non-participation in writing tests in accordance with the established rules, does not achieve at least 60% of the written and practical tests and does not succeed even in the retaken term, will automatically be graded X - "unclassified".
- Continuous control tests are evaluated based on the number of points achieved (%) with evaluation according to the Study Regulations of the UPJŠ in Košice, Faculty of Medicine, II. part, Art. 13, paragraph 4.
- Student who fulfilled conditions, is allowed to register for the final exam
- Final exam: evaluation according to the table attached "A to E"
- The final assessment takes into account the results of the interim assessment
Evaluation of the final exam:
100 – 93 /A/ excellent
92 – 85 /B/ very good
84 – 77 /C/ good

76 – 69 /D/ satisfactory
68 – 60 /E/ sufficient
59 and below /FX/ fail

Learning outcomes:

Study of anatomical structures of the retroperitoneal space and lesser pelvis including the urinary system, male and female genital organs in mutual topographical relationships. Detailed study of skull, joints, and muscles of the head and neck. Become familiar with the blood supply, venous and lymphatic drainage of the head and neck. Detailed study of cranial nerves, their topography, branches, and function. Become familiar with other nerves of the head and neck (cervical plexus, sympathetic trunk). The need of knowledge all areas of the head and neck and their relationships. Understanding of individual parts of the central nervous system (CNS), study of external and internal features of the brain, its function as a control center for all systems of human body. Acquiring knowledge about the blood supply, venous drainage, coverings, and ventricles of the brain. Anatomical description and function of the eye, ear, skin, and endocrine glands complete the information needed for students. Knowledge obtained are important for functional anatomy and neuroanatomy to acquire an overview of the human body and interrelationships between various anatomical systems.

Brief outline of the course:

Neurovascular structures of the retroperitoneal space and lesser pelvis including the organs of urinary and genital systems. Skull – neurocranium and splanchnocranium. Cavities and spaces of the skull. Muscles of the head and neck. Blood supply, venous, and lymphatic drainage of the head and neck. Cranial nerves, innervation and topography of the head and neck. CNS – spinal cord, brain stem, cerebellum, diencephalon. Functional regions of telencephalon, rhinencephalon, limbic system, basal ganglia and their connections, nerve pathways. Ventricles, coverings, blood supply a venous drainage of CNS. Ear, Eye, including nerve tracts. Skin. Endocrine glands.

Recommended literature:

Povinná literatúra:
PLATZER, W.: Color Atlas of Human Anatomy: Locomotor System. Thieme, 2014
FRITSCH, H., KUEHNEL, W.: Color Atlas of Human Anatomy: Internal organs. Thieme, 2014
KAHLE, W., FROTSCHER, M.: Color Atlas of Human Anatomy: Nervous system and Sensory organs. Thieme, 2015
CROSSMAN, A.R., NEARY, D.: Neuroanatomy. An illustrated colour text. Churchill Livingstone, 2019
Odporúčaná literatúra:
HUDÁK, R., KACHLÍK, D. et al.: Memorix of Anatomy, Triton, 2015
LOVÁSOVÁ, K., KLUCHOVÁ, D.: Topographical Anatomy of Hardly Accessible and Clinically Significant Areas of Head. Typopress, 2010
DRAKE, R., VOGL, A., MITCHELL, A.: Gray's Anatomy for students. Elsevier, 2019
MOORE, K.L. et al.: Clinically oriented anatomy. Wolters Kluwer Health, 2022
NETTER, F.H.: Atlas of Human Anatomy. Elsevier Science, 2018
PAULSEN, F., WASCHKE, J.: Sobotta Atlas of Human Anatomy: General Anatomy and Musculoskeletal System. Elsevier, 2013
PAULSEN, F., WASCHKE, J.: Sobotta Atlas of Human Anatomy: Internal Organs. Elsevier, 2013
PAULSEN, F., WASCHKE, J.: Sobotta Atlas of Human Anatomy: Head, Neck, and Neuroanatomy. Elsevier, 2013
ROHEN, J.W, YOKOSHI, CH., LŰTJEN-DRECOLL, E.: Photographic Atlas of Anatomy. Wolters Kluwer Health, 2021

Course language:
English

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 16.02.2023

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/AD-GM1p/23	**Course name:** Anatomy Dissection 1

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 0 / 2 **Per study period:** 0 / 28
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 5.

Course level: I.II.

Prerequisities: MI-Pr/A-GM2p/23

Conditions for course completion:
For successful obtained of the credits from subject is necessary:
1. 100% of active presence at practical lessons
2. Active exploration and dissection of the human body by the student
3. Students are allowed to be absent for a maximum of 3 practical lessons per semester.
4. The final oral presentation of individual work - autopsy

Learning outcomes:
Students have the opportunity to deepen their knowledge of anatomy by performing anatomical dissection under the supervision of the teacher and preparing material for teaching medical students in the lower grades of medical school. Students improve their practical skill to work with tweezers and a scalpel, which will be helpful to them in their own medical practice.

Brief outline of the course:
Dissection of subcutaneous structures on the palmar and dorsal side of upper limb, dissection of axillary fossa, dissection of subfascial layer in anterior region of arm and forearm, cubital fossa, anterior region of wrist, palm of hand, scapular region, posterior region of arm and forearm, posterior region of wrist and dorsum of hand.

Recommended literature:
Rohen, Yokochi: Color Atlas of Anatomy, Lippincott Williams & Wilkins, 2011
Netter F. H.: Atlas of Human Anatomy.

Course language:
English

Notes:
Total number of assessed students: 18

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:
Date of last modification: 31.10.2022
Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/AD-GM2p/23	**Course name:** Anatomy Dissection 2

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 0 / 2 **Per study period:** 0 / 28
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 6.

Course level: I.II.

Prerequisities: MI-Pr/A-GM2p/23

Conditions for course completion:
During semester, students help to teacher with prosection of the thorax and abdomen. Results of the prosection are demonstrated to the other students. Credits will not be awarded to a student who misses more than 6 hours of practical exercises.

Learning outcomes:
Anatomical dissection is carried out under the supervision of teacher. Students prepare cadaveric material for teaching of medical students. Students improve their knowledge of anatomy of the trunk and abdomen. Participants can develop manual dexterity skills

Brief outline of the course:
Dissection of subcutaneous structures of the anterior chest wall, dissection of intercostal spaces, opening of thoracic cavity, dissection of upper mediastinum, taking off lungs, heart and pericardium, dissection of arteries and veins of heart, dissection of hert chambers, dissection of posterior mediastinum. Dissection of subcutaneous structures of abdominal wall, abdominal muscles, inguinal canal, opening of abdomen, dissection branches of abdominal aorta.

Recommended literature:
Rohen, Yokochi: Color Atlas of Anatomy, Lippincott Williams & Wilkins, 2011
Netter F. H.: Atlas of Human Anatomy.

Course language:
English

Notes:
The subject is provided only in the summer semester, capacity of the subject is limited to 10 students, in case of higher interest students will be selected.

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 11.05.2022
Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ FE-GMp/23	**Course name:** Basic Embryology

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 0 / 2 **Per study period:** 0 / 28
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 3.

Course level: I.II.

Prerequisities:

Conditions for course completion:
Presentation of seminar project evaluated: A-E

Learning outcomes:
Basic Embryology is a medical subject focused on developmental processes in the human body from fertilization, embryonic development to fetal period under physioplogical and pathological conditions. Students will use acquired knowledge of developmental processes and fundamentals of organ development in preclinical and clinical subjects.

Brief outline of the course:
Fertilization, blastogenesis, implantation, development of placenta and fetal membranes.
Primitive embryonic organs development: notochord, somites, neural tube, nephrotomes, folding of embryo, primitive gut, early development of cardiovascular system. Development of systems: cardiovascular and nerve systems, urogenital system, respiratory and digestive systems, head development, sensory organs development.
https://www.upjs.sk/public/media/9552/EN_GM_%20Basic%20Embryology_Content.pdf

Recommended literature:
K.L. Moore, T.V.N. Persaud, M.G. Torchia: Before we are born. Essentials of Embryology and Birth Deffects. Elsevier.
Thomas W. Sadler: Langman´s Medical Embryology. Wolters Kluwer Health.
Gary C. Schoenwolf: Larsen's Human Embryology, 2020 Elsevier
https://www.upjs.sk/public/media/9552/EN_Basic%20Embryology_Literature%20GM.pdf

Course language:
English

Notes:

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:
Date of last modification: 17.05.2022
Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ BHM-GMp/23	**Course name:** Behavioral Medicine

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 1 / 1 **Per study period:** 14 / 14
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 4.

Course level: I.II.

Prerequisities:

Conditions for course completion:
Individual work, course assignment during the semester, presentation of the assignment results before the end of the semester, compulsory participation at practices, final test.

Learning outcomes:
To provide an insight into basic biobehavioural determinants of health and disease. Students will get an overview of modifiable social, psychological, and environmental factors that affect health behaviour, functional status and quality of life. Become acquainted with the methodology of measuring these factors. Obtain information on intervention programmes in the prevention of chronic diseases, health promotion, and chronic disease self-management. To learn the basic principles of the transfer of scientific knowledge into healthcare practice and policy, especially within the context of patient-centered, multidicsiplinary, and integrated care.

Brief outline of the course:
The continuum of health and illness. Biopsychosocial determinants of health. Quality of life and chronic disease. Chronic condition management and health behaviour. Psychoneuroimmunology. Stress, coping and health. Health-enhancing and health-damaging psychosocial factors. Adjustment to disease. Possibilities of measuring modifiable psychological, social and environmental factors affecting health-related behaviour and quality of life; patient-reported outcomes. Treatment adherence, compliance, self-management support. Non-pharmacological interventions, cognitive-behaviour therapy. Digital health interventions. Evidence-based behavioural medicine. Transfer of behavioural medicine knowledge into healthcare practice and policy.

Recommended literature:
[1] Steptoe A (ed). Handbook of Behavioral Medicine: Methods and Applications. Springer Science & Business Media, 2010, ISBN 0387094881, pp. 1074
[2] Nagyova I, Katreniakova Z (eds.) Behavioural medicine: biomedical and psychosocial aspects of chronic diseases, Equilibria, s.r.o., Košice, 2014, ISBN 978-80-8143-158-6, pp.280
[3] Talen MR, Burke Valeras A (Eds.) Integrated Behavioral Health in Primary Care. Springer-Verlag New York 2013, ISBN 978-1-4614-6888-2, pp. 354

Course language:
english

Notes:

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 03.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ B-GM1p/23	**Course name:** Biology 1
Course type, scope and the method: **Course type:** Lecture / Practice **Recommended course-load (hours):** **Per week:** 2 / 2 **Per study period:** 28 / 28 **Course method:** present	
Number of ECTS credits: 4	
Recommended semester/trimester of the course: 1.	
Course level: I.II.	
Prerequisities:	
Conditions for course completion: active presence in all practical lessons each test assessment: minimum of 60%	
Learning outcomes: To introduce the basic concepts of cell biology and molecular biology, including cell structure, biomacromolecules, cell cycle, cell reproduction, gene exprression and cell communications. To give students a thorough grounding in the theoretical and practical foundations of molecular biology and cytology. Students have acquired an understanding of the major concepts in cell and molecular biology and have obtained basic information related to cytogenetics in clinical practice.	
Brief outline of the course: Biomacromolecules – the fundamental components of biological macromolecules, common characteristics, the structure and function of saccharides, lipids, proteins and nucleic acids. Cell structure – prokaryotic and eukaryotic cells, cell organelles, their structure and function. General characteristic of biomembranes, molecular structure of biomembranes; movement of molecules through the membrane. The structural organization of genome - organization of DNA in genomes, the basic principles of human cytogenetics. Replication of DNA. Cell cycle – phases, control of cell cycle, mitosis, meiosis, spermatogenesis, oogenesis. Cell signalling. Gene expression – gene structure and function, transcription, post-transcriptional RNA processing, translation, synthesis of proteins, posttranslation modifications, regulation of gene expression. The basic principles of epigenetics. Cell differentiation, cell ageing and cell death. Genomics and medicine.	
Recommended literature: Židzik J. et al.: Medical Biology and Genetics. Second edition, Equilibria, 2015, 296 p. Mičková et al.: Biology: practical lessons. Second edition, Equilibria, 2020, 98 p.	
Course language: English	
Notes: English language	

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 17.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ B-GM2p/23	**Course name:** Biology 2

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 2 / 3 **Per study period:** 28 / 42
Course method: present

Number of ECTS credits: 6

Recommended semester/trimester of the course: 2.

Course level: I.II.

Prerequisities: MI-Pr/B-GM1p/23

Conditions for course completion:
All practical lessons (100%) are obligatory for all students.
Assessment of the student´s learning achievements is carried out as a combination of continuous monitoring of the study during the teaching part of the semester (40%) with the final examination for the period of the semester concerned (60%). Prerequisite for the final examination (to register for the final examination) is the acquirement of 20 points minimum from continuous assessment during the semester.

Learning outcomes:
To introduce the basic concepts of general biology and human genetics, including mutations and their role in pathogenesis in human diseases, Mendelian genetics, quantitative and population genetics. To give students a thorough grounding in the theoretical and practical foundations of basic genetics. Students have acquired an understanding of the major concepts in human and molecular genetics and have obtainined basic information related to genetic and molecular biology methods in clinical practice.

Brief outline of the course:
Mutations I. - classification of mutations, mechanisms of mutagenesis, gene (point) mutations, structural and numerical chromosome mutations. Mendelian genetics - historical overview, general characteristics, Mendel´s laws of inheritance. Quantitative genetics - polygenic inheritance, heritability, multifactorial diseases. Gene linkage. Heredity and sex. Genetics in pathogenesis of human diseases. Inheritance of blood group systems I. - ABO, Rh, MNss, Lewis, ... HLA system. Population genetics - Hardy-Weinberg law, population equilibrium, panmixis, inbreeding, genetic drift, eugenics, euphenics. Genealogy and genetic counselling. Genetics of cancer. Molecular biology methods in human genetics and clinical practice. Ethical issues in human genetics.

Recommended literature:
Židzik J. et al.: Medical Biology and Genetics. Second edition, Equilibria, 2015, 296 p.
Mičková et al.: Biology: practical lessons. Second edition, Equilibria, 2020, 98 p.

Course language:
English

Notes:

Course assessment Total number of assessed students: 0					
A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0
Provides:					
Date of last modification: 17.05.2022					
Approved:					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ BCHM-GMp/23	**Course name:** Bioorganic Chemistry in Medicine

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 1 / 1 **Per study period:** 14 / 14
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 2.

Course level: I.II.

Prerequisities:

Conditions for course completion:
seminars, lectures; more details: https://www.upjs.sk/public/media/25149/BioorgCh_Requirements.pdf

Learning outcomes:
The graduate knows the structures and functions of selected organic and bioorganic molecules that participate in chemical processes taking place in living systems, which leads to a better understanding of the functions of the whole organism. Bioorganic chemistry is the chemical basis for mastering and properly understanding medical biochemistry, which is its superstructure and also forms the theoretical basis of several medical disciplines.

Brief outline of the course:
Organic compounds (e.g. hydrocarbon derivatives, carboxylic acids. Structure and biochemically significant reactions of organic compounds. Heterocyclic compounds. Saccharides. Lipids and steroids. Nucleic acids. Amino acids and peptides. Proteins - structure and function. Natural substances - e.g. vitamins, alkaloids. More details: https://www.upjs.sk/public/media/9648/V-Bioorganic%20Chemistry_GM-2018.pdf

Recommended literature:
Mareková M. et al.: Lectures, 2021; https://portal.lf.upjs.sk/articles.php?aid=250
Stupák M. et al.: Medical Chemistry - "Hand book", 2020; https://portal.lf.upjs.sk/articles.php?aid=69
Urban P. et al.: Chemistry - Repetitorium, 2017; https://portal.lf.upjs.sk/articles.php?aid=236
Stupák M. et al.: Medical Chemistry - Calculation, 2017; https://portal.lf.upjs.sk/articles.php?aid=232
Országová Z. et al.: Medical Chemistry, 2008

Course language:
english

Notes:

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 03.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ B-GMp/23	**Course name:** Biostatistics

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 0 / 2 **Per study period:** 0 / 28
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 4., 6., 8., 10.

Course level: I.II.

Prerequisities: MI-Pr/MInf-GMp/23

Conditions for course completion:
1. 100% and active attendance.
2. Min. 60% from each test during the term.
3. Elaboration of all given classworks.

Learning outcomes:

Brief outline of the course:

Recommended literature:
1. Dale E. Mattson, Ph.D., Statistics, Difficult concepts, understandable explanations, Bolchay - Carducci Publishers, 1999.
2. Douglas G. Altman, Practical Statistics for Medical Research, CHAPMAN @ HALL, London, 1994.
3. Notes from exercises.

Course language:
english

Notes:

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 11.02.2016

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ CGO-GMp/23	**Course name:** Clerkship - Gynaecology and Obstetrics
Course type, scope and the method: **Course type:** Practice **Recommended course-load (hours):** **Per week: Per study period:** 80s **Course method:** present	
Number of ECTS credits: 2	
Recommended semester/trimester of the course: 10.	
Course level: I.II.	
Prerequisities: MI-Pr/GO-GM2p/23 and MI-Pr/SL-GM4p/23	
Conditions for course completion: After completing the clerkship, the student acquires the practical knowledge obtained in the theoretical classes.	
Learning outcomes: Course Objectives: Acquaintance with basic examination and therapeutic procedures in gynaecology and obstetrics.	
Brief outline of the course: Brief outline of the course: Basic examination methods in gynaecology and obstetrics, course of physiological and pathological pregnancy, physiological and pathological delivery, menstrual cycle disorders, gynaecological inflammations and infections, benign and malignant tumours of female genital organs, infertility, urogynaecology, breast diseases	
Recommended literature:	
Course language: Study literature: Čech E., et al., Porodnictví, 1999 Citterbart, K., et al., Gynekologie, 2001 Martius G., et al., Gynekológia a pôrodníctvo, 1997 Ponťuch A., et al., Gynekológia a pôrodníctvo, 1989 Ponťuch A., et al., Gynekológia a pôrodníctvo, 1987 Poradovský K., et al., Gynekológia, zv. 1, 1982 Poradovský K., et al., Pôrodníctvo, zv. 2, 1982 Chamberlain G., et al., Illustrated textbook of obstetrics, 1991 Tindall V. R., et al., Illustrated textbook of gynaecology, 1991 Gabbe S. G., et al., Obstetrics, 1996 Varga J., et al., Praktikum z gynekológie a pôrodníctva, 2022	
Notes:	

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 13.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ CIM-GMp/23	**Course name:** Clerkship - Internal Medicine

Course type, scope and the method:
Course type: Practice
Recommended course-load (hours):
Per week: Per study period: 120s
Course method: present

Number of ECTS credits: 4

Recommended semester/trimester of the course: 8.

Course level: I.II.

Prerequisities: MI-Pr/IM-GM1p/23 and MI-Pr/SL-GM4p/23

Conditions for course completion:
1. For successful obtained of the credits from subject is necessary:
- successful completion of professional practice
- complete the evaluation of Clerkship of Internal Medicine

Learning outcomes:
Get acquainted with and master the work in the department under the guidance of a practice assistant.

Brief outline of the course:
All medical students are required to undertake the clinical internship in the hospital wards under the supervision of the clinical tutor or other clinician who is responsible for the internship. The students make the ward rounds daily, they make daily medical notes, write case histories of newly admitted patients, read and assess X-rays, ECGs and other laboratory findings with their supervisor and at the same time they acquaint themselves with other medical records and work in the hospital ward.
Practical clinical work (under tutorial guidance nad support) includes taking various biological samples for laboratory testing, administration of subcutaneous, intramuscular, intravenous injections and transfusions. The students take responsible part in therapeutic procedures and physical examinations such as pleural, abdominal and sternal punction in monitored patients (or in other cases interesting from the diagnostic view), USG, X-ray, ECG, bicycle ergometry, pulmonary function examination, endoscopy, and autopsy in the case of death.
According to hospital possibilities the clinical internship requires 1-2 days of laboratory work to perform in order to become familiar with available basic diagnostic techniques such as doing urine tests, blood counts and blood smears. In more common internal diseases sternal biopsies are demonstrated to students.
According to hospital possibilities, the students are required to become familiar with the work of Central Admission Department, Intesive Care Unit, Dialysis Unit and Anaesthesiology and Resuscitation Department.
The students are required to take part in seminars. If it is possible they are supposed to perform night duties with qualified medical staff at least twice during their internship

course.
The students are required to write an internship diary with the records of all the performed procedures during their internship. The diary will be regularly checked by the clinical tutor at the end of each week.
CONTENT OF THE SUBJECT
Procedure:
Patient's entrance physical examination and writing a receiving report form
Ward round with the Head of Department
Patient release – writing a dismissal report form
Measuring vital signs (P, blood pressure, respiratory rate), objective status of patients, patient's disease course – separately – daily
Work at the Department of Anaesthesiology and Intensive Care or at the Coronary and Arythmologic Intensive Care Unit – 2 days
Examination per rectum ork (stay) at the Admission Outpatient Department
Assistance in puncture of ascites, pleura, liver, kidney
Assistance in gastroscopy
Assistance in colonoscopy
Loading electrodes, ECG, and make its assessment by an ECG Doctor
Chest X-ray - escorting a patient, assessment of chest X-ray, native stomach, gastrointestinal passage K. L.
Assistance in USG examination of abdomen and heart
Active participation in a dif. dg. seminar: heart failure primary and secondary hypertension dif. dg. hepatosplenomegaly

Recommended literature:

Course language:
english

Notes:
The subject Clerkship of Internal Medicine is provided only in the summer term.

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 13.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/CPae-GMp/23	**Course name:** Clerkship - Paediatrics

Course type, scope and the method:
Course type: Practice
Recommended course-load (hours):
Per week: Per study period: 40s
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 10.

Course level: I.II.

Prerequisities: MI-Pr/PE-GM1p/23

Conditions for course completion:
Succesful completion of practice in pediatrics
Submission of evaluation of clinical practice
Evaluation during course (test, individual work): individual work under guidance of tutor
Final evaluation (exam): Final evaluation of internship – awarding credits

Learning outcomes:

Brief outline of the course:
A student participates at work at the department under the supervision of a tutor. He/she improves his/her skills in examining children and assessing the clinical conditions and participates in the diagnostic and therapeutic process of newly admitted patients.
List of clinical procedures, which are necessary to be completed by the student under the supervision of a tutor:
• Initial clinical examination, writing an admission report
• Morning rounds with the head of a ward
• Discharge of patients – writing an discharge report
• Assistance during (abdominal) USG investigation
• Assistance during collection of biologic material and insertion of intravenous cannulas

Recommended literature:
Marcdante KJ, Kliegman RM, Jenson HB, et al.: Nelson Essentials of Pediatrics, Sixth Edition, Saunders Elsevier 2011, ISBN-13: 978-1-4377-0643-7, 831 pp.
Roberton DM, South M: Practical Paediatrics, Sixth Edition, Churchill Livingstone Elsevier, 2007, ISBN: 978-0-443-10280-6, 861 pp.

Course language:
English language

Notes:
The subject is to be completed by the end of the summer term (at a paediatric ward of selected facility closest to the place of living).

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 16.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/CS-GMp/23	**Course name:** Clerkship - Surgery

Course type, scope and the method:
Course type: Practice
Recommended course-load (hours):
Per week: Per study period: 80s
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 10.

Course level: I.II.

Prerequisities: MI-Pr/S-GM3p/23 and MI-Pr/SL-GM4p/23

Conditions for course completion:
1. For successful completion of the practical exercises / lectures is required:
- successful completion of clerkship in surgery
- submit the evaluation of completion of clerkship in surgery

Learning outcomes:
The students will have the practical knowledge and skills in the investigation and treatment the patients in the ambulance, department of surgery and in the operating rooms. The students will learn the ethical principles of healthcare delivery. The students will increase the ability to communicate effectively with the patient on the surgical ambulance and bedside department.

Brief outline of the course:
To work in surgical ambulance in daytime and emergency service. The activity of outpatient clinics. Patient management. Examination and collection of material for examination. Interpretation of laboratory and imaging examinations. Assistance during surgical operations in the operating rooms.

Recommended literature:
Frankovičová Surgical for Medical Students.

Course language:
English

Notes:

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 11.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ CA-GMp/23	**Course name:** Clinical Anatomy

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 1 / 1 **Per study period:** 14 / 14
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 8.

Course level: I.II.

Prerequisities: MI-Pr/A-GM2p/23

Conditions for course completion:
Students must present anatomical speciments they prerared during the semester.
Evaluation: completed

Learning outcomes:
The aim of this subject is the study of topographical relationships of the anatomical structures, their position in the human body with emphasis on needs of clinical medicine. The explanation of the existence of different variations of various anatomical structures is very important for the next practice. The lectures are divided into anatomical and clinical part. The clinical part is lectured by doctors – clinicians.

Brief outline of the course:
Topographical anatomy of the various regions of the head, neck, chest, abdomen, pelvis, upper and lower limbs. The dissection and study of surface and in-depth services in these areas.

Recommended literature:
Platzer W.: Color Atlas of Human Anatomy, Locomotor system, Internal organs, Nervous system , Thieme, 6th Edition, 2008.
Gilroy A. M.: Anatomy An essential Textbook, Thieme 2013.
Leonhardt H.: Color Atlas of Human Anatomy, Internal organs , Thieme, 6th Edition, 2008.
Kahle W.: Color Atlas of Human Anatomy, Nervous system and sensory organs . Thieme, 6th Edition, 2008.
Netter F. H.: Atlas of Human Anatomy .
Sobotta: Atlas of Human Anatomy , 15th Edition, Musculosceletal System, Internal Organs, Head, Neck, Neuroanatomy, Ed. by F. Paulsen and J. Waschke, English version with English Nomenclature, Elsevier Urban &Fisher, www. e-sobotta.com/service.
Kluchová D. et al.: Guide through Anatomy of Human Body , Košice, 2010.
Kluchová D. : Neuroanatomy, Košice, 2010
Rohen, Yokochi: Colour Atlas of Anatomy
K. L. Moore: Essential Clinical Anatomy

Course language:
English

Notes:
subject is provided only in the summer semester

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 11.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/CB-GMp/23	**Course name:** Clinical Biochemistry

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 2 / 2 **Per study period:** 28 / 28
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 9.

Course level: I.II.

Prerequisities: MI-Pr/MBCH-GM2p/23 and MI-Pr/PP-GM2p/23

Conditions for course completion:
lectures, seminars; more details:https://www.upjs.sk/public/media/9648/GM_Clin_Bioch_Requirement.pdf

Learning outcomes:
The graduates should understand and be able to explain the principal pathobiochemical mechanisms of selected diseases, understand the relationships between metabolism and the results of laboratory tests and be familiar with routine clinical-biochemical tests. The students will learn on typical case reports, respectively the results of tests of model patients, how to select appropriate laboratory tests and use clinical-biochemical diagnostic algorithms. Correct and targeted indication of laboratory tests related to the expected diagnosis and proper interpretation of test results is an important part of the daily work of a physician.

Brief outline of the course:
Introduction to clinical biochemistry. Water and mineral homeostasis (e.g. regulation of osmolality). Acid-base balance disorders. Renal function. Liver function. Biochemistry background of diabetes mellitus. Cardiac markers. Calcium-phosphate and magnesium balance. Biochemical tests in endocrinology. Laboratory markers of malignant diseases. Disorders of iron metabolism. Biochemistry of extreme age. More details.: https://www.upjs.sk/public/media/9648/GM_Clin_Bioch_Lectures.pdf

Recommended literature:
Ďurovcová E. et al.: Lectures, 2020; https://portal.lf.upjs.sk/articles.php?aid=145
Ďurovcová E. a Mareková M.: Clinical Biochemistry - selected chapters; 2021 https://portal.lf.upjs.sk/articles.php?aid=114
Ďurovcová E. a Mareková M.: Clinical Biochemistry, 2013
Nessar A.: Clinical Biochemistry, 2nd edition, Oxford University Pres, 2016
Gaw A. et al.: Clinical Biochemistry, Elsevier, 2013

Course language:
english

Notes:

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 03.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ CBf-GMp/23	**Course name:** Clinical Biophysics

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 0 / 1 **Per study period:** 0 / 14
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 9.

Course level: I.II.

Prerequisities: MI-Pr/MBF-GMp/23

Conditions for course completion:
Presence at practical lessons, the student may have maximum three absences. Compensations are mandatory. Final exam - at least 60% form written test. The minimum number of students is 5 students.

Learning outcomes:
Clinical biophysics comprises the scientific and technological basis of clinical technigues and procedures that are based on physics. Most direct diagnostic tests and many of the therapeutic procedures use the efffects of physical forces, ionizing and non-ionizing radiation on human body. Clinical biophysics implies that an understanding of the function, as wellas an appreciation of the scope and limitations of the equipment used in diagnosis or therapy, are absolutely necessary for good medical practise.

Brief outline of the course:
Lasers in medicine, Physical basics of lasers, types of lasers used in medicine, safety aspects of the use lasers, Clinical application of lasers in ophthalmology, diabetic retinopathy - panretinal photocoagulation, glaucoma – iridotomy, capsulotomy, correction of refractive properties of the eye, laser surgery observation,
Physiotherapy in rehabilitation, Physical and biophysical basics of galvanic current, diathermy and diadynamic current, magnetotherapy and ultrasound in physiotherapy of vertebral diseases, Observation of practical application of physiotherapy,
Nuclear magnetic resonance tomography, Physical basics of nuclear magnetic resonance, magnetic properties of nuclei, larmor equation, resonance and relaxation, relaxation times, Basic principles of imaging, spatial encoding of signal, possible hazards of NMR imaging, Clinical application of magnetic resonance (MR), equipment in local hospital, modelling of the examination of patient, images of tissues with disorders, advantages and disadvantages MR compared to CT, Observation of the examination of patient.

Recommended literature:
Fundamentals of Biophysics and Medical Technology, I. Hrazdira, V. Mornstein et al., Masaryk University, Faculty of Medicine, 2nd revised edition, Brno 2012
Clinical MR Imaging, A Practical Approach, P. Reimer, P.M. Parizel, J.F.M. Meaney, F. A. Stichnoth (Eds.), 3rd Edition, Springer-Verlag Berlin Heidelberg 2010

Clinical Rehabilitation, Pavel Kolář et al., Praha, 2013

Course language:

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 11.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ CI-GMp/23	**Course name:** Clinical Immunology

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 0 / 1 **Per study period:** 0 / 14
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 9.

Course level: I.II.

Prerequisities: MI-Pr/FI-GMp/23 and MI-Pr/PP-GM2p/23

Conditions for course completion:
Successful completion of continuous control of study and final exam
Continuous assessment (test, individual work): elaboration of seminar work
Final assessment (exam): written and oral exam
Link to the Conditions of graduation on the website of the Department of Paediatrics and Adolescent Medicine
https://www.upjs.sk/lekarska-fakulta/klinika/deti-a-dorast/vyucba/predmety/dr/

Learning outcomes:
To provide students with basic knowledge and understanding of the use of knowledge of basic immunology in the medical and preventive care of patients with immunologically mediated diseases.
After completing the course, students will be able to use the acquired theoretical concepts, distinguish between basic theories and concepts that they use. Students will be able to evaluate and use the acquired knowledge in further study and at the same time will be able to apply the acquired theoretical knowledge in practice.

Brief outline of the course:
Beginning with the basic concepts: development of immune system, allergy and anaphylaxis, immunodeficiency, autoimmunity.
Detailing: characterization, clinical presentation, diagnosis and differential diagnosis of immune-based diseases.
Deals with indications, contraindications and side effects of immunomodulatory therapy.
The current timetable for a given semester is published on the website of the Department of Paediatrics and Adolescent Medicine.

Recommended literature:
Rich R. et al.: Clinical Immunology, Elsevier-Sauders, 2018
Bernstein J.: Primary and Secondary Immunodeficiency, Springer, 2021
Abul K. Abbas, Andrew H. Lichtman: Basic Immunology - Functions and Disorders of the Immune System Third Edition / Updated Edition, Elsevier – Saunders, 2010

Course language:

English language

Notes:
The course is provided only in the winter semester, if at least 3 students enroll in it.

