Course descriptions

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COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

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

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

Number of credits: 1

Recommended semester: 10.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
pediatrics 1

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

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

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

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

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 1

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

Lecturers: doc. MUDr. Ľubica Jakušová, PhD.
Last change: 16.10.2019
Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.KAIM/J-S-VL-585/19	**Course title:** Algesiology and Paliative Medicine
Educational activities: **Type of activities:** practicals **Number of hours:** **per week:** ,5 **per level/semester:** 7,5 **Form of the course:** on-site learning	
Number of credits: 1	
Recommended semester: 10.	
Educational level: I.II.	
Prerequisites:	
Recommended prerequisites: internal medicine, emergency medicine	
Course requirements: Attendance of 100 % practice workouts and successful completition of final test.	
Learning outcomes: With completition of the subject, student will obtain knowledge: anatomy, physiology and pathophysiology of pain, clinical forms of pain, characteristic of analgetics and their clinical use	
Class syllabus: History of pain management, definition of pain, anatomy, physiology, pathophysiology of pain, clinical types of pain, diagnostics of pain syndromes, analgetics, clinical pain management	
Recommended literature: Dobríková-Porubčanová P. a kol.: Nevyliečiteľne chorí v súčasnosti. Kapitola 10: Ošetrovateľské aspekty v paliatívnej starostlivosti, Spolok svätého Vojtecha, Trnava 2005, s.164-183. Fabuš S., Kulichová M: Paliatívna a hospicovástarostlivost. Medicínska etika a biotika, Vol 5, 1998, s. 9-11. Ed. Kulichová M.: Algeziológia, EDIS, Žilina, 2005, ISBN 80-8070-445-7, s.299. Kulichová M.: Etické princípy a základné zásady liečby chronickéj bolesti. Mozaika hospicovej starostlivosti, Hospice o.z., Martin 2007, ISBN 978-80-969736-2-0 Kulichová M.: Bolesť – definícia, rozdelenie, patofyziologia, klasifikácia a diagnostika. Lek.Obz., 57, 2008, č.1, s. 7 -11. Kulichová M.: Bolesť u onkologického pacienta – diferenciálno-diagnostické spracovanie, ONKOLÓGIA, 5/2007, r.2. s. 287-291. Kulichová M.: Bolesť. In: Dzúrik R., Trnovec T.: Štandardné terapeutické postupy. Osveta Martin, 2001, 2.vydanie, ISBN 80-8063-088-7, s. 760-770. Rokyta R., Kršiak M., Kozák J.: Bolest, Tigis, Praha, 2006, ISBN: 80-235 00000-0-0, s.684. Slama O., Kabelka L., Vorlíček J.: Paliatívna medicína pro praxi. Praha, Galen, 2007, 1.vydanie, ISBN 978-80-7262-505-5, 362s	
Languages necessary to complete the course: English	
Notes:	

Past grade distribution
Total number of evaluated students: 49

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

Lecturers: doc. MUDr. Milan Minarik, PhD., prof. MUDr. Beata Drobná Sániová, PhD.

Last change: 19.11.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚA/J-S-VL-501/17	Anatomy (1)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 3 / 2 **per level/semester:** 45 / 30
Form of the course: on-site learning

Number of credits: 7

Recommended semester: 1.

Educational level: I.II.

Prerequisites:

Course requirements:
100% participation in practicals, at least 60% success rate on written tests
Scale of assessment (preliminary/final): 10/90

Learning outcomes:
Graduate acquires detailed knowledge of the systematic anatomy of the locomotor system - general and special osteology, arthrology and myology and some organ systems. Knowledge will be the basis for the study of topographical anatomy and also for the subsequent study of physiology, pathological anatomy and clinical disciplines.

Class syllabus:
Contents of lectures is systematic anatomy: Locomotor apparatus - general bone structure, bone joints and skeletal muscles; Cardiovascular system; Digestive system.
In the practicals students study special osteology, arthrology and myology - the bones and joints of the head, neck and trunk and bones, joints and muscles of the limbs.

Recommended literature:
Richard L. Drake, A. Wayne Vogl, Adam W. M. Mitchell:
Gray´s Anatomy for Students, 2nd Edition. Philadelphia Churchill Livingstone, 2010, 1150 pp.
ISBN 978-0-443-06952-9
Richard L. Drake, A. Wayne Vogl, Adam W. M. Mitchell et al. :
Gray's Atlas of Anatomy. Philadelphia Churchill Livingstone, 2008, 576 pp.
ISBN 978-0-443-06721-1
David A. Morton, Kurt H. Albertine, Kerry D. Peterson:

Languages necessary to complete the course:
english

Notes:

Past grade distribution
Total number of evaluated students: 583

A	ABS0	B	C	D	E	FX
4,46	0,17	13,21	23,67	27,62	24,7	6,17

Lecturers: doc. MUDr. Yvetta Mellová, CSc., MUDr. Gabriela Hešková, PhD., MUDr. Lenka Kunertová, RNDr. Magdaléna Marčeková, PhD., doc. MUDr. Desanka Výbohová, PhD.

Last change: 26.11.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚA/J-S-VL-502/15	Anatomy (2)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 5 / 4 **per level/semester:** 75 / 60
Form of the course: on-site learning

Number of credits: 10

Recommended semester: 2.

Educational level: I.II.

Prerequisites:

Course requirements:
100% participation in practicals, 100% participation in dissection, at least 60% success rate on written tests
A:95 % - 100 %, B:88 % - 94 %, C: 77 % - 87 %, D: 66 % - 76 %, E: 60 % - 65 %
Scale of assessment (preliminary/final): 10/90

Learning outcomes:
The graduate of anatomy acquires detailed knowledge of systematic anatomy of selected organ systems, including peripheral vessels and peripheral nerves. Knowledge will be the basis for the study of topographical anatomy and also for the subsequent study of physiology, pathological anatomy and clinical disciplines.

Class syllabus:
The content of the lectures is systemic anatomy - blood supply, lymph drainage and nerve supply of limbs; , urinary system, male and female reproductive systems.
The content of the practical is topographical anatomy of limbs - topographic-anatomical dissection of upper and lower limbs; practical study of organ systems - cardiovascular, digestive, respiratory and urogenital systems.

Recommended literature:
Susan Standring: Gray´s Anatomy, 39th edition. Churchill Livingstone 2004, 1600 p.
Romanes. G. J.:Cunningham´s manual of practical anatomy1.,2.,3. New York, Oxford University Press 1992. 263, 298, 346 p.
ATLASES
Petra Kopf-Maier Wolf-Heidegger´s atlas of Human Anatomy 1 (6th edition) Basel: Karger, 2004.
Petra Kopf-Maier Wolf –Heidegger´s atlas of Human Anatomy 2 (6th edition) Basel: Karger, 2004.

Languages necessary to complete the course:
english

Notes:

Past grade distribution
Total number of evaluated students: 837

A	ABS0	B	C	D	E	FX
1,91	0,0	14,81	37,16	28,32	10,27	7,53

Lecturers: doc. MUDr. Yvetta Mellová, CSc., MUDr. Gabriela Hešková, PhD., MUDr. Lenka Kunertová, RNDr. Magdaléna Marčeková, PhD., doc. MUDr. Desanka Výbohová, PhD.

Last change: 26.11.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚA/J-S-VL-503/16	Anatomy (3)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 4 / 2 **per level/semester:** 60 / 30
Form of the course: on-site learning

Number of credits: 8

Recommended semester: 3.

Educational level: I.II.

Prerequisites:

Course requirements:
100% participation in practicals, 100% participation in dissection, at least 60% success rate on written tests
Final Exam:
• the written part: at least 65% success rate for the written exam
• practical examination
• oral examination
Scale of assessment (preliminary/final): 10/90

Learning outcomes:
The graduate of anatomy should master the anatomy of the human body in the extend necessary for pregradual studies. The graduate should understand principles of human body construction, its parts and organs up to such details, that the knowledge gathered is permanent and becomes a base for understanding of physiological and pathological processes and changes and later is the base for studies of clinical disciplines.