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 27.08.2021

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ CPF-GMp/23	**Course name:** Clinical Pathophysiology

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 0 / 1 **Per study period:** 0 / 14
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 6., 8.

Course level: I.II.

Prerequisities: MI-Pr/PP-GM1p/23

Conditions for course completion:
Credits can be assignedto a student who completes a full
attendance at the lessons and an adequate level of knowledge in the semester assessment..

Learning outcomes:
Advanced theoretical and practical pathophysiology of diseases necessary for a deeper understanding of the pathogenesis of diseases credits are awarded to students who have full Advanced knowledge of the pathogenesis of selected diseases, their clinical manifestations and complications and practical skills necessary for a understanding of clinical diagnosis and treatment

Brief outline of the course:
Pathophysiology & pathogenesis of selected diseases & pathol. states>
Metabolic & inner milieu disorders : Electrolyte dysbalance; Acid-base balance; Practice: Model situations - analysis. Case reports.
Hematology: Anemias, Polycythmias, etc., Leukocyte dis. (leukemias, leucosis), Thrombocyto/ pathies, Practice: Laboratory findings in hematology & case reports
Cardiology: Cardiac channelopathies, Congenital cardiomyopathies; Ischemic heart disease, Practice: Dysrrythmias, ECG diagnostics, Holter monitoring (principles), Hyperlipidemias
Respiratory: Obstructive disorders (asthma, COPD); Restrictive & occupational dis. (lung fibrosis), pulmonary hypertension; Practice: Spirometry, auscultatory & percussion phenomena
Neurology: Cerebrovascular disorders; Neurodegenerative dis. (Alzheimer'd , Parkinson' d.); Vegetative disorders, Practice: Evaluation of VNS; HUT, HRV. Etc.
Endocrinology: Diabetes mellitus; etiopathogenesis & classification; Chronic complications of diabetes (dia. retinopathy, dia. dermatopathy, dia. vasculopathy, diabetic leg)
Nephrology: Renal hypertension; Glomerulopathies; Diabetic nephropathy; Practice: casual cases
Pathohysiology of gravidity: Early and late gestosis; Neonatology; Practice: casual cases

Recommended literature:
1. Norris, T., Lalchandani, R.: Porth's Pathophysiology: Concepts of Altered Health States ,10th Ed. M LWW, 1688 p., ISBN-10: 1496377559, 2018
2. Hammer, G., McPhee, S.: Pathophysiology of Disease: An Introduction to Clinical Medicine, 7th Ed. Lange Medical Books, ISBN-10: 0071806008

3. Ralston, S.H. , Penman, I.D., Strachan, M.W.J, Hobson, R. (Eds):Davidson's Principles and Practice of Medicine, 23rd Ed. Elsevier; , 1440 p., ISBN-10 : 0702070289, ISBN-13 : 978-0702070280
4. Kumar, V. Abbas, A.K., Aster, J.C. Fausto, N.: Robbins & Cotran Pathologic Basis of Disease. 8ed, Saunders, 1464p., ISBN-10: 1416031219

Course language:
english

Notes:
The course opens in a given semester only on condition that the number of students is greater than 2.

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 03.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ CPSM-GMp/23	**Course name:** Clinical Physiology - Sleep Medicine

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 0 / 1 **Per study period:** 0 / 14
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 9.

Course level: I.II.

Prerequisities: MI-Pr/PP-GM2p/23 and MI-Pr/Ph-GM2p/23

Conditions for course completion:
Continuous assessment in the form of solving assigned tasks, 100% and active participation in lectures and practical lessons. Final evaluation in the form of a written exam, at least 60% success rate.

Learning outcomes:
Acquisition of basic knowledge about physiological and pathophysiological mechanisms of sleep and breathing during sleep, adaptive, regulatory and integration mechanisms of individual systems of the human body necessary for understanding the pathogenetic mechanisms of sleep disorders, their diagnosis and therapeutic interventions. A visit to the patient's all-night polysomnographic examination and a demonstration of a comprehensive evaluation of the examination records should enable the diagnosis of various sleep disorders and the consequent failure of individual vital functions of the organism.

Brief outline of the course:
· Sleep and its regulation: sleep neurogenesis, mammalian sleep, EEG findings (REM and NREM).
· Sleep disorders: Insomnia, hypersomnia, narcolepsy, circadian rhythms, parasomnias, restless legs syndrome.
· Genesis and changes in respiration and circulation in sleep: Chemical regulation, hypoxia, asphyxia, somato- and viscero-motor changes in sleep, unconsciousness, coma.
· Sleep-disordered breathing, epidemiology and pathogenesis: Obstructive, mixed and central apnea, central hypoventilation syndrome, SIDS.
· Diagnosis of sleep-disordered breathing: Snoring, OSA, MSA, CSA, cardiovascular, endocrine-metabolic and neuro-psychiatric consequences and treatment proposal for individual disorders.
· Visit to the Sleep Lab: Demonstration of polysomnographic recording, anamnesis, diagnosis and treatment (CPAP, Bi PAP, Auricular stimulation).
· Demonstration of a comprehensive evaluation of the anamnesis, PSG findings, treatment proposal: final protocol.
Week Lectures Exercises
1. Wakefulness and sleep, sleep stages, EEG, neurological sleep diseases: insomnia, hypersomnia, narcolepsy, parasomnia, restless legs syndrome, etc. 2. 3. Respiratory regulation (nervous, chemical), monitoring of various parameters, EEG, EMG, VT, ECG, BMI, blood pressure, acoustic

parameters, etc. Different types of sleep breathing disorders. Demonstration of polysomnographic record evaluation.
4. 5. Epidemiology, pathogenesis of sleep-disordered breathing (SDB), predisposing factors, metabolic complications, diabetes I. and II. type. Their diagnosis, prevention and therapy.
6. 7. Cardiovascular and other complications of untreated SDB. Their diagnosis, prevention and therapy
8. 9. Different methods of SDB therapy (CPAP, drug treatment, UPPP, etc.) Methods of prophylaxis.
10. 11. Visit to the sleep laboratory throughout the night, PSG recording of patients (diagnosis and therapeutic night).
12. 13. Selected problem questions. Final written test in sleep medicine - awarding credits.

Recommended literature:
· Meir H. Kryger MD. FRCPC, Thomas Roth PhD, William C. Dement MD PhD: Principles and Practice of Sleep Medicine (Kryger'sSleepMedicine) 6th Edition, ISBN: 9780323242882, Elsevier 2017, p. 1784
· Continuous review of relevant articles and book literature

Course language:
english

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 11.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ CBm-GMp/23	**Course name:** Computer Biometrics

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 0 / 1 **Per study period:** 0 / 14
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 3.

Course level: I.II.

Prerequisities: MI-Pr/MInf-GMp/23

Conditions for course completion:
1. 100% and active attendance.
2. Min. 60% from each test during the term.
3. Elaboration of all given classworks.
4. Final exam.

Learning outcomes:
This subject should provide an understanding of the basic principles that underlie research design, data analysis and interpretation of results and enable the students to carry out a wide range of statistical analyses.

Brief outline of the course:
Basic notion. General sequence of steps in a research project. The design of experiment. Descriptive statistics - mean, standard deviation, variance, standard error of the mean, quartils, confidence intervals. The distribution of observations. Theoretical models of distribution probability. Data protection in information systems. Estimation and hypothesis testing. Data collection, data entry, data checking, data cleaning, data analysis. The two-sample test for equal means, paired and not-paired. Homogenity of variance in the two samples means test. Analysis of variance one way, parametric. Non-parametric tests. Solution of tasks with using commercialy software. Regression and correlation. Relation between two continuous variables. Simple linear regression and correlation. Correlation coeficient. Point and interval estimates for parameters of line. Testing hypothesis of probability. Contingency tables. Uncertainty models and their aplications in medicine. Solution of typical tasks.

Recommended literature:
1. Dale E. Mattson, Ph.D., Statistics, Difficult concepts, understandable explanations, Bolchay - Carducci Publishers, 1999.
2. Douglas G. Altman, Practical Statistics for Medical Research, CHAPMAN @ HALL, London, 1994.
3. Notes from exercises.

Course language:
english

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 17.05.2017

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ Ds-GMp/23	**Course name:** Dentistry
Course type, scope and the method: **Course type:** Lecture / Practice **Recommended course-load (hours):** **Per week:** 1 / 1 **Per study period:** 14 / 14 **Course method:** present	
Number of ECTS credits: 2	
Recommended semester/trimester of the course: 7.	
Course level: I.II.	
Prerequisities: MI-Pr/MB-GM1p/23 and MI-Pr/PA-GM1p/23 and MI-Pr/PP-GM1p/23	
Conditions for course completion: Credit test Exam	
Learning outcomes: Point out the relationship between oral health and the overall health of the patient. To clarify the importance of oral organisms and their influence on focal infection of dentogenic origin.	
Brief outline of the course: Examination of the oral cavity, hygiene of the oral cavity, cariology, diseases of the dental pulp, periodontal diseases. Negative effect of untreated diseases of hard dental tissues, pulp and periodontium on the overall health of the patient. Surgical procedures in oral cavity, possibilities of local anesthesia, indications, contraindications and side effect of local anesthesia. Peculiarities in the treatment of children and elderly patients. Orthodontic treatment. The manifestation of various systemic diseases in oral cavity. Odontogenic infections, their symptoms, treatment and complications. Orofacial oncology. Salivary gland diseases. The cooperation between dentists and other medical specializations. Preventive dentistry.	
Recommended literature: Dostálová T., Seydlová M.: Dentistry and Oral Diseases, Grada, 2010 Kotsanos N., Sarnat H., Park K.: Pediatric Dentistry, Springer, 2022 Mehra P., D´Innocenzo R.: Manual of Minor Surgery for the General Dentists, WILLEY Blackwell, 2015 Professional, scientific and domestic foreign magazines and books.	
Course language: English	
Notes:	

Course assessment Total number of assessed students: 0					
A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0
Provides:					
Date of last modification: 19.01.2023					
Approved:					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ D-GMp/23	**Course name:** Dermatovenerology

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 2 / 2 **Per study period:** 28 / 28
Course method: present

Number of ECTS credits: 5

Recommended semester/trimester of the course: 7.

Course level: I.II.

Prerequisities: MI-Pr/MB-GM1p/23 and MI-Pr/PA-GM1p/23 and MI-Pr/PP-GM1p/23

Conditions for course completion:
To participate at all of practical exercises. In the case of excused absence practice, student may substitute up to 3 exercise. To get at least 60 % of total score for ongoing review of the theoretical training to practical exercises. Compulsory attendance in at least 7 lectures requirements

Learning outcomes:
To familiarize the students with the field of dermatology through an overview of types of disorders, differential diagnosis of skin diseases, procedures, and treatment methods common in dermatology. Students have to be certain of history taking and should develop a basic dermatologic vocabulary that enables them to appropriately describe skin lesions. The students should be familiar with the epidemiology of sexually transmitted diseases, their clinical manifestations, modes of transmission, diagnostic methods and their appropriate treatment.

Brief outline of the course:
General dermatology, Dermatological terminology and morphology. Skin infections (viral, bacterial, mycotic, parasitic). Erythematosquamous disseases. Psoriasis. Lichen planus. Endogenous and exogenous eczemas. Atopic dermatitis. Drug eruptions, urticaria, allergic reactions. Facial dermatoses. Bullous dermatoses. Autoimmune connective tissue diseases. Hair and nail disorders. Chronic venous insufficiency. Differential diagnosis of leg ulcers. Pediatric dermatovenerology. Skin tumours. Malignant melanoma. Syphilis. STD´s.

Recommended literature:
Braun-Falco, Plewig,Wolff, Winkelmann: Dermatology. Springer-Verlag, Berlin Heidelberg, 3rd, 2000.
Richard P.,J.B.Weller, John A.A., Hunter, John A.Savin and Mark V.Dahl. Clinical Dermatology. ©2008 R.Weller, J.Hunter, J.Savin, M.Dahl. 2008
Wolfram Sterry, Ralf Paus, Walter Burgdorf: Dermatology. Thieme clinical companions 2010
Švecová, D. and Danilla, T. :Textbook of Dermatology. 3rd rev. ed. Bratislava: Comenius University, 2017.384 p. ISBN 978-80-223-4277-3 2017
Baloghová, J.: General Dermatovenerology: a Practical Guide for Medical Students. 1.vyd.- Košice: Vydavateľstvo Šafárik Press UPJŠ – 99p. 2019
James G. H. Dinulos, Habif's: Clinical Dermatology, 7th Edition. A Color Guide to Diagnosis and Therapy. Elsevier. 2021

Course language:
English language

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 17.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/DMC-GMp/23	**Course name:** Diagnostic Methods in Cardiology

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 1 / 2 **Per study period:** 14 / 28
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 8.

Course level: I.II.

Prerequisities: MI-Pr/IP-GMp/23

Conditions for course completion:
The criterion for succesful completion of the course is active participation in lectures, practicals and elaboration of assigned tasks.

Learning outcomes:
Students will gain new knowledge in the field of examination methods in cardiology.
They will learn the basics of diagnosis of ischemic heart disease, heart failure, valve defects, heart rhythm disorders and consciousness disorders.

Brief outline of the course:
Electrocardiography
Holter ECG
Stress ergometry
Echocardiography
Head up tilt test
CT coronarography
Selective coronarography
Electrophysiology Procedure

Recommended literature:
Electrocardiogram in Clinical Medicine, John Wiley & Sons, 2020
Feather A, Randall D, Waterhouse M. Kumar & Clark's Clinical Medicine, Elsevier Science, 2020

Course language:
english

Notes:

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:
Date of last modification: 06.04.2022
Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/DTD-GMp/23	**Course name:** Diploma Thesis and Diploma Thesis Defence

Course type, scope and the method:
Course type:
Recommended course-load (hours):
Per week: Per study period:
Course method: present

Number of ECTS credits: 8

Recommended semester/trimester of the course: 11., 12..

Course level: I.II.

Prerequisities: MI-Pr/SDT-GM1p/23 and MI-Pr/SDT-GM2p/23

Conditions for course completion:
The diploma thesis is the result of the student's own creative work. It must not show elements of academic fraud and must meet the criteria of good research practice defined in the Rector's Decision no. 21/2021, which lays down the rules for assessing plagiarism at Pavol Jozef Šafárik University in Košice and its components. Fulfillment of the criteria is verified mainly in the training process and in the process of thesis defense. Failure to do so is grounds for disciplinary action.

Learning outcomes:
With the diploma thesis the student demonstrates mastery of extended theory and professional terminology of the field of study, acquisition of knowledge, skills and competences in accordance with the declared profile of the graduate of the study program, as well as the ability to apply them in an original way in solving a selected problem of the field of study. The student demonstrates the ability of independent professional work in terms of content, form and ethics. Further details of the diploma thesis are determined by Directive no. 1/2011 on the basic requirements of final theses and the Study Rules of Procedure of UPJŠ FM in Košice.

Brief outline of the course:

Recommended literature:

Course language:
English

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 17.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ DTP-GMp/23	**Course name:** Donation and Transplantation Programme

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 2 / 0 **Per study period:** 28 / 0
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 10.

Course level: I.II.

Prerequisities:

Conditions for course completion:
To graduate successfully and to get credits from the subject it is necessary to:
- to participate in lectures
- to get through the final written test and to obtain at least 60% of the total score of the final written test

Learning outcomes:
Getting to know basic principles of organ donor and transplantation programme.

Brief outline of the course:
basic information about donation and transplantation programme, history of transplantations, ethical issues, legislative issues, potential organ donor, organ donor, brain death diagnosis, organ donor – clinical management, organ retrieval, indications for the kidney transplantation, types of kidney transplantation, waiting list for the transplantation, organ allocation principles, clinical management post KTx, immunosuppression post KTx, posttransplant complications (non-immunological), outcomes of transplantations, transplantation of other organs, tissue transplantations, regenerative medicine, cell therapies, personalized therapies, future of transplantations

Recommended literature:
Guide to the quality and safety of organs for transplantation, European Committee on Organ Transplantation (CD-P-TO), EDQM 7th Edition, 2018

Course language:
English language

Notes:
The course Donation and Transplantation Programme is provided only in the summer term.
The minimum number of registered students is 3 and more.

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 19.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ E-GMp/23	**Course name:** Epidemiology

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 1 / 2 **Per study period:** 14 / 28
Course method: present

Number of ECTS credits: 3

Recommended semester/trimester of the course: 7.

Course level: I.II.

Prerequisities: MI-Pr/MB-GM2p/23 and MI-Pr/PP-GM1p/23

Conditions for course completion:
Attendance on lectures, active participation and discussion.
Seminar – seminars work on chosen topic with presentation.
Written test.

Learning outcomes:
Student of the subject will receive the basic knowledge about occurrence and distribution of infectious diseases and chronic diseases with outbreaks in a population, about fundamental factors influencing their occurrence, about preventive and repressive measures against their spread and to improve the health status of the population.

Brief outline of the course:
Epidemiology - characteristics, goals. Basic epidemiological methods, causality. Descriptive methods, analytic methods, experimental epidemiology, epidemiological surveillance. Statistical methods in epidemiology. Evolution of parasitism and infectious diseases. Sources of infection – forms, characteristics, scope and epidemiological measures. Transmission of infectious diseases. Phases of transmission, particular ways of transmission. Classification of infectious diseases. Epidemiology of intestinal, airborne, arthropod-borne, and skin and external mucosae infections. Epidemiology of zoonoses. Epidemiology of nosocomial infections. Epidemic process – characteristics, determinants. Principles of control of infectious diseases. Specific prophylaxis, active and passive immunization. Decontamination, disinfection, sterilization, disinsection, rodent control.

Recommended literature:
Bakoss et al. Compendium of Epidemiology. Comenius University: Bratislava, 1999
Epidemiology and Prevention of Vaccine-Preventable Diseases. 12th Edition. CDC: Atlanta, 2011
Rothamn KJ.: Epidemiology. An Introduction. Oxford University Press, 2002.
Glossary of Epidemiology Terms. CDC: Atlanta, 2012

Course language:
english

Notes:

Course assessment Total number of assessed students: 0					
A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0
Provides:					
Date of last modification: 03.05.2022					
Approved:					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ MZND-GMp/23	**Course name:** Evidence Based Medicine

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 0 / 1 **Per study period:** 0 / 14
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 6., 8., 10.

Course level: I.II.

Prerequisities: MI-Pr/MInf-GMp/23

Conditions for course completion:
1. 100% and active attendance.
2. Min. 60% from each test during the term.
3. Elaboration of all given classworks.

Learning outcomes:
Understand basic principles of Evidence based Medicine (EBM). The students will get skills to obtain information about clinical scientific outputs; they will know how to critically evaluate clinical information as well as they will know to present benefits for clinical praxis. Basics of scientific work related to the medicine will be also explained.

Brief outline of the course:
The history, the development and the recent state on Evidence Based Medicine. Characteristics of clinical trials. Formulation of clinical questions. Specialized information resources for evidence based medicine. Methodology of clinical information searching. Qualitative evaluation of clinical studies and reviews. Presentation of practical works.

Recommended literature:
1. Heneghan C., Badenoch D.: Evidence-based Medicine Toolkit, BMJ Books, Blackwel Publishing, 2006, ISBN 978-0-7279-1841-3.
2. Majerník J., Švída M., Majerníková Ž.: Medicínska informatika, UPJŠ, Košice 2010, Equilibria, ISBN 978-80-7097-811-5.
3. Notes from exercises.

Course language:
english

Notes:

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:
Date of last modification: 12.05.2016
Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ FAID-GMp/23	**Course name:** First Aid

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 1 / 1 **Per study period:** 14 / 14
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 1.

Course level: I.II.

Prerequisities:

Conditions for course completion:
1. Pass all excercises - 100% participation in exercises
2. Final test - min. 60% criteria

Learning outcomes:
Practical education in cardiopulmonary resuscitation, care of the bleeding victim, burns care, covering and imobilization of injury of the skelet.

Brief outline of the course:
Emergency Rescue and Transfer – Removal from Automobile. Basic Resuscitation Steps: Respiratory Emergencies, Airway Obstructions, Cardiopulmonary Resuscitation - Basic life support. Unconscious Victim. Wounds – Definition, Causes, First Aid for Open Wounds. Heat Stroke. Burns – First Aid

Recommended literature:
First Aid Manual (Dk First Aid) John Ambulance (Author), 10th edition, 2014, ISBN: 978-1-4093-4200-7.
First Aid for Babies and Children by DK, DK (Author) , 5th edition, 2012, ISBN: 978-1409379126.
www.erc.com

Course language:
English language

Notes:

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 12.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ FC-GMp/23	**Course name:** Forensic Criminalistics

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 1 / 1 **Per study period:** 14 / 14
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 8., 10.

Course level: I.II.

Prerequisities:

Conditions for course completion:
Attendance on lectures and seminars to the specified extent, successful presentation of seminar work. Detailed conditions for mandatory participation and forms of evaluation are available on the department's website.
https://www.upjs.sk/en/faculty-of-medicine/department/forensic-medicine/teaching/courses/dr/

Learning outcomes:
Criminalistics is one of the important components of medical and legal science that provides knowledge and skill for analysis and assessment of criminal offenses – from committing a crime to punishing the offender. The teaching of the subject Forensic Criminalistics is focused on selected procedures and methods of forensic investigation, which are in many aspects built on the basic knowledge of the human body and chemical processes associated with the study of general medicine. The course also offers a demonstration and analysis of real criminal cases, which can be an interesting addition to content of studies not only for the future forensic doctors.

Brief outline of the course:
Introduction to forensic sciences. Areas of forensic science. History of forensic sciences. Forensic science organization in Slovakia. Expert activities. Process of investigation (STAIR tool). Crime scene investigation. Types of evidence. Collection of evidence at the crime scene. Bloodstain patterns. Forensic identification. Techniques and procedures in postmortem identification. Dactyloscopy. Portrait identification. Forensic odorology. Forensic biology and genetics. Forensic anthropology. Trasology. Firearms and toolmarks. Criminalistic tactics. Interviewing, questioning, and interrogation. Forensic psychology. Sanity evaluations and criminal responsibility. Criminology. Different schools of criminology. Areas of focus of criminologist. Victimology. Famous murder cases that took place in Slovakia.

Recommended literature:
JAMES, S. H., J. J. NORDBY, and S. BELL. Forensic Science: An Introduction to Scientific and Investigative Techniques. 4th ed. New York: CRC Press, 2014.
ERZINCLIOGLU, Z. The Illustrated Guide to Forensics: True Crime Scene Investigations. London: Carlton Book Ltd., 2004.
REDDY, K. S. N. and MURTY, O. P. The Essentials of Forensic Medicine and Toxicology. 33rd edition. New Delhi: Jaypee Brothers Medical Publishers Ltd., 2014.

KARCH, S. B. Postmortem Toxicology of Abused Drugs. New York: CRC Press, 2008.
MOREWITZ, S. J., GOLDSTEIN, M. L. Handbook of Forensic Sociology and Psychology. New York: Springer, 2014.
SIEGEL, L. J. Criminology: Theories, Patterns and Typologies. 13th ed. Boston: Cengage Learning, 2016.

Course language:
English

Notes:
Maximum class size is 20 students.

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 21.07.2021

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ FMML-GMp/23	**Course name:** Forensic Medicine and Medicine Law

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 1 / 2 **Per study period:** 14 / 28
Course method: present

Number of ECTS credits: 3

Recommended semester/trimester of the course: 10.

Course level: I.II.

Prerequisities: MI-Pr/S-GM3p/23 and MI-Pr/IM-GM3p/23 and MI-Pr/NL-GM2p/23

Conditions for course completion:
Attendance on lectures and seminars to the specified extent, successful completion of a credit test and oral exam. Detailed conditions for mandatory participation and forms of evaluation are available on the department's website.
https://www.upjs.sk/en/faculty-of-medicine/department/forensic-medicine/teaching/courses/dr/

Learning outcomes:
The aim of the subject is to acquaint students with the role of Forensic Medicine, as one of the main branches of medicine. The students will learn how to identify and assess the effects of violence on the human body, determine the cause of death in cases of non-violent and violent death, as well as apply medical knowledge to questions of civil and criminal law. Emphasis is placed on acquiring the basic knowledge necessary to perform an examination of the dead body at the scene of death, as a knowledge required of every future doctor.

Brief outline of the course:
Introduction to the forensic medicine. Role of forensic medicine in Slovakia and worldwide. Concept of forensic medicine in Slovakia. Health Care Surveillance Authority. Examination of the dead body at the scene of death. Coroner system and medical examiner system. Medical examination of the dead in Slovakia. Types of autopsies. Autopsy procedure. Neonatal autopsy. Documentation required for the autopsy. Autopsy diagnosis. Autopsy report. Medicolegal death investigation. Postmortem changes. Supravital and vital reactions. Identification of the living and the dead. Forensic dentistry. Identity of decomposed or skeletalised remains. Identification in mass disasters. Exhumation. Natural (non-violent) death in adults. Natural (non-violent) death in children. Sudden infant death syndrome. Violent death in children. Child abuse and neglect. Pregnancy and childbirth. Sexual offenses. Violent death. Mechanical injuries. Examination of wounds. Blunt and sharp force injuries. Firearm and blast injuries. Forensic investigation of traffic accidents. Suffocation. Mechanical asphyxia. Drowning. Thermal injuries. Electrical injuries. Diving accidents (barotrauma, decompression sickness). High altitude illness. Ionizing radiation injury and illness. Medical errors. Iatrogenic damage. Expert activity in medical profession. Forensic expert activity. Forensic medical examination of the living persons. Forensic toxicology. General aspects of poisoning. Types of poisons. Forensic diagnosis of poisoning. Methods in forensic toxicology. Gaseous poisons. Agrochemical poisons. Corrosive poisons. Heavy metals.

Mushroom poisoning. Forensic toxicology. Alcohols. Medicolegal aspects of ethanol intoxication. Methanol poisoning. Ethylene glycol poisoning. Drugs of abuse and dependence. Forensic histopathology. Immunohistochemistry.

Recommended literature:

REDDY, K. S. N., and O. P. MURTY. The Essentials of Forensic Medicine and Toxicology. 33rd edition. New Delhi: Jaypee Brothers Medical Publishers Ltd., 2014.
DIMAIO, V. J., and D. DIMAIO. Forensic Pathology. 2nd edition. Boca Raton: CRC Press, 2001.
PAYNE-JAMES, J., JONES, R., KARCH, S. B. and MANLOVE, J. Simpson's Forensic Medicine. 13th edition, London: Hodder Arnold, 2011.
BURTON, J., S. SAUNDERS, and S. HAMILTON. Atlas of Adult Autopsy Pathology. Boca Raton: CRC Press, 2015.
LONGAUER, F., N. BOBROV, and P. LÁBAJ. Practising in Forensic Medicine. Košice: UPJŠ, 2000.

Course language:
English

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 22.03.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ FNCD-GMp/23	**Course name:** Fundamentals in Nutrition and Clinical Dietology

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 2 / 2 **Per study period:** 28 / 28
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 10.

Course level: I.II.

Prerequisities: MI-Pr/IM-GM3p/23

Conditions for course completion:
1. For successful completion of the practical exercises/seminars is required:
- To participate at all of practical exercises, theoretical and practical performance of all exercises/seminars.
- To get at least 60 % of total score for ongoing review of written test or the theoretical training to practical exercises.
- Two absences are allowed /justified/
2. For successful obtained of the credits from subject is necessary:
- To gain the credit from practical exercises (paragraph 1 above).
- Evaluation: Study rules of procedure UPJŠ in Košice, the Faculty of Medicine, Par II, Art13
- The final classification includes the evaluation of the written test and the results obtained in practical exercises
Education can alternatively by conducted in a distant mode. The teachers will communicate with students by email, skype or other teleconference applications.
1. The presence of the students at individual practices will be recorded by their teachers.
2. Teachers will assign the tasks to students in the form of essays and solving case reports.
3. Knowledge assessment will be carried out by a distance test.
4. Completion of the course will be evaluated on the basis of the records of presence, written assignments and test results.

Learning outcomes:
Point out the importance of proper nutrition in the prevention and treatment of various diseases.

Brief outline of the course:
Characteristics of individual nutrients.The importance of diet in the development of lifestyle diseases.Principles of diet in lipid disorders, obesity and diabetes type 2 patients
Obesity, clinical dietology guide, cardiovascular protection diet.Enteral and Parenteral Nutrition
Water and electrolytes (sodium, potassium, chloride).Protein, carbohydrate, fat, fiber intake

Vitamin, mineral, trace element, antioxidant, electrolyte intake.Function of the gastrointestinal (GI) tract.Hormonal control of nutrient metabolism.Nutrition and immunity
Characteristics of an adequate diet, Veganism/vegetarianism.Diarrhea, water, electrolytes, acid-base balance.Chronic diseases (cancer, cardiovascular disease, hyperlipidemia, hypertension, osteoporosis.
Omega 3-PUFA a metabolic syndrome .Malnutrition .Weight loss diet plans and evidence based medicine .Principles of diet in lipid disorders, obesity and
diabetes type 2 patients.Probiotics .Obesity.Antioxidants , Protein (deficiency, metabolism, bioavailability, food sources, requirements) .Dietary fiber, energy balance.Carbohydrates (food sources, requirements) .Physiology related to thirst, hunger, satiety.Nutrient intake recommendations .Nutritional anemias, Laboratory evaluation,
Growth.Sources, bioavailability, action, deficiency,
excess of micronutrients.

Recommended literature:
Catherine Hankey PhD RD, Kevin Whelan PhD RD FBDA : Advanced Nutrition and Dietetics in Obesity, Print ISBN:9780470670767
Online ISBN:9781118857991
DOI:10.1002/9781118857991© 2018 John Wiley & Sons Ltd.
Ronald Watson : Nutrition in the Prevention and Treatment of Abdominal Obesity 2nd EditioneBook ISBN: 9780128137819,Paperback ISBN: 9780128160930,Imprint: Academic Press,Published Date: 6th December 2018,Page Count: 522

Course language:
english

Notes:
The course Fundamentals in Nutrition and Clinical Dietology is provided only in the summer term.

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 05.08.2021

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ FHRA-GMp/23	**Course name:** Fundamentals of Health Risk Assesment

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 2 / 0 **Per study period:** 28 / 0
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 9.

Course level: I.II.

Prerequisities:

Conditions for course completion:
Attendance on lectures, active participation and discussion.
Seminar - written essay on chosen topic, with presentation which will be evaluated by teacher.

Learning outcomes:
Student of the subject will receive the knowledge about elementary roles of risk assessment in environment and occupational conditions.

Brief outline of the course:
Risk assessment, risk evaluation, risk of exposure. The concept of concentration, dose, internal dose. The risk assessment is carried out in four basic steps: Identification of risk (hazard identification). Evaluation of the dose / concentration / level. Exposure - response / action on the body (evaluating the relationship dose - response). Risk management.
Exposure assessment. The principles of risk assessment in the field of environmental and working environment. Risk characterization, the effective dose – response, method HIA. Specific approaches to analyze the environmental risk for the individual components of environment. Factors of working environment, exposure monitoring, qualitative and quantitative assessment. Effects of chemicals, carcinogens, mutagens and teratogens. Stochastic and non - stochastic effects. NOEL, LOEL RFD. Factors of change, uncertainty factor, confounding factor. Risks of physical activity (one term excessive burden, JNDZ). Risk management and risk categorization.

Recommended literature:
1. RIMÁROVÁ, K.: Environmental medicine – hygiene. Košice, Univerzita Pavla Jozefa Šafárika v Košiciach, 2006. - 148 s. - ISBN 80-7097-646-2.
2. RIMÁROVÁ, K.: Compendium of Hygiene. Košice, Univerzita Pavla Jozefa Šafárika, 2014. - 210 s. - ISBN 9788081521676 (brož.).
3. KOLARZYK, E.: Selected topics on hygiene and human ecology. Edited by http://www.e-nujag.cm-uj.krakow.pl/materialy/higiena/main.pdf.
4. PAUSTENTBACH, D. J.: The Risk Assessment of Environmental and Human Health Hazards: Textbook of Case Studies, 1989, 220 s., ISBN. 978-0471849988.

Course language:
English

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 12.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ FI-GMp/23	**Course name:** Fundamentals of Immunology

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 2 / 2 **Per study period:** 28 / 28
Course method: present

Number of ECTS credits: 5

Recommended semester/trimester of the course: 4.

Course level: I.II.

Prerequisities: MI-Pr/B-GM1p/23

Conditions for course completion:
tests, examination

Learning outcomes:
Overview of the structure, mechanisms and function of immune system.

Brief outline of the course:
Cells of immune system. Function of T and B lymphocytes. NK cells. Myeloid cells. Structure and function of lymphoid organs. Mucosal immune system. Major histocompatibility system. Antigens, immunoglobulins, cytokines, adhesive molecules. Regulation of immune response. Immunopathological reactions I, II, III, IV. Anticancer immunity. Autoimmunity. Immunodeficiency.

Recommended literature:
Stites, D.P.: Medical Immunology

Course language:
english

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 15.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ GM-GMp/23	**Course name:** General Practice Medicine

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 1 / 1 **Per study period:** 14 / 14
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 10.

Course level: I.II.

Prerequisities: MI-Pr/IP-GMp/23 and MI-Pr/SP-GMp/23

Conditions for course completion:
Lectures, Practice, Fellowhips, completion of the course

Learning outcomes:
Medical history : current condition, personal, family, work and medication history. Physical examination (and rectal). Preventive examination. Vaccination. Prescription of the drugs and medical devices. Acute conditions. Therapy. Consultant examination. Auxiliary examination. Hospitalization. Etics. Law. Documentation.

Brief outline of the course:
1. General medicine : definition, basic concepts
2. Work of general practitioner : medical and non- medical
3. Diagnosis and treatment : symptoms, syndrome, diagnosis, differential diagnosis , therapy
4. Work particularities of general practitioner : preventive exam, vaccination, prehospital care, medical service of first aid, visits, occupational health services, sickness absence
5. Acute conditions
6. The principles of communication with different groups
7. Medical files. Examination of the dead. Possession of weapons. Motor vehicles. Cooperation with police.
8. eHealth

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 23.03.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ GO-SS-GMp/23	**Course name:** Gynaecology and Obstetrics
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 2	
Recommended semester/trimester of the course: 11., 12..	
Course level: I.II.	
Prerequisities: MI-Pr/GO-GM3p/23 and MI-Pr/PM-GM2p/23	
Conditions for course completion: Obtaining at least 300 credits for compulsory and compulsory elective courses in the prescribed composition by the study plan for the 1st to 5th year of study + completion of the compulsory course Gynaecology and Obstetrics 3.	
Learning outcomes: Verify the student's acquired practical and theoretical knowledge and skills in the matter of the state examination.	
Brief outline of the course:	
Recommended literature: Study literature: Čech E., et al., Porodnictví, 1999 Citterbart, K., et al., Gynekologie, 2001 Martius G., et al., Gynekológia a pôrodníctvo, 1997 Ponťuch A., et al., Gynekológia a pôrodníctvo, 1989 Ponťuch A., et al., Gynekológia a pôrodníctvo, 1987 Poradovský K., et al., Gynekológia, zv. 1, 1982 Poradovský K., et al., Pôrodníctvo, zv. 2, 1982 Chamberlain G., et al., Illustrated textbook of obstetrics, 1991 Tindall V. R., et al., Illustrated textbook of gynaecology, 1991 Gabbe S. G., et al., Obstetrics, 1996 Varga J., et al., Praktikum z gynekológie a pôrodníctva, 2022	
Course language: English	
Notes:	

Course assessment Total number of assessed students: 0					
A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0
Provides:					
Date of last modification: 13.05.2022					
Approved:					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ GO-GM1p/23	**Course name:** Gynaecology and Obstetrics 1

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 2 / 2 **Per study period:** 28 / 28
Course method: present

Number of ECTS credits: 3

Recommended semester/trimester of the course: 9.

Course level: I.II.

Prerequisities: MI-Pr/IM-GM3p/23

Conditions for course completion:
100 % presences on lectures, minimum 60 % of point in exam test

Learning outcomes:
Learning outcomes: Getting to knowledge the principal investigation in gynecology: digital assessment, assessment in specula, oncocytology and colposcopy. In Second goal student obtain knowledge in imaging ,methid as ultrasonography, CT and MRI. Student in this part of study obtain knowledge about principal surgical methods as: curettage, hysteroscopy, laparoscopy, surgical treatment of pelvic organe prolapse and urinary incointinence and basic in oncogynecology. In the same part will be presented diagnostic and terapeutic options in women infertility. Student will also obtain knowledge about diagnostic a terapeutic options of breast diseases. Inseparable part of study will be training skill in center of simulations and virtual medicine.

Brief outline of the course:
Brief outline of the course: Digital assessment, assessment in specula, oncocytology, colposcopy, USG, CT, MRI, menstrual disorders infertility, urogynecology, breast dissease, infertility, oncogynecology

Recommended literature:
Literatúra:
Ostró A., et al., Peripartální hemoragie 2, 2018
Ostró A., et al., Vybrané kapitoly z gynekológie detí a dospívajících, 2017
Ostró A., et al., Peripartální hemoragie, 2013
Toporcerová S., Základy reprodukčnej medicíny 2015
Urdzík P., Základy urogynekológie, 2011
Čech E., et al., Porodnictví, 1999
Citterbart, K., et al.,Gynekologie, 2001
Martius G., et al., Gynekológia a pôrodníctvo, 1997
Ponťuch A., et al., Gynekológia a pôrodníctvo, 1989
Ponťuch A., et al., Gynekológia a pôrodníctvo, 1987
Poradovský K., et al., Gynekológia, zv. 1, 1982
Poradovský K., et al., Pôrodníctvo, zv. 2, 1982
Chamberlain G., et al., Illustrated textbook of obstetrics, 1991

Tindall V. R., et al., Illustrated textbook of gynaecology, 1991
Gabbe S. G., et al., Obstetrics, 1996
Novak´s and Berek J., et al., Gynaecology, 1996

Course language:
english

Notes:

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 13.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/GO-GM2p/23	**Course name:** Gynaecology and Obstetrics 2

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 2 / 3 **Per study period:** 28 / 42
Course method: present

Number of ECTS credits: 4

Recommended semester/trimester of the course: 10.

Course level: I.II.

Prerequisities: MI-Pr/GO-GM1p/23

Conditions for course completion:
- 100 % participation in practical lesson, signed in logbook
- 100% attendance of lectures
- obtain at least 60% from credit test (mark E)

Learning outcomes:
Aim of subject:
get to know basic knowledge about examination in obstetrics: digital assessment, pelvic leveles and obstetric hostory. Student obtain knowledge abou physioligal, pathological, vaginal instrumental delivery and ceasarean section. Stusdent also obtain knowledge about ultrasioography in obstetrics, prenatal screening methods and prenatal care. Student obtain knowledge about premature labour and newborn care. During bloks stuident will traine skill s on obstetrcina simulators.

Brief outline of the course:
Basic structure of subject:
basic examination methods in obsterics, process of physiocogical and pathological pregnancy, pshysiological and pathological bitrh

Recommended literature:
Chamberlain G., et al., Illustrated textbook of obstetrics, 1991
Tindall V. R., et al., Illustrated textbook of gynaecology, 1991
Gabbe S. G., et al., Obstetrics, 1996
Novak´s and Berek J., et al., Gynaecology, 1996

Course language:
English

Notes:

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:
Date of last modification: 13.05.2022
Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ GO-GM3p/23	**Course name:** Gynaecology and Obstetrics 3

Course type, scope and the method:
Course type: Practice / Controlled study hour
Recommended course-load (hours):
Per week: Per study period: 160s / 60s
Course method: present

Number of ECTS credits: 9

Recommended semester/trimester of the course: 11., 12..

Course level: I.II.

Prerequisities: MI-Pr/GO-GM2p/23 and MI-Pr/CGO-GMp/24

Conditions for course completion:
- 100 % participation in practical lectures, signed in logbook
- obtain at least 60% from credit test (Mark E)

Learning outcomes:
aim of subject:
basic structure:
basic operative techniques in gynecology and obsterics, techniques in urogynecology and oncogynecology, prenatal diagnostic techniques (amniocentesis), techniques in minimal invasive surgery (hysterescopy, laparoscopy), process of physiological and pathological gravidity, psysiological birt, menstrual cycle disorders, infection in gynecology, benign and malignant tumors, inferility, urogynecology,and breast disease.

Brief outline of the course:
basic structure:
basic operative techniques in gyn&obs specialiyed operative, techniques, prenatal diagnostic techniques (amniocentesis), techniques in minimal invasive surgery (hysterescopy, laparoskopy), process of physiological and pathological gravidity, psysiological birt, menstrual cycle disorders, infection in gynecology, benign and malignant tumors, sterility, urogynecology, breast disease

Recommended literature:
Obsterics and gyneacology
Steven G. Gabbe
Jeniffe R. Niebyl
Joe Leih simpson
ISBN 978-1-4377-1935-2
2012

Course language:
English

Notes:

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 13.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ HCM-GMp/23	**Course name:** Health Care Management

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 0 / 1 **Per study period:** 0 / 14
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 9.

Course level: I.II.

Prerequisities:

Conditions for course completion:
1. 100 % attendance at seminars.
2. Written elaboration and presentation of the assigned semester work.
Successful completion of the final exam
Evaluation of semester work

Learning outcomes:
To provide students with main information and knowledge in the field of general management with aim to understand the basic management processes and principles at the organizational level and to acquire basic managerial skills. After completing the course, students will be able to apply the knowledge of general management in the management of health care at various levels.

Brief outline of the course:
Basic managerial functions - planning, organizing, leading and controlling; Organization and environment - external environment, internal environment, SWOT analysis; Managerial roles and skills - communication, preparation and management of business meetings, task delegation, troubleshooting, decision making; Quality standards and quality management in healthcare; Basics of change management.

Recommended literature:
James H. DONNELLY, JH, GIBSON, JL. Jr, IVANCEVICH, JM. Fundamentals of management. 6th ed. Plano, Tex. : Business Publications, 1987. 827 p. ISBN 0256036829. 2. Websites
European Observatory on Health Systems and Policies
https://eurohealthobservatory.who.int/
Public Health Europe - European Commission - EU
https://ec.europa.eu/health/home_en
WISMAR, M. et al. Cross-border Health Care in the European Union. Mapping and analysing practices and policies. World Health Organization 2011. ISBN 978 92 890 0221 9. Available online: https://www.euro.who.int/__data/assets/pdf_file/0004/135994/e94875.pdf

Course language:

english

Notes:
Estimated time of the student' burden: 34 hours
Present study (Pr): 14 hours
Preparation of presentation 12 hours
Self-study 8 hours

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 17.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ HDMP-GMp/23	**Course name:** Health Damage in Medical Practice

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 1 / 1 **Per study period:** 14 / 14
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 8., 10.

Course level: I.II.

Prerequisities:

Conditions for course completion:
Attendance on lectures and seminars to the specified extent, successful presentation of seminar work. Detailed conditions for mandatory participation and forms of evaluation are available on the department's website.
https://www.upjs.sk/en/faculty-of-medicine/department/forensic-medicine/teaching/courses/dr/

Learning outcomes:
The subject offers a comprehensive view on the various types and causes of health damage that every doctor might encounter during clinical practice. Unlike clinically oriented subjects that are focusing on pathological conditions in terms of their etiology, diagnosis and treatment, this elective course focuses rather on the assessment of specific health damage such as one resulting from a criminal offence, accident or medical malpractice. Topics regarding epidemics, pandemics and bioterrorism also deal with specific approach of health professionals and altered conditions for provision of health care, especially in terms of protection of own health.

Brief outline of the course:
Definition of health damage and its classification from different points of view. Health damage due to a disease and external factors. Bodily harm from legal point of view. Assessment of traumatic injury. Medical records management. Diagnoses, their arrangement and relevance for forensic and legal purposes. Assessment of the causal link between diagnosis and patient data. Assessment of long-term sickness absence. Traumatic health damage. Traffic accidents – forensic assessment. Quantification of injuries in traffic accidents. Quantification of injuries in traffic accidents. Direct and associated complications of traumatic injuries. Injury Severity Score (ISS). Abbreviated Injury Scale (AIS). Health damage resulting from the offense. Forms of physical abuse. CAN syndrome. Examination of the person injured while committing a crime and the person suspected of committing a crime. External examination of the person after the committed crime. Biological and chemical weapons of mass destruction in connection with damage to human health. Bioterrorism. Biohazard Safety Level (BSL) and its importance. Work in a BSL regime in case of biological threat. Mass casualty incident. M.E.T.H.A.N.E. method. Sorting of wounded people. Triage (START). Health services in epidemic/pandemic. Challenges of epidemic/pandemic for the health care system. Working conditions of healthcare professionals during epidemic/pandemic. Compensation for the pain and deteriorated social and work capacity in Slovak legislation. Damage

to health during provision of health care. Medical malpractice. Lege artis. Supervision of provision of health care and. Health Care Surveillance Authority (HCSA) in Slovakia. Expert activity in the field of healthcare and pharmacy in cases of health damage. HCSA vs. medical expert activity in case of damage to health during provision of health care.

Recommended literature:

REDDY, K. S. N. and MURTY, O. P. The Essentials of Forensic Medicine and Toxicology. 33rd edition. New Delhi: Jaypee Brothers Medical Publishers Ltd., 2014.
PAYNE-JAMES, J., JONES, R., KARCH, S. B. and MANLOVE, J. Simpson's Forensic Medicine. 13th edition, London: Hodder Arnold, 2011.
BARTLEY, G. P. Traffic Accidents: Causes and Outcomes. New York: Nova Publishers, 2008.
JENNY, C. Child Abuse and Neglect: Diagnosis, Treatment and Evidence. Cambridge: Elsevier, 2010.

Course language:
English

Notes:
Maximum class size is 20 students.

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 21.07.2021

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ HP-GM/23	**Course name:** Health Psychology

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 1 / 1 **Per study period:** 14 / 14
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 7.

Course level: I.II.

Prerequisities:

Conditions for course completion:
Completion of online lectures, tests, elaboration of seminar assignments and active participation in the colloquium.

Learning outcomes:
To provide students with basic information in the field of health psychology, ie the significance of psychological factors in maintaining good health, preventing disease, managing negative health conditions, providing psychological assistance to patients during recovery and coping with chronic diseases.

Brief outline of the course:
1st block of lectures: Being healthy and staying healthy
1.Health and social determinants of health
2.Health related behaviour
3.Changing health related behaviour
4.Health promotion
2nd block of lectures:Becoming ill
5.Therories and mechanisms of stress
6.Stress moderators , coping and personality
7. Social support
3rd block of lectures: Being ill
8. Being ill
9. Chronic disease from the patient's perspective
11. Complementary, alternative and integrative medicine in patient care
12.Health literacy
4th block of lectures: Improving health care
13. Access to health care
14. Doctor patient relationship
15. Patient safety, second victim

Recommended literature:
Morrison V., Bennett P.: Introduction to Health Psychology. Pearson Education Limited 2016.

Database of Individual Patients' Experiences https://www.healthtalk.org/ https://hovoryozdravi.cz/
Ziebland S., McPherson A.: Making sense of qualitative data analysis: an introduction with illustration from DIPEx. Medical Education 2006, 40:405-414
Silverman J. et al.: Skills for communicating with patients. CRS Press 2013

Course language:
english

Notes:
Provided only if at least 15 students assigned.
Combined form of education

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 13.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ HE-GM1p/23	**Course name:** Histology and Embryology 1

Course type, scope and the method:
Course type: Lecture / Practice / Controlled study hour
Recommended course-load (hours):
Per week: 2 / 3 / 1 **Per study period:** 28 / 42 / 14
Course method: present

Number of ECTS credits: 6

Recommended semester/trimester of the course: 2.

Course level: I.II.

Prerequisities:

Conditions for course completion:
Requirements for completion of subject:
1. Student has to attend all practical lessons (100%) and minimally 70% of the lectures.
2. Limits to pass the subject Histology and Embryology 1:
control tests during practical classes – average minimum 60%
semestral slide test – minimum 60% of each slide
semestral written test – minimum 60%
If these conditions are not completed the student is evaluated - Fx
https://www.upjs.sk/en/faculty-of-medicine/department/histology-and-embryology/teaching/courses/dr/

Learning outcomes:
The student gains knowledge about the microscopic structure and function of the cells and tissues within living human organism. This serves as the base for studying pathology and pathophysiology. Cells and tissues are studied practically by the light microscope.
Embryology 1 is concerned with basic principles of early human development.

Brief outline of the course:
Histologic technic; Cytology; Epithelial tissue; Connective tissue proper; Cartilage; Bone; Ossification; Blood - hemopoiesis and bone marrow; Muscle tissue; Nervous tissue; Embryology - blastogenesis, early organogenesis.
https://www.upjs.sk/en/faculty-of-medicine/department/histology-and-embryology/teaching/courses/dr/

Recommended literature:
Compulsory literature:
1. Adamkov M. et al.: Introduction to FUNCTIONAL HISTOLOGY, Nakladatelství Barbara, 2016
2. Mechírová E. and Domoráková I.: *HISTOLOGY, Practical lessons, 2020
3. Mechírová E., Domoráková I., Tóth Š. et al.: Study material of Histology and Embryology – Supplement http://www.lf.upjs.sk/uhe/histology_topics/
4. Junqueira L. C. et al.: Basic Histology, Elsevier, 2016

5. Moore K. L. and Persaud T. V. N.: Before We Are Born, Essentials of Embryology and Birth Deffects, Elsevier, 2015
Recommended literature:
1. Mechírová E., Domoráková, I., Tóth Š., Veselá J.: Lectures HE1 pdf. - https://portal.lf.upjs.sk/
2. Ross M.H. and Pawlina W.: Histology: A Text and Atlas: With Correlated Cell and Molecular Biology, Wolters Cluver, 2021
3. Ovalle W. K. and Nahirnay P. C.: Netters´s ESSENTIAL HISTOLOGY, Ilustrations, colour atlas, Saunders, 2020
https://www.upjs.sk/public/media/9552/EN%20HE1_Literature%20GM.pdf

Course language:
English

Notes:

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 21.03.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ HE-GM2p/23	**Course name:** Histology and Embryology 2

Course type, scope and the method:
Course type: Lecture / Practice / Controlled study hour
Recommended course-load (hours):
Per week: 2 / 4 / 1 **Per study period:** 28 / 56 / 14
Course method: present

Number of ECTS credits: 7

Recommended semester/trimester of the course: 3.

Course level: I.II.

Prerequisities: MI-Pr/HE-GM1p/23

Conditions for course completion:
Requirements of HE2 during semester:
1. Student has to attend all practical lessons (100%).
2. Control tests – average minimum 60%
3. Final slide test (three slides) in 14th week of semester - each slide minimally 60%.
Final exam of HE2 consists of 2 parts:
A. Final written test - minimum 60% to continue to the final oral exam.
B. Final oral exam - three questions – evaluation for each minimally 60%:
a) cytology and tissues
b) microscopic anatomy
c) embryology
Teaching is by presence and by distance.
https://www.upjs.sk/en/faculty-of-medicine/department/histology-and-embryology/teaching/courses/dr/

Learning outcomes:
The student gains knowledge about the microscopic structure and function of the cells, tissues, organs and organ systems within living human organism. This serves as the base for studying pathology and pathophysiology. The microscopic structure of the organs are studied practically by the light microscope.
Embryology II. is concerned with basic principles of early human development, organogenesis and malformations during prenatal development.

Brief outline of the course:
Cardiovascular system, Lymphoid system, Digestive system, Respiratory system, Urinary system, Male and Female reproductive systems, Endocrine and Nervous system, Skin, Sense organs. Embryology II. - organogenesis.
https://www.upjs.sk/en/faculty-of-medicine/department/histology-and-embryology/teaching/courses/dr/

Recommended literature:
Compulsory literature:

1. Adamkov M. et al.: Introduction to FUNCTIONAL HISTOLOGY, Nakladatelství Barbara, 2016
2. Mechírová E. and Domoráková I.: *HISTOLOGY, Practical lessons, 2020
3. Mechírová E., Domoráková I., Tóth Š. et al.: Study material of Histology and Embryology – Supplement http://www.lf.upjs.sk/uhe/histology_topics/
4. Junqueira L. C. et al.: Basic Histology, Elsevier, 2016
5. Moore K. L. and Persaud T. V. N.: Before We Are Born, Essentials of Embryology and Birth Deffects, Elsevier, 2015
Recommended literature:
1. Mechírová E., Domoráková, I., Tóth Š., Veselá J.: Lectures HE1 pdf. - https://portal.lf.upjs.sk/
2. Ross M.H. and Pawlina W.: Histology: A Text and Atlas: With Correlated Cell and Molecular Biology, Wolters Cluver, 2021
3. Ovalle W. K. and Nahirnay P. C.: Netters´s ESSENTIAL HISTOLOGY, Ilustrations, colour atlas, Saunders, 2020
https://www.upjs.sk/public/media/9552/EN%20HE2_Literature%20GM.pdf

Course language:
English

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 08.09.2021

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ HIS-GMp/23	**Course name:** Hospital Information System

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 0 / 1 **Per study period:** 0 / 14
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 3.

Course level: I.II.

Prerequisities: MI-Pr/MInf-GMp/23

Conditions for course completion:
1. 100% and active attendance.
2. Min. 60% from each test during the term.
3. Elaboration of all given classworks.
4. Final exam.

Learning outcomes:
The main aim is to manage work with the real hospital information system. Students should understand principles of electronic health records, to know how to organize patients administration using individual modules of information system and to understand flow of information across the hospital departments and clinics.

Brief outline of the course:
Basics of hospital information systems. Parts of complex HIS (modules), access rights, interface description. Communication between users of HIS. Central register, Central card. Module of Outpatient clinic, creation of new outpatient clinic card, entry examination, anamnesis, emergency data set, score schemes, examination requests and orders, waiting room, outpatient clinic examination, consilium report, dispensatory treatment. Module of Hospital departments, administrative acceptance of patient for hospitalisation, entry examination, organisation of patients in rooms and beds, creation of health care records, displacement of patients in and between hospital departments, administrative discharge of hospitalised patients, final report. Gynaecological and maternity department. Module of Intensive Care Units. Module of Surgery departments. HIS for nurses and caregivers.

Recommended literature:
1. Majerník J., Kotlárová K.: Medicínska informatika 2 - Nemocničný informačný systém, UPJŠ, Košice 2010, Equilibria, ISBN 978-80-7097-812-2.
2. Majerník J., Švída M., Majerníková Ž.: Medicínska informatika, UPJŠ, Košice 2010, Equilibria, ISBN 978-80-7097-811-5.
3. Notes from exercises and manuals of hospital information systems.

Course language:
english

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 17.05.2017

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ H-GMp/23	**Course name:** Hygiene

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 1 / 2 **Per study period:** 14 / 28
Course method: present

Number of ECTS credits: 3

Recommended semester/trimester of the course: 8.

Course level: I.II.

Prerequisities: MI-Pr/Ph-GM2p/23

Conditions for course completion:
Attendance at practical lesson and seminars and accepted correct report on measurement, preparation and presentation of seminar thematic topic.
Duty attendance minimum 20 % at lectures.
The final exam in the written form- at least 64 % to pass the exam.

Learning outcomes:
Students will acquire knowledge about patterns of factors resulting from living and working environment, the impact of the different lifestyle factors on health, health promotion, health protection principles, population health and will receive the knowledge through addressing preventive measures.

Brief outline of the course:
Primary prevention in health care of the population. Primary, secondary and tertiary prevention, risk factors of chronic non-infectious diseases (cardiovascular, cancer, mental, metabolic, accidents, chronic respiratory, etc.). State health supervision, its meaning, structure of governmental service for public health, public health institutes. Public health service in Slovakia. Principles for evaluating health risks in living and working environment. Impact of factors resulting from environmental health. Environmental health, air quality, air contaminants effect on the health. Water its quality and its impact on health. Essential nutrients, their importance and the daily intake, rational nutrition. Food hygiene, principles of food control, contaminants in food. Occupational hygiene, health in the workplace, distribution and influence of factors from working conditions and occupational environment on health (physical, chemical, biological, ergonomic, specific, unspecific, hazardous work). Hygiene and sanitary in health care facilities. Effect of ionizing and non-ionizing radiation on health, protection of the population. Hygienic problems of housing and urbanization. Hygiene of children and youth. Growth and development of children, their health determinants, depending on the environment. Practical and theoretical principles in design, implementation and monitoring of population-based studies determinants of health. Practical visit of selected departments.

Recommended literature:
1. RIMÁROVÁ, K.: Environmental medicine – hygiene. Košice, Univerzita Pavla Jozefa Šafárika v Košiciach, 2006. - 148 s. - ISBN 80-7097-646-2.

2. RIMÁROVÁ, K.: Compendium of Hygiene. Košice, Univerzita Pavla Jozefa Šafárika, 2014. - 210 s. - ISBN 9788081521676 (brož.). 3. KOLARZYK, E.: Selected topics on hygiene and human ecology. Edited by http://www.e-nujag.cm-uj.krakow.pl/materialy/higiena/main.pdf

Course language:
English

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 11.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ IFM-GMp/23	**Course name:** Infectology

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 1 / 3 **Per study period:** 14 / 42
Course method: present

Number of ECTS credits: 3

Recommended semester/trimester of the course: 9.

Course level: I.II.

Prerequisities: MI-Pr/IM-GM3p/23

Conditions for course completion:

Learning outcomes:
Epidemiological aspects and basic diagnostics of infectious diseases, the basic principles of antiinfectious treatment, current problems of infectology in the 21st century.

Brief outline of the course:
The nature of infectious diseases, principles of diagnosis. Intestinal infections. Viral hepatitis. Respiratory infections. Neuroinfections. HIV / AIDS. Anti-infective therapy. Exanthematous diseases. Differential diagnosis of fever of unknown origin.

Recommended literature:
Mandell G.L., Douglas R.G., Bennett J.E., Dolin R., Principles and practise of infectious diseases. 8th edithion, 2015. P. 3904. ISBN 9781455748013
Mandal B. K., Wilkins E.G.L, Dunbar E.M., Mayon-White R.T., Infectious diseases . Fifth edition, 1997.
ISBN 0-632-03351-7
John E. Bennett, Raphael Dolin, Martin J. Blaser, Mandell, Douglas and Bennett's Infectious Disease Essentials (Principles and Practice of Infectious Diseases) 1st Edition, Elsevier, 2017

Course language:

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 26.08.2021

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ IM-SS-GMp/23	**Course name:** Internal Medicine

Course type, scope and the method:
Course type:
Recommended course-load (hours):
Per week: Per study period:
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 11., 12..

Course level: I.II.

Prerequisities: MI-Pr/CIM-GMp/24 and MI-Pr/IM-GM6p/23 and MI-Pr/IFM-GMp/23 and MI-Pr/CB-GMp/23 and MI-Pr/AIM-GMp/24 and MI-Pr/PM-GM2p/23 and MI-Pr/PT-GM2p/24

Conditions for course completion:
1. For successful completion of the practical exercises/seminars is required:
- To participate at all of practical exercises, theoretical and practical performance of all exercises/seminars.
- To get at least 60 % of total score for ongoing review of written test /60 questions/ and of the theoretical training to practical exercises.
- Two absences are allowed /justified/
2. For successful obtained of the credits from subject is necessary:
- To gain the credit from practical exercises (paragraph 1 above).
- Examining of the patient, dg., dif. dg., treatment
- Evaluation: Study rules of procedure UPJŠ in Košice, the Faculty of Medicine, Par II, Art13
- Students attending IM 6 abroad must complete a practical part of the exam including a test no later than 10 days prior to the final state examination in the original study group
- The final classification includes the evaluation of the written test and the results obtained in practical exercises
- To the state exam bring the student´s book with the appreciation
Education can alternatively by conducted in a distant mode. The teachers will communicate with students by email, skype or other teleconference applications.
1. The presence of the students at individual practices will be recorded by their teachers.
2. Teachers will assign the tasks to students in the form of essays and solving case reports.
3. Knowledge assessment will be carried out by a distance test.
4. Completion of the course will be evaluated on the basis of the records of presence, written assignments and test results.

Learning outcomes:
Graduate acquires knowledge in accordance with the profile of the graduating general medicine

Brief outline of the course:

1. Methods of investigation in cardiology
2. Pericarditis
3. Myocarditis
4. Endocarditis
5. Mitral stenosis and regurgitation
6. Aortic stenosis and regurgitation
7. Aortic disorders - aneurysm, dissection, syndrome of aortic arch
8. Systemic hypertension – classification, complications, treatment
9. Secondary hypertension
10. Acute pulmonary embolism
11. Pulmonary hypertension
12. Vein diseases – varices, superficial thrombophlebitis and deep phlebothrombosis of lower extremities
13. Atherosclerosis – aetiopathogenesis, risk factors, clinical manifestations
14. Peripheral arterial disease
15. Coronary heart disease – clinical symptoms, treatment
16. Acute coronary syndrome – unstable angina pectoris, acute myocardial infarction
17. Hypertrophic cardiomyopathy
18. Dilated cardiomyopathy
19. Atrial septal defect
20. Supraventricular tachycardia, atrial fibrillation
21. Ventricular tachycardia, ventricular fibrillation
22. Bradyarrhythmias - sick sinus syndrome, A-V blocks
23. Congestive heart failure
24. Syncope
25. Shock - differential diagnosis, treatment
26. Cardiopulmonary resuscitation
27. Methods of investigation in pneumology
28. Bronchial asthma
29. Chronic obstructive pulmonary disease, bronchiectasis
30. Respiratory failure
31. Pneumonias and complications
32. Tumours of the respiratory tract – lungs and pleura
33. Tuberculosis – epidemiology, aetiopathogenesis, diagnosis, clinical symptoms, treatment
34. Mediastinal lesions, sarcoidosis
35. Disorders of the pleura
36. Diffuse interstitial lung disorders
37. Methods of investigation in nephrology and differential diagnosis of kidney diseases
38. Acute glomerulonephritis
39. Chronic glomerulonephritis
40. Nephrotic syndrome
41. Tubulo-interstitial nephritis
42. Tumours of the kidney, nephrolithiasis, cystic renal disease
43. Acute renal failure
44. Chronic renal failure
45. Methods of investigation in gastroenterology
46. Methods of investigation in hepatology
47. Methods of investigation in diseases of pancreas

48. Diseases of the oesophagus
49. Gastritis - acute and chronic, peptic ulcer disease – complications and treatment
50. Gastric tumours
51. Inflammatory bowel diseases
52. Tumours of the small intestine and colonic tumours
53. Chronic hepatitis
54. Liver cirrhosis
55. Liver failure – acute and chronic
56. Differential diagnosis of jaundice
57. Toxic liver damage. Liver and metabolic disorders
58. Gastrointestinal bleeding – ethiopatogenesis, clinical symptoms, diagnosis and treatment
59. Upper and lower dyspeptic syndrome, colon irritabile
60. Tumours of the liver and biliary tract
61. Diseases of the gallbladder and biliary tract – clinical symptoms and complications
62. Pancreatitis
63. Tumours of the pancreas
64. Malabsorption
65. Acute states in gastroenterology
66. Methods of investigation in thyreology
67. Investigation methods of adrenal glands
68. Hyperpituitarism
69. Hypopituitarism
70. Diseases of neurohypophysis - diabetes insipidus, SIADH
71. Goitre, inflammatory diseases, and tumours of the thyroid gland
72. Hyperthyroidism
73. Hypothyroidism
74. Parathyroid glands disorders
75. Hypocorticism
76. Hypercorticism - Cushing syndrome
77. Disorders of sympathoadrenal system, pheochromocytoma
78. Primary and secondary hyperaldosteronism
79. Disorders of male and female reproduction
80. Diagnosis and treatment of acute states in endocrinology
81. Methods of investigations in haematology
82. Anaemias - classification and differential diagnosis
83. Microcytic anaemias
84. Macrocytic anaemias
85. Haemolytic anaemias
86. Acute leukaemias
87. Myeloproliferative disorders
88. Myelodysplastic syndrome
89. Chronic lymphocytic leukaemia
90. Hypocoagulation – congenital and acquired
91. Thrombocytopenias and thrombocytopathies
92. Hypercoagulation, disseminated intravascular coagulopathy
93. Anticoagulant and fibrinolytic treatment
94. The lymphomas
95. Monoclonal gammapathies
96. Aplastic anaemia

97. Blood transfusion and treatment with blood derivatives
98. Coma states in internal medicine
99. Differential diagnosis of oedema in internal medicine
100. Differential diagnosis of chest pain
101. Differential diagnosis of back pain
102. Differential diagnosis of dyspnoea
103. Differential diagnosis of subfebrilities and febrilities in internal medicine
104. Focal infection and sepsis
105. Splenomegaly and hypersplenism
106. Antibiotics - classification, indications, adverse reactions
107. Disorders of water and electrolytes
108. Disorders of acid – base balance
109. Methods of investigation in clinical genetics and its indications
110. Paraneoplastic syndromes
111. Brain stroke
112. Lipid disorders
113. Diabetes mellitus – pathogenesis, classification, diagnosis, criteria of compensation
114. Diabetes mellitus - acute complications and treatment
115. Diabetes mellitus – chronic complications and treatment
116. Diabetes mellitus type 1 – etiopathogenesis, diagnosis and treatment
117. Diabetes mellitus type 2 – etiopathogenesis, diagnosis and treatment
118. Obesity – diagnosis and treatment, metabolic syndrome
119. Porphyrias
120. Vitamins deficiencies
121. Rheumatoid arthritis
122. Seronegative spondylarthritis – morbus Bechterev, reactive, psoriatic and enteropatic arthritis
123. Arthritis urica, hyperuricemic syndrome
124. Osteoporosis and osteomalacia
125. Systemic lupus erythematosus
126. Vasculitis – classification, polyarteritis nodosa
127. Connective tissue disorders – progressive systemic sclerosis, scleroderma, Sjögren´s syndrome, dermatomyositis
128. Acute poisoning - general principles of management
129. Drug poisoning - CNS stimulating drugs, CNS depressants (ethanol, methanol)
130. Mushrooms poisoning
131. Organophosphate and carbon monoxide poisoning
132. Drug poisoning - paracetamol, ibuprofen, salicylates, antihistamines
133. Corticosteroids treatment - indications and contraindications, side effects
134. Immune disorders - immunodeficiency states, hypersensitivity states, autoimmunity
135. Imunomodulatory treatment - immunosuppressive, immunostimulatory and immunorestaurant - indications in internal medicine

Recommended literature:
Kumar and Clark: Clinical Medicine 10th Edition, ELSEVIER 2020 Kasper D, Fauci A.: Harrison s principles of Internal medicine, 20 ed 2017

Course language:
English

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 27.01.2023

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ IP-GMp/23	**Course name:** Internal Medicine - Propedeutics

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 2 / 2 **Per study period:** 28 / 28
Course method: present

Number of ECTS credits: 5

Recommended semester/trimester of the course: 5.