Class syllabus:
Contents of lectures is systematic anatomy of the central nervous system, autonomic nervous system, organ of vision and organ of hearing.
The content of the practical is topographical anatomy of head, neck and trunk - topographic-anatomical dissection of head, neck and trunk; practical study of the central nervous system and practical study of organ of vision and organ of hearing.

Recommended literature:
Susan Standring: Gray´s Anatomy, 39th edition. Churchill Livingstone 2004, 1600 p.
Romanes. G. J.:Cunningham´s manual of practical anatomy1.,2.,3. New York, Oxford University Press 1992. 263, 298, 346 p.
ATLASES
Petra Kopf-Maier Wolf-Heidegger´s atlas of Human Anatomy 1 (6th edition) Basel: Karger, 2004.
Petra Kopf-Maier Wolf –Heidegger´s atlas of Human Anatomy 2 (6th edition) Basel: Karger, 2004.

Languages necessary to complete the course:
english

Notes:

Past grade distribution
Total number of evaluated students: 651

A	ABS0	B	C	D	E	FX
5,84	0,0	11,21	21,66	19,82	25,5	15,98

Lecturers: doc. MUDr. Yvetta Mellová, CSc., MUDr. Gabriela Hešková, PhD., doc. MUDr. Desanka Výbohová, PhD.

Last change: 26.11.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.KAIM/J-S-VL-558/19	**Course title:** Anesthesiology and Intensive Medicine

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 2 / 2 **per level/semester:** 30 / 30
Form of the course: on-site learning

Number of credits: 4

Recommended semester: 10.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
internal medicine 3, emergency medicine

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

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

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

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

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 87

A	ABS0	B	C	D	E	FX
17,24	0,0	44,83	19,54	11,49	5,75	1,15

Lecturers: doc. MUDr. Milan Minarik, PhD., prof. MUDr. Beata Drobná Sániová, PhD., MUDr. Denisa Osinová, PhD., MUDr. Silvia Učňová

Last change: 19.11.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.ÚCJ/J-S-VL-507-Z/15	**Course title:** Basic of Medical Terminology (1)
Educational activities: **Type of activities:** practicals **Number of hours:** **per week:** 2 **per level/semester:** 30 **Form of the course:** on-site learning	
Number of credits: 2	
Recommended semester: 1.	
Educational level: I.II.	
Prerequisites:	
Course requirements: 2 written tests - minimum percentage to pass is 60% Evaluation: A: 91-100%, B: 90-81%, C: 80-73%, D: 72-66%, E: 65-60%, FX: less than 60% Scale of assessment (preliminary/final): Written tests - min. 60%	
Learning outcomes:	
Class syllabus: 1. Brief Survey of the History of Medical Terminology 2. Introduction to Latin Grammar and Structure of Terms 3. 1st A – Declension 4. 2nd O – Declension (Latin Substantives) 5. 2nd O – Declension (Greek Substantives) 6. 3rd Declension 7. 3rd Declension of Adjectives 8. Test I. 9. 3rd Consonant - Declension 10. 3rd Vowel – Declension 11. 3rd Declension – Greek Substantives. Some Greek Word Stems 12. 3rd Declension –Adjectives 13. Comparison of Adjectives in Latin 14. Attributes in Latin. Revision 15. Test II Seminars	
Recommended literature: BUJALKOVÁ, M., JUREČKOVÁ, A.: Greco-Latin Medical Terminology. Textbook for Students of Medicine. Martin: Osveta 2017. 190 s. (učebnica). ISBN 978-80-8063-451-3.	
Languages necessary to complete the course: English language, Latin language	
Notes:	

Past grade distribution
Total number of evaluated students: 837

A	ABS0	B	C	D	E	FX
23,18	0,84	31,3	18,76	16,13	9,32	0,48

Lecturers: PhDr. Mária Bujalková, CSc., Mgr. Miroslav Čovan, PhD., Mgr. Nora Malinovská, PhD., Mgr. Samuel Javornický, PhD.

Last change: 15.03.2018

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚCJ/J-S-VL-507-L/15	Basic of Medical Terminology (2)

Educational activities:
Type of activities: practicals
Number of hours:
per week: 2 **per level/semester:** 30
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 2.

Educational level: I.II.

Prerequisites:

Course requirements:
2 written tests and final written exam, minimum percentage to pass is 60% Evaluation: A: 91-100%, B: 90-81%, C: 80-73%, D: 72-66%, E: 65-60%, FX: less than 60%
Scale of assessment (preliminary/final): Written tests - min. 60% Final classification involves student´s credits (rated 40%) and written exam result (rated 60%)

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

Class syllabus:
- 3rd Declension Adjectives – “One ending” Adjectives, “Two ending s” Adjectives, “ Three ending s” Adjectives
- 3rd Declension Adjectives – Declension; Greek Adjectives of 3rd Declension
- Comparison of Adjectives – Regular, Irregular, Incomplete Comparison
- Comparison of Adjectives – Declension of Comparatives and Superlatives
- Numerals – Cardinal, Ordinal, Multiple Numerals. Declension of Numerals
- Medical Prescription – Verb. Decimal Point Metric Prefixes.
- Medical Prescription – Grammatical Structure. Extratemporaneous MP, Trade - drug MP
- Prefixes – Prefixes Related to Direction, Place and Time; Prefixes Denoting Quality and Negation
- Suffixes – Noun Suffixes, Adjective Suffixes.
- Compound Words – Most Common Roots: Nouns Denoting State/Process, Disease, Branch of Medicine; Nouns Denoting Surgical or Diagnostic Procedure, Human Body.
- Compound Words – Most Common Roots: Nouns Denoting Body Fluids, Secretions, Substances. Adjectives/Numerals Denoting State, Quality, Quantity, Color.
- Latin and Greek Equivalents Most Freguently Used in Medical Terms

- Repetition in Exercises.

Recommended literature:
BUJALKOVÁ, M., JUREČKOVÁ, A.: Greco-Latin Medical Terminology. Textbook for Students of Medicine. Martin: Osveta 2017. 190 s. (učebnica). ISBN 978-80-8063-451-3.

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

Notes:

Past grade distribution
Total number of evaluated students: 681

A	ABS0	B	C	D	E	FX
30,98	0,29	33,77	20,85	10,28	3,82	0,0

Lecturers: PhDr. Mária Bujalková, CSc., Mgr. Miroslav Čovan, PhD., Mgr. Nora Malinovská, PhD., Mgr. Samuel Javornický, PhD.

Last change: 10.10.2017

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

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

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: ,5 / 1 **per level/semester:** 7,5 / 15
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 10.

Educational level: I.II.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 0

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

Lecturers: prof. MUDr. Jana Plevková, PhD.

Last change:

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚPF/J-S-VL-630/19	Basics of First Aid

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 1 / ,5 **per level/semester:** 15 / 7,5
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 2.

Educational level: I.II.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 0

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

Lecturers: prof. MUDr. Jana Plevková, PhD.

Last change:

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚO/J-S-VL-634/19	Basics of Nursing Techniques

Educational activities:
Type of activities: practicals
Number of hours:
per week: 1,5 **per level/semester:** 22,5
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 3.

Educational level: I.II.