Course level: I.II.

Prerequisities: MI-Pr/Ph-GM1p/23 and MI-Pr/A-GM2p/23

Conditions for course completion:
1. For successful completion of the practical exercises/seminars is required:
- To participate at all of practical exercises, theoretical and practical performance of all exercises/seminars,it is possible to complete practical exercises in the Center for Simulator Teaching
- To get at least 60 % of total score for ongoing review of written test /30 questions/ and the theoretical training to practical exercises.
- Two absences are allowed /justified/
2. For successful obtained of the credits from subject is necessary:
- To gain the credit from practical exercises (paragraph 1 above).
- The final exam consists of oral parts
- Evaluation: Study rules of procedure UPJŠ in Košice, the Faculty of Medicine, Part II, Art13
- The final classification includes the evaluation of the written test and the results obtained in practical exercises
- To the exam bring the student´s book with the appreciation /patient/
- For the pre-term, a teacher's recommendation is required based on the student's active approach, excellent theoretical and practical knowledge and passing the test with at least 90%

Learning outcomes:
Basic clinical nomenclature, evaluation of anamnestic data and physical examination in internal medicine. Evaluation of basic auxiliary examination methods.

Brief outline of the course:
Introduction to clinical medicine. History taking .Inspection – part I. General inspection, consciousness, position, shape and size, skin inspection. Inspection – part II. Special inspection.Palpation – the head, neck, chest (lungs and heart), abdomen, physical examination of ascites. Palpation of the peripheral vessels, Examination of the pulse.Main symptoms in the diseases of the GIT (liver, gallbladder, pancreas) and diseases of the kidneys and urinary tract.Percusion of the lungs, heart and abdomen – physiology and pathology.Auscultation of the lungs – physiological and pathological findings. Main symptoms in most frequent diseases (bronchitis, asthma, pneumothorax, pneumonia and pleuritis.Auscultation of the heart. Heart sounds and murmurs.

Physical findings in the most frequent heart diseases (inspection, palpation, auscultation).Principles of clinical electrocardiography - normal ECG, pathologic changes, myocardial hypertrophy, electrolyte disturbances.ECG – coronary heart disease, acute myocardial infarction, pulmonary embolism, pulmonary heart disease, myocarditis, pericarditis.ECG – arrhythmias.Basic principles of X-ray in Internal Medicine. X-rey of the cest – patological findings.
The current timetable for a given term is published on the electronic bulletin board of the course in AiS2 or on the clinic's website.
Topics :
1. History taking – The history of presenting complaints
2. History taking – Previous medical history
3. History taking – Family history
4. History taking – Social and travelling history
5. The symptoms and signs of gastrointestinal diseases
6. The symptoms and sings of cardiac diseases
7. The symptoms and sings of diseases of peripheral arteries and veins
8. The symptoms and sings of the respiratory diseases
9. The symptoms and sings of kidney and bladder diseases
10. The symptoms and sings of the hematological diseases
11. The symptoms and sings of rheumatic disorders
12. Symptoms and signs of endocrine disorders
13. The symptoms and sings of the allergy
14. First impression
15. Mobility and posture
16. Physical examination of the head
17. Physical examination of the skin
18. Physical examination of the mouth
19. Physical examination of the neck
20. Facial appearance
21. Jaundice
22. Cyanosis
23. Dyspnea – main causes and physical examination
24. Hemoptoe and hemoptysis
25. Physical examination of the heart (heart sounds)
26. Physical examination of the chest (inspection, palpation, auscultation and percussion of the lung
27. Physical examination of the abdomen – inspection, palpation, percussion, auscultation
28. Heart murmurs
29. Physical examination of the unconscious or poorly responsive patient
30. Physical examination of the spine and joints
31. Measurement of blood pessure, examination of pulse
32. Body temperature and fever
33. The physical sings in some respiratory disorders / pleural effusion, pneumothorax, bronchial asthma /
34. Aortic stenosis and regurgitation
35. Mitral stenosis and regurgitation
36. ECG – basic principles
37. ECG – hypertrophy of the left and right ventricles
38. Pneumonia, acute and chronic bronchitis, emphysema –physical examination
39. ECG – acute pulmonary embolism, pericarditis, electrolyte disturbances

40. ECG – supraventricular arrythmias
41. ECG - ventricular arrythmias
42. ECG – coronary heart disease, acute myocardial infarction
43. Diagnostic and therapeutic punctions
44. X-ray methods in internal medicine /chest, investigations with contrast agents/
45. Palpation of the liver and spleen

Recommended literature:

1. Chrobák L, Grall T, Kvasnička J. Physical examination in Internal Medicine, 1997, GRADA Publishing.
2. P.J. Toghill: Examining Patients. An Intoduction to Clinical Medicine, 1993

Course language:
english

Notes:
The subject Internal propeadeutics is provided only in the winter term.

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 10.10.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ IM-GM1p/23	**Course name:** Internal Medicine 1

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 3 / 3 **Per study period:** 42 / 42
Course method: present

Number of ECTS credits: 5

Recommended semester/trimester of the course: 6.

Course level: I.II.

Prerequisities: MI-Pr/Ph-GM2p/23 and MI-Pr/IP-GMp/23

Conditions for course completion:
1. For successful completion of the practical exercises/seminars is required:
- To participate at all of practical exercises, theoretical and practical performance of all exercises/seminars,it is possible to complete practical exercises in the Center for Simulator Teaching
- To get at least 60 % of total score for ongoing review of written test and the theoretical training to practical exercises.
- Two absences are allowed /justified/
2. For successful obtained of the credits from subject is necessary:
- To gain the credit from practical exercises (paragraph 1 above).
- Evaluation: Study rules of procedure UPJŠ in Košice, the Faculty of Medicine, Part II, Art13
- The final classification includes the evaluation of the written test and the results obtained in practical exercises

Learning outcomes:
Gain basic theoretical knowledge of cardiology and pneumology, get acquainted with the examination procedures used in these diseases. .

Brief outline of the course:
Coronary heart disease- diagnosis and treatment.Myocardial infarction – clinical features, diagnosis and treatment .Endocarditis, myocarditis and pericarditis – dif. diagnosis and treatment.
Heart failure .Heart rhythm disorders I. Heart rhythm disorders II. Angiology. Peripheral vascular diseases.
Acute and chronic cor pulmonale. Thromboembolic disease .Arterial hypertension
Syncope. Shock .Echocardiography.Secondary hypertension.Cardiomyopathy.Tuberculosis
Chronic obstructive pulmonary disease. Chronic respiratory insuficiency.Inflammatory lung diseases. Investigation methods in pneumology.Bronchogenic carcinoma, other lung tumours
Bronchial asthma – diagnosis and treatment .Interstitial lung diseases

Recommended literature:
Kumar and Clark: Clinical Medicine 10th Edition, ELSEVIER 2020
Kasper D, Fauci A.: Harrison s principles of Internal medicine, 20 ed 2017

Course language:
english

Notes:
The course Internal Medicine 1 is provided only in the summer term.

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 09.02.2023

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ IM-GM2p/23	**Course name:** Internal Medicine 2

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 2 / 2 **Per study period:** 28 / 28
Course method: present

Number of ECTS credits: 4

Recommended semester/trimester of the course: 7.

Course level: I.II.

Prerequisities: MI-Pr/IM-GM1p/23

Conditions for course completion:
1. For successful completion of the practical exercises/seminars is required:
- To participate at all of practical exercises, theoretical and practical performance of all exercises/seminars,it is possible to complete practical exercises in the Center for Simulator Teaching
- To get at least 60 % of total score for ongoing review of written test and the theoretical training to practical exercises.
- Two absences are allowed /justified/
2. For successful obtained of the credits from subject is necessary:
- To gain the credit from practical exercises (paragraph 1 above).
- Evaluation: Study rules of procedure UPJŠ in Košice, the Faculty of Medicine, Part II, Art13
- The final classification includes the evaluation of the written test and the results obtained in practical exercises

Learning outcomes:
Gain basic theoretical knowledge of endocrinology, diabetology and hematology, get acquainted with the examination procedures used in these diseases.

Brief outline of the course:
Investigation methods in endocrinology.Hypothalamus – pituitary axis. and its disorders. Male and female reproductive endocrinology.Thyroid gland disorders.Parathyroid glands disorders. Differential diagnosis of hypercalcemia and hypocalcemia.Adrenal glands disorders.Diabetes mellitus type 1 – acute complications .Diabetes mellitus type 2 – chronic complications .Disorders of the lipid metabolism. Investigation methods in hematology .Anemias I: classification, iron deficiency anemia, anemia of chronic diseases, aplastic anemia .Anemias II– hemolytic anemia, macrocytic anemia.Lymphoproliferative disorders – differential diagnosis. Myeloproliferative disorders. The current timetable for a given term is published on the electronic bulletin board of the course in AiS2 or on the clinic's website.

Recommended literature:
Kumar and Clark: Clinical Medicine 10th Edition, ELSEVIER 2020
Kasper D, Fauci A.: Harrison s principles of Internal medicine, 20 ed 2017

Course language:
english

Notes:
The course Internal Medicine 2 is provided only in the winter term.

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 10.10.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ IM-GM3p/23	**Course name:** Internal Medicine 3

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 2 / 2 **Per study period:** 28 / 28
Course method: present

Number of ECTS credits: 4

Recommended semester/trimester of the course: 8.

Course level: I.II.

Prerequisities: MI-Pr/IM-GM2p/23

Conditions for course completion:
1. For successful completion of the practical exercises/seminars is required:
- To participate at all of practical exercises, theoretical and practical performance of all exercises/seminars,it is possible to complete practical exercises in the Center for Simulator Teaching
- To get at least 60 % of total score for ongoing review of written test and the theoretical training to practical exercises.
- Two absences are allowed /justified/
2. For successful obtained of the credits from subject is necessary:
- To gain the credit from practical exercises (paragraph 1 above).
- Evaluation: Study rules of procedure UPJŠ in Košice, the Faculty of Medicine, Part II, Art13
- The final classification includes the evaluation of the written test and the results obtained in practical exercises

Learning outcomes:
Complete examination and differential diagnosis of a patient with disorders of hematopoesis and lymphatic system, gastrointestinal tract.

Brief outline of the course:
Myelodysplastic syndrome and acute leukemias.Anticoagulation and fibrinolytic therapy.
Blood transfusion.Haemostasis and its disorders .Investigation methods in gastroenterology and hepatology .Diseases of the oesophagus.Disorders of the stomach and doudenum.Disorders of the small bowel. Malabsorption.
Inflammatory bowel diseases.Tumours of the small and large bowel.The Pancreas
Disorders of the gallbladder and biliary tract .Chronic hepatitis. Liver tumors
Acute states in gastroenterology.Metabolic and toxic liver diseases.
Liver cirrhosis. Hepatic failure .Immunodeficiency. Immunomodulatory and immunosupressive treatment.Treatment with glucocorticoids.
The current timetable for a given term is published on the electronic bulletin board of the course in AiS2 or on the clinic's website.

Recommended literature:

Kumar and Clark: Clinical Medicine 10th Edition, ELSEVIER 2020
Kasper D, Fauci A.: Harrison s principles of Internal medicine, 20 ed 2017

Course language:
english

Notes:
The course Internal Medicine 3 is provided only in the winter term.

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 09.02.2023

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ IM-GM4p/23	**Course name:** Internal Medicine 4 (Occupational Medicine, Geriatrics)

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 1 / 2 **Per study period:** 14 / 28
Course method: present

Number of ECTS credits: 3

Recommended semester/trimester of the course: 9.

Course level: I.II.

Prerequisities: MI-Pr/IM-GM3p/23 and MI-Pr/MBCH-GM2p/23

Conditions for course completion:
1. For successful completion of the practical exercises/seminars is required:
- To participate at all of practical exercises, theoretical and practical performance of all exercises/seminars,it is possible to complete practical exercises in the Center for Simulator Teaching
- To get at least 60 % of total score for ongoing review of written test or the theoretical training to practical exercises.
- Evaluation: Study rules of procedure UPJŠ in Košice, the Faculty of Medicine, Part II, Art13
2. For successful obtained of the credits from subject is necessary:
- To gain the credit from practical exercises (paragraph 1 above).
- The final exam is written in the form of the Rogo test
- It is necessary to bring student´s book to the exam with evidence of practical exercises.
- The final classification includes the evaluation of the written test and the results obtained in practical exercises

Learning outcomes:
Acquisition of examination and treatment methods of geriatric patients and with specific problems of gerontology, acquisition of diagnostic and treatment methods for occupational diseases and also the basics of diagnosis and treatment of some intoxications

Brief outline of the course:
Occupational Health.Poisoning /drugs, mushrooms, ethanol, methanol, CO/. Gerontology and geriatrics. Eating disorders.The acid-base balance .Sleep apnea syndrome .Gerontology and geriatry. Main problems.Basics of Clinical Geriatrics.Atherosclerosis – pathophysiology, clinical manifestations, treatment.Investigation methods in nephrology.Nephrotic syndrome. Differential diagnosis of proteinuria.Acute renal failure. Dialysis. Chronic renal failure. Kidney transplantation. Tubulointerstitial nephropathy. Nephrolithiasis.
The current timetable for a given term is published on the electronic bulletin board of the course in AiS2 or on the clinic's website.

Recommended literature:
Kumar and Clark: Clinical Medicine 10th Edition, ELSEVIER 2020

Kasper D, Fauci A.: Harrison s principles of Internal medicine, 20 ed 2017
Macejová Ž., Aljubouri A.: Selected rheumatology topics for medical students, Academic text book 2019

Course language:
english

Notes:
The subject Internal Medicine 4 is provided only in the winter term in block teaching.

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 10.10.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ IM-GM5p/23	**Course name:** Internal Medicine 5 (Rheumatology, Nephrology)

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 2 / 2 **Per study period:** 28 / 28
Course method: present

Number of ECTS credits: 3

Recommended semester/trimester of the course: 10.

Course level: I.II.

Prerequisities: MI-Pr/IM-GM4p/23

Conditions for course completion:
1. For successful completion of the practical exercises/seminars is required:
- To participate at all of practical exercises, theoretical and practical performance of all exercises/ seminars.
- To get at least 60 % of total score for ongoing review of written test or the theoretical training to practical exercises.
- Evaluation: Study rules of procedure UPJŠ in Košice, the Faculty of Medicine, Part II, Art13
2. For successful obtained of the credits from subject is necessary:
- To gain the credit from practical exercises (paragraph 1 above).
- The final exam is written in the form of the Rogo test
- It is necessary to bring student ´s book to the exam with evidence of practical exercises.
- The final classification includes the evaluation of the written test and the results obtained in practical exercises

Learning outcomes:
Diagnosis and treatment of rheumatic and kidney diseases. Acquisition of examination and treatment methods in rheumatological and nephrological patients.

Brief outline of the course:
Glomerular diseases. Glomerulonephritis.Investigation methods in rheumatology, Rheumatoid arthritis. Spondylarthropaties. Metabolic (crystal) induced arthropaties. Vasculitis . Systemic connective tissue diseases - SLE, systemic sclerosis, dermatomyositis. Sjogren syndrome.Immunity, autoimmunity. imunodeficiency – hereditary and acquired. Allergy. Metabolic bone diseases. Fluid and electrolyte disorders.

Recommended literature:
1. Kumar and Clarks: Clinical Medicine, 8th Edition
2. Kasper D, Fauci A. Harrison ´s principles of Internal Medicine
3. Macejová Ž., Aljubouri A.: Selected rheumatology topics for medical students

Course language:
english

Notes:

The subject Internal Medicine 5 is provided only in the summer term in block teaching.

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 10.10.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ IM-GM6p/23	**Course name:** Internal Medicine 6

Course type, scope and the method:
Course type: Practice / Controlled study hour
Recommended course-load (hours):
Per week: Per study period: 320s / 60s
Course method: present

Number of ECTS credits: 13

Recommended semester/trimester of the course: 11., 12..

Course level: I.II.

Prerequisities: MI-Pr/IM-GM5p/23 and MI-Pr/NL-GM2p/23

Conditions for course completion:
1. For successful completion of the practical exercises/seminars is required:
- To participate at all of practical exercises, theoretical and practical performance of all exercises/seminars.
- To get at least 60 % of total score for ongoing review of written test /60 questions/ and of the theoretical training to practical exercises.
- Two absences are allowed /justified/
2. For successful obtained of the credits from subject is necessary:
- To gain the credit from practical exercises (paragraph 1 above).
- Examining of the patient, dg., dif. dg., treatment
- Evaluation: Study rules of procedure UPJŠ in Košice, the Faculty of Medicine, Par II, Art13
- Students attending IM 6 abroad must complete a practical part of the exam including a test no later than 10 days prior to the final state examination in the original study group
- The final classification includes the evaluation of the written test and the results obtained in practical exercises
- To the state exam bring the student´s book with the appreciation
Education can alternatively by conducted in a distant mode. The teachers will communicate with students by email, skype or other teleconference applications.
1. The presence of the students at individual practices will be recorded by their teachers.
2. Teachers will assign the tasks to students in the form of essays and solving case reports.
3. Knowledge assessment will be carried out by a distance test.
4. Completion of the course will be evaluated on the basis of the records of presence, written assignments and test results.

Learning outcomes:

Brief outline of the course:
Back pain. Chest pain .

Immunodeficiency. Immunomodulatory and immunosupressive treatment.Poisoning (drugs, alcohol, mushroom).Differential diagnosis of jaundice.
Alcoholic liver disease .Paraneoplastic syndromes.Syncope. Shock.

Recommended literature:

Kumar and Clark: Clinical Medicine 10th Edition, ELSEVIER 2020
Kasper D, Fauci A.:Harrison s principles of Internal medicine, 20 ed 2017
Pobeha P., Paraničová Z., Joppa P.:Respiratory Medicine and Tuberculosis. Selected chapters, 2022
Link: https://unibook.upjs.sk/sk/lekarska-fakulta/1686-respiratory-medicine-and-tuberculosis-selected-chapters

Course language:

english

Notes:

Course assessment

Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 16.09.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ LDCP-GMp/23	**Course name:** Laboratory Diagnosis in Clinical Practice

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 0 / 1 **Per study period:** 0 / 14
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 7.

Course level: I.II.

Prerequisities:

Conditions for course completion:
lectures, practical exercise; more informations: https://www.upjs.sk/public/media/9648/Requirements-LabDiag-4GM-WS-15.pdf

Learning outcomes:
Laboratory diagnostics is an everyday part of the practice of both general practitioners and specialists. In addition to the basic approaches in the diagnosis, treatment and prevention of diseases, there are also laboratory examinations of body fluids, the analysis of which the graduate of the course should be able to handle. In recent years, many new analytes and approaches have emerged in the field of laboratory diagnostic procedures, not only in the field of molecular biological or proteomic techniques, with which students will be acquainted. The graduate knows the current laboratory methods and their use in clinical diagnostics at the theoretical and practical level, including changes and adjustments to recommended procedures, reference intervals and methods used.

Brief outline of the course:

Recommended literature:
McPherson, R. A. a Pincus M. R.: Henry´s Clinical Diagnosis and Management by Laboratory Methodsd, ELSEVIER, 2011
Burtis C. A., Ashwood E. R., Bruns D. E.: Tietz Textbook of Clinical Chemistry and Molecular Diagnostics, ELSEVIER, 2006

Course language:
english

Notes:

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 03.05.2022
Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ MBCH-GM1p/23	**Course name:** Medical Biochemistry 1

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 2 / 3 **Per study period:** 28 / 42
Course method: present

Number of ECTS credits: 5

Recommended semester/trimester of the course: 3.

Course level: I.II.

Prerequisities: MI-Pr/MCH-GMp/23

Conditions for course completion:
lectures, practical exercises, seminars, exam; more details: https://www.upjs.sk/public/media/9648/GM_Requirements_MBCh1_WT.PDF

Learning outcomes:
In the medical study, medical biochemistry plays an irreplaceable role, which is to teach students to perceive life processes as events taking place at the molecular level. Only with such a view can the future doctor take an objective and exact opinion when deciding on the treatment procedure. The graduate masters the course of biochemical processes, is able to distinguish pathological processes from physiological processes at the level of reactions taking place in the cell. It perceives biochemical reactions in the cell as part of metabolism and understand the regularities of metabolism regulation.

Brief outline of the course:
Enzymes and their role in metabolism (e.g. kinetics of enzymatic reactions, coenzymes – the structure and function). Intermediary metabolism – cell biochemistry (e.g. macroergic compounds, respiratory chain, the citric acid cycle, oxidation stress). Carbohydrate metabolism (e.g. oxidative decarboxylation of pyruvate, glycolysis, gluconeogenesis, metabolism of glycogen). Degradation and synthesis of triacylglycerols and fatty acids. Metabolism of phospholipids, leukotriens, cholesterol, lipoproteins. Intermediary metabolism relationships between lipids and saccharides. Disorders of metabolism saccharides and lipids. More information: https://www.upjs.sk/public/media/9648/GM_Med%20Bioch%201.pdf

Recommended literature:
Mareková M et al.: Medical Biochemistry - Lectures, 2021, https://portal.lf.upjs.sk/articles.php?aid=165
Ferrier D.: Biochemistry 7th edition (Lippincott Illustrated Reviews), 2017
Mareková M. et al.: Seminars from medical biochemistry, 2013
Mašlanková et al.: Practical exercises from Medical Biochemistry for students GM, 2021, https://portal.lf.upjs.sk/articles.php?aid=162
Rodwell v. et al.: Harper´s illustrated Biochemistry, 31st wddition, 2018
Baynes J.W., Dominiczak J.G.: Medical Biochemistry (Elsevier), 2018

Course language:
english

Notes:

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 03.02.2023

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ MBCH-GM2p/23	**Course name:** Medical Biochemistry 2

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 3 / 3 **Per study period:** 42 / 42
Course method: present

Number of ECTS credits: 7

Recommended semester/trimester of the course: 4.

Course level: I.II.

Prerequisities: MI-Pr/MBCH-GM1p/23

Conditions for course completion:
lectures, practical exercisess, seminars, exam; more details.: https://www.upjs.sk/public/media/9648/nGM_Requirements_MBCh2_ST.PDF

Learning outcomes:
The graduate will understand the course of biochemical processes of physiological life processes as events taking place in individual organs and tissues of man. He can distinguish basic pathological processes from physiological processes, while he perceives biochemical processes in individual organs and tissues as a part of cellular metabolism. The graduate masters the laws of biochemical regulation of metabolism and learns the basics of clinical-biochemical diagnostics.

Brief outline of the course:
Metabolism of amino acids (e.g. ammonia formation and urea synthesis, biogenic amines, biosynthesis of catecholamines). Metabolism of nucleotides. Intermediary metabolism relationships. Nucleic acids (e.g. replication, transcription, translation). Regulation of gene expression and gene engineering. Synthesis and modification of native proteins. Chemical communication in living systems (e.g. homrmones). Biochemistry of blood. Pathobiochemical processes in cell. Special metabolic processes (e.g. liver, kidney, metabolism of minerals and trace elements). Biochemistry and pathobiochemistry of digestion and nutrition. Metabolism of foreign compounds – xenobiochemistry. Introduction to clinical biochemistry. More details: https://www.upjs.sk/public/media/9648/GM_Medical%20Biochemistry%202_ST.PDF

Recommended literature:
Mareková M et al.: Medical Biochemistry - Lectures, 2021, https://portal.lf.upjs.sk/articles.php?aid=165
Ferrier D.: Biochemistry 7th edition (Lippincott Illustrated Reviews), 2017
Mareková M. et al.: Seminars from medical biochemistry, 2013
Mašlanková J. et al.: Practical exercises from Medical Biochemistry for students GM, 2021, https://portal.lf.upjs.sk/articles.php?aid=162
Rodwell V. et al.: Harper´s illustrated Biochemistry, 31st wddition, 2018
Baynes J.W., Dominiczak J.G.: Medical Biochemistry (Elsevier), 2018

Course language:

english

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 03.02.2023

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ MBF-GMp/23	**Course name:** Medical Biophysics

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 4 / 3 **Per study period:** 56 / 42
Course method: present

Number of ECTS credits: 8

Recommended semester/trimester of the course: 2.

Course level: I.II.

Prerequisities:

Conditions for course completion:
Assessment of the learning achievements in the study subject is performed by continuous monitoring on the study achievements during the teaching part of the period which consists of written tests on practical exercises, a written test of the lectured topics during the teaching part of the semester, and a measurement report. To ensure the adequate preparation for the exam it is highly recommended to attend the lectures. Even in case of non-participation in the lecture, during the exam in medical biophysics, the student must master the topics in the lectured content and form. For students to be admitted to the final examination in Medical biophysics it is required to complete the practical course in medical biophysics, i.e., attendance at all practical lessons finished with accepted reports (protocols) on the measurement and the score at least 60% of maximal number of points, the student can get during the semester. Final examination for the period of study concerned takes place in a written form and can be performed by the full-time or distance method according to the actual arrangements. The knowledge evaluation is expressed by the percentage level from the received points. To complete the exam successfully it is necessary to gain at least 60% of points (assessment E).

Learning outcomes:
At the end of the course students will become familiar with the elementary knowledge about physical background of processes in human body on molecular, atomic and subatomic level. Students will understand physical principles of diagnostic and therapeutic devices, as well as biophysical effects in human body after application of biophysical technigues, encountered side effects and safe, efficient usage of medical devices in practice. Course will introduce also the subjects of molecular biophysics, membrane biophysics, and bioenergetics. As the aditional benefit from the course students will be able to address biophysical problems having close relationship to health and sickness in man.

Brief outline of the course:
Relation physics and medicine, Structure of matter, Nuclear radiation and its application in medicine, Magnetic resonance imaging, Lasers in medicine, X rays – the nature and physical properties, Conventional radiography and CT, Pulse oximetry, Ultrasound–physical characteristics, Medical application of ultrasound, Disperse system – classification and physical properties, Colligative properties of disperse systems, Transport processes – flow, diffusion, Membrane

biophysics, Bioelectricity, Electrical current and tissues, Biophysics of senses, Sound and hearing, Biophysics of vision, Biophysics of cardiovascular system.

Recommended literature:

Fundamentals of Biophysics and Medical Technology, I. Hrazdira, V. Mornstein et al., Masaryk University, Faculty of Medicine, Brno 2012

An Introduction to biophysics with medical orientation, edited by G.Rontó, I.Tarján, Akadémiai Kiadó, Budapest, 1991

Medical biophysics practical exercises, M. Legiň et al., VŠ učebné texty, Košice 2009

Course language:

English

Notes:

Course assessment

Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 17.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ MCH-GMp/23	**Course name:** Medical Chemistry

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 2 / 2 **Per study period:** 28 / 28
Course method: present

Number of ECTS credits: 5

Recommended semester/trimester of the course: 1.

Course level: I.II.

Prerequisities:

Conditions for course completion:
lectures, seminars, practical exercise, exam;
more details: https://www.upjs.sk/public/media/9648/GM_Requirements_MCh.pdf

Learning outcomes:
The graduate will acquire knowledge of general, physical, inorganic and bioorganic chemistry as well as methodologically very important - analytical chemistry. Graduates know the structures and functions of medically important substances, they will know the importance of acid-base properties of substances, energy processes and will understand the essence of chemical processes taking place in living systems. The acquired knowledge will contribute to a better understanding of the functions of the whole organism and is the basis for successful mastery and correct completion of biochemistry, which is a good theoretical basis for several medical disciplines.

Brief outline of the course:
Properties of disperse systems and biological importance of water. Buffer solutions and pH calulation (titration). Colloid systems. Thermodynamics and kinetics of chemical reactions. Biochemical aspects of redox reactions. Elements and their compounds in medicine. Solution (concentration, dilution - calculations). Organic chemistry (e.g. heterocyclic compounds, carboxylic acids). Saccharides. Lipids. Amino acids. Proteins. Nucleic acids. Natural compounds (e.g. vitamins).
More details: https://www.upjs.sk/public/media/9648/GM_Medical%20Chemistry.pdf

Recommended literature:
Mareková M. et al.: Medical Chemistry - Lectures for GM students, 2021, https://portal.lf.upjs.sk/articles.php?aid=250
Stupák M. et al.: Medical Chemistry - "hand book" for student GM and DM, 2018, https://portal.lf.upjs.sk/articles.php?aid=69, 2018
Urban P. et al.: Chemistry – Repetitorium, 2017, https://portal.lf.upjs.sk/articles.php?aid=236
Stupák M. et al.: Medical Chemistry - Calculation, 2017, https://portal.lf.upjs.sk/articles.php?aid=232
Országhová Z., Žitňanová I. et al.: Medical chemistry, 2008

Course language:

english

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 03.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ MEk-GMp/23	**Course name:** Medical Ecology

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 0 / 1 **Per study period:** 0 / 14
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 3.

Course level: I.II.

Prerequisities: MI-Pr/B-GM1p/23

Conditions for course completion:
Attendance at practical lessons, preparation of final semester report which will be evaluated.
Active participation and discussion on seminars.
The final exam: Evaluation of written thematic topic essay and presentation of the essay.

Learning outcomes:
Students will acquire knowledge about the relationship between human exposure and the environment, will receive the knowledge about mutual interaction and consequences of human activities on the quality of the environment. They will identify options for addressing governmental protective measures and preventive activities as to prevent the damage of the health and the environment.

Brief outline of the course:
Fundamental of ecology. Basic factors in ecology influencing on health. Methods of epidemiological work, the strategy on environment and health. Biological features of human population. Adaptation of man on the environment. Adaptability. Forms of stress. Global perspective in terms of human ecology. Urban environment and health risks. The components of the environment (atmosphere, hydrosphere, lithosphere, waste) and health, the possible environmental impact of the polluted environment on population health, health risks. The inorganic and organic pollutants. Allergies, allergens, distribution, concepts, preventive measures. Effects of different factors on health (physical, chemical, biological, microbiological factors, infectious risk factors and disease, presence in the environment and working environment). Ecology of parasites and pathogen emergence and spread conditions, effects on human health (cause disease and prevention). Cancer disease and prevention. The impact of carcinogens in living and working environment, risk of cancer - for gastrointestinal tumors, respiratory system, blood, sexual organs of men and women skin. Cancer risk prevention.

Recommended literature:
1. RIMÁROVÁ, K.: Environmental medicine – hygiene. Košice, Univerzita Pavla Jozefa Šafárika v Košiciach, 2006. - 148 s. - ISBN 80-7097-646-2.
2. RIMÁROVÁ, K.: Compendium of Hygiene. Košice, Univerzita Pavla Jozefa Šafárika, 2014. - 210 s. - ISBN 9788081521676 (brož.).
3. KOLARZYK, E.: Selected topics on hygiene and human ecology. Edited by

http://www.e-nujag.cm-uj.krakow.pl/materialy/higiena/main.pdf. 4. Paustenbach, D.J.: The Risk Assessment of Environmental and Human Health Hazards: Textbook of Case Studies, 1989, 220 s., ISBN. 978-0471849988.

Course language:
English

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 12.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ ME-GMp/23	**Course name:** Medical Ethics

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 1 / 1 **Per study period:** 14 / 14
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 3.

Course level: I.II.

Prerequisities:

Conditions for course completion:
Attendance on lectures and seminars to the specified extent, successful completion of a credit test and oral exam. Detailed conditions for mandatory participation and forms of evaluation are available on the department's website.
https://www.upjs.sk/en/faculty-of-medicine/department/forensic-medicine/teaching/courses/dr/

Learning outcomes:
The student acquires knowledge of ethical dimension and requirements of health care profession, and learns how to recognize principles of medical ethics in solving complicated ethical issues in selected areas of medical practice, such as informed consent of the patient, terminally ill and dying patients, euthanasia, assisted suicide, biomedical research, etc.

Brief outline of the course:
Ethics and morality. Bioethics and Medical Ethics. Landmark events in the evolution of bioethics. Global ethics and bioethics. Goals and ethical aspects of health care. Medical ethics. The basic principles of medical ethics. Ethical dilemma. The ethics of medical education. UPJŠ in Košice Code of Student Conduct. Hippocratic Oath. Physician's Pledge. Character requirements for medical profession. WMA International Code of Medical Ethics. Ethical Code for Health Care Providers in Slovakia. Important international conventions and declarations relevant to the health care professions. Patients' rights. Slovak Medical Chamber and Health Care Surveillance Authority in Slovakia. Human dignity in health care. Doctor – patient relationship. Informed consent/refusal – ethical and legal issues. Previously expressed wish of the patient. Communication in medical care. Guide to medical interview. Approach to specific patient groups. Burnout syndrome in medical profession. Ethical and legal issues in pediatrics. The rights of hospitalized children. Elderly patient. Risks in the hospital by elderly patients. Terminal illness. Ethical aspects of resuscitation and intensive care. Futile treatment. Dying patient – ethical and legal issues. Ethical issues in thanatology. Euthanasia and dysthanasia. Assisted suicide. Ethical aspects of organ and tissue transplantation. Living and dead donors. Ethical status of the dead human body. Ethics of autopsy and exhumation. Ethical aspects of examination in forensic medicine and pathology. Reproductive medicine and responsible parenthood. Methods used to achieve or prevent pregnancy. Surrogacy. Ethical issues of abortions. Surrogacy. Ethical issues in selected medical divisions [neonatal and fetal medicine, gynecology and obstetrics, surgery, nephrology, psychiatry, prehospital emergency

care]. Ethics of expert activities in medicine. Ethics in biomedical research. Ethical and legal regulations regarding biomedical research involving human subjects. Ethical issues in animal experimentation. Ethics Committees. Publication ethics. Ethical issues in human genetics and genomics. Genetic testing and preimplantation genetic diagnosis. Gene therapy and genetic manipulation. Ethics of 'designer babies'. Ethical aspects of human cloning. Ethical issues in stem cell research and therapy.

Recommended literature:

BOBROV, N., FARKAŠOVÁ IANNACCONE, S., SOPKOVÁ, D., NERANTZAKIS, I. Medical Ethics. Košice: Pavol Jozef Šafárik University, 2017.
BOYLAN, M. Medical Ethics. 2nd edition. New York: Wiley-Blackwell, 2014.
TALBOT, M. Bioethics: an introduction. Cambridge: Cambridge University Press, 2012.
JONSEN, A. R., SIEGLER, M., WINSLADE, W. J. Clinical Ethics: A Practical Approach to Medical Decisions in Clinical Medicine. 6th edition. New York: The McGraw-Hill Company Inc., 2007.
HOPE, T. Medical Ethics: A Very Short Introduction. New York: Oxford University Press Inc., 2004.
CAMPBELL, A., GILLETT, G. and JONES G. Medical Ethics. 3rd edtion. Victoria: Oxford University Press, 2001.

Course language:
English

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 21.07.2021

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ MInf-GMp/23	**Course name:** Medical Informatics

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 0 / 2 **Per study period:** 0 / 28
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 1.

Course level: I.II.

Prerequisities:

Conditions for course completion:
1. 100% and active attendance.
2. Min. 60% from each test during the term.
3. Elaboration of all given classworks.

Learning outcomes:
The aim of the course is to get knowledge about the basic terms, methods and tools of information and communication technologies. To reach the computer skills at the level, that allows students to create and to use databases and to get skills in information systems used in health care system. Students should also understand the importance of medical terminology, standards and evidence based medicine.

Brief outline of the course:
Utilization of ICT and informatics tools in medicine, eHealth, electronic health record, ePrescription, eMedication, eAllocation, information systems, telemedicine, bioinformatics, electronic signature, eLearning. Databases, data processing, database tables, primary keys, input mask, relations between tables. Forms in database, controls in forms, searching for information in database, data filtering, data sorting, queries, selection criteria, working with printing reports. Introduction into the biomedical statistics, descriptive statistics. Hospital information system. Terminology in medicine. PACS. Laboratory information system. Evidence based medicine.

Recommended literature:
1. Majerník J., Švída M., Majerníková Ž.: Medicínska informatika, UPJŠ, Košice 2010, Equilibria, ISBN 978-80-7097-811-5.
2. Majerník J., Kotlárová K.: Medicínska informatika 2 - Nemocničný informačný systém, UPJŠ, Košice 2010, Equilibria, ISBN 978-80-7097-812-2.
3. Majerník J.: Základy informatiky, Košice 2008, Aprilla, ISBN 978-80-89346-03-5.
4. Notes from exercises.
5. Manuals of information systems used in health care system.

Course language:
english

Notes:

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 11.02.2016

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ ML-GMp/23	**Course name:** Medical Law

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 1 / 1 **Per study period:** 14 / 14
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 6., 8., 10.

Course level: I.II.

Prerequisities: MI-Pr/NC-GM2p/23

Conditions for course completion:
Attendance on lectures and seminars to the specified extent, successful presentation of seminar work. Detailed conditions for mandatory participation and forms of evaluation are available on the department's website.
https://www.upjs.sk/en/faculty-of-medicine/department/forensic-medicine/teaching/courses/dr/

Learning outcomes:
Every doctor is obliged to practice his profession in accordance with generally binding legal regulations. Knowledge of the legal norms concerning provision of health care, basic duties of a health care professional, as well as basic rights and obligations of patients, is therefore a necessary requirement of every future doctor. The aim of teaching the subject Medical Law is development of legal thinking required for everyday situations arising during the provision of health care such as informed consent of the patient, management and access to the medical records, resolution of legal issues in the relationship between the doctor and the patient, the doctor and his/her colleagues, and the doctor and the employer, medical errors, expert activities, and cooperation with state authorities, including law enforcement agencies.

Brief outline of the course:
Medical law. Health care regulations in different countries. Rights and duties of people during provision of health care. Patients' rights. Health insurance, medicine and law. Health Care Surveillance Authority and its role in Slovak Republic. International organizations in health care. Legal requirements to medical profession. Rights and duties of health care professionals: doctor, nurse, medical laboratory technician. De lege artis. Confidentiality in medicine. Informed consent in medical care. Informed refusal in medical care. Difficult patient – legal approach. Types of legal responsibilities of the doctor. Duty of care. Medical malpractice: errors, mistakes, negligence. Civil vs. criminal case of medical malpractice. Legal issues related to the dying patient. Withholding and withdrawing life sustaining treatment. Physician assisted dying. Legal aspect of autopsy practice. Legal status of human corpse. Legal issues in reproductive medicine. Assisted reproduction. Surrogacy. Abortion laws. Legal regulations of biomedical research. Animal experimentation. Research involving human subjects. Legal regulations of genetic testing and therapy. Legal regulations of stem cell research and human cloning. Expert activity in health care.

Doctor as a witness. Doctor as an expert witness. Compensation of pain and deteriorated work capacity.

Recommended literature:

BUCHANAN, A. Justice & Health Care. New York: Oxford University Press, Inc., 2009.
VEITCH, K. The Jurisdiction of Medical Law. Hampshire: Ashgate Publishing Limited, 2007.
WELLMAN, C. Medical Law and Moral Rights. Dordrecht: Springe, 2005.
DEVEREUX, J. Medical Law. 2nd edition. Newport: Cavendish Publishing, 2002.

Course language:

English

Notes:

Maximum class size is 20 students.

Course assessment

Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 21.07.2021

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ MBR-GMp/23	**Course name:** Methodology of Biomedical Research

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 1 / 1 **Per study period:** 14 / 14
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 7.

Course level: I.II.

Prerequisities:

Conditions for course completion:
Individual work, course assignment during the semester, presentation of the assignment results before the end of the semester, compulsory participation at practices, final test.

Learning outcomes:
To provide students with basic information on the methodology of biomedical research: concepts, methods and research plans. To teach students to acquire, process and present scientific knowledge. Work with databases, scientific literature. Forms of presentation and scientific communication of research results: scientific article, oral presentation, poster.

Brief outline of the course:
The objectives of science. Ethical aspects of scientific research. The main stages and the basic steps of the research process. Selection and definition of research problems. Defining the concept of variable (categorization and types of variables). Internal and external validity of the experiment. Hypotheses (typology, characteristics, formulating and testing hypotheses). Research designs: experimental, quasi-experimental, non-experimental designs. Sampling (representative / non-representative, probability / non-probability). Overview of the basic research data collection methods: observation, interview, self-reports, biophysiologic measures. The criteria for selection and evaluation of measurement tools (validity, reliability). Communication in the research process (scientific article, oral presentation, poster). Critical evaluation of research reports (reviews, opinions).

Recommended literature:
1. Trochim, W. M. K. “Structure of Research” Research Methods Knowledge Base 2nd Edition. [URL: http://www.socialresearchmethods.net/kb/contents.php]
2. Booth W, Colomb G, Williams J (eds) In The Craft of Research. Chicago: University of Chicago Press, 2008
3. Polit DF, Hungler BP. Nursing Research: Principles and Methods. J. B. Lippincott Company, Philadelphia 1991
4. Alley M. The Craft of Scientific Presentations: Critical Steps to Succeed and Critical Errors to Avoid, New York, NY: Springer, 2003

Course language:

english

Notes:

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 17.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ MB-GM1p/23	**Course name:** Microbiology 1

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 2 / 2 **Per study period:** 28 / 28
Course method: present

Number of ECTS credits: 4

Recommended semester/trimester of the course: 4.

Course level: I.II.

Prerequisities: MI-Pr/B-GM1p/23

Conditions for course completion:
tests

Learning outcomes:
Overview of fundamental characteristics of microorganisms in relation to infectious diseases. Laboratory diagnosis, therapy and prevention of infectious diseases.

Brief outline of the course:
Classification and basic characteristics of microorganisms. Growth and cultivation. Pathogenicity. Immunity against microbes. Antimicrobial Agents. Immunization. Laboratory diagnosis of infectious diseases. Normal flora. Staphylococci. Streptococci. Pneumococci. Enterococci. Neisseria.

Recommended literature:
Murray, P.R.: Medical Microbiology.

Course language:
english

Notes:

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 15.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/MB-GM2p/23	**Course name:** Microbiology 2

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 2 / 3 **Per study period:** 28 / 42
Course method: present

Number of ECTS credits: 6

Recommended semester/trimester of the course: 5.

Course level: I.II.

Prerequisities: MI-Pr/MB-GM1p/23

Conditions for course completion:
tests, examination

Learning outcomes:
Knowledge of general and specific characteristics of microbes in relation to human infections, laboratory diagnosis, therapy and prophylaxis

Brief outline of the course:
Selected genera of grampositive and gramnegative cocci and rods.
Anaerobic bacteria. Selected yeasts, molds and parasites. DNA and RNA viruses. Selected causative agents of respiratory, gastrointestinal, genitourinary, cardiovascular and central nervous system, nosocomial infections and infections of soft tissue and bones.

Recommended literature:
Murray, P.R.: Medical Microbiology.

Course language:
english

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 15.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ MPF-GMp/23	**Course name:** Molecular Pathophysiology

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 1 / 0 **Per study period:** 14 / 0
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 6., 8.

Course level: I.II.

Prerequisities: MI-Pr/PP-GM1p/23

Conditions for course completion:
Credits may be awarded to a student who completes a full range for presence of teaching and demonstrate adequate knowledge of the final oral / written examination. Continuous assessment based on the solution of the tasks on the basis of final exams.

Learning outcomes:
Acquisition of basic knowledge in the field cellular pathophysiology and molecular medicine necessary for a deeper understanding of the pathogenesis of diseases, their molecular diagnostics and the current therapy and future technologies.

Brief outline of the course:
Fundamentals of electrogenic membrane and transport processes (ion channels, transporters)
Channelopathies and disorders of transporters
Humoral intercellular signaling - intracellular signaling cascades
Contact interactions - adhesion molecules, extracellular matrix
The molecular nature of the acute and chronic inflammation & tissue repair
The molecular basis of carcinogenesis and the molecular basis of the pathogenesis of immune
The principles and mechanisms of the growth, differentiation, damage and cell death
Oxidative damage; Redox homeostasis; ischemia and hypoxia; reperfusion injury
Selected genetic aspects of the disease

Recommended literature:
Kumar, V. Abbas, A.K., Aster, J.C. Fausto, N.: Robbins & Cotran Pathologic Basis of Disease. Online Access, 8ed, Saunders, 1464p (ISBN-10: 1416031219)
Lang F. (Ed.): Encyclopedia of Molecular Mechanisms of Disease. Springer, Berlin, 2009, 766 s. (ISBN-10: 3540671366)
Runge, M. S., Patterson, C. (Ed.): Principles of molecular medcine. 2.ed., Humana Press, New Jersey, 2006, 1304 s., ISBN-10: 1588292029
Trent, R.J.: Molecular Medicine, Genomics to Personalized Healthcare, 4.ed., Academic Press, New York, 346 s., ISBN-10: 0123814510
Das, U.N: Molecular Basis of Health and disease. Springer, Berlin, 2011, 583 s. ISBN-10: 9400704941

Course language:
english

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 11.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ NL-GM1p/23	**Course name:** Neurology 1
Course type, scope and the method: **Course type:** Lecture / Practice **Recommended course-load (hours):** **Per week:** 2 / 2 **Per study period:** 28 / 28 **Course method:** present	
Number of ECTS credits: 4	
Recommended semester/trimester of the course: 7.	
Course level: I.II.	
Prerequisities: MI-Pr/A-GM2p/23	
Conditions for course completion: 1. 100 % active participation in practical exercises, in the case of absence, may substitute up to 3 exercises per semester 2. Compulsory attendance in at least 9 lectures (national holidays are not included). 3. Practical examination of the neurological patient. 4. Successful completion of the test, evaluation A – E (possibility to repeat the test 2 times).	
Learning outcomes:	
Brief outline of the course: Neurology - general considerations. History taking. Cranial nerves I-XII, anatomy, physiology, pathology. Affection of the upper and the lower motor neurons – anatomic and physiologic considerations, diagnosis of paralytic states – lesion of corticospinal tract, brain stem syndromes, lower motor neuron lesions. Sensation. Anatomy, pathology. Cerebellum. Anatomy. Paleocerebellar and neocerebellar syndromes. Disorders of stance and gait. Extrapyramidal system. Hypertonic - hypokinetic syndrom. Hypotonic - hyperkinetic syndrom. Dystonia. Language and higher cortical function. Physiological and anatomical considerations. Language disorders, brain lobes pathology. Consciousness and unconsciousness. Causes of unconsciousness, quantitative disorders of consciousness: drowsiness, stupor, coma. The investigation of unconscious patient. Glasgow coma scale. Delirium. Brain death.Meningeal syndrom. Cerebrospinal fluid. Physiology, pathology. Lumbar puncture. Intracranial hypertension. Herniation of the brain – temporal, occipital. Plane X-ray of the skull and spine. Computer tomography of the brain and spinal column. MRI of the brain and spinal cord. PET, SPECT, DAT SCAN. Neurophysiological examination in neurology. Evoked potentials, electromyography. General considerations, clinical value. Electroencephalography. Polysomnography. Ultrasound examintaion in neurology. Duplex ultrasound of extracranial and intracranial cerebral arteries. Angiography of cerebral arteries. General considerations, clinical value. Head injury. Concussion, subdural, epidural hematoma, contusion of the brain. Spinal column and spinal cord injury. Dementia. Diagnosis, diferencial diagnosis. Alzheimer disease, Lewy body disease, frontotemporal dementia. Vascular dementia, other dementias. Diagnostic, therapy. Sleep disorders. Hypersomnia of the CNS origin. Restless leg syndrome. Developmental diseases of the nervous system. Cranial abnormities, cerebral	

palsy, fakomatosis, neurofibromatosis (M. Recklinghausen,) angiomatosis, myelodysplazy, syringomyelia.

Recommended literature:

Literature:

Gdovinová Z., Szilasiová J.: Textbook of general neurology. Košice : Aprilla Ltd. for Hanzluvka Books, 2009. 189 s. ISBN 9788089346158 (brož.).

Brust J.C.M.: Neurology. Current Diagnosis and treatment. Lange Medical Books/McGraw-Hill, 2007. 601 pp. ISBN: 13: 978-0-07-110554-5

Course language:

english language

Notes:

Course assessment

Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 17.09.2019

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ NL-GM2p/23	**Course name:** Neurology 2

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 2 / 2 **Per study period:** 28 / 28
Course method: present

Number of ECTS credits: 5

Recommended semester/trimester of the course: 8.

Course level: I.II.

Prerequisities: MI-Pr/NL-GM1p/23

Conditions for course completion:
Due to the change in the form of study to distance study due to the Covid 19 virus epidemy, the conditions for passing the subject Neurology II will change as follows:
The condition for passing the subject Neurology II is:
1. Preparation of power point presentations by each study group on the topics listed below, with marking which student has prepared which parts / slides of the presentation, each student must participate in the presentation
2. These presentations are sending to their teachers once a week, the latest one by 15.5. 2020.
3. The sources for the preparing of presentations are lectures, which are on the website of the Department of Neurology UPJŠ LF and recommended literature.
4. The condition for signing up for the exam is fulfilling of the conditions 1-3.
5. The final test will consist of the content of the subjects Neurology I and Neurology II.
As it is uncertain whether contact teaching will resume, the exams of Neurology II in the school year 2019/2020 will be only by ROGO tests. In order to successfully complete the subject Neurology II, the student must pass the exam in the regular or 1st or 2nd term, with a minimum of 60% in the given test.
Students will be informed about the terms of tests (exams) continuously in the AIS system (from 20 April 2020), each student is required to apply for the exam term 2 days in advance.
Verification of technical compatibility and connectivity of students to the ROGO system will be on 11. – 12. May 2020 from 7AM to 7PM. In case of technical problems the student should contact Ing. Vladislav Ondič (mail: vladislav.ondic@upjs.sk).
Presentation topics:
5. teaching week: 9. 3. - 13.3.2020 Ischemic stroke, Spinal cord ischemia
6. teaching week : 16.3. - 20.3.2020 Brain haemorrhage, Subarachnoid haemorrhage, Spinal cord haemorrhage
7. teaching week: 23.3. -27.3.2020 Demyelininative disorders of the CNS: MS, NMOSD, ADEM.
8. teaching week: 30.3. - 3.4.2020 Disorders affecting extrapyramidal system
9. teaching week: 6.4. - 10.4.2020 Headache
10. teaching week : 13.4. - 17.4.2020 Brain tumors. Paraneoplastic disorders. Pseudotumor cerebri.
11. teaching week : 20.4. - 24.4.2020 Neuroinfections I a II
12. teaching week : 27.4. - 1.5.2020 Inflammatory polyneuropathies – AIDP, CIDP, MMN.

13. teaching week : 4.5. - 8.5.2020 Myopathies, Myasthenia gravis.
14. teaching week : 11.5. - 15.5.2020 Metabolic disorders, Mononeuropathies and plexopathy

Learning outcomes:

Brief outline of the course:
Epilepsy and seizures. Classification, generalized and partial seizures. Diagnostic, therapy. Febrile convulsions. Ischemic stroke. Risk factors, clinical feature, diagnosis, therapy. Brain haemorrhage, subarachnoid haemorrhage. Risk factors, clinical feature, diagnosis, therapy. Brain tumors. Classification, clinical feature, general and focal signs, diagnostic, therapy. Brain MTS. Paraneoplastic disorders. Pseudotumor cerebri. Demyelinating disorders - multiple sclerosis. Infectious disorders of the nervous system –menin gitis, encephalitis. Neurosyfilis. Lyme disease. AIDS. Brain abscess. Polyradiculoneuritis Guillain-Barre. Muscle diseases. Metabolic disorders.

Recommended literature:
Gdovinová Z., Szilasiová J.: Textbook of general neurology. Košice : Aprilla Ltd. for Hanzluvka Books, 2009. 189 s. ISBN 9788089346158 (brož.).
Brust J.C.M.: Neurology. Current Diagnosis and treatment. Lange Medical Books/McGraw-Hill, 2007. 601 pp. ISBN: 13: 978-0-07-110554-5

Course language:
english language

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 22.03.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ NM-GMp/23	**Course name:** Nuclear Medicine

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 1 / 1 **Per study period:** 14 / 14
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 7.

Course level: I.II.

Prerequisities: MI-Pr/MBF-GMp/23

Conditions for course completion:
During semester the students will pass 2 checkpoints – each for one credit. Students with results A-C can pass the preterm and other will pass the standard oral exam in normal term. Students with both results Fx – cannot go on exam and must repeat course in next semester.

Learning outcomes:
Students will understand the principles of Nuclear medicine. The diagnostics and therapy by NM methods and known indications; contraindications of the method and prepare of patients for them. Understand methods of radioprotection, new methods in imaging and its place in diagnostic process

Brief outline of the course:
1. Principals and history of nuclear medicine;
2. Principals and methods of radioprotection in medicine;
3. Radiopharmaceuticals (RF): definitions, methods of preparing and quality control;
4. The instrumentation in nuclear medicine: Gamma camera, SPECT and PET hybrid methods with CT and MRI tomography and principals of metabolic imaging and image quantification;
5. Bone scintigraphy in orthopedics and oncology and therapy of bone MTS;
6. Diagnostic proces in nuclear medicine, quality, indications, evaluation of examinations;
7. Nuclear cardiology and diagnostics of pulmonary diseases by radionuclide methods;
8. Nuclear medicine in endocrinology diagnostics and therapy and per operative detection;
9. Radionuclide diagnostics in oncology, diagnostic and therapy by RF – Teranostics;
10. Radionuclide diagnostics in nephrology specifics in diagnostics of children;
11. Nuclear medicine in gastroenterology diagnostics and therapy of liver tumors by RF;
12. Evidence based medicine in imaging – principles of method selections and interpretation;
13. Radionuclide methods in brain imaging.
14. Telemedicine in radiology and nuclear medicine and artificial intelligence in imaging - Radiomics

Recommended literature:
Mettler F.A.- Guiberteau, M.J.: Essentials of Nuclear Medicine and Molecular Imaging 7th ed. 2019

Course language:

English language

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 17.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ NCCP-GMp/23	**Course name:** Nursing Care - Clinical procedures

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 0 / 2 **Per study period:** 0 / 28
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 6., 8.

Course level: I.II.

Prerequisities: MI-Pr/NC-GM2p/23

Conditions for course completion:
Successful completion of continuous study reviews and final graded assessment.
Detailed conditions for completing the course are annually updated on the electronic bulletin board AiS2 and on the website of the Institute of Nursing.
Link to the Conditions for completing the course on the website of the Institute of Nursing
https://www.upjs.sk/public/media/11253/NCCP%20-%20Requirements.pdf

Learning outcomes:
The student will know to perform basic nursing diagnostic and therapeutic procedures and achieve the best experience. The student will know how to cooperate with medical staff. The student will be able to communicate with patients.
Aim of nursing care is introduce to the student general knowledge about nursing care ant help them to gain skills of nursing clinical procedure which they will use in there medical practice in hospital. Student will be able to understand the main principals of the health care system, infection control, health and safety, nutrition of the patient... He/she will know different types of binders and bandages an will be able to provide them in practice.

Brief outline of the course:
Health and Safety rules. Patient safety. How to fill up observation chart correctly. Assessing vital signs – laboratory silmulation and the clinical training. Administering parenteral medications: types of medications removing medication from a vial and an ampoule - laboratory silmulation and the clinical training. Administering an intradermal (ID), a subcutaneous (SC, SQ) injections, an intramuscular injection (IM), an intravenous injection (IV) - laboratory silmulation and the clinical training. Administering a blood transfusion – laboratory simulation and the clinical training. Administering of catheterization the female and male urinary bladder - laboratory simulation and the clinical training.
Clinical observation, assessing vital signs. How to fill up observation chart correctly. Administration of medication. Administering parenteral medications - types of medications, types of syringes and needles, removing medication from a vial and an ampoule. Administering intradermal, subcutaneous, intramuscular, intravenous injection. Administering i. v. fluids and medications. Administering a blood transfusion. Clinical training in hospital environment - administering different types of parenteral medications, phlebotomy and blood sampling.

Recommended literature:

Basic study literature:

ZAMBORIOVÁ M., DIMUNOVÁ L. et al. Nursing Care Clinical Procedures II. UPJŠ Medical Fakulty: ŠafárikPress, 2019.

ŠTEFKOVÁ G., ZAMBORIOVÁ M., SOVÁRIOVÁ SOÓSOVA M. et al. Nursing Care Clinical procedure I.

UPJŠ Medical faculty. Equlibria, s.r.o., 2017.

Further study literature:

ŠTEFKOVÁ G., ZAMBORIOVÁ M. A small phrases book for nursing care. UPJŠ, Faculty of Medicine, Košice, 2017.

Course language:

English language

Notes:

Course assessment

Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 11.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ NC-C-GMp/23	**Course name:** Nursing Care - clerkship in hospital

Course type, scope and the method:
Course type: Practice
Recommended course-load (hours):
Per week: Per study period: 80s
Course method: present

Number of ECTS credits: 3

Recommended semester/trimester of the course: 4.

Course level: I.II.

Prerequisities: MI-Pr/NC-GM1p/23

Conditions for course completion:
Successful completion of continuous study reviews and final graded assessment.
Detailed conditions for completing the course are annually updated on the electronic bulletin board AiS2 and on the website of the Institute of Nursing.
Link to the Conditions for completing the course on the website of the Institute of Nursing
https://www.upjs.sk/public/media/11253/EN_Requirements_NCC.pdf

Learning outcomes:
Main aim of nursing care is to be able Student will be able to understand the main principals of functioning the nursing ward unite, the system of the work, the main principals of nursing clinical procedure. Student will be able to provide nursing clinical procedure in clinical practice in environment of hospital.

Brief outline of the course:
Functioning and system of the work nursing in the ward unite. Admission, transfer and discharge of patients, ward round, nursing clinical procedures - assessing vital signs, administration of medication, intradermal, parenteral medications (intradermal, subcutaneous, intramuscular, intravenous injection), administering a blood transfusion, administering a cleansing enema, catheterising the female and male urinary bladder.

Recommended literature:
Basic study literature:
ZAMBORIOVÁ M., DIMUNOVÁ L. et al. Nursing Care Clinical Procedures II. UPJŠ Medical Fakulty: ŠafárikPress, 2019.
ŠTEFKOVÁ G., ZAMBORIOVÁ M., SOVÁRIOVÁ SOÓSOVA M. ate al. Nursing Care Clinical procedure I.
UPJŠ Medical faculty. Equlibria, s.r.o., 2017.
Further study literature:
ŠTEFKOVÁ G., ZAMBORIOVÁ M. A small phrases book for nursing care. UPJŠ, Faculty of Medicine, Košice, 2017.

Course language:
English language

Notes:

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 11.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ NC-GM1p/23	**Course name:** Nursing Care 1

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 1 / 2 **Per study period:** 14 / 28
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 3.

Course level: I.II.

Prerequisities:

Conditions for course completion:
Successful completion of continuous study reviews and final graded assessment.
Detailed conditions for completing the course are annually updated on the electronic bulletin board AiS2 and on the website of the Institute of Nursing.
Link to the Conditions for completing the course on the website of the Institute of Nursing
https://www.upjs.sk/public/media/11253/EN_Requirements_Nursing%20Care1.pdf

Learning outcomes:
Main aim of nursing care is introduce to the student general knowledge about nursing care ant help them to gain skills of nursing clinical procedure which they will use in there medical practice in hospital. Student will be able to understand the main principals of the health care system, infection control, health and safety, nutrition of the patient... He/she will know different types of binders and bandages an will be able to provide them in practice.

Brief outline of the course:
Assessing vital signs - pulse rate, respiratory rate, body temperature, blood pressure. Administration of medication. Administering parenteral medications - types of medications, types of syringes and needles, removing medication from a vial and an ampoule. Administering intradermal, subcutaneous, intramuscular, intravenous injection. Administering i. v. fluids and medications. Administering a blood transfusion. Administering a cleansing enema. Catheterising the female and male urinary bladder.

Recommended literature:
Basic study literature:
ZAMBORIOVÁ M., DIMUNOVÁ L. et al. Nursing Care Clinical Procedures II. UPJŠ Medical Fakulty: ŠafárikPress, 2019.
ŠTEFKOVÁ G., ZAMBORIOVÁ M., SOVÁRIOVÁ SOÓSOVA M. et al. Nursing Care Clinical procedure I.
UPJŠ Medical faculty. Equlibria, s.r.o., 2017.

Course language:
English language

Notes:

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 11.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ NC-GM2p/23	**Course name:** Nursing Care 2

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 1 / 2 **Per study period:** 14 / 28
Course method: present

Number of ECTS credits: 4

Recommended semester/trimester of the course: 4.

Course level: I.II.