Prerequisites:

Course requirements:
Subject evaluation is based on the written test and the practical exam; student must achieve at least 60 %. Evaluation: A: 91-100 %, B: 81-90 %, C: 73-80 %, D: 66-72 %, E: 60-65 %, Fx: less than 60 %

Learning outcomes:
By completion of the subject student gains reliable evidence-based information for safe healthcare practice. Student understands fundamental principles of nursing care provision and standard procedures of selected nursing techniques and interventions. While using the methods of simulation, demonstration, case study method and learning by doing method the student will gain theoretical knowledge and practical skills in performance of basic nursing procedures within nursing care provision.
After completion of this subject while performing nursing procedures student will be able to:
- argue for and justify the method / technique of the procedure chosen,
- prepare equipment and supplies necessary to carry out the procedure,
- assess the patient in relation to the procedure (risk factors, factors affecting its performance, patient's readiness for the procedure (if long-term preparation required)
- provide instructions and support the patient prior to the procedure,
- prepare the patient for the procedure from the physical perspective,
- carry out the procedure independently while following clinical standards and guidelines, respecting the ethical principles and principles of asepsis including hand hygiene,
- communicate with the patient during the procedure, provide patient education / instruction after the procedure,
- record and document the procedure and values assessed,
- process all the equipment and items used (decontamination).
Acquired competences together with ability to argue for and justify the method / technique of the procedure chosen will be the basis for the ability to manage basic and frequently occurring clinical nursing situations and react to them correctly in real clinical practice in the future.

Class syllabus:
Infection precautions in health care setting
Hand hygiene practices

Personal protective equipment (PPE)
Safe managing and disposing used equipment and materials (sharps)
Procedures trained:
hand wash (= antiseptic hand washing)
hand rub (= alcohol-based hand rub / antiseptic hand rub / hygienic hand disinfection)
surgical hand rub (= surgical hand antisepsis / surgical scrub / surgical hand disinfection / surgical hand preparation technique with an alcohol-based hand rub)
donning and removing gloves (non-sterile / sterile)
Vital signs
Procedures trained:
measuring and assessing vital signs: arterial blood pressure; radial and apical pulse; respiration; body temperature; oxygen saturation – pulse oximetry
Bandages and binders
Materials used for bandages and binders
General principles and rules of bandaging
Types of bandages
Procedures trained:
bandaging body parts using different techniques
applying a gauze bandage to secure the dressing – bandaging of hand, lower arm, elbow, foot
applying an elastic thigh-length compression bandage
Specimen collection – blood specimens
General principles of obtaining a specimen
Obtaining blood specimens – blood tests
Procedures trained:
collecting blood specimens by venipuncture (syringe and vacutainer method)
obtaining capillary blood specimens for blood glucose analysis and blood gas analysis (CBG – capillary blood gas) by skin puncture / capillary puncture
blood glucose monitoring by blood glucose meter
Parenteral application of medications I. – ID, SC, IM injections
Parenteral application of medications: prevention of needlestick injuries; general principles and rules of preparing injections and administering intradermal (ID), subcutaneous (SC), intramuscular (IM) injections
Special considerations for administration of insulin, heparin and LMWHs
Procedures trained:
preparing injections – ampoules and vials
mixing parenteral medications in one syringe
administering ID, SC (insulin, heparin, LMWH) and IM injections
Parenteral application of medications II. – IV injections, parenteral fluid replacement therapy and parenteral nutrition
Routes of IV application of medications, types of venous access
General principles and rules of IV injections and IV infusions application
IV infusion solutions
Initiating IV therapy
Prevention of intravascular infection
Blood therapy – preparation and assistance, pre-transfusion tests, adverse reactions to transfusion
Procedures trained:
preparing an injection for IV application
peripheral IV line insertion (venipuncture with over-the-needle-catheter ONC / butterfly needle)

administering medication by IV bolus (into existing peripheral IV line / by venipuncture with single-shot needle)
preparing IV infusion – adding medication/additive into IV fluid container
initiating and administering IV infusion via peripheral IV line (intermittent application: flushing a saline lock; connecting / disconnecting IV tubing; adjusting IV infusion rate by gravity)
Gastric intubation and enteral nutrition (tube feeding)
General principles and rules of gastric tube insertion, maintenance and removal, administering medications via gastric tube and tube feeding
Care measures of working with patients having a gastric tube
Procedures trained:
gastric tube insertion (nasogastric / orogastric)
tube feeding – verifying feeding tube placement, checking gastric residual volume, administering enteral nutrition by bolus (syringe) or intermittent gravity drip (bag / container), flushing the tube
administering medications via gastric tube
gastric tube removal
Administering an enema
Types of enemas / enema solutions
General principles and rules of administering different types of enemas
Procedures trained:
preparing and administering cleansing enema
Urinary catheterization
Straight / indwelling retention urinary catheters
Special considerations for urinary catheterization in female / male patients
General principles and rules of urinary catheter insertion, maintenance and removal
Collecting urine specimen, assessing and examination of urine
Prevention of catheter-associated urinary tract infections (CAUTI)
Care measures of working with patients having indwelling retention urinary catheter
Procedures trained:
obtaining urine specimen by straight catheter in female patient
insertion of indwelling retention catheter in female patient
removal of indwelling catheter
Nursing care in surgery
Principles and practices of surgical asepsis
Establishing and maintaining a sterile field
Wound care – wound healing and assessment, wound dressing materials (traditional / modern), general principles and rules of cleaning a wound and applying sterile dressing in different types of wounds
Procedures trained:
manipulation with sterile items and equipment, sterile packages – dressing trolley
cleaning and changing the dressing of aseptic surgical wound
cleaning and changing the dressing of septic (chronic) wound – red, yellow, black (RYB) colour code
cleaning and changing the dressing of a drain site

Recommended literature:

Dingová, M., Lepiešová, M., Rosenberg, A. et al.: Basics of Nursing. Textbook for Medical and Nursing Students. Martin : Comenius University in Bratislava, Jessenius Faculty of Medicine in Martin, 2011. 283 p. ISBN 978-80-88866-6-88-6.
Lepiešová, M., Dingová, M., Nemcová, J., Ovšonková, A., Miertová, M., Tabaková, M., Tomagová, M.: Basics of nursing presentations. Martin : JLFUK – portal MEFANET, 2012,

419 p. [online] ISBN 1337-7396ISSN 1337-7396. Available at: http://portal.jfmed.uniba.sk/articles.php?aid=187https://stella.uniba.sk/epc/JL/2012/vtls000257495.pdf
Kozier, B., Berman, A., Erb, G., Snyder, S. J.: Fundamentals of Nursing: Concepts, Process and Practice. 7th ed. Pearson Prentice Hall, 2004. 1500 p. ISBN 0130455296.
Perry, A. G., Potter, P. A., Ostendorf W.: Clinical Nursing Skills & Techniques. 8th ed. St. Louis, Missouri: Mosby/Elsevier, 2013. 1196 p. ISBN 978-0-323-08383-6.

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 249

A	ABS0	B	C	D	E	FX
32,13	0,0	40,16	19,68	6,83	1,2	0,0

Lecturers: prof. Mgr. Katarína Žiaková, PhD., Mgr. Anna Ovšonková, PhD., Mgr. Martina Lepiešová, PhD.

Last change: 18.10.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

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

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

Number of credits: 1

Recommended semester: 8.

Educational level: I.II.

Prerequisites:

Course requirements:

Learning outcomes:
Basic information regarding pathomechanisms of the origin of the most frequent sleep disorders related to breathing dysregulation. Prevalence of sleep-related breathing disorders is relatively very high in population, symptomatology is very poor and complications shortening the life expectancy are very frequent. There are new diagnostic and therapeutic procedures that can significantly increase the quality of life from clinical view and from mental and social points, as well.

Class syllabus:
Lectures and seminars: epidemiology of sleep-related breathing disorders, categories of sleep-related breathing disorders, pathomechanisms of snoring, increased upper airway resistance, obstructive and central apnoeic events and Pickwickian syndrome, cardiovascular, haematological, neurological, mental and endocrine complications of sleep-related breathing disorders, social consequences, symptomatology, sleep-related breathing disorders in patients with primary respiratory diseases, sudden infant death syndrome, management of sleep-related breathing disorders. Laboratory training: sleep laboratory service: polysomnography – registration of respiratory and cardiovascular parameters, oximetry, sleep architecture and muscle tone during sleep period and their evaluation.

Recommended literature:
hand-outs

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 21

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

Lecturers: prof. MUDr. Miloš Tatár, CSc., prof. MUDr. Jana Plevková, PhD.

Last change: 31.01.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

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

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 1 / 1 **per level/semester:** 15 / 15
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 7.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Medical biochemistry, Internal Medicine Propaedeutics

Course requirements:
Lectures attendance - 70 % Practicals attendance - 90 % Credit test A: 91- 100%, B: 81- 90%, C: 73 - 80%, D: 66 - 72%, E: 60 - 65%, Fx: ≤ 59%
Scale of assessment (preliminary/final): Credit test

Learning outcomes:
Laboratory testing is inevitable in the differential diagnostic process, therapy and prevention of the diseases. The aim of the subject is to make students familiar with the work in the clinical-biochemical laboratory and to teach them, how to properly indicate the biochemical tests and how to interprete the results in patients with various clinical states.

Class syllabus:
The role of clinical biochemistry in medicine, the pricniples of specimen collection and sampling, preparation of the patient, indications of clinical-biochemical tests, the sources of errors in biochemical analysis, quality control, reference range, interpretation of the biochemical tests. The assessment of acid-base balance – primary and mixed disorders. Disturbances in the fluid and electrolytes balance – hyper – and hypo- natremia, kalemia, chloridemia. Metabolism of the lipoproteins, clinical-biochemical tests of the lipid metabolism, hyperlipidaemias, new perspectives in interpretation of dyslipidaemias. Tumor markers – clasification according to the biological function, use in the screening, diagnostics and therapy of tumor diseases. The clinical applications of genetic analysis – basic panels of single nucleotide polymorphisms in relation to thrombophilia, lipid metabolism, pharmacogenetics, hemochromatosis and osteoporosis. The examination of urine – chemical and microscopical, urinary wastes of minerals and metabolites. Electrophoretic methods.

Recommended literature:
Gaw & Murphy & Srivastava & Cowan & O'Reilly: Clinical Biochemistry, 5th Edition, An Illustrated Colour Text Imprint: Churchill Livingstone, 2013, 196 p., ISBN 9780702051791;
Marks V., Cantor T., Mesko D., Pullmann R., Nosalova G.: Diferential Diagnosis by Laboratory Medicine, Springer, 2002 Brown, Mitchell, Young: Chemical Diagnosis of Disease, Elsevier, 1998, 1136 p., ISBN 3540430571

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 207

A	ABS0	B	C	D	E	FX
85,02	0,0	12,08	0,97	1,93	0,0	0,0

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

Last change: 13.02.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

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

Educational activities:
Type of activities: practicals
Number of hours:
per week: 1 **per level/semester:** 15
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 9.

Educational level: I.II.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 24

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

Lecturers: prof. MUDr. Rudolf Hyrdel, CSc.

Last change:

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

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

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

Number of credits: 1

Recommended semester: 10.

Educational level: I.II.

Prerequisites:

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

Learning outcomes:
Student will acquire the information about the content of clinical immunology and allergology, overview about the principal objects of clinical immunology, get know the specificities of management of selected immune-mediated diseases

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

Recommended literature:
Abbas A. et al. Basic Immunology, 6th Edition, 2019.
Chapel H. et al. Essential of Clinical Immunology, 5th Edition, 2014.

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 12

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

Lecturers: prof. MUDr. Mgr. Miloš Jeseňák, PhD., MBA
Last change: 28.10.2019
Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

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

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

Number of credits: 1

Recommended semester: 9.

Educational level: I.II.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:
Lectures: importance of basic science knowledge in clinical practice, the role of clinical research in recognition of the pathomechanisms of diseases, symptoms and signs of diseases: the role of tissue injury, involvement of compensatory and defensive mechanisms, occurrence of positive feed-backs in the development of pathological processes, scoring systems: quantification of symptoms intensity and clinical state of patient, pathomechanisms of disease complications, clinical thinking and differential diagnosis, evidence based medicine – modern management of diseases. Seminars and clinical training: problem-based teaching methods are using to solve clinico-pathophysiological tasks in „virtual patient“, evaluation of symptoms and signs in patients suffering from different cardiovascular, respiratory, renal and gastrointestinal diseases and their pathophysiological interpretation; concentration to pathophysiological analysis of patient symptoms, mechanisms for the developmental progression of disease and pathophysiological principles of treatment.

Recommended literature:
hand-outs http://www.medinfo.sk

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 58

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

Lecturers: prof. MUDr. Miloš Tatár, CSc., prof. MUDr. Renata Péčová, PhD.

Last change: 29.10.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

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

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 1 / 1 **per level/semester:** 15 / 15
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 10.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Successfull passing the courses of Pharmacology 1 and Pharmacology 2.

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

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

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

Recommended literature:
The obligatory literature: B. Kaztung et al.: Basic and Clinical Pharmacology. McGrawHill Lange 12th Ed, 2012, 1229 s. P. N. Bennet et al.: Clinical Pharmacology. Churchill Livingstone Elsevier, 11th Ed, 2012, 667 s. H. P. Rang et al.: Rang and Dale`s Pharmacology. Elsevier Churchill Livingstone, 7th Ed, 2012, 777 s. - dostupné v rámci intranetu JLF UK aj online (http://elsevierelibrary.co.uk/bookshelf)

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 63

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

Lecturers: prof. MUDr. Mgr. Juraj Mokrý, PhD., prof. RNDr. Soňa Fraňová, PhD., doc. MUDr. Martina Šutovská, PhD.
Last change: 26.09.2019
Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

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

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 1 / 1 **per level/semester:** 15 / 15
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 9.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Microbiology 2

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

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

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

Recommended literature:
Bednář M a kol. Lékařská mikrobiologie. Praha: Marvil 1996; 558 s. Učebné texty na MEFANETe http://portal.jfmed.uniba.sk/lekarske-discipliny.php?disid=119 a web stránke Ústavu mikrobiológie a imunológie Greenwood D, Barer M, Slack R, Irwing W. Medical Microbiology Eighteenth Edition. Edinburgh: Elsevier Saunders 2012; pp. 778. Murray PR, Rosenthal KS, Pfaller MA. Medical Microbiology Seventh Edition. Philadelphia: Elsevier Saunders 2013; pp. 874. Carey A.R. a kol.Lékařská mikrobiologie v klinických případech Praha, Stanislav Juhaňák Triton, 2011.

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 0

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

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

Last change: 26.09.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚO/J-S-VL-627/18	Clinical skills

Educational activities:
Type of activities: practicals
Number of hours:
per week: 1 **per level/semester:** 15
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 8.

Educational level: I.II.

Prerequisites:

Course requirements:
Subject evaluation is based on the written test and the practical exam; student must achieve at least 60 %. Evaluation: A: 91-100 %, B: 81-90 %, C: 73-80 %, D: 66-72 %, E: 60-65 %, Fx: less than 60 %

Learning outcomes:
By completion of the subject student gains reliable evidence-based information for safe performance of clinical practice. Student understands standard procedures of selected nursing techniques, interventions and procedures. While using the methods of simulation, demonstration, case study and learning by doing method the student gains theoretical knowledge and practical skills in performance of basic clinical procedures within healthcare provision. Acquired clinical competences together with ability to argue for and justify the procedure chosen while performing intervention will become the basis for the ability to respond clinically correctly and safely to situations with which a graduate of the subject will be confronted in the future, in real conditions of clinical practice.