Prerequisities: MI-Pr/NC-GM1p/23

Conditions for course completion:
Successful completion of continuous study checks and final exam.
Detailed conditions for completing the course are annually updated on the electronic bulletin board AiS2 and on the website of the Institute of Nursing.
Link to the Conditions for completing the course on the website of the Institute of Nursing
https://www.upjs.sk/public/media/11253/EN_Requirements_Nursing%20Care2.pdf

Learning outcomes:
Main aim of nursing care is introduce to the student general knowledge about assessing vital signs, administration of medication., parenteral medications (intradermal, subcutaneous, intramuscular, intravenous injection), administering a blood transfusion, administering a cleansing enema, catheterising the female and male urinary bladder. Student will be able to understand the main principals of the named clinical procedures will be able to provide them in practice.

Brief outline of the course:
Introduction to nursing care. Introduction health care system in Slovakia. The medical staff and health care workers. Types of nursing care unit. Stay in hospital, adaptation to the hospital enviroment. Admission, transfer and discharge of patients. Infection control, health and safety - sterilisation and desinfection. Nutrition, introduction of dietology. Applying binders and bandages - purposes, assessment, planning, settings goals, preparation of equipment, technique in general.

Recommended literature:
Basic literature:
ZAMBORIOVÁ M., DIMUNOVÁ L. et al. .Nursing Care Clinical Procedures II. UPJŠ Medical Fakulty: ŠafárikPress, 2019.
ŠTEFKOVÁ G., ZAMBORIOVÁ M., SOVÁRIOVÁ SOÓSOVA M. et al. Nursing Care Clinical procedure I.
UPJŠ Medical faculty. Equlibria, s.r.o., 2017.
Further study literature:
ŠTEFKOVÁ G., ZAMBORIOVÁ M. A small phrases book for nursing care. UPJŠ, Faculty of Medicine, Košice, 2017.

Course language:

English language

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 11.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ O-GMp/23	**Course name:** Obesitology

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 0 / 1 **Per study period:** 0 / 14
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 10.

Course level: I.II.

Prerequisities: MI-Pr/IP-GMp/23 and MI-Pr/PSM-GMp/23

Conditions for course completion:
For successful obtained of the credits from subject is necessary:
- By completing the course, the student will understand the issues of obesity as a disease, the principle of etiopathogenesis, diagnosis and treatment options. The student will be able to evaluate a patient with obesity, recognizes the multidisciplinary nature of obesity as part of the metabolic syndrom and manage it.
- To participate at all of practical exercises, theoretical and practical performance of all seminars,excused two absences.
- To get at least 60 % of total score for ongoing review of written test and the theoretical training to practical exercises.
- Evaluation: Study rules of procedure UPJŠ in Košice, the Faculty of Medicine, Part II, Art13
- the final classification includes the evaluation of the written test and the results obtained in practical exercises

Learning outcomes:
Case study processing - obtaining max. 10 points.
The student demonstrates the ability to diagnose and treat through a clear and concise case report of an obese patient.
The student submits the case report by the end of the 10th week of teaching.
Epidemiology, etiology, diagnosis of obesity, communication with an obese patient, conservative treatment of obesity, surgical treatment of obesity - obtaining max. 10 points.
Within the case study processing, the student will critically re-evaluate the proposed treatment model, his / her own originally proposed procedure, the form of communication based on evidence-based medicine and evaluate the strengths and weaknesses.
The processing of the analysis is handed over at the end of the semester.
Mandatory active participation in seminars - obtaining max. 12 points.
Content standard :
The student demonstrates knowledge and skills in the field of content, which is given by the content of the result of education and a wide range of recommended literature.

Brief outline of the course:

Epidemiology, etiology, diagnosis of obesity, temporal and professional approach to treatment. Conservative treatment of obesity based on four basic pillars: influencing dietary patterns, physical activity, cognitive-behavioral approach aimed at permanent lifestyle change and pharmacotherapy and / or bariatric surgery. The multidisciplinary nature of obesity issues based on evidence-based medicine.

Recommended literature:

1. Boris Krahulec, Ľubomíra Fábryová, Pavol Holéczy a Iwar Klimeš.I et al.: Klinická obezitológia, Facta medica, 2016
2. Ivan Majerčák : Diagnóza Obezita, Kontakt, 2007

Course language:
English

Notes:
The subject Obezitológia is provided only in the summer term.

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 08.06.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/OF-GMp/23	**Course name:** Ophthalmology

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 1 / 2 **Per study period:** 14 / 28
Course method: present

Number of ECTS credits: 3

Recommended semester/trimester of the course: 10.

Course level: I.II.

Prerequisities: MI-Pr/IM-GM3p/23 and MI-Pr/PP-GM2p/23

Conditions for course completion:
Test
Oral exam

Learning outcomes:
Basic knowledge of Ophthalmology, especialy most common causes leading to blidness, acute diseases and general medicine aspects of Ophthalmology

Brief outline of the course:
Loss of vision, Ocular pain and discomfort,Abnormal appearance, Abnormal eye movement, Double vision and squint,Traumatology of the eye,The eye systemic disease,Pharmacology of the eye

Recommended literature:
Lectures, Jogi, R.: Basic Ophthalmology, Kozák, I., Juhás, T. : Ophthalmology Outline, Košice, 2004, Ahmed, E.: Test Book of Ophthalmology, Oxford University, Press, 1998,

Course language:
english

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 12.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ ORL-GMp/23	**Course name:** Otorhinolaryngology

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 1 / 2 **Per study period:** 14 / 28
Course method: present

Number of ECTS credits: 3

Recommended semester/trimester of the course: 9.

Course level: I.II.

Prerequisities: MI-Pr/NL-GM1p/23 and MI-Pr/PM-GM1p/23 and MI-Pr/S-GM3p/23

Conditions for course completion:
Test
Exam

Learning outcomes:
Diagnosis and treatment of the most common diseases in ENT. Examination procedure and differential diagnosis of life-threatening conditions. Get information on the full range of ENT examinations and performances, even in border industries.

Brief outline of the course:
Nose and paranasal sinuses traumatology, inflamations, complications, Laryngeal and tracheal stenosis inflamation of lymphoid pharyngeal tissue, Tumours of the nose, paranasal sinuses, pharyngx and laryngx, Acoustic neurinoma, Tumours of the ear, External ear diseases, Acute otitis media amd its complications, Chronica otitis media, Otogenic intracranial complication, Otosclerosis.

Recommended literature:
Šuster : Otorhinolaryngológia
Profant M., : Otorhinolaryngológia
Kovaľ J., : Nervus facialis

Course language:
English

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 10.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ PE-SS-GMp/23	**Course name:** Paediatrics
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 2	
Recommended semester/trimester of the course: 11., 12..	
Course level: I.II.	
Prerequisities: MI-Pr/AIM-GMp/24 and MI-Pr/PE-GM3p/23 and MI-Pr/PM-GM2p/23 and MI-Pr/PT-GM2p/24	
Conditions for course completion: Obtaining the minimum number of credits for compulsory and optional subjects in the prescribed composition by the study plan.	
Learning outcomes: Graduate acquires knowledge in accordance with the profile of the graduating general medicine.	
Brief outline of the course: Pneumonia in Infants and Toddlers Pneumonia in Older Children Tuberculosis Bronchial Asthma Acute Bronchitis and Bronchiolitis Sinusitis, Tonsillitis and Adenoids Otitis Media, Mastoiditis, Hearing Screening Cystic Fibrosis Foreign Body Aspiration Acute Infectious Laryngitis, Acute Epiglottitis Differential Diagnosis of Unconsciousness Differential Diagnosis of Lymphadenopathy Differential Diagnosis of Nonconjugated Hyperbilirubinemia Differential Diagnosis of Conjugated Hyperbilirubinemia Differential Diagnosis of Nausea and Vomiting in Children Differential Diagnosis of Haematuria Differential Diagnosis of Proteinuria Differential Diagnosis of Oedema Differential Diagnosis of Chronic Cough Differential diagnosis of Dyspnoe Differential diagnosis of Chest Pain Differential Diagnosis of Syncope Differential Diagnosis of Hepatosplenomegaly	

Primary and Secondary Immunodeficiencies (AIDS)
Fever and its Treatment, Fever of Unknown Origin (FUO), PIMS
Vaccination - Principles, Schedule
Side Effects of Longterm Treatment with Corticosteroids and Prevention's Possibilities
Infective Endocarditis
Cardiomyopathies
Myocarditis and Pericarditis
Congenital Heart Diseases with Left to Right Shunt
Congenital Heart Diseases with Right to Left Shunt
Dysrhythmias in Children
Heart Failure and its Treatment
Arterial Hypertension
ALTE and Sudden Infant Death Syndrome
Childs Growth and Development
Breastfeeding, Complementary feeding and Weaning Principles and
Indications of Formula Feeding, Formula Types
Congenital Viral and Bacterial Newborn's Infections (TORCH, GBS, E. coli)
Neonatal Screening, Birth Trauma
Prematurity and Low Birth Weights Complications and Consequences
The Most Frequent Respiratory Complications in Term Neonates (RDS, PPNH, Transitory Tachypnea of Newborn, MAS)
Juvenile Idiopathic Arthritis
Bone Diseases (Osteomyelitis, Aseptic Necrosis, Osteoporosis)
Systemic Lupus Erythematosus, Juvenile Dermatomyositis and Scleroderma
Seizures in Children
Adrenal Gland Cortex Diseases
Hypoglycaemia in Children
Disorders of Thyroid Gland
Growth Disorders
Diabetes Mellitus Type 1
Disorders of Puberty
Obesity in Childhood, Dyslipidaemias
Disorders of Calcium and Phosphorus Metabolism, Disorders of Parathyroid Gland Cutaneous Infections in Children
Solid Tumours in Children (including Tumours of Central Nervous System)
Congenital and Acquired Coagulopathies
Iron Deficiency Anaemias
Anaemias (except for Iron Deficiency Anaemias)
Congenital and Acquired Thrombocytopenias and Thrombocytopathies
Acute Leukaemias, Malign Lymphomas
Numeric and Structural Anomalies of Autosomes and Gonosomes
Defects in Metabolism of Carbohydrates (Galaktosemia, Fructose Disorders, Glycogenoses)
Primary Monosymptomatic Nocturnal Enuresis, Undescended Testis
Upper and Lower Urinary Tract Infections
Vesicoureteral Reflux and Obstructive Uropathy
Chronic Kidney Disease (CKD)
Acute Kidney Injury, Haemolytic-Uremic Syndrome
Nephrotic Syndrome
Acute Poststreptococcal and Rapidly Progressive glomerulonephritis

Chronic glomerulonephritis (IgA Nephropathy, Henoch-Schönlein Purpura), Alport Syndrome
Differential Diagnosis of Polydipsia and Polyuria
Disorders of Water Balance
Disorders of Sodium and Potassium metabolism
Acid-Base Disorders
Shock in children Infant and Child Resuscitation
Sepsis in Childhood
Acute Abdomen
Meningitis and Encephalitis
Congenital Abnormalities of Digestive System
Oesophageal (GERD) and Stomach Disorders
Vitamin D and K deficiency (rickets)
Malnutrition and Failure to Thrive
Acute Diarrhoea in Children
Inflammatory Bowel Disease in Children
Malabsorption and Celiac Disease
Liver Insufficiency, metabolic Disorders of Liver
Viral hepatitis and Chronic Hepatitis
Disorders of Amino Acid Metabolism (Phenylketonuria, Disorders of Ammonia Detoxification)
Antibiotic Therapy in Children
Child Abuse and Neglect
Scope and History of Pediatrics, Pediatric Epidemiology
Non-infectious Cutaneous Disorders in Children (Atopic Dermatitis, Urticaria, Seborrhei Dermatitis, Haemangiomas)
Congenital Malformations of Central Nervous System

Recommended literature:

Lissauer, T.: Illustrated Textbook of Paediatrics, 4th Edition, ISBN: 978-0-7234-3565-5, 2012, s. 552.
Roberton, DM., South, M.: Practical Paediatrics, Churchill Livingstone, UK, 6 edition, ISBN 978-0-443-10280-6, 2007, s. 874
Kliegman, R.: Nelson Textbook of Pediatrics E-dition (Book/Website) Package, 19th Edition, Saunders, 2011, ISBN 9781437707557, s. 2680.

Course language:
English language

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 16.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ PE-GM1p/23	**Course name:** Paediatrics 1

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 2 / 3 **Per study period:** 28 / 42
Course method: present

Number of ECTS credits: 3

Recommended semester/trimester of the course: 9.

Course level: I.II.

Prerequisities: MI-Pr/PM-GM1p/23

Conditions for course completion:
1. Attendance on practical lessons confirmed by assistant´s signature in the record book of the student
- it is obligatory to compensate more than one legitimate absence
- (in case of 2 absent practical lessons their compensation in the corresponding form shall be determined by the teaching assistant, in case of more than 3 absences the Head of the department shall decide how to compensate)
2. Compulsory attendance in at least 10 lectures in winter term
3. Active participation on practical lessons – estimated by the teaching assistant
4. Successful passing of the credit test – achieving minimum 60 % of total score from credit test
5. Credits from the subject are going to be administered on the basis of fulfillment of criterias 1 - 4.

Learning outcomes:
Examination and health care of a child patient on pediatric department. Acquisition of theoretical and practical skills beginning from admission of the patient to his discharge from hospital (medical history taking, physical examination, layout of diagnostic procedures, their interpretation, differential diagnosis, treatment). Working with medical records, documentation.
Learning of basic diagnostic and therapeutic algorithms following the most common diseases of chilhood, according to systems presented on lectures.

Brief outline of the course:
Diseases of the respiratory system – acute infections, asthma bronchiale, non-inflammatory diseases. Cardiovascular system – congenital heart diseases, inflammatory diseases, hypertension. Congenital anomalies of the Gastrointestinal tract, malabsorptive syndrome, IBD, liver diseases. Disorders of the thyroid gland, diabetes mellitus, disorders of calcium-phosphate metabolism, most common inborn errors of metabolism.

Recommended literature:
Lissauer T.: Ilustrated Textbook of Paediatrics, 2012
Kovács L: Introduction to Paediatrics, 2001
Schusterová I.: Pediatric Cardiology: selected chapters, 2016

Course language:

English language

Notes:

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 26.11.2021

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ PE-GM2p/23	**Course name:** Paediatrics 2

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 2 / 2 **Per study period:** 28 / 28
Course method: present

Number of ECTS credits: 3

Recommended semester/trimester of the course: 10.

Course level: I.II.

Prerequisities: MI-Pr/PE-GM1p/23

Conditions for course completion:
1. Attendance on practical lessons confirmed by assistant´s signature in the record book of the student
- it is obligatory to compensate more than one legitimate absence
- (in case of 2 absent practical lessons their compensation in the corresponding form shall be determined by the teaching assistant, in case of more than 3 absences the Head of the department shall decide how to compensate)
2. Compulsory attendance in at least 10 lectures in summer term
3. Active participation on practical lessons – estimated by the teaching assistant
4. Successful passing of the credit test – achieving minimum 60 % of total score from credit test
5. Credits from the subject are going to be administered on the basis of fulfillment of criterias 1-4 .

Learning outcomes:
Examination and health care of a child patient on pediatric department. Acquisition of theoretical and practical skills beginning from admission of the patient to his discharge from hospital (medical history taking, physical examination, layout of diagnostic procedures, their interpretation, differential diagnosis, treatment). Working with medical records, documentation.
Learning of basic diagnostic and therapeutic algorithms following the most common diseases of chilhood, according to systems presented on lectures.

Brief outline of the course:
Kidney disesaes – congenital anomalies, Urinary tract infections, renal syndromes, glomerulonephritis, inherited tubular disorders, electrocyte and acid-base disorders. Genetic syndromes, anemias, Disorders of coagulation and trombocytes, leukemias and most common solid tumors of childhood. Pediatric neurology – epilepsy, neuromuscular disorders. Rheumatic diseases – JIA, SLE, most common immunologic system disorders, neonatal pathology. Disorders of the Adrenal glands and side-effects of corticotherapy.

Recommended literature:
Lissauer T.: Ilustrated Textbook of Paediatrics, 2012
Kovács L: Introduction to Paediatrics, 2001
Roberton, DM.: Practical Paediatrics, 2007

Course language:
English language

Notes:

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 16.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ PE-GM3p/23	**Course name:** Paediatrics 3

Course type, scope and the method:
Course type: Practice / Controlled study hour
Recommended course-load (hours):
Per week: Per study period: 200s / 60s
Course method: present

Number of ECTS credits: 10

Recommended semester/trimester of the course: 11., 12..

Course level: I.II.

Prerequisities: MI-Pr/NL-GM2p/23 and MI-Pr/PE-GM2p/23

Conditions for course completion:
1. For successful completion of the practical exercises is required:
- To participate at all of practical exercises, theoretical and practical performance of all exercises.
- Active participation in work on the ward under the supervision of a teacher.
- Two absences are allowed /justified/
2. For successful obtained of the credits from subject is necessary:
- Successful completion of the practical exercises
- Practical exam – evaluation of the physical examination of the patient in written form evaluated (A-E)
The teaching proces may alternatively take place in a distance mode, through MS teams platform.

Learning outcomes:
Teach students to work as a residents at the ward in hospital, lead them to work independently in both the practical procedures and differential-diagnostic thinking. Daily work at the ward includes taking history, physical examination, drafting diagnostic and treatment process. Students learn to operate with documentation, including admitting and releasing process, also reporting the patients to the head of department during main ward rounds. Each student has to participate on “a patient of the week” analysis.

Brief outline of the course:
Fever of unknown origin
Alergological examination
Cystic fibrosis
Premature and hypotrophic newborn
Diff. dg. of unconsciousness
Diff. dg. of hypoglycemia
Growth retardation
Diff. dg. of polydipsia and polyuria
Hematuria and proteinuria
Adrenal cortex disorders

ALTE and SIDS
Sepsis in children
Cardiopulmonary resuscitation
Anaemia in children
Thrombocytes disorders
Dysrhytmias
Endocarditis, myocarditis, pericardiatis
Inflammatory bowel disease
Meningitis and encephalitis
Diff. dg. of dyspnoe and chest pain
Rheumatic diseases
Lymphadenopathy
Primary and secondary immunodeficiency
Malnutrition and failure to thrive
Solid tumors in children
Congenital malformation of neural tube

Recommended literature:
Lissauer T.: Ilustrated Textbook of Paediatrics, 2012
Kliegman R.: Nelson Textbook of Pediatrics, 2011
Schusterová I.: Pediatric Cardiology: selected chapters, 2016
Roberton DM.: Practical Paediatrics, 2007

Course language:
English language

Notes:

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 16.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/PA-GM1p/23	**Course name:** Pathological Anatomy 1

Course type, scope and the method:
Course type: Lecture / Practice / Controlled study hour
Recommended course-load (hours):
Per week: 4 / 4 / 1 **Per study period:** 56 / 56 / 14
Course method: present

Number of ECTS credits: 7

Recommended semester/trimester of the course: 5.

Course level: I.II.

Prerequisities: MI-Pr/A-GM2p/23 and MI-Pr/HE-GM2p/23

Conditions for course completion:
Tests and Colloqium

Learning outcomes:
gain knowledge from the field of General pathology, mastery of histomorphology selected diagnoses, learn about with macroscopic autopsy diagnosis

Brief outline of the course:
Introduction to Pathology, Biopsy,cytology and autopsy,Thanatology, Cell Injury, Dystrophic changes: Alterations in protein metabolism, Alterations in carbohydrate metabolism, Alterations in lipid metabolism, Disturbances of electrolytes and body fluids, Pigments,calcification, crystals and lithiasis,Progressive changes,Atrophy and necrosis,Inflammation, Growth disorders,Teratology,Pseudotumors,Basis histological features of tumors,Tumors,Tumor systematics,Lymhomas,Hypersensitivity reactions, Immunodeficiency diseases, Cardiovascular system.

Recommended literature:
Kumar V, Abbas AK, Fausto N, Robbins SL, Cotran RS: Robbins and Cotran pathologic basis of disease, 7th edition,Elsevier/Saunders,Philadelphia,2005
Böőr,A.,Jurkovič,I.,Benický,M. and Havierova,Z: Practical lessons in histopathology nd methods in pathology,UPJŠ Košice,2004

Course language:
English language

Notes:

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 13.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/PA-GM2p/23	**Course name:** Pathological Anatomy 2

Course type, scope and the method:
Course type: Lecture / Practice / Controlled study hour
Recommended course-load (hours):
Per week: 4 / 4 / 1 **Per study period:** 56 / 56 / 14
Course method: present

Number of ECTS credits: 8

Recommended semester/trimester of the course: 6.

Course level: I.II.

Prerequisities: MI-Pr/PA-GM1p/23

Conditions for course completion:
credit test, histomorphological colloquium final written and oral examination

Learning outcomes:
Gaining a proper knowledge in the field of special pathology, gross necropsy diagnostics and histomorphological diagnostics of chosen diagnoses.

Brief outline of the course:
Pathology of the Respiratory System, Pathology of haematopoetic system,Pathology of the gastrointestinal trakt, Pathology of the liver,Biliary tract and pancreas, Uropathology, pathology of ovaries and uterus, Pathology of pregnancy, Pathology of the breast, Pathology of the Endocrine system, Pathology of the Musculoskeletal system, Pathology of CNS, Dermatopathology, Pathology of infancy and childhood

Recommended literature:
Kumar V, Abbas AK, Fausto N, Robbins SL, Cotran RS: Robbins and Cotran pathologic basis of disease, 7th edition,Elsevier/Saunders, Philadelphia,2005
Böőr,A.,Jurkovič,I.,Benický,M. and Havierova,Z: Practical lessons in histopathology and methods in pathology,UPJŠ Košice,2004

Course language:
English language

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 13.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ PP-GM1p/23	**Course name:** Pathological Physiology 1

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 2 / 3 **Per study period:** 28 / 42
Course method: present

Number of ECTS credits: 5

Recommended semester/trimester of the course: 5.

Course level: I.II.

Prerequisities: MI-Pr/Ph-GM2p/23

Conditions for course completion:
2 credit tests, 4-5 written quizzes, semestral evaluation of knowledge (oral, written),at least 50% attendance in lectures

Learning outcomes:
General pathophysiology is providing the comprehensive knowledge related to the causality, the mechanisms of the alteration, progression and consequences of human diseases, pathological states and processes including overview of their underlying etiological factors, processing pathways and resulting manifestations on systemic, organ -specific and cellular level.

Brief outline of the course:
- Health and disease, pathological states, processes, outcomes of disease, terminology
- Etiology of diseases: genetic factors (genomic, chromosomal mutations & non-Mendelian inheritance), physical (burning injury, hypo-/hyperthermia), chemical, biological, nutritional factors (malnutrition, obesity), inherited and acquired metabolic diseases
- Acute and chronic inflammation, fever, multiple organ dysfunction, systemic stress-maladaptation, cellular stress, immunopathology (allergies, autoimmunity, immunodeficiency),
- Benign and malignant tumours, systematic & molecular carcinogenesis,
- Cell damage & death, necrosis, apoptosis, hypoxic- ischaemic damage, reactive oxygen species, principles of intercellular signalling, enzymopathies, Disorders of inner milieu including water and electrolyte dysbalance and disorders of acid-base balance
- Disorders of consciousness, pre-coma, coma, brain death, terminal states & illness

Recommended literature:
1. McCance,K.L., Sue E. Huether, S.E.: Pathophysiology - The Biologic Basis for Disease in Adults and Children. 5th Ed., Mosby, Elsevier, 2006, 1808 p., ISBN: 0323035078
2. Kumar, V., Abbas, A., Fausto, N.: Robbins & Cotran Pathologic Basis of Disease, 7th edition, Sauders Publ., 2004
1552 p., ISBN 0721601871
3. McPhee. S. J., Lingappa, V.R., Ganong, W.F. Pathophysiology of Disease. McGraw-Hill/ Appleton & Lange, 4th ed., 2002, 760 p. ISBN-10: 0071387641
4. Silbernagl, S., Lang, F.: Color Atlas of Pathophysiology. Thieme Med. Publ.; 2000, 406 p., ISBN-10: 0865778663

Course language:
english

Notes:

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 03.02.2023

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ PP-GM2p/23	**Course name:** Pathological Physiology 2

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 3 / 3 **Per study period:** 42 / 42
Course method: present

Number of ECTS credits: 6

Recommended semester/trimester of the course: 6.

Course level: I.II.

Prerequisities: MI-Pr/PP-GM1p/23 and MI-Pr/MBCH-GM1p/23

Conditions for course completion:
semestral work, 3 credit tests, semestral evaluation of knowledge (oral, written), at least 50% attendance in lectures, as a part of compulsory credited activities, final exam

Learning outcomes:
Special pathophysiology presents the in-depth overview of the underlying celullar and/or systemic etiopathogenesis, symptomatology and principal diagnostic findings of the clinically most important diseases and syndromes arising from the alterations in all systems of the human body. The subject provides the integration of the pre-clinical skills for general medicine

Brief outline of the course:
Congenital acquired heart disorders, Ischaemic heart disease & myocardial infarction, Atherosclerosis, arterial hypertension, Cardiac dysrrhythmias, Cardiomyopathies, Shock states, hypotension, collapse, venous disorders
- disorders of red cells (anemia), coagulopathies, vasculopathy, Disorders of the white cells, Leucaemias, Lymphomas
- Obstructive & restrictive lung disorders (asthma, COPD), Acute respiratory failure, Respiraotry dysrhythmias
- Motor & sensory disorders, Neuropathies & neuromuscular dis., Degenerative & demyelinating dis, Epilepsy, Pain
- Cerebrovascular diseases, Higher nervous dysfunctions & dementia sy., Vegetative nervous disorders
- Hypoth. – hypophyseal. disorders, Thyroid and parathyroid gland dysfunction, Supraren diroders, Diabetes mellitus and its acute a& chronic complications, Molecular principles of endocrine disorders,
- Acute & chronic renal failure, Glomerulopathies, Tubulopathies, Renovascular diseases
- Disorders of pharyx, esophagus, Peptic ulcer, Pancreatopathy - maldigestion, Liver and gall bladder disorders - icterus, hepatitis

Recommended literature:
1. McCance,K.L., Sue E. Huether, S.E.: Pathophysiology - The Biologic Basis for Disease in Adults and Children. 5th Ed., Mosby, Elsevier, 2006, 1808 p., ISBN: 0323035078

2. Kumar, V., Abbas, A., Fausto, N.: Robbins & Cotran Pathologic Basis of Disease, 7th edition, Sauders Publ., 2004
1552 p., ISBN 0721601871
3. McPhee. S. J., Lingappa, V.R., Ganong, W.F. Pathophysiology of Disease. McGraw-Hill/ Appleton & Lange, 4th ed., 2002, 760 p. ISBN-10: 0071387641
4. Silbernagl, S., Lang, F.: Color Atlas of Pathophysiology. Thieme Med. Publ.; 2000, 406 p., ISBN-10: 0865778663

Course language:
english

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 12.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ PM-GM1p/23	**Course name:** Pharmacology 1

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 3 / 2 **Per study period:** 42 / 28
Course method: present

Number of ECTS credits: 4

Recommended semester/trimester of the course: 6.

Course level: I.II.

Prerequisities: MI-Pr/A-GM2p/23 and MI-Pr/MBCH-GM2p/23 and MI-Pr/Ph-GM2p/23

Conditions for course completion:
Written tests
Passed

Learning outcomes:
To provide students with a comprehensive introduction to the fundamental Pharmacology and uses of the major classes of drugs currently used in medical practice.

Brief outline of the course:
Prescription of drugs, practical application. Basic pharmacology (pharmacokinetic and pharmacodynamic principles), factors influencing drug effects, routes of drug application.
Special pharmacology including drugs affecting the autonomic nervous system, myorelaxants and ganglioplegic drugs, drugs affecting CNS (drugs used to treat psychiatric disorders, antiepileptics, antiparkinson drugs, hypnotics).

Recommended literature:
Whalen K et al.: Lippincott Illustrated Reviews: Pharmacology 7th edition, 2019
Ritter JM et al.: Rang & Dale's Pharmacology, 2019

Course language:
English

Notes:

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 03.09.2021

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ PM-GM2p/23	**Course name:** Pharmacology 2

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 2 / 3 **Per study period:** 28 / 42
Course method: present

Number of ECTS credits: 6

Recommended semester/trimester of the course: 7.

Course level: I.II.

Prerequisities: MI-Pr/PM-GM1p/23 and MI-Pr/PP-GM1p/23

Conditions for course completion:
test
exam

Learning outcomes:
To provide students with a comprehensive introduction to the fundamental Pharmacology and uses of the major classes of drugs currently used in medical practice.

Brief outline of the course:
Drugs affecting cardiovascular system and blood including cardiac glycosides, antianginal drugs, antidysrhytmic drugs, diuretics, antihypertensive drugs, lipid-lowering drugs. Drugs affecting hemostasis (anticoagulants, antiaggregatory drugs), antianemic drugs. Mechanism of action of antibiotics, resistance, classification. Penicillins. Penicillins with broader spectrum. Cephalosporins. Aminoglycosides. Tetracyclines. Macrolides, lincosamides. Sulphonamides and quinolones. Antistaphylococcal antibiotics. Antimycobacterial agents. Antiviral and antifungal drugs. Antiprotozoal and anthelmintic drugs. Antithyroid drugs. Steroids, androgens. Oral contraceptives. Corticosteroids. Antidiabetic drugs. Drug influencing of plasmatic calcium concentration. Treatment of drug poisoning. Drug interaction.

Recommended literature:
Whalen K et al.: Lippincott Illustrated Reviews: Pharmacology 7th edition, 2019
Ritter JM et al.: Rang & Dale's Pharmacology, 2019

Course language:
ENGLISH

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 21.03.2022
Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ PRM-GMp/23	**Course name:** Physical and Rehabilitation Medicine

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 1 / 1 **Per study period:** 14 / 14
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 6.

Course level: I.II.

Prerequisities: MI-Pr/A-GM2p/23

Conditions for course completion:
1. For successful completion of the practical exercises/seminars is required:
- To participate at all of practical exercises, theoretical and practical performance of all exercises/ seminars.
- To get at least 60 % of total score for ongoing review of the theoretical training to practical exercises.
- Non-participation in practical exercises and seminars shall be properly excused with the teacher, who shall determine a substitute in the corresponding form. The student may replace the excused practical exercises within three weeks at most during the semester (except for the block teaching). In the block system of teaching, the head physician shall decide on how to compensate for the teaching missed.
2. For successful obtained of the credits from subject is necessary:
- To gain the credit from practical exercises (paragraph 1 above).
- Continuous monitoring on the study achievements during the teaching part of the period of study concerned (minimum performance in the treatment of patients, individual tasks, semester assignments).
- The final exam consists of written part.
- Evaluation: Study rules of procedure UPJŠ in Košice, the Faculty of Medicine, Par II, Art13.
- The final classification includes the evaluation of the written test and the results obtained in practical exercises.

Learning outcomes:
Learning outcomes:Prepare the students for the diagnostics, treatment and prevention of disabilities of all types and holistic approach to patient care, working with an interdisciplinary team of experts in many fields - nursing, physical therapy, occupational therapy, speech and language pathology, psychology, social work and others, help patients achieve their maximum functional capacity and highest quality of life.

Brief outline of the course:
Concepts of rehabilitation, definitions in rehabilitation medicine, International Classification of functioning, Disability and Health (WHO).Clinical decision making and examination

Approaches to rehabilitation, benefits of rehabilitation, outcomes measurement in rehabilitation Musculoskeletal examination .The rehabilitation team. Medical conditions requiring intensive rehabilitation services. Examination of motor function General principles in physical medicine. Physical therapy methods and concepts. General principles in comprehensive rehabilitation . Intervention strategies for rehabilitation. Modalities in physical medicine.Classification of modalities based on applied energy and their primary effects. Exercise therapy,benefits, mechanisms, precautions .Muscle strength exercises, active assistive exercise, passive movements Rehabilitation therapy in myoskeletal medicine.Kinesiology and clinical examination of the musculoskeletal system .Rehabilitation in cardiology.Key components of the complex rehabilitation plan. Rehabilitation of pulmonary diseases. Methods and approaches used in the rehabilitation of patients with pulmonary system dysfunction. Rehabilitation in neurology. Rehabilitation strategies in central and peripheral nervous system disorders. Rehabilitation in traumatology. Rehabilitation treatment principles in various conditions. Rehabilitation in geriatrics.Principles of movement activity selection in the aging population. Rehabilitation in psychiatry, oncology Rehabilitation specifics, basic goals and assessment.