Class syllabus:
1. Assessment and management of acutely deteriorating patient I.
ABCDE approach of assessment and management, SBAR communication: assessing and monitoring vital signs (body temperature, blood pressure, pulse, respiration, oxygen saturation measured by pulse oximetry); collecting blood specimens (venipuncture of peripheral vein – obtaining blood specimen by open / closed method; obtaining blood specimen from central venous catheter; obtaining capillary blood specimen for blood gases test, laboratory blood glucose test and glucose monitoring via blood glucose meter).
2. Assessment and management of acutely deteriorating patient II.
ABCDE approach of assessment and management, SBAR communication: naso/orogastric tube insertion, urinary catheterization.
3. Assessment and management of a patient with parenteral therapy I.
The procedure of patient assessment and management, SBAR communication: obtaining peripheral intravenous access (peripheral i.v. line insertion), care of peripheral and central intravenous accesses; administering injections –preparing and application (intradermal, subcutaneous, intramuscular, intravenous).

4. Assessment and management of a patient with parenteral therapy II.
The procedure of patient assessment and management, SBAR communication: preparing and application of i.v. infusions, preparing and application of blood therapy (pre-transfusion tests, adverse reactions).
5. Assessment and management of a patient with wound
The procedure of patient assessment and management, SBAR communication: handling sterile material, sterile field preparation, wound care – aseptic / chronic wound, applying bandages

Recommended literature:

MIERTOVÁ, M., ŽIAKOVÁ, K., OVŠONKOVÁ, A. a kol. Multimediálna vysokoškolská učebnica techník a zručností. [online]. Univerzita Komenského Bratislava, Jesseniova lekárska fakulta v Martine, Ústav ošetrovateľstva, 2015. 672 s. Dostupné na: http://e-knihy.jfmed.uniba.sk/knihy/ostech/ ISBN 978-80-89544-88-2.
DINGOVÁ, M., LEPIEŠOVÁ, M., ROSENBERG, A. et al. Basics of Nursing. Textbook for Medical and Nursing Students. Martin : Comenius University in Bratislava, Jessenius Faculty of Medicine in Martin, 2011. 283 p. ISBN 978-80-88866-6-88-6.
HANÁČEK, J., MOKRÝ, J. a kol. Trendy v medicínskom vzdelávaní a hodnotení jeho výsledkov. Vysokoškolská učebnica pre mladých učiteľov a doktorandov na lekárskych fakultách. Martin: Osveta, 2018. 255 s. ISBN 978-80-8063-460-3.
KOZIER, B., BERMAN, A., ERB, G., SNYDER, S. J. Fundamentals of Nursing: Concepts, Process and Practice.7th ed. Pearson Prentice Hall, 2004. 1500 p. ISBN 0130455296.
KRIŠKOVÁ, A. a kol. Ošetrovateľské techniky. 2. preprac. a dopl. vyd. Martin : Osveta, 2006. 780 s. ISBN 80-8063-202-2.
LEPIEŠOVÁ, M., DINGOVÁ, M., NEMCOVÁ, J., OVŠONKOVÁ, A., MIERTOVÁ, M., TABAKOVÁ, M., TOMAGOVÁ, M. Basics of nursing presentations. Martin : JLFUK, portal MEFANET, 2012, 419 p. [online] ISBN 1337-7396ISSN 1337-7396. Available at: http://portal.jfmed.uniba.sk/articles.php?aid=187

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 6

A	ABS0	B	C	D	E	FX
50,0	0,0	50,0	0,0	0,0	0,0	0,0

Lecturers: prof. Mgr. Katarína Žiaková, PhD., Mgr. Martina Lepiešová, PhD.

Last change: 22.01.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.PK/J-S-VL-625/18	**Course title:** Communication in Clinical Practice (1)
Educational activities: **Type of activities:** practicals **Number of hours:** **per week:** 1 **per level/semester:** 15 **Form of the course:** on-site learning	
Number of credits: 1	
Recommended semester: 8.	
Educational level: I.II.	
Prerequisites:	
Recommended prerequisites: Medical Psychology and Basics of Communication	
Course requirements: 1. The participation in practicals is compulsory for at least 6-times (12 hours, especially from 1st to 11th week). 2. Check in the course of practicals: - Evaluation till the end of 14th week: active participation in practicals; permanent study check (control question); examination of patients, case reports and analysis	
Learning outcomes: A student shall understand the fundamental aspects of potentially difficult situations that may in interaction doctor – patient occur. A student shall understand the general communication abilities and with so-called problematic group of patients, e.g. aggressive, agitated and non- cooperating patients. A student will be able to understand and to use the specifics of communication with the patients with anxiety, depression, suicidal behavior and patients with somatization. A student will know the specifics of the communication with patients with cognitive disorder, delirium, psychotic and manic disorder. A student shall understand the psychological aspects of patient complaints and communication skills in the medical team. Self-experience in education develops awareness and experiencing emotions of themselves and others, self-support and support, self-reflection and decent work with defense mechanisms type of projection, rationalization, reflection and reinforcement of empathy, strengthening the ability to manage affective responses.	
Class syllabus: I. practical exercises (2 hours) Communication in medicine – characteristic and meaning. Basic communication skills of doctor: effective listening, empathy, understanding, advices. II. practical exercises (2 hours)	

Verbal and nonverbal communication in medicine. Criteria of effective communication in medicine. Psychotherapy and communication. Communication in interdisciplinary team of health staff. Communication with patient´s relatives.
III. practical exercises (2 hours)
Non-compliance patients. Dissatisfied and aggressive patient. Patient´s silence. Conflict in doctor ´s work and its solution.
IV. practical exercises (2 hours)
Communication with anxious and somatoform patient. Communication with depressive patient. Communication with suicidal patient.
V. practical exercises (2 hours)
Communication with cognitive disability and intellectual disability patient.
VI. practical exercises (2 hours)
Communication with qualitative disturbance of consciousness.
VII. practical exercises (2 hours)
Communication with psychotic patient. Communication with manic patient.

Recommended literature:

Recommended literature:
Lloyd, M. Bor, R. Communication skills for medicine. 3rd . ed. Elsevier, Edinburgh. 2009. 212 p.
Alder, B. et.al Psychology and sociology applied to medicine. 3rd . ed. Elsevier, Edinburgh. 2009. 182 p.
McManus, I. C., Richards, P. Psychology in Medicine. Oxford: Butterworth-Heinemann Ltd., l992. 327 pp. ISBN 0-7506-0496-4
Ayers, S., Visser R. Psychology for medicine. Sage, Los Angeles : SAGE. 2011. 530p. ISBN 9781412946919

Languages necessary to complete the course:
englich

Notes:

Past grade distribution
Total number of evaluated students: 175

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

Lecturers: doc. MUDr. Igor Ondrejka, PhD., MUDr. PhDr. Igor Hrtánek, PhD.

Last change: 26.09.2018

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.PK/J-S-VL-626/18	**Course title:** Communication in Clinical Practice (2)
Educational activities: **Type of activities:** practicals **Number of hours:** **per week:** 1 **per level/semester:** 15 **Form of the course:** on-site learning	
Number of credits: 1	
Recommended semester: 9.	
Educational level: I.II.	
Prerequisites:	
Recommended prerequisites: Medical Psychology and Basics of Communication	
Course requirements: 1. The participation in practicals is compulsory for at least 6-times (12 hours, especially from 1st to 11th week). 2. Check in the course of practicals: active participation in practicals; permanent study check (control questions); examination of patients, case reports and analysis (specific communication problem solving in different branch of medicine)	
Learning outcomes: A student shall understand the specific aspects of potentially difficult situations that may in interaction doctor – patient occur. A student shall understand the specifics of outpatient and inpatient care, the communication with long-term and chronically ill patients, with handicapped patients. A student shall handle the reporting of bad messages or messages with infaust prognosis. A student shall understand and handle the specifics of communication in different development stages - childhood and senium. A student shall handle the specifics of communication with the internal medicine and polymorbid patient, surgical patients and psychological specifics of communication in obstetrics and gynecology. A student shall understand and handle the specifics of communication with so-called problematic group of patients, for example with intoxicated and addicted patients, with personality disorder patients. A student shall understand the psychological aspects of patient´s complaints, their relatives and communication skills in a medical team.	
Class syllabus: I. practical exercises Specifics of communication with somatically ill patient in child age and adolescence. Communication with parents. Specifics of communication in child psychiatry. II. practical exercises	

Specifics of communication with internal medicine patient, polymorbid patient and seniors.
III. practical exercises
Specifics of communication with surgical patient.
IV. practical exercises
Specifics of communication in obstetrics and gynecology.
V. practical exercises
Communication with intoxicated and addicted patient. Communication with personality disorder patient.
VI. practical exercises
Communication with seriously ill and dying patient. Communication with oncological patient. Reporting of negative/adverse messages. Communication with relatives.
VII. practical exercises
Communication with physical disability patient. Communication with sensory disability patient.

Recommended literature:

Lloyd, M. Bor, R. Communication skills for medicine. 3rd . ed. Elsevier, Edinburgh. 2009. 212 p.
Alder, B. et.al Psychology and sociology applied to medicine. 3rd . ed. Elsevier, Edinburgh. 2009. 182 p.
McManus, I. C., Richards, P. Psychology in Medicine. Oxford: Butterworth-Heinemann Ltd., l992. 327 pp. ISBN 0-7506-0496-4
Ayers, S., Visser R. Psychology for medicine. Sage, Los Angeles : SAGE. 2011. 530p. ISBN 9781412946919

Languages necessary to complete the course:
english

Notes:

Past grade distribution
Total number of evaluated students: 255

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

Lecturers: doc. MUDr. Igor Ondrejka, PhD., MUDr. PhDr. Igor Hrtánek, PhD.

Last change: 03.09.2018

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

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

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 3 / 2 **per level/semester:** 45 / 30
Form of the course: on-site learning

Number of credits: 5

Recommended semester: 7.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
microbiology 2, pathological anatomy 2

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

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

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

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

Recommended literature:

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

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 282

A	ABS0	B	C	D	E	FX
76,24	0,0	19,86	3,19	0,71	0,0	0,0

Lecturers: prof. MUDr. Juraj Péč, CSc., doc. MUDr. Eva Minariková, PhD.

Last change: 29.01.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.ÚFy/J-S-VL-593/18	**Course title:** Diploma Thesis Seminar (1)
Educational activities: **Type of activities:** seminar **Number of hours:** **per week:** 1 **per level/semester:** 15 **Form of the course:** on-site learning	
Number of credits: 2	
Recommended semester: 8.	
Educational level: I.II.	
Prerequisites:	
Course requirements:	
Learning outcomes: A student chooses a topic of a thesis, and together with a supervisor he/she determines a strategy of thesis preparation (schedule), prepares a working outline of a thesis, presents the main objective of work and information retrieval.	
Class syllabus: Becoming familiar with the internal regulations related to thesis preparation. Becoming familiar with the basic stages of thesis preparation. Choosing a thesis topic. Strategy of thesis preparation (schedule). Working outline of a thesis, presentation of work objective. Information retrieval - searching documents related to the topic. Consultations.	
Recommended literature: In each student individually according to the diploma thesis assignment. Internal Regulation No. 12/2013 Guideline of the Rector of Comenius University in Bratislava on the Basic Essentials of Theses, Rigorous Theses and Habilitation Theses, Check of Their Originality, Their Storage and Accessing at Comenius University in Bratislava Internal Regulation No. 43/2013 Decision of the Dean of the Jessenius Faculty of Medicine in Martin CU on Theses (bachelor's and master's) of students of JFMED CU in Martin Hanacek J, Javorka K et al. Introduction to Scientific Work. Textbook for Medical Students. ŠEVT a.s., Bratislava, 2011. 196 p. ISBN 978-80-88866-95-4.	
Languages necessary to complete the course: English language	
Notes:	

Past grade distribution
Total number of evaluated students: 179

A	ABS0	B	C	D	E	FX
98,88	0,0	1,12	0,0	0,0	0,0	0,0

Lecturers: prof. MUDr. Michal Javorka, PhD., prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Daniela Mokrá, PhD., prof. MUDr. Ingrid Tonhajzerová, PhD., prof. MUDr. Kamil Javorka, DrSc., prof. RNDr. Soňa Fraňová, PhD., doc. MUDr. Marta Jošková, PhD., prof. MUDr. Mgr. Juraj Mokrý, PhD., doc. MUDr. Martina Šutovská, PhD., PharmDr. Martin Kertys, PhD., MUDr. Ladislav Šutiak, PhD., prof. MUDr. Ľudovít Laca, PhD., doc. MUDr. Ivana Dedinská, PhD., prof. MUDr. Alexander Ferko, CSc., MUDr. Michal Hošala, PhD., MUDr. Ján Janík, PhD., MUDr. Marek Smolár, PhD., MPH, MUDr. Marek Malík, doc. MUDr. Branislav Kolarovszki, PhD., MUDr. Romana Richterová, PhD., prof. MUDr. Lukáš Plank, CSc., prof. MUDr. Katarína Adamicová, PhD., MUDr. Tomáš Balhárek, PhD., MUDr. Jozef Mičák, PhD., MUDr. Jaroslav Fábry, PhD., prof. MUDr. Ján Staško, PhD., prof. MUDr. Peter Kubisz, DrSc., MUDr. Lenka Lisá, PhD., doc. MUDr. Juraj Sokol, PhD., MUDr. Lucia Stančiaková, PhD., MUDr. Tomáš Šimurda, PhD., prof. MUDr. Henrieta Hudečková, PhD., MPH, prof. MUDr. Tibor Baška, PhD., doc. Ing. Viera Jakušová, PhD., MPH, Ing. Stanislav Kuka, PhD., prof. MUDr. Viera Švihrová, CSc., PhDr. Marta Tkáčová, PhD., doc. MUDr. Vladimír Čalkovský, PhD., prof. MUDr. Andrej Hajtman, PhD., prof. MUDr. Mirko Zibolen, CSc., MUDr. Tomáš Jurko, PhD., prof. MUDr. Egon Kurča, PhD., FESO, doc. MUDr. Ema Kantorová, PhD., doc. MUDr. Vladimír Nosáľ, PhD., FESO, doc. MUDr. Štefan Sivák, PhD., MUDr. Monika Turčanová Koprušáková, PhD., prof. MUDr. Dušan Meško, PhD.

Last change: 29.01.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.KHT/J-S-VL-595/19	**Course title:** Diploma Thesis Seminar (2)
Educational activities: **Type of activities:** seminar **Number of hours:** **per week:** 5,33 **per level/semester:** 79,95 **Form of the course:** on-site learning	
Number of credits: 1	
Recommended semester: 9.	
Educational level: I.II.	
Prerequisites:	
Course requirements: Submission of final thesis outline. Scale of assessment (preliminary/final): continuous	
Learning outcomes: A student is able to choose relevant documents and information related to the given topic, he/she is able to work with literature and knows how to cite it correctly. He/she can gather and process research material (according to the aim of a thesis).	
Class syllabus: Becoming familiar with the content of the documents obtained in the information retrieval in details, reading, studying. Selection of relevant documents and information for further processing. Ways of citations. Method of diploma thesis elaboration (information gathering and processing) according to the aim of a thesis). Thesis elaboration – final thesis outline, layout of the material into content-related units. Independent research work of students – according to the aim of a thesis. Consultations.	
Recommended literature: In each student individually according to the diploma thesis assignment Internal Regulation No. 12/2013 Guideline of the Rector of Comenius University in Bratislava on the Basic Essentials of Theses, Rigorous Theses and Habilitation Theses, Check of Their Originality, Their Storage and Accessing at Comenius University in Bratislava Internal Regulation No. 43/2013 Decision of the Dean of the Jessenius Faculty of Medicine in Martin CU on Theses (bachelor's and master's) of students of JFMED CU in Martin Hanacek J, Javorka K et al. Introduction to Scientific Work. Textbook for Medical Students. ŠEVT a.s., Bratislava, 2011. 196 p. ISBN 978-80-88866-95-4.	
Languages necessary to complete the course: English language	
Notes:	