Recommended literature:

Basic study literature:

Ceravolo M, Christodoulou N. et al. Physical and Rehabilitation Medicine for Medical Students, Edi-Ermes-Milan, 2018

Next study literature:

Mayer S. Physical Medicine and Rehabilitation Oral Board Review: Interactive Case Discussions, Demos Health, 2021

Course language:

english

Notes:

Course assessment

Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 03.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ Ph-GM1p/23	**Course name:** Physiology 1

Course type, scope and the method:
Course type: Lecture / Practice / Controlled study hour
Recommended course-load (hours):
Per week: 3 / 4 / 1 **Per study period:** 42 / 56 / 14
Course method: present

Number of ECTS credits: 7

Recommended semester/trimester of the course: 3.

Course level: I.II.

Prerequisities:

Conditions for course completion:
credit tests,

Learning outcomes:
obtained credits

Brief outline of the course:
Physiological principles. Homeostasis. Blood. Respiratory system. Cardiovascular system Excretory system.Digestive system.

Recommended literature:
Guyton - Hall: Textbook of Medical Physiology
Š.Kujaník: Practical lessons in Physiology. Part I. 1998
M.Pallayová,Š.Kujaník: Textbook of practical physiology Part I. - Cardiovascular Physiology 2013

Course language:
english

Notes:

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 21.03.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ Ph-GM2p/23	**Course name:** Physiology 2

Course type, scope and the method:
Course type: Lecture / Practice / Controlled study hour
Recommended course-load (hours):
Per week: 3 / 4 / 1 **Per study period:** 42 / 56 / 14
Course method: present

Number of ECTS credits: 8

Recommended semester/trimester of the course: 4.

Course level: I.II.

Prerequisities: MI-Pr/Ph-GM1p/23

Conditions for course completion:
credit tests, practical exam, final written test,oral exam,

Learning outcomes:
exam

Brief outline of the course:
Thermoregulation. General neurophysiology. Sensory physiology. Motor nervous system. Autonomous nervous system. Higher functions of the CNS. Physiology of the muscles and work. Endocrinology. Specialized lectures (childhood physiology, stress, biorhythms)

Recommended literature:
Guyton - Hall: Textbook of Medical Physiology
Š.Kujaník: Practical lessons in Physiology. Part II. 1998

Course language:
English

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 18.02.2019

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ PSM-GMp/23	**Course name:** Preventive and Sports Medicine

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 2 / 2 **Per study period:** 28 / 28
Course method: present

Number of ECTS credits: 3

Recommended semester/trimester of the course: 8.

Course level: I.II.

Prerequisities: MI-Pr/IM-GM2p/23

Conditions for course completion:
1. For successful completion of the practical exercises/seminars is required:
- To participate at all of practical exercises, theoretical and practical performance of all exercises/ seminars.
- To get at least 60 % of total score for ongoing review of written test and the theoretical training to practical exercises.
- Two absences are allowed /justified/
2. For successful obtained of the credits from subject is necessary:
- To gain the credit from practical exercises (paragraph 1 above).
- Evaluation: Study rules of procedure UPJŠ in Košice, the Faculty of Medicine, Part II, Art13
- The final classification includes the evaluation of the written test and the results obtained in practical exercises

Learning outcomes:
To acquaint students with the issues of sports medicine, aspects of rehabilitation and sports training.Point out the importance of preventive medicine in practice.

Brief outline of the course:
Introduction to sports medicine, organization, support at athletic events.Physiological aspects of exercise, energy metabolism.Physiological aspects of nutrition, sports nutrition.Aerobic threshold, anaerobic threshold, lactate curve.Sports traumatology – most frequent injuries, specific aspects of sports trauma, treatment, rehabilitation, prevention.Doping, doping control.Recreational sports activities, prescription of exercise in civilization diseases.Preventive medicine, definition, organization, education, public health.Physical exercise – how much is too much.Prevention of obesity, nutrition.Preventive cardiology.Cancer – epidemiology, statistics, prevention.Metabolic syndrome as a cardiovascular risk factor.Prevention of Internal diseases from the perspective of patients with dental diseases.

Recommended literature:
Dzurenková, D., Marček, T., Hájková, M.: Essentials of Sports Medicine. Bratislava: CU, 2000.,22 pp. 2000
Marček, T. et all.:Sports Medicine (Manual of Practical Sports Medicine). Bratislava: CU, 1995. 76 p.

1995
Harries, M., Williams, C., Stanish, W.D., Micheli, L.J.:Oxford Textbook of Sports Medicine. Oxford: Oxford University Press, 1994. 748 p 1994
Thomas P. Gullotta and Martin Bloom Encyclopedia of Primary Prevention and Health Promotion
2014
David L. Katz,Ather Ali - IOM: Preventive Medicine, Integrative Medicine and the Health of the Public
2009

Course language:
english

Notes:

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 26.08.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ PT-GM1p/23	**Course name:** Psychiatry 1
Course type, scope and the method: **Course type:** Lecture / Practice **Recommended course-load (hours):** **Per week:** 2 / 2 **Per study period:** 28 / 28 **Course method:** present	
Number of ECTS credits: 4	
Recommended semester/trimester of the course: 8.	
Course level: I.II.	
Prerequisities: MI-Pr/PP-GM1p/23 and MI-Pr/PM-GM1p/23 and MI-Pr/PMC-GMp/23	
Conditions for course completion: 1. Student has to attend minimally 90% of the practical lessons and minimally 50% of the lectures. In the case of absence, may substitute up to 3 practical lessons per semester. 2. Evaluation: active participation in practicals; permanent study check (control questions); Successful completion of the written test - minimum 60	
Learning outcomes: - to learn about the content of the subject, etiology and pathophysiology of mental disorders, psychopathology, principles of classification in psychiatry, syndromology of mental disorders, diagnosis and treatment of mental disorders and with the stress on communication with mentally ill patients	
Brief outline of the course: - psychiatry - history of psychiatry and its content - etiology and pathophysiology - psychopathology, signs and symptoms of mental disorders /disturbances of perception, mood, thinking, memory, motor activity and behavior, intelligence, consciousness and attention, personality/ - diagnosis in psychiatry - syndroms of mental disorders - principles of classification in clinical psychiatry - treatment of mental disorders - legal and ethical aspects considering psychiatric patients - communication with mentally ill patients – training of communication´s skills	
Recommended literature: 1. Puri, Treasaden, Textbook of Psychiatry, 3rd edition, Churchill Livingstone, Elsevier, 2011 2. Pridmore S. Download of Psychiatry, Front matter. Last modified: October, 2015. http:// eprints.utas.edu.au/287/	
Course language: English language	
Notes:	

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 12.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ PT-GM2p/23	**Course name:** Psychiatry 2

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 2 / 2 **Per study period:** 28 / 28
Course method: present

Number of ECTS credits: 3

Recommended semester/trimester of the course: 9.

Course level: I.II.

Prerequisities: MI-Pr/PT-GM1p/23

Conditions for course completion:
1. Student has to attend minimally 90% of the practical lessons and minimally 50% of the lectures. In the case of absence, may substitute up to 3 practical lessons per semester.
2. Evaluation: active participation in practicals; permanent study check (control questions); Successful completion of the written test - minimum 60%.
3. Practical exam – case report and oral exam.

Learning outcomes:
To build up student´s skills on basic diagnostics, differential diagnosis and principles of therapy of specific groups of mental disorders, principles of first aid in psychiatry. He/she has been taught about legal status of mentally ill. Student fulfils requirements for communication with mentally ill patients and communication with another specialists and psychiatrists.

Brief outline of the course:
- schizophrenia and schizophrenia - like disorders
- mood disorders
- organic and symptomatic mental disorders, cognitive disorders
- reactive (stress-related) mental disorders, anxiety, obsessive - compulsive, somatoform and dissociative disorders,...
- alcoholism and other substance use disorders
- mental disorders of childhood and adolescence
- geriatric psychiatry
- personality disorders
- psychiatric sexuology
- emergency psychiatry, first aid in psychiatry
- biological treatment in psychiatry
- psychopharmacology
- psychotherapy, psychoeducation, rehabilitation in psychiatry
- social psychiatry
- legal and ethical principles in psychiatry

Recommended literature:

Psychiatry and Pedopsychiatry, Hosák Ladislav - Hrdlička Michal et al. Karolinum 2017 ISBN 9788024633787
Pridmore, S (2006) Download of Psychiatry, University of Tasmania, http://eprints.utas.edu.au/287/

Course language:
English language

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 12.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ PMC-GMp/23	**Course name:** Psychology and Medical Communication

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 1 / 2 **Per study period:** 14 / 28
Course method: present

Number of ECTS credits: 3

Recommended semester/trimester of the course: 6.

Course level: I.II.

Prerequisities: MI-Pr/B-GM2p/23 and MI-Pr/Ph-GM2p/23

Conditions for course completion:
1. At least 90% active participation is obligatory on the practical lessons. The most 3 practical lessons are allowed to compensate when legitimate absences occured during the semester.
2 Evaluation: active participation in practicals; permanent study check (control questions);
Successful completion of the written test - minimum 60% .

Learning outcomes:
Get knowledge in basic psychological terminology, stressing clinical psychology, and its application in different medical settings. Basic orientation in main theories of personality and models of psychopathology. Psychodiagnostics and its use in clinical practice in specific medical situations, considering specific mental health changes. Psychotherapy – gain orientation in basic psychotherapeutic approaches, in basic psychotherapeutic methods. Possibilities and limits of psychotherapy in medical specializations. Bio-psycho-social model of health and illness. Psychosomatic disorders and their managment. Theoretical and practical knowledge of principles of effective verbal and nonverbal communication in general, as well as their implementation in difficult interpersonal situations (partner, professional relationships, relationship patient-physician, physician-patientś relative).

Brief outline of the course:
• Psychology as a profession, theoretical and application disciplines, clinical psychologist as a member of the diagnostic and therapeutic team
• Problem of personality, main teories of personality, and main models of psychopathology. The problem of normality
• Psychodiagnostics – basic methods used in clinical practice, their indication and practical contribution in the process of treatment
• Psychotherapy – main theories and schools. Basic methods of psychotherapy. Indications of psychotherapy considering the specific disorder.
• Bio-psycho-social model of illness and health, psychosomatic disorders, behavioral medicine, psychohygiene.
• Verbal and nonverbal communication, principles of effective communication. Managment of difficult situations in medical practice.

Recommended literature:

M.W. Eysenck: Fundamentals of psychology, Psychology press, 2009

Course language:
English language

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 12.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/PTR-GMp/23	**Course name:** Psychotherapy

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 0 / 1 **Per study period:** 0 / 14
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 9.

Course level: I.II.

Prerequisities: MI-Pr/Ph-GM2p/23 and MI-Pr/PMC-GMp/23

Conditions for course completion:
1. Compulsory attendance on at least 90 % of all of lectures held during semester and participate in all seminars.
2. Evaluation: active participation in practicals; permanent study check (control questions).
3. Final exam

Learning outcomes:
Practical application of theoretic knowledge on main psychotherapeutic approaches and methods – psychoanalysis, cognitive-behavioral, gestalt, and training procedures. Possibilities and limits of psychotherapy in psychiatry and other medical settings. Diagnostic vs. psychotherapeutic interview. Construction of the psychotherapeutic plan. Principles of individual and group psychotherapy.

Brief outline of the course:
• Psychotherapy as profession, its history and development
• Psychotherapeutic methods – interview, dialog, training
• Indications of pschotherapy (psychiatry, other medical settings)
• Relaxation and hypnosis
• Psychological transfer in medicine

Recommended literature:
M. W. Eysenck: Fundamentals of psychology, Psychology Press, 2009

Course language:
English language

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 12.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/R-GMp/23	**Course name:** Radiodiagnostic

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 1 / 1 **Per study period:** 14 / 14
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 8.

Course level: I.II.

Prerequisities:

Conditions for course completion:
Rogotest - presence form

Learning outcomes:
Radio imaging methods and procedures, physical principles. Orientation in classical radiology. Control of USG, CT, MR, angiographic and interventional methods. Practical exercises at the clinic.

Brief outline of the course:
- Fundamentals of physics and biophysics.
- Ionizing radiation.
- Diagnostic modalities.
- Using imaging methods to display individual organs.
- Imaging modalities of the bones, nervous system, chest, abdominal organs, vascular system.
- Intervention methods.

Recommended literature:
1. Basic Radiology – Michaely.M.Chen. Thomas L. Pope, David J.Ott Lange
2. Radiology 101 The Basics and Fundamentals of Imaging - W. Smith, T. Farell
3. The Chest X-Ray - G. Lacey, S. Morley, L. Berman
4. CT Teaching Manual - M. Hofer

Course language:
English language

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 19.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ RCO-GMp/23	**Course name:** Radiotherapy and Clinical Oncology

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 2 / 2 **Per study period:** 28 / 28
Course method: present

Number of ECTS credits: 3

Recommended semester/trimester of the course: 10.

Course level: I.II.

Prerequisities: MI-Pr/NM-GMp/23 and MI-Pr/R-GMp/23

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification:

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/RD-GMp/23	**Course name:** Rare Diseases

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 0 / 1 **Per study period:** 0 / 14
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 9.

Course level: I.II.

Prerequisities: MI-Pr/MBCH-GM2p/23 and MI-Pr/PP-GM2p/23

Conditions for course completion:
exam pass

Learning outcomes:
To obtain general information about rare diseases, to know clinical manifestations, laboratory diagnostics and treatment options of the most commmonly occuring in the childhood.

Brief outline of the course:
This course provides an introduction to rare diseases, their screening, diagnosis and treatment in general. National and transnational registers, as well as, social issues. Students will learn about the characteristics, clinical picture, diagnostics treatment and prognosis of the most common rare diseases – inherited metabolic disorders, endocrine diseases, cystic fibrosis, neurological diseases with emphasis on the pediatric patient.

Recommended literature:
1. Zschocke J, Hoffman GF, Vademecum Metabolicum, 2004,2nd edition Schattauer
2. Fernandes J, Saudubray JM, van den Berghe G., Walter JH. Inborn Metabolic Diseases, Diagnosis And Treatment, 2006, 2nd edition, Springer

Course language:
English language

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 16.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ ST-GMp/23	**Course name:** Scientifis Training

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 2 / 0 **Per study period:** 28 / 0
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 9.

Course level: I.II.

Prerequisities:

Conditions for course completion:
After conclusion of this subjects, students should understand scientific principles of preclinical and clinical aspects, as well as population-based research in medicine. Students will be able to search and evaluate quality of scientific informations, write a scientific thesis/article, they should understand basic methodologies of data acquisition as well as basics of scientific communication and scientometry.
Final evaluation: 0/100.

Learning outcomes:
Perform a model literature review – max. 30% of evaluation.
Student will demonstrate ability to work with bibliographic database PubMed / SCOPUS demonstrated by a systematically preformed review of scientific publications in the area of students choice. Literature review will be finalized by the end of 10th week of the subject duration.
Evaluation of quality of acquired references – max. 30% of evaluation.
Student will perform a critical data quality control of references included in his/her literature review. This should include among other: methodology of the study, design, strength of evidence, strengths and weaknesses of the publication. This will be provided by the end of subject duration
Compulsory active participation at seminars – max. 40% of evaluation.
Two excused absences.
Content knowledge standard
Student will demonstrate knowledge and skills in this field, which is defined as to its content based on results of education and as to its width based on the recommended literature.

Brief outline of the course:
Characteristics of research process; types of research and methodology of project planning; methods of data acquisition; methods of processing and quality control of acquired data; essence and structure of modern research; international collaboration in research; principles of leadership in medicine and science; types of scientific and non-scientific methods in research; research ethics; presentation of results; evidence-based medicine; types of scientific publications.

Recommended literature:
1. Chang M.: Principles of Scientific Methods. Chapman and Hall/CRC New York, 2014, 247s. https://doi.org/10.1201/b17167

2. Schultz K.F., Grimes D.A.: Essential Concepts in Clinical Research: Randomised Controlled Trials and Observational Epidemiology 2nd edition. Elsevier, 2018, 272s. ISBN 9780702073939.
3. Supino PG, Borer JS. Principles of Research Methodology: A Guide for Clinical Investigators. Springer, 2012, 293s. ISBN 978-1461433590

Course language:
English Language.

Notes:

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 02.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ SDT-GM1p/23	**Course name:** Seminar of Diploma Thesis 1
Course type, scope and the method: **Course type:** Practice **Recommended course-load (hours):** **Per week: Per study period:** 50s **Course method:** present	
Number of ECTS credits: 2	
Recommended semester/trimester of the course: 9.	
Course level: I.II.	
Prerequisities:	
Conditions for course completion: Individual work, Obtaining credits	
Learning outcomes: Preparatory steps and formality of Diploma Thesis´ writing	
Brief outline of the course: • Main phases and basic steps of Diploma Thesis´ writing (conceptualization, planning, empirical phase, analytical and dissemination phase) • Ethical principles and Thesis writing principles (Thesis originality, copyright) • Formal aspects of Diploma Thesis • Citations and bibliographical references	
Recommended literature: 1. Directive No. 2/2022 for Final Theses Submitted at Pavol Jozef Šafárik University in Košice, Faculty of Medicine 2. Rozhodnutie rektora č. 9/2022 o predkladaní záverečných prác na 1., 2. a spojenom 1. a 2. stupni vysokoškolského vzdelávania a uzatváraní licenčných zmlúv. 3. DIRECTIVE No. 1/2011 on Essential Prerequisites of Final Theses, Doctorate Degree Theses, and Associate Professorship Degree Theses, Release and Making Available Thereof During the Time of Keeping the Same, and Originality Check Valid for Pavol Jozef Šafárik University in Košice and Its Constituents 4. STN 01 6910: 2010 5. STN ISO 690 6. STN ISO 2145 7. https://www.upjs.sk/en/departments/university-library/theses/ 8. Preparatory steps and formality of Diploma Thesis´ writing	
Course language:	
Notes:	

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 20.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ SDT-GM2p/23	**Course name:** Seminar of Diploma Thesis 2

Course type, scope and the method:
Course type: Practice
Recommended course-load (hours):
Per week: Per study period: 50s
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 10.

Course level: I.II.

Prerequisities:

Conditions for course completion:
individual work, obtaining the credits

Learning outcomes:
Structure and content of the Diploma Thesis

Brief outline of the course:
• Structure of the Diploma Thesis: mainly parts of the Diploma Thesis - introductory and main part of the text
• Content page of the Diploma Thesis I.: abstract, proem, introduction, discusion, conclusion
• Content page of the Diploma Thesis II.: aim, metodology and research methods of the Diploma Thesis

Recommended literature:
1. Directive No. 2/2022 for Final Theses Submitted at Pavol Jozef Šafárik University in Košice, Faculty of Medicine
2. Rozhodnutie rektora č. 9/2022 o predkladaní záverečných prác na 1., 2. a spojenom 1. a 2. stupni vysokoškolského vzdelávania a uzatváraní licenčných zmlúv.
3. DIRECTIVE No. 1/2011 on Essential Prerequisites of Final Theses, Doctorate Degree Theses, and Associate Professorship Degree Theses, Release and Making Available Thereof During the Time of Keeping the Same, and Originality Check Valid for Pavol Jozef Šafárik University in Košice and Its Constituents
4. STN 01 6910: 2010
5. STN ISO 690
6. STN ISO 2145
7. https://www.upjs.sk/en/departments/university-library/theses/
8. Preparatory steps and formality of Diploma Thesis´ writing

Course language:
English

Notes:

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 20.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ SL-GM1p/23	**Course name:** Slovak Language 1

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 0 / 4 **Per study period:** 0 / 56
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course:

Course level: I.II.

Prerequisities:

Conditions for course completion:
Students are required to attend Slovak language classes according to the schedule. Active participation is required.
Students are not allowed to have more than four absences during the semester.
There are 2 continuous oral assessments (Week 7. and 13.). The result of each continuous oral assessment must be at least 60%. Students are given an opportunity to retake the continuous oral assessment in the last week of the semester (week 14). The final assessment is based on the results of both continuous oral assessments (The final mark = the first continuous oral assessment result + the second continuous oral assessment result.)
Grading scale: A 100-93%; B 92-85%; C 84-77%; D 76-69%; E 68-60%; FX 59% and less.
THE STUDY FORM: in person/distant/combined in accordance with epidemiological situation and the Rector's Ordinance.

Learning outcomes:
Students achieve basic language skills with the focus on the communication in selected general and medical topics - language level A1.1.

Brief outline of the course:
Human Body. Doctor - Patient Communication. Personal and Family History - Introduction.
My Family. In the Town. Medical Faculty, Accommodation. Healthy and Unhealthy Food and Drinks.
Numerals (0 – 100). Days of the Week. Colours. Personal Pronouns. Nouns – Grammatical Gender. Verbs - Conjugation in Present Tense.

Recommended literature:
Madárová, I., Barnišinová, L., Pálová, V.: Pán doktor, hovoríte po slovensky? Košice, UPJŠ 2019.
e-publikácia: Madárová, I. Pálová, V., Tóthová, L.: Pán doktor, rozumiete po slovensky? Cvičebnica. Košice, UPJŠ 2021.
Kamenárová, R. a kol.: Krížom-krážom. Slovenčina A1. Bratislava, Univerzita Komenského 2018.
Sedláková, M. a kol.: Slovenčina pre cudzincov. Pracovné listy. Košice: UPJŠ 2013. https://www.upjs.sk/public/media/5596/Sedlakova-Slovencina-pre-cudzincov.pdf

Doplnkové materiály pripravené vyučujúcimi v printovej a elektronickej forme.
www.slovake.eu

Course language:
English B2

Notes:

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 13.09.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ SL-GM2p/23	**Course name:** Slovak Language 2

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 0 / 4 **Per study period:** 0 / 56
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course:

Course level: I.II.

Prerequisities: MI-Pr/SL-GM1p/23

Conditions for course completion:
Students are required to attend Slovak language classes according to the schedule. Active participation is required. Students are not allowed to have more than 4 absences during the semester. Students are expected to be on time to class. In case of late arrivals which happen more than 3 times, students are given an absence. There is one continuous oral assessment (week 8). The result of the continuous oral assessment must be at least 60%. Students are given an opportunity to retake the continuous oral assessment in the last week of the semester (week 14). Students with a final result lower than 60% in the summer semester are not allowed to register for the final exam, i.e. their final grade is FX. The final assessment is based on the result of the final oral exam and the continuous oral assessment. The final mark = the final oral exam (the final oral exam = 60% of the final mark) + the continuous oral assessment (the continuous oral assessment = 40% of the final mark) = 100%. Grading scale: A 100-93%, B 92-85%, C 84-77%, D 76-69%, E 68-60%, FX 59% and less. The study form: in person/distance/combined in accordance with epidemiological situation.

Learning outcomes:
Students are able to communicate with patients at the basic level, ask questions, give advice, etc. Language level A1.2.

Brief outline of the course:
Medical Topics: At the Doctor's: Vyšetrím vás. Budete užívať lieky. Health Problems: Máte problémy s trávením? Healthy Food. Diet: Nesmiete jesť potraviny s laktózou. At the Doctor's: Mali ste hnačku? At the Doctor's: Čo ste jedli? Daily Routine: Čo ste robili? In the Hospital: Na príjme. Referral to a Specialist: Pôjdete k očnému lekárovi. At the Doctor's: Odmeriam vám tlak.
Grammar: Future Tense. Perfective and Imperfective Verbs in Medical Communication.Verbs: ísť, odísť, prísť. Instrumental Case. Verbs: jesť, piť. Modal Verbs – Present Tense. Past Tense I. Past Tense II – Irregular Verbs. Past Tense III. – Questions, Word Order. Locative Case. Dative Case – Nouns, Prepositions.
Dative Case – Pronouns, Word Formations.

Recommended literature:
Madárová, I., Barnišinová, L., Pálová, V.: Pán doktor, hovoríte po slovensky? Košice, UPJŠ 2019.

e-book: Madárová, I. Pálová, V., Tóthová, L.: Pán doktor, rozumiete po slovensky? Cvičebnica. Košice, UPJŠ 2021.
Kamenárová, R. a kol.: Krížom-krážom. Slovenčina A1. Bratislava: Univerzita Komenského 2007 (+CD).
Sedláková, M. a kol.: Slovenčina pre cudzincov. Pracovné listy. Košice: UPJŠ 2013.
Doplnkové materiály pripravené vyučujúcimi v printovej a elektronickej forme.
http://www.slovake.eu

Course language:
English level B2 / Slovak level A1.1

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 23.01.2023

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ SL-GM3p/23	**Course name:** Slovak Language 3

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 0 / 2 **Per study period:** 0 / 28
Course method: present

Number of ECTS credits: 1

Recommended semester/trimester of the course:

Course level: I.II.

Prerequisities: MI-Pr/SL-GM2p/23

Conditions for course completion:
Students are required to attend Slovak language classes according to the schedule. Active participation is required.
Students are not allowed to have more than two absences during the semester.
There is 1 continuous oral assessment (Week 12. and 13.). The result of continuous oral assessment must be at least 60%. Students are given an opportunity to retake the continuous oral assessment in the last week of the semester (week 14). The final assessment is based on the result of continuous oral assessment.
Grading scale: A 100-93%; B 92-85%; C 84-77%; D 76-69%; E 68-60%; FX 59% and less.
THE STUDY FORM: in person/distant/combined in accordance with epidemiological situation and the Rector's Ordinance.

Learning outcomes:
Students are able to communicate with patients, ask questions; give advice or instructions - language level A1.2.

Brief outline of the course:
Special Medical Examinations: Kidney Ultrasound, Chest X-ray, Urine Examination, Knee Examination... At the General Practitioner. Patient's Personal Data. Family History. Personal History. Localization of Pain. Provoking and Inhibiting Factors. Accompanying Risk Problems. Genitive Case – Selectively. The Imperative. Past Tense. Modal Verbs.

Recommended literature:
Madárová, I., Barnišinová, L., Pálová, V.: „Pán doktor, hovoríte po slovensky?“ Košice, UPJŠ 2019.
Madárová, I., Pálová, V., Tóthová, L.: „Pán doktor, rozumiete po slovensky?“ Cvičebnica. Košice, UPJŠ 2021.
Petruňová, H.: How to Use Slovak in a Medical Environment – Basic Slovak for Medical Students. Košice, UPJŠ 2019.
Brožová, I.: Slovak for you. Bratislava, Ikar 2016.
Doplnkové materiály pripravené vyučujúcimi v printovej a elektronickej forme.

Course language:

English B2, Slovak A1.1.

Notes:

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 21.09.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ SL-GM4p/23	**Course name:** Slovak Language 4

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 0 / 2 **Per study period:** 0 / 28
Course method: present

Number of ECTS credits: 1

Recommended semester/trimester of the course:

Course level: I.II.

Prerequisities: MI-Pr/SL-GM3p/23

Conditions for course completion:
Students are required to attend Slovak language classes according to the schedule. Active participation is required.
Students are not allowed to have more than two absences during the semester.
Students are expected to be on time to class. In case of late arrivals which happen more than 3 times, students are given an absence.
There is one continuous oral assessment (weeks 7 and 8). The result of the continuous oral assessment must be at least 60%. Students are given an opportunity to retake the continuous oral assessment in the last week of the semester (week 14). Students with a final result lower than 60% in the summer semester are not allowed to register for the final exam, i.e. their final grade is FX. The final assessment is based on the result of the final oral exam and the continuous oral assessment. The final mark = the final oral exam (the final oral exam = 60% of the final mark) + the continuous oral assessment (the continuous oral assessment = 40% of the final mark) = 100%.
Grading scale: A 100-93%, B 92-85%, C 84-77%, D 76-69%, E 68-60%, FX 59% and less.
The study form: in person/distance/combined in accordance with epidemiological situation.

Learning outcomes:
Students are able to communicate with patients at the basic level at specialized departments in hospital. Language level A2.1.

Brief outline of the course:
Medical Topics: Personal History - Present and Previous Diseases. Drug History. Allergies. Social History. Addictions. Gynaecologic History. Pregnancy and Obstetric History. History Taking in Paediatrics I. Communication with Parents. History Taking in Paediatrics II. Communication with Children.
History Taking in Surgery I. Localization of Pain. History Taking in Surgery II. Intensity and Types of Pain. History Taking in Neurology.
Grammar: The Dative Case. Comparison of Adverbs. Deminutives. Imperative Forms in Informal Communication. Imperative Forms. Conditional.

Recommended literature:
Petruňová, H.: How to Use Slovak in a Medical Environment – Basic Slovak for Medical Students. Košice: UPJŠ 2019.

Madárová, I., Barnišinová, L., Pálová, V.: Pán doktor, hovoríte po slovensky? Košice, UPJŠ 2019. e-publikácia: Madárová, I. Pálová, V., Tóthová, L.: Pán doktor, rozumiete po slovensky? Cvičebnica. Košice, UPJŠ 2021.
Doplnkové materiály pripravené vyučujúcimi v printovej a elektronickej forme.

Course language:
English level B2/ Slovak level A1.2

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 23.01.2023

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ SM-GMp/23	**Course name:** Social Medicine

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 1 / 2 **Per study period:** 14 / 28
Course method: present

Number of ECTS credits: 3

Recommended semester/trimester of the course: 3.

Course level: I.II.

Prerequisities:

Conditions for course completion:
1. At minimum attendance at 10 practices and 3 lectures.
2. Successful completion of presentation on selected topic (minimum 20 points).
3. Successful completion of the final test (minimum 31 points).
The latest update:
https://www.upjs.sk/public/media/11786/USBM_UP_Pr-Cv_GM-1_SM_2021-02-10.pdf
Successful completion of the final exam
Presentation on selected topic and final test

Learning outcomes:
To provide students with evidence-based knowledge of selected main determinants of health with an emphasis on social determinants, behavioral determinants and health care, with aim to better understand their positive and negative impact on the health of individuals and populations. After completing the course, students will be better acquainted with the trends of health development of the population, get better informed with approaches to health and disease at the population level, health care systems and about current health challenges at the national, international and global levels. They will know the main social causes and consequences of diseases and their importance in the process of effective diagnosis, treatment and aftercare.

Brief outline of the course:
Determinants of health: social, behavioral, health care; Health systems, healthcare organization and integrated care; Health promotion and health protection; Disease prevention; Global health: urbanization, migration, population aging; Family, dysfunctional family, child abused and neglect syndrome, domestic violence; Health and social consequences of substance and non-substance addictions; Specifics of health and social care for people with physical, sensory and mental disabilities; Specifics of health and social care for Roma, immigrants, the elderly and persons in the terminal stage of disease; Unemployment and homelessness as a health and social problem; Social assistance to people in an unfavorable life situation.
The current timetable for the semester is published on the website of the Institute of Social and Behavioral Medicine:
https://www.upjs.sk/public/media/11786/USBM_UP_Pr-Cv_GM-1_SM_2021-02-10.pdf

Recommended literature:

Základná študijná literatúra:
NAGYOVA, I., KATRENIAKOVA, Z. (eds.). Textbook of Social Medicine. SafarikPress Publishing, Kosice 2019. MZ SR. Strategický rámec starostlivosti o zdravie pre roky 2014 – 2030. Dostupné online: http://www.health.gov.sk/Zdroje?/Sources/Sekcie/IZP/strategicky-ramec-starostlivosti-o-zdravie2014-2030.pdf
DETELS, R, BEAGHOLE, R, LANSANG, MA, GULLIFORD, M (eds.) Oxford Textbook of Public Health. Oxford Medical Publications. Fifth edition. 2009. ISBN-13: 9780199218707.
Ďalšia študijná literatúra:
NAGYOVA I (ed.). Measuring health and quality of life in the chronically ill. Kosice, Slovakia, EQUILIBRIA Ltd 2009.
WILKINSON, R & MARMOT, M. Social determinants of health. The solid facts. Second edition. 2003, 31 pages. ISBN 978 92 890 1401 4. Accessible online: http://www.euro.who.int/__data/assets/pdf_file/0005/98438/e81384.pdf

Course language:
english

Notes:
Estimated time of the student' burden: 78 hours
Present study (L, Pr): 42 hours
Preparation of presentation 12 hours
Self-study 24 hours

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 17.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ SSWp/23	**Course name:** Student Science Work - Presentation at SSC

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 0 / 2 **Per study period:** 0 / 28
Course method: present

Number of ECTS credits: 4

Recommended semester/trimester of the course: 3., 4.., 5., 6.., 7., 8.., 9., 10..