Past grade distribution
Total number of evaluated students: 164

A	ABS0	B	C	D	E	FX
97,56	0,0	0,61	1,22	0,0	0,61	0,0

Lecturers: MUDr. Ladislav Šutiak, PhD., prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Michal Javorka, PhD., prof. MUDr. Kamil Javorka, DrSc., prof. MUDr. Daniela Mokrá, PhD., prof. MUDr. Ingrid Tonhajzerová, PhD., prof. MUDr. Henrieta Hudečková, PhD., MPH, prof. MUDr. Tibor Baška, PhD., doc. Ing. Viera Jakušová, PhD., MPH, Ing. Stanislav Kuka, PhD., prof. MUDr. Viera Švihrová, CSc., PhDr. Marta Tkáčová, PhD., prof. RNDr. Soňa Fraňová, PhD., doc. MUDr. Marta Jošková, PhD., PharmDr. Martin Kertys, PhD., prof. MUDr. Mgr. Juraj Mokrý, PhD., doc. MUDr. Martina Šutovská, PhD., prof. MUDr. Miloš Tatár, CSc., prof. MUDr. Renata Péčová, PhD., prof. MUDr. Jana Plevková, PhD., MUDr. Tomáš Buday, PhD., doc. RNDr. Mariana Brozmanová, PhD., prof. MUDr. Ľudovít Laca, PhD., doc. MUDr. Ivana Dedinská, PhD., prof. MUDr. Alexander Ferko, CSc., MUDr. Michal Hošala, PhD., MUDr. Ján Janík, PhD., MUDr. Marek Malík, MUDr. Marek Smolár, PhD., MPH, prof. MUDr. Ján Staško, PhD., prof. MUDr. Peter Kubisz, DrSc., MUDr. Lenka Lisá, PhD., doc. MUDr. Juraj Sokol, PhD., MUDr. Lucia Stančiaková, PhD., MUDr. Tomáš Šimurda, PhD., doc. MUDr. Vladimír Čalkovský, PhD., prof. MUDr. Andrej Hajtman, PhD., prof. MUDr. Dušan Meško, PhD., prof. MUDr. Mirko Zibolen, CSc., MUDr. Tomáš Jurko, PhD., doc. MUDr. Branislav Kolarovszki, PhD., MUDr. Romana Richterová, PhD., prof. MUDr. Egon Kurča, PhD., FESO, doc. MUDr. Ema Kantorová, PhD., doc. MUDr. Vladimír Nosáľ, PhD., FESO, doc. MUDr. Štefan Sivák, PhD., MUDr. Monika Turčanová Koprušáková, PhD., prof. MUDr. Lukáš Plank, CSc., prof. MUDr. Katarína Adamicová, PhD., MUDr. Tomáš Balhárek, PhD., MUDr. Jozef Mičák, PhD., Ing. Marcel Veterník, PhD.

Last change: 22.10.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.KHT/J-S-VL-596/19	**Course title:** Diploma Thesis Seminar (3)
Educational activities: **Type of activities:** seminar **Number of hours:** **per week:** 5,33 **per level/semester:** 79,95 **Form of the course:** on-site learning	
Number of credits: 1	
Recommended semester: 10.	
Educational level: I.II.	
Prerequisites:	
Course requirements: Fulfilment of particular parts of thesis outline in the form of material from the study and/or research (according to the aim of thesis). Scale of assessment (preliminary/final): continuous	
Learning outcomes: A student is able to choose relevant documents and information related to the given topic, he/she is able to work with literature and knows how to cite it correctly. He/she can gather and process research material (according to the thesis topic). A student is able to create a text as far as formal requirements and content are concerned.	
Class syllabus: Becoming familiar with the content of other documents obtained in the information retrieval in details, reading, studying. Selection of relevant documents and information for further processing. Summarizing the bibliography. Thesis elaboration – filling the particular parts of a final outline of thesis with material from the study and research (according to the aim of a thesis), thesis text elaboration. Preparation of documentation related to thesis – bibliography, illustrations, tables. Independent research work of students – according to the aim of a thesis. Consultations.	
Recommended literature: In each student individually according to the diploma thesis assignment Internal Regulation No. 12/2013 Guideline of the Rector of Comenius University in Bratislava on the Basic Essentials of Theses, Rigorous Theses and Habilitation Theses, Check of Their Originality, Their Storage and Accessing at Comenius University in Bratislava Internal Regulation No. 43/2013 Decision of the Dean of the Jessenius Faculty of Medicine in Martin CU on Theses (bachelor's and master's) of students of JFMED CU in Martin Hanacek J, Javorka K et al. Introduction to Scientific Work. Textbook for Medical Students. ŠEVT a.s., Bratislava, 2011. 196 p. ISBN 978-80-88866-95-4.	
Languages necessary to complete the course: English language	
Notes:	

Past grade distribution
Total number of evaluated students: 88

A	ABS0	B	C	D	E	FX
93,18	0,0	3,41	2,27	0,0	1,14	0,0

Lecturers: MUDr. Ladislav Šutiak, PhD., prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Michal Javorka, PhD., prof. MUDr. Kamil Javorka, DrSc., prof. MUDr. Daniela Mokrá, PhD., prof. MUDr. Ingrid Tonhajzerová, PhD., prof. MUDr. Henrieta Hudečková, PhD., MPH, prof. MUDr. Tibor Baška, PhD., doc. Ing. Viera Jakušová, PhD., MPH, Ing. Stanislav Kuka, PhD., prof. MUDr. Viera Švihrová, CSc., PhDr. Marta Tkáčová, PhD., prof. RNDr. Soňa Fraňová, PhD., doc. MUDr. Marta Jošková, PhD., PharmDr. Martin Kertys, PhD., prof. MUDr. Mgr. Juraj Mokrý, PhD., doc. MUDr. Martina Šutovská, PhD., prof. MUDr. Miloš Tatár, CSc., prof. MUDr. Renata Péčová, PhD., prof. MUDr. Jana Plevková, PhD., MUDr. Tomáš Buday, PhD., doc. RNDr. Mariana Brozmanová, PhD., prof. MUDr. Ľudovít Laca, PhD., doc. MUDr. Ivana Dedinská, PhD., prof. MUDr. Alexander Ferko, CSc., MUDr. Michal Hošala, PhD., MUDr. Ján Janík, PhD., MUDr. Marek Malík, MUDr. Marek Smolár, PhD., MPH, prof. MUDr. Ján Staško, PhD., prof. MUDr. Peter Kubisz, DrSc., MUDr. Lenka Lisá, PhD., doc. MUDr. Juraj Sokol, PhD., MUDr. Lucia Stančiaková, PhD., MUDr. Tomáš Šimurda, PhD., doc. MUDr. Vladimír Čalkovský, PhD., prof. MUDr. Andrej Hajtman, PhD., prof. MUDr. Dušan Meško, PhD., prof. MUDr. Mirko Zibolen, CSc., MUDr. Tomáš Jurko, PhD., doc. MUDr. Branislav Kolarovszki, PhD., MUDr. Romana Richterová, PhD., prof. MUDr. Egon Kurča, PhD., FESO, doc. MUDr. Ema Kantorová, PhD., doc. MUDr. Vladimír Nosáľ, PhD., FESO, doc. MUDr. Štefan Sivák, PhD., MUDr. Monika Turčanová Koprušáková, PhD., prof. MUDr. Lukáš Plank, CSc., prof. MUDr. Katarína Adamicová, PhD., MUDr. Tomáš Balhárek, PhD., MUDr. Jozef Mičák, PhD.