Course level: I.II.

Prerequisities:

Conditions for course completion:
Presentation in the faculty round of SSW

Learning outcomes:

Brief outline of the course:
Work under the guidance of the topic´s supervisor of SSW and presentation of results

Recommended literature:
According to the chosen topic

Course language:
English

Notes:

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 17.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ S-SS-GMp/23	**Course name:** Surgery

Course type, scope and the method:
Course type:
Recommended course-load (hours):
Per week: Per study period:
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 11., 12..

Course level: I.II.

Prerequisities: MI-Pr/AIM-GMp/24 and MI-Pr/CS-GMp/24 and MI-Pr/FMML-GMp/23 and MI-Pr/OF-GMp/23 and MI-Pr/ORL-GMp/23 and MI-Pr/PM-GM2p/23 and MI-Pr/S-GM6p/23

Conditions for course completion:
It is obtaining at least 300 credits for compulsory and optional subjects in the prescribed composition by the study plan for the 1st to 5th year + completion of the mandatory subject Surgery 6.

Learning outcomes:
To verify the student's acquired theoretical knowledge and skills from the subject of the state exam, i.e. abdominal, thoracic, cardiovascular, trauma, pediatric and plastic surgery, urology, neurosurgery, and orthopedics. Verify practical knowledge in examining the patient and writing a medical record - mastering the basics of medical documentation. Practical verification of diagnostics knowledge using imaging methods - X-rays, CT, angiography, ultrasonography, and MRI of primary surgical diseases.

Brief outline of the course:
Summarize knowledge within the block and multidisciplinary seminars in thoracic surgery, vascular surgery, abdominal surgery, pediatric surgery, oncological surgery, neurosurgery, orthopedics, and urology. Chest and mediastinal surgery. Sudden abdominal events. Trauma surgery. Principles of transport of the sick and wounded in shock, unconsciousness, spinal injury. Burns. Cardiovascular surgery. Pediatric surgery. Resuscitation and intensive care. Oncosurgery. Neurosurgery.

Recommended literature:

Course language:
English

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 16.05.2022
Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ SP-GMp/23	**Course name:** Surgery - Propedeutics

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 2 / 2 **Per study period:** 28 / 28
Course method: present

Number of ECTS credits: 5

Recommended semester/trimester of the course: 5.

Course level: I.II.

Prerequisities: MI-Pr/A-GM2p/23 and MI-Pr/HE-GM2p/23

Conditions for course completion:
1. For successful completion of the practical exercises / lectures is required:
- To participate at all of practical and theoretical exercises (100%) / lectures (75%)
- To get at least 60 % of total score for ongoing review of written test
- Two absences are possible needed to be compensated
2. For successful obtained of the credits from subject is necessary:
- To gain the credit from practical exercises / lectures (paragraph 1 above)
- The control tests are evaluated on the basis of the achieved number of points (%)
- Evaluation: Study rules of procedure UPJŠ in Košice, the Faculty of Medicine, Part II, Art. 13, Paragraph 4
- The final exam consists of oral parts
- To the exam bring the student´s book with attendance
- The final classification includes the evaluation of the written test and the results obtained in practical exercises
Education can alternatively by conducted in a distant mode. The teachers will communicate with students by email, MS Teams or other teleconference applications.
1. The presence of the students at individual practices will be recorded by their teachers.
2. Teachers will assign the tasks to students in the form of essays and solving case reports.
3. Knowledge assessment will be carried out by a distance test.
4. Completion of the course will be evaluated on the basis of the records of presence, written assignments and test results.

Learning outcomes:
Get knowledge from the basics of symptomatology and diagnostics of surgical diseases, using physical, laboratory and instrumental examination. Students will acquire basics of RTG diagnostics of acute abdomen and other RTG contrast examinations of gastrointestinal tract, thorax and skeletal injuries. Apprise principles of surgical procedures, preoperative care of the patient and postoperative care. The attention is focused on the basics of surgical thinking and scientific work in surgery.

Brief outline of the course:

Introduction to Surgery-propedeutic study. History development of surgery. Patient history and symptoms of surgical diseases and its value for establishment of proper diagnosis. Basic principles of clinical examination. Value of paraclinic examinations – lab.tests.X ray, CT, US, MRI, endoscopy and nuclear medicine techniques for approvement of clinical diagnosis in acute and chronic surgical diseases. Principles of antisepsis and sepsis. Desinfection and sterilisation in surgical ward and in all health care facilities. Preoperative management of the patient. Indications and contraindications for the operation. Basic operative procedures – terminology, classification, description. Shock in surgery. Shock in surgery. Basis methods of anasthesia. Types of anaesthesia (anaesthesia, premedication, general anaesthesia, endotracheal anaesthesia). Postoperative care. General principles of postoperative care. Operative wounds, types of wounds, healing of wounds. Tromboembolism in surgery. Thrombophlebitis, phlebotrombosis, pulmonary embolism, air and fat embolism. Bleeding in surgery. Non- surgical diseases – cardiovascular, respirátory, metabolic, hepatocelular, renal, endocrine, neurologic, haemarological, ummunological in correlation to surgical procedure. Blood derivates and transfusions for urgent and elective surgery.

Recommended literature:

Frankovičová, M. et al.: Surgery for medical students. Košice, Faculty of Medicine, Pavol Jozef Šafárik University in Košice, 2014, 408 p. ISBN 978-80-8152-202-4
Frankovičová, M., Kaťuchová J. et al.: Surgery for medical students. second revised edition, Košice, Faculty of Medicine, Pavol Jozef
Šafárik University in Košice, 2017, 521 p. ISBN 978-80-8152-581-0

Course language:
English

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 05.08.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/S-GM1p/23	**Course name:** Surgery 1

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 2 / 2 **Per study period:** 28 / 28
Course method: present

Number of ECTS credits: 4

Recommended semester/trimester of the course: 6.

Course level: I.II.

Prerequisities: MI-Pr/SP-GMp/23

Conditions for course completion:
1. For successful completion of the practical exercises / lectures is required:
- To participate at all of practical and theoretical exercises (100%) / lectures (75%)
- To get at least 60 % of total score for ongoing review of written test
- Two absences are possible needed to be compensated
2. For successful obtained of the credits from subject is necessary:
- To gain the credit from practical exercises / lectures (paragraph 1 above)
- The control tests are evaluated on the basis of the achieved number of points (%)
- Evaluation: Study rules of procedure UPJŠ in Košice, the Faculty of Medicine, Part II, Art. 13, Paragraph 4
- The results of ongoing evaluations are included in the final classification
Education can alternatively by conducted in a distant mode. The teachers will communicate with students by email, MS Teams or other teleconference applications.
1. The presence of the students at individual practices will be recorded by their teachers.
2. Teachers will assign the tasks to students in the form of essays and solving case reports.
3. Knowledge assessment will be carried out by a distance test.
4. Completion of the course will be evaluated on the basis of the records of presence, written assignments and test results.

Learning outcomes:
Students gain basic information on diagnosis and treatment of surgical diseases of infectious origin. The outcome of the studies of trauma and war surgery is the acquiring the basic knowledge of injury causes and prevention, pointing out the peculiarities of war injuries. Important is the knowledge of open and closed wounds – students must master first aid as well as the basics of conservative and surgical treatment and its complications. Important is the knowledge of shock pathophysiology as well as its diagnosis and treatment. The aim in the field of plastic and replacement surgery is the knowledge of the possibilities in these fields as well as indications, preparation, transportation of a patient as well as a replacement to the corresponding department. The important part of the surgery is the gained knowledge in the field of post-surgical rehabilitation of patients. Significant are also the basics of dietetics of surgical patients with the possibilities of parenteral and enteral nutrition. Students master the basics of home parenteral nutrition all-in-one, taking into consideration the

increasing number of patients also in Slovakia. Significant is the knowledge of the increasing importance of enteral nutrition everywhere in the post-surgical period where its usage is possible.

Brief outline of the course:
Surgical infection I., Surgical infection II., Injury, prevention of injuries, occupational and nonoccupational injury (categories of injuries, mass injury, disaster), Open injuries – types of open injuries. Wounds, types of wounds, healing of wounds. First aid, modalites of the treatment, Closed injuries – types of closed injuries. Fractures and dislocations. First aid. Conservative therapy.
Speciality of military injuries and their management. Cardiovascular injury, Shock, pathogenesis of the shock. Manifestations of the shock, laboratory diagnostic methods, clinical symptoms and therapy. Failure of organs, Thermal and cold injuries, The basic problems and principles of plastic surgery, Basic principles of microsurgery and replantation surgery, Basic principles of transplantation surgery, Principles of rehabilitation of surgical patients, Principles of dietetics in surgical patients in pre- and post-operative period. Parenteral and enteral nutrition in surgical diseases.

Recommended literature:
Frankovičová, M. et al.: Surgery for medical students. Košice, Faculty of Medicine, Pavol Jozef Šafárik University in Košice, 2014, 408 p. ISBN 978-80-8152-202-4
Frankovičová, M., Kaťuchová J. et al.: Surgery for medical students, second revised edition, Košice, Faculty of Medicine, Pavol Jozef Šafárik University in Košice, 2014, 408 p. ISN 978-80-8152-581-0

Course language:
English

Notes:

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 16.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ S-GM2p/23	**Course name:** Surgery 2

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 2 / 2 **Per study period:** 28 / 28
Course method: present

Number of ECTS credits: 4

Recommended semester/trimester of the course: 7.

Course level: I.II.

Prerequisities: MI-Pr/S-GM1p/23 and MI-Pr/PA-GM1p/23

Conditions for course completion:
I. For successful completion of the practical exercises/lectures is required:
- To participate at all of practical exercises (100%) and theoretical lectures (75%).
- To get at least 60 % of total score for ongoing review of written test
- Two absences are allowed, needed to be compensated
II. For successful obtained of the credits from subject is necessary:
- To gain the credit from practical exercises (paragraph 1 above).
- Evaluation: Study rules of procedure UPJŠ in Košice, the Faculty of Medicine, Par II, Art13
- The final classification includes the evaluation of the written test and the results obtained in practical exercises
Education can alternatively by conducted in a distant mode. The teachers will communicate with students by email, MS teams or other teleconference applications.
1. The presence of the students at individual practices will be recorded by their teachers.
2. Teachers will assign the tasks to students in the form of essays and solving case reports.
3. Knowledge assessment will be carried out by a distance test.
4. Completion of the course will be evaluated on the basis of the records of presence, written assignments and test results.

Learning outcomes:
The students acquire knowledge of the surgical treatment of diseases of the throat and thyroid, the basics of thoracic surgery, including heart disease and blood vessels. The students will be able to use knowledge from the abdominal surgery, the basic principles of treatment of liver, gallbladder, bile duct, pancreas, spleen and stomach and duodenum diseases.

Brief outline of the course:
Surgery of the neck, thyroid gland and parathyroid gland.
Surgery of the thoracic wall and surgery of the mediastinum. Surgery of the breast. Surgery of the trachea, lung and pleura. Surgery of the oesophagus and diaphragm. Surgery of the congenital and acquired diseases of the heart. Surgery of the arteries. Surgery of the veins and lymphatic veins. Surgery of the abdominal wall and hernia. Surgery of the pancreas. Surgery of the spleen. Surgery of the gall- bladder and the biliary tree. Surgery of the liver. Surgical icterus, portal hypertension, hepatorenal syndrome. Surgery of the stomach and the duodenum.

Recommended literature:

Frankovičová, M. et al.: Surgery for medical students. Košice, Faculty of Medicine, Pavol Jozef Šafárik University in Košice, 2014, 408 p. ISBN 978-80-8152-202-4
Doherty G.: Current Diagnosis & Treatment Surgery, 13 ed., McGraw-Hill Medical, 2010
Cameron, JL.: Current surgical therapy. 8.ed., Philadelphia; Elsevier, 2013
Townsend, CM. et al.: Sabiston Textbook of Surgery: The Biological Basis of Modern Surgical Practice. 19 ed., Elsevier : Toronto, 2012
Mclatchie G, Borley N, Chikve J.: Oxford handbook in clinical surgery. 4.ed., Oxford: University Press, 2007

Course language:

English

Notes:

Course assessment

Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 11.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ S-GM3p/23	**Course name:** Surgery 3

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 2 / 2 **Per study period:** 28 / 28
Course method: present

Number of ECTS credits: 5

Recommended semester/trimester of the course: 8.

Course level: I.II.

Prerequisities: MI-Pr/S-GM2p/23

Conditions for course completion:
I. For successful completion of the practical exercises/lectures is required:
- To participate at all of practical exercises (100%) and theoretical lectures (75%).
- To get at least 60 % of total score for ongoing review of written test
- Two absences are allowed, needed to be compensated
II. For successful obtained of the credits from subject is necessary:
- To gain the credit from practical exercises (paragraph 1 above).
- Evaluation: Study rules of procedure UPJŠ in Košice, the Faculty of Medicine, Par II, Art13
- The final classification includes the evaluation of the written test and the results obtained in practical exercises
- The final exam consists of oral parts
- The final classification includes the evaluation of the written test and the results obtained in practical exercises
Education can alternatively by conducted in a distant mode. The teachers will communicate with students by email, MS teams or other teleconference applications.
1. The presence of the students at individual practices will be recorded by their teachers.
2. Teachers will assign the tasks to students in the form of essays and solving case reports.
3. Knowledge assessment will be carried out by a distance test.
4. Completion of the course will be evaluated on the basis of the records

Learning outcomes:
Surgery of the small intestine, mesentery and the retroperiteal spaces. Surgery of the colon. Surgery of the rectum and anus. Acute abdomen - the definition, distribution of acute abdominal situations, classification, symptoms and diagnosis of acute abdomen. Acute abdomen accident - injury to the abdomen and chest. Acute abdomen inflammation, bleeding in the GIT. Acute abdomen - Congenital background. Surgical diseases in childhood and their treatment. Emergency situations thoracosurgical. Emergency situations angiosurgical.
Congenital and acquired defects hands in plastic surgery. The diagnosis and treatment of cancer. Combination therapy of cancer. Selected chapters from plastic surgery. Endocrine diseases requiring surgical treatment

Brief outline of the course:

Surgery of the small intestine and retroperitoneum. Surgery of the colon. Surgery of the rectum and anus. Acute abdominal conditions – definition, clasification, symptoms and diagnosis. Acute abdomen - mechanical, neurogenic and vascular ileus. Acute abdomen – inflammatory diseases. Acute abdomen - gastrointestinal bleeding. Traumatic acute abdomen. Congenital acute abdominal conditions. Thoracosurgical acute abdominal conditions. Angiosurgical acute abdominal conditions. Current concepts of surgical oncology. Multimodal therapy of surgical malignancies. Endocrine diseases requiring surgical treatment. Special chapters of plastic, reconstructive surgery.

Recommended literature:

Frankovičová, M. et al.: Surgery for medical students. Košice, Faculty of Medicine, Pavol Jozef Šafárik University in Košice, 2014, 408 p. ISBN 978-80-8152-202-4
Doherty G.: Current Diagnosis & Treatment Surgery, 13 ed., McGraw-Hill Medical, 2010
Cameron, JL.: Current surgical therapy. 8.ed., Philadelphia; Elsevier, 2013
Townsend, CM. et al.: Sabiston Textbook of Surgery: The Biological Basis of Modern Surgical Practice. 19 ed., Elsevier : Toronto, 2012
Mclatchie G, Borley N, Chikve J.: Oxford handbook in clinical surgery. 4.ed., Oxford: University Press, 2007

Course language:
English

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 05.09.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/S-GM4p/23	**Course name:** Surgery 4 (Neurosurgery, Orthopedics)

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 2 / 2 **Per study period:** 28 / 28
Course method: present

Number of ECTS credits: 3

Recommended semester/trimester of the course: 9.

Course level: I.II.

Prerequisities: MI-Pr/S-GM3p/23

Conditions for course completion:
solution of the problems, test

Learning outcomes:
Neurosurgery, orthopedics
Students will acquire basic knowledge of investigative methodologies in orthopedics. They will learn the diagnosis and treatment of inflammatory, degenerative and metabolic diseases of the bone system. It is important to manage the diagnostic and treatment of primary and secondary tumors of the axial skeleton. Students will learn the basics of rehabilitation and assessment activities in the field of orthopedic surgery. It is crucial to obtain information about the symptoms and treatment of intracranial hypertension diagnosis and determination of brain death, which is important for the possibility of organ transplantation. Findings of birth defects of the nervous system similar to the diagnosis and treatment of head and spinal injuries are an essential range of what the student obtains at this semester. Diagnosis and treatment of tumors of the nervous system, as well as using of radioinvasive procedures in neurosurgery are necessary, which must be controlled after completing each section of the course.

Brief outline of the course:
Investigative techniques in orthopedics. Inflammatory and degenerative diseases of the musculoskeletal system. Metabolic disease, bone tumors and tumor-like affections. The most frequent orthopedic diseases arms and legs. Disease of the axial skeleton. Reconstructive and assessment activities in orthopedics. Intracranial pressure - pathophysiology of intracranial hypertension. Congenital malformations of the nervous system. Head injuries. Trauma of spine, spinal cord and peripheral nerves. Tumours of the nervous system. Vascular neurosurgery. Pain and nerve compression syndromes of peripheral nerves.

Recommended literature:
Frankovičová, M. et al.: Surgery for medical students. Košice, Faculty of Medicine, Pavol Jozef Šafárik University in Košice, 2014, 408 p. ISBN 978-80-8152-202-4
Šulla, I. et al.: Selected topics from neurosurgery. Texbook for physicians and students of general medicine. Pavol Jozef Šafárik University in Košice, 2011. - 309 p. ISBN 9788070978832
Southerland, J.: McGlamrys Comprehensive Textbook of Foot and Ankle Surgery, Lippincot Williams Wilkins, 2012, 2112 p. ISBN: 9780781765800

Fitzgerald, R. H. et al. Orthopeadics. Mosby 2002, 2006 p. ISBN 0-323-01318-X.

Course language:
English, Slovak

Notes:

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 16.03.2018

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/S-GM5p/23	**Course name:** Surgery 5 (Trauma Surgery, Urology)

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 2 / 2 **Per study period:** 28 / 28
Course method: present

Number of ECTS credits: 3

Recommended semester/trimester of the course: 10.

Course level: I.II.

Prerequisities: MI-Pr/PM-GM2p/23 and MI-Pr/S-GM3p/23

Conditions for course completion:
solution of the problems, test

Learning outcomes:
Trauma surgery, urology
Students will acquire knowledge of the diagnosis and treatment of traumatic brain injury and spinal cord injury often simultaneously with chest injuries. Also important are the knowledge acquired in the abdomen and retroperitoneal injury, especially for its relative rarity. Frequently occurring musculoskeletal injuries, which is important to proper diagnosis and treatment. The student has to know the life-threatening symptoms of compartment syndrome and other rarely occurring due to injuries / Crush syndrome, algodystrophic syndrome, etc. /. In the field of urology is the result of learning the knowledge of the occurrence of urogenital anomalies syndrome. It is important to gain knowledge about the relatively frequently occurring inflammatory diseases in this area. Students master the diagnosis and treatment of calculous disease of the urinary system. In terms of incidence of diseases of the prostate is a common disability - whether benign hyperplasia or tumors, thus acquiring knowledge about the disease is extremely important. Similarly, the student must control the symptoms and treatment of injuries of the urogenital system, although they occur less frequently.

Brief outline of the course:
Craniocerebral injury. Spinal injuries. Chest injury. Injury to the abdomen, pelvis and urogenital system. The injuries of the upper limb. Lower limb injuries. Specific types of injuries and injury complications. History, terminology and basic principles of examination in urology. Anomalies of the urogenital system. Inflammatory diseases of the urogenital system, epidemiology, etiopathogenesis, diagnostic principles. Urolithiasis - etiopathogenesis, diagnostic procedure, complications and prognosis. Tumors of the urogenital system. Benign prostatic hyperplasia. Injuries of the urogenital system.

Recommended literature:
Frankovičová, M. et al.: Surgery for medical students. Košice, Faculty of Medicine, Pavol Jozef Šafárik University in Košice, 2014, 408 p. ISBN 978-80-8152-202-4
Southerland, J.: McGlamrys Comprehensive Textbook of Foot and Ankle Surgery, Lippincot Williams Wilkins, 2012, 2112 p. ISBN: 9780781765800
Pokorný, J. et al.: Traumatologie, Triton, 2002, ISBN 80-7254-277-X

Muller, M. et al.: Chirurgie pro studium a praxi. Goldstein and Goldstein 1997, ISBN 80-86094-10-3
Tanaghoe, E. A., McAninch, J. W.: Smith´s General Urology. McGraw Hill Medical, 2000, ISBN 0-07-159331-4
Breza, J. et al.: Všeobecná a špeciálna urológia, Univerzita Komenského Bratislava 2004, ISBN 80-223-1907-4.

Course language:
English, Slovak

Notes:

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 17.05.2021

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ S-GM6p/23	**Course name:** Surgery 6

Course type, scope and the method:
Course type: Practice / Controlled study hour
Recommended course-load (hours):
Per week: Per study period: 280s / 60s
Course method: present

Number of ECTS credits: 12

Recommended semester/trimester of the course: 11., 12..

Course level: I.II.

Prerequisities: MI-Pr/S-GM4p/23 and MI-Pr/S-GM5p/24 and MI-Pr/RCO-GMp/23

Conditions for course completion:
1. For successful completion of the practical exercises / seminars is required:
- To participate at all of practical and theoretical exercises (100%) and seminars (75%)
- To get at least 60 % of total score for ongoing review of written test last day of classes in ROGO system
- Two absences are possible needed to be compensated
2. For successful obtained of the credits from subject is necessary:
- To gain the credit from practical exercises (paragraph 1 above).
- Written test last day of classes in ROGO system (30 questions)
- To complete two night duties on Surgery Departments according to the schedule
- Evaluation: Study rules of procedure UPJŠ in Košice, the Faculty of Medicine, Part II, Art. 13, Paragraph 4
- The final classification includes the evaluation of the written test and the results obtained in practical exercises
In case of rotation abroad, is an obligation to complete the final test in Surgery 6 on the last day of the rotation in ROGO system with a confirmation of completion of rotation abroad
Education can alternatively by conducted in a distant mode. The teachers will communicate with students by email, MS Teams or other teleconference applications.
1. The presence of the students at individual practices will be recorded by their teachers.
2. Teachers will assign the tasks to students in the form of essays and solving case reports.
3. Knowledge assessment will be carried out by a distance test.
4. Completion of the course will be evaluated on the basis of the records of presence, written assignments and test results.

Learning outcomes:
After the completion of this part of the studies students shall master basic diagnostic, therapeutic and evaluative outcomes in the field of thoracic and mediastinum surgery. They must know the basics of diagnosis and treatment of acute abdomen including abdominal traumas. The important knowledge includes that of the transportation of the sick and injured in shock or those unconscious or when spinal injury is suspected. They must master first aid, including the medical one, in case of thermal damages of organisms. They will acquire the basic knowledge from cardiovascular surgery as well as pediatric surgery. They will master the basics of resuscitation and intensive care. They

will know the basic diagnostic and therapeutic procedures in onco-surgery. They will know the basics of diagnostic and therapeutic procedures in orthopedics, urology and neurosurgery. They are able to diagnose basic diseases of the given fields based on the X-ray interpretation.

Brief outline of the course:
Multidisciplinary seminars: Thoracic and mediastinum surgery. Acute abdomen. Trauma surgery. Principles of the transportation of the sick and injured in shock, unconscious, or in case of spinal injury. Burns. Cardiovascular surgery. Pediatric surgery. Resuscitation and intensive care. Onco-surgery. Orthopedics, urology, neurosurgery + X-rays.

Recommended literature:
Frankovičová, M. et al.: Surgery for medical students. Košice, Faculty of Medicine, Pavol Jozef Šafárik University in Košice, 2014, 408 p. ISBN 978-80-8152-202-4
Frankovičová, M., Kaťuchová J. et al.: Surgery for medical students, second revised edition, Košice, Faculty of Medicine, Pavol Jozef Šafárik University in Košice, 2014, 408 p. ISN 978-80-8152-581-0

Course language:
English

Notes:

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 16.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ OTT-GMp/23	**Course name:** The Organ and Tissue Transplantation

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 0 / 2 **Per study period:** 0 / 28
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 10.

Course level: I.II.

Prerequisities:

Conditions for course completion:
1. For successful completion of the practical exercises/seminars is required:
- To participate at all of practical exercises (100%)
- Elaboration of specified tasks
2. For successful obtained of the credits from subject is necessary:
- To gain the credit from practical exercises (paragraph 1 above).
- Evaluation: Study rules of procedure UPJŠ in Košice, the Faculty of Medicine, Par II, Art13
- The final classification includes the evaluation of the written test and the results obtained in practical exercises
Education can alternatively by conducted in a distant mode. The teachers will communicate with students by email, MS teams or other teleconference applications.
1. The presence of the students at individual practices will be recorded by their teachers.
2. Teachers will assign the tasks to students in the form of essays and solving case reports.
3. Knowledge assessment will be carried out by a distance test.
4. Completion of the course will be evaluated on the basis of the records of presence, written assignments and test results.

Learning outcomes:
The students will acquire basic knowledge on the theory of biology and transmission organs and tissues. They will know the principle donors of organs, brain death determination and the principle of selection of suitable recipients. The students will acquire knowledge of the techniques of collection, storage and transportation of the tissues and organs, the basic principles of organ and tissue transplantation. They will know the possibilities of the products of The Tissue Banks.

Brief outline of the course:
General principles of transplantation of organs and tissues. Indications for explant organs from deceased donors. Indications for the explant organs from living donors. Kidney transplantation. Kidney transplantation in children. Pancreas transplantation. Liver transplantation. Heart transplantation. Lung transplantation. Transplantation of the small intestine. Combined and re-transplantation. Complications after transplant surgery. Organ rejection, acute and chronic. Stem cell transplantation in surgery.

Recommended literature:

1. Frankovičová M. et al. : Surgery for Medical Students. Equilbria, Košice,2014
2. Doherty G.: Current Diagnosis & Treatment Surgery, 13 ed., McGraw-Hill Medical, 2010
3. Cameron, JL.: Current surgical therapy. 8.ed., Philadelphia; Elsevier, 2013
4. Townsend, CM. et al.: Sabiston Textbook of Surgery: The Biological Basis of Modern Surgical Practice. 19 ed., Elsevier : Toronto, 2012
5. Mclatchie G, Borley N, Chikve J. : Oxford handbook in clinical surgery. 4.ed., Oxford: University Press, 2007

Course language:
English

Notes:

Course assessment
Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 11.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ TCCP-GMp/23	**Course name:** Training of Competencies for Clinical Practice

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 0 / 2 **Per study period:** 0 / 28
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 10.

Course level: I.II.

Prerequisities:

Conditions for course completion:
Active participation in training ; Active preparation for individual exercises (studying texts, watching videos, etc.)

Learning outcomes:
To develop communication competencies that enable physicians to establish a cooperative relationship with the patient, to collect and evaluate information obtained from the patient effectively, to inform the patient about health and the proposed health care appropriately, to involve the patient in shared decision-making on health care, to respond to the specific needs of the patient, to respect the cultural and social differences of patients and the level of their health literacy, to better understand the psycho-social needs of patients and their perspectives on the disease and treatment. The overall objective is to improve the efficiency of the healthcare provided by future healthcare professionals through the so-called soft skills.

Brief outline of the course:
Introduction to the training of competencies for clinical practice; The patient's perspective on illness and treatment, psycho-social needs and the patient's social background, health literacy; Calgary-Cambridge model for consultation with the patient (initiating consultation, building a relationship, gathering information, structuring a meeting, ending a meeting); Planning and shared decision-making; Effective sharing of information (use of plain language, teach-back method, etc.); Sharing bad news; Mobilisation of patient´s social support; Working with a patient with low health literacy; Working with yourself, reflecting, adapting to the patient's communication needs and the patient's capabilities and resources.

Recommended literature:
Parrott T., Crook T.: Effective Communication Skills for doctors. 2011., Silverman J., Kurtz S., Draper J.: Skills for Communicating with Patients. Taylor and Francis, 2013, Kickbusch I., Pelikan J.M., Apfel F., Thouros A.D.: Health literacy. The solid facts. WHO 2013.

Course language:
english

Notes:

The subject will only be open if at least 12 students register it; the Number of allowed absences – 2 exercises; Healthcare professionals with different specializations will be invited to selected exercises as guests.

Course assessment

Total number of assessed students: 0

abs	abs-A	abs-B	abs-C	abs-D	abs-E	neabs
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 17.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: MI-Pr/ TM-GMp/23	**Course name:** Tropical Medicine

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 0 / 1 **Per study period:** 0 / 14
Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 9.

Course level: I.II.

Prerequisities: MI-Pr/MB-GM2p/23

Conditions for course completion:
- 100 % active participation in the practicals
- final test minimum percentage of 60 %

Learning outcomes:
Epidemiological aspects and basic diagnostics of infectious diseases, the basic principles antiinfectious treatment of tropical infection, imported infections.

Brief outline of the course:
The nature of infectious diseases, principles of diagnosis. Tropical intestinal infections. Viral hepatitis. HIV / AIDS. Malaria. Tropical parasitic diseases. Imported infections.

Recommended literature:
- Šerý, V. Bálint, O.: Tropická a cestovní medicína, Medon s.r.o. Praha 1998, 569 s.Bálint O. a kol.: Infektológia a antiinfekčná terapia. 2.prepracované vydanie. Bratislava, Osveta 2007.
- Michael Eddleston , Oxford Handbook of Tropical Medicine.
Oxford University Press, Incorporated, 2005.

Course language:
English

Notes:

Course assessment
Total number of assessed students: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 17.05.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: MI-Pr/ UM-GMp/23	**Course name:** Urgent Medicine
Course type, scope and the method: **Course type:** Lecture / Practice **Recommended course-load (hours):** **Per week:** 0 / 1 **Per study period:** 0 / 14 **Course method:** present	
Number of ECTS credits: 2	
Recommended semester/trimester of the course: 9.	
Course level: I.II.	
Prerequisities: MI-Pr/IM-GM3p/23 and MI-Pr/PM-GM2p/23 and MI-Pr/S-GM3p/23	
Conditions for course completion: Final test minimum percentage of 60%	
Learning outcomes: Introduction and brief history of urgent medicine. Intitial patient assessment. Disaster management, Triage, scoring systems in trauma. Shock, types of shock, evaluation, initial management and early treatment Thermal injury (burns, cold injury, hypothermia). Acute coronary syndrome. Instable angina pectoris. Acute myocarrdial infarction with /without ST elevation. Acute treatment. Transport. Pulmonary oedema cardiogenic , non-cardiogenic. Venous thromboembolism. Pulmonary embolism. Phlebothrombosis. Cardiac arrhythmias. Tachyarrhythmias. Bradyarrythmias. ECG analysis. Treatment. Acute endocrinological states. Hypoglycemic, hyperglycemic coma. Thyrotoxic storm. Hypercalciaemia. Hypocalciaemia. Bronchial asthma. Respiratory failure. Airways stabilisation, needle thoracocentesis and tube thoracostomy, cricothyrotomy and tracheostomy Spine stabilisation and prevention of further damage, state of consciousness assessment. Examination (Test) Etiology, treatment. Hypertensive crisis. Etiology. Consequences. Treatment.	
Brief outline of the course:	
Recommended literature:	
Course language: english	
Notes:	

Course assessment Total number of assessed students: 0					
A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0
Provides:					
Date of last modification: 10.05.2022					
Approved:					