Last change: 22.10.2019

Approved by:

STATE EXAM DESCRIPTION

University: Comenius University in Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF/2-JVL-SS55/17	**Course title:** Diploma Thesis and Defense of Diploma Thesis
Number of credits: 4	
Educational level: I.II.	
Course requirements: Elaboration of final version of diploma thesis, submission of diploma thesis, presentation and diploma thesis defence in front of the committee for state examination subject Diploma Thesis Defence.	
Learning outcomes: A student is able to work creatively with literature sources and summarize basic scientific knowledge into logically organized unit which meets formal requirements of diploma thesis. He/she can clearly define the aim and methodology of diploma thesis, he/she can process the results together with practical interpretation (according to the aim of a thesis), he/she knows how to cite literature in accordance with valid regulations. He/she is able to present and defend results of his/her diploma thesis.	
Class syllabus: Elaboration of work – elaboration of text (formal structure and content) – writing a thesis, filling the particular parts of outline with material from study of literature and research (according to the aim of a thesis), specifying relationships and formulations, illustrations, tables. Preparation of documentation – bibliography and its summarization with regard to the ethics and techniques, author reading, corrections. Preparation of diploma thesis final version – in terms of content (aiming predominantly at discussion and conclusion) and formal structure, incorporating supervisor´s comments Consultations regarding particular parts of preparation of diploma thesis final version. Submission of diploma thesis. Defence – presentation of diploma thesis and its preparation.	
State exam syllabus:	
Recommended literature: In each student individually according to the diploma thesis assignment Internal Regulation No. 12/2013 Guideline of the Rector of Comenius University in Bratislava on the Basic Essentials of Theses, Rigorous Theses and Habilitation Theses, Check of Their Originality, Their Storage and Accessing at Comenius University in Bratislava Internal Regulation No. 43/2013 Decision of the Dean of the Jessenius Faculty of Medicine in Martin CU on Theses (bachelor's and master's) of students of JFMED CU in Martin Hanacek J, Javorka K et al. Introduction to Scientific Work. Textbook for Medical Students. ŠEVT a.s., Bratislava, 2011. 196 p. ISBN 978-80-88866-95-4.	
Languages necessary to complete the course: English language	
Last change: 20.03.2018	
Approved by:	

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

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

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 1 / 1 **per level/semester:** 15 / 15
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 9.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
internal medicine 3

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

Learning outcomes:
With completition of the subject, students will obtain practical skills in cardiopulmonary resuscitatiion, first aid, initial management of patients with life threathening situations, organisation of mass accidents a disasters.

Class syllabus:
Basica life support, advanced life support, arrhythmia management, management of airways and breathing, acute coronary syndromes, respiratory failure, injuries, mass accidents, organisation of prehospital care

Recommended literature:
ERC Guidelines 2015, https://cprguidelines.eu ATLS Student course manual American college of surgeons committee on Trauma, tenth edition, 2018 European Trauma Course ERC, 2015 James G. Adams et al. Emergency Medicine . Elsevier, 2014. Wyatt, J. P. et al. Oxford Handbook of Emergency Medicine. New York: Oxford University Press, 2006. 768 s. ISBN 978-0-19-920607-0

Languages necessary to complete the course:
English Language

Notes:

Past grade distribution
Total number of evaluated students: 176

A	ABS0	B	C	D	E	FX
11,93	0,0	22,73	28,98	23,3	13,07	0,0

Lecturers: doc. MUDr. Milan Minarik, PhD., prof. MUDr. Beata Drobná Sániová, PhD., MUDr. Denisa Osinová, PhD., MUDr. Silvia Učňová

Last change: 19.11.2019
Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.ÚVZ/J-S-VL-605/18	**Course title:** Financing of Healthcare System and Health Insurance

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 1 / 1 **per level/semester:** 15 / 15
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 8.

Educational level: I.II.

Prerequisites:

Course requirements:
Evaluation of students is provided through attending, running (10 items - max. 50 p.) and final written (10 items - max. 50 p.) tests.
Minimal level to pass the subject: 65 %.
Evaluation: A: 93–100 %, B: 86–92 %, C: 79–85 %, D: 72–78 %, E: 65–71 %, FX: 64 % and less.
Scale of assessment (preliminary/final): 0/100

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

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

Recommended literature:
Recommended literature:
ONDRUŠ, P., ONDRUŠOVÁ, I. A KOL. Manažment a financovanie v zdravotníctve: príručka zdravotníckeho manažéra Bratislava: Matica slovenská, 2017. 320 s.
KOVÁČ E.: Zdravotné poistenie. Bratislava, Herba, 2009, s. 96, ISBN 978-80-89171-62-0
Zákon č. 580/2004 Z. z. v znení neskorších predpisov

Zákon č. 581/2004 Z. z. v znení neskorších predpisov
aktuálna Správa o stave vykonávania verejného zdravotného poistenia (Vestník ÚDZS)
materiály dostupné na: www.health.gov.sk, www.udzs.sk

Languages necessary to complete the course:
slovak

Notes:

Past grade distribution
Total number of evaluated students: 0

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

Lecturers: prof. MUDr. Viera Švihrová, CSc.

Last change: 27.09.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

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

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 2 / 1 **per level/semester:** 30 / 15
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 9.

Educational level: I.II.

Prerequisites:

Course requirements:

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

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

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

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 179

A	ABS0	B	C	D	E	FX
46,37	0,0	38,55	7,26	5,59	2,23	0,0

Lecturers: prof. MUDr. František Novomeský, PhD., doc. MUDr. Jozef Krajčovič, PhD., doc. MUDr. Ľubomír Straka, PhD., MUDr. Martin Janík, PhD.

Last change: 21.10.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KDTBC/J-S-VL-615/19	Functional examination of lungs in childhood

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

Number of credits: 1

Recommended semester: 9.

Educational level: I.II.

Prerequisites:

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

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

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

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

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 0

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

Lecturers: MUDr. Jaroslav Fábry, PhD.

Last change: 19.11.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.IK1/J-S-VL-591/19	**Course title:** General Medicine and Practice at General Practitioner
Educational activities: **Type of activities:** lecture **Number of hours:** **per week:** 1 **per level/semester:** 15 **Form of the course:** on-site learning	
Number of credits: 2	
Recommended semester: 9.	
Educational level: I.II.	
Prerequisites:	
Recommended prerequisites: Internal medicine 3, Pediatrics 1	
Course requirements: EN The condition for successful completion of the course and obtaining credit is participation in practical exercises, which students attend directly in practice, ie. in non-state medical outpatient clinics (general practitioner and general practitioner for children and adolescents - PLDD). Scale of assessment (preliminary/final): monitoring activity in practical exercises and writing case reports	
Learning outcomes:	
Class syllabus: History of paediatrics and general medicine. Basic terms. PLDD and general practice management for adults. Diagnosis and treatment of a patient in a PLDD outpatient clinic and general practitioner - from symptoms and syndrome to diagnosis (diagnostics, differential diagnosis, therapeutic options, etc.) Specific work of PLDD doctor and general practitioner - preventive examinations, vaccination, diagnostics, pre-hospital medical care, LSPP, visiting service, field work, occupational health care, incapacity, cooperation with the Social Insurance Agency, ÚPSaR. Acute conditions in ambulance PLDD and general practitioner. Keeping medical records in PLDD and general practitioners, examination of dead, assessment of possession of weapons and ammunition, SBS, ability to drive a motor vehicle, cooperation with police. Electronic Healthcare.	
Recommended literature: Robert Rakel David Rakel: Textbook of Family Medicine 9th Edition,2015,ISBN: 9780323239905 eBook ISBN: 9780323340939	
Languages necessary to complete the course: English language	
Notes:	

Past grade distribution
Total number of evaluated students: 171

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

Lecturers: doc. MUDr. Jurina Sadloňová, CSc., doc. MUDr. Ľubica Jakušová, PhD.

Last change: 22.10.2019

Approved by:

STATE EXAM DESCRIPTION

University: Comenius University in Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.GPK/2-JVL-SS53/17	**Course title:** Gynecology and Obstetrics
Number of credits: 3	
Educational level: I.II.	
Prerequisites: JLF.GPK/2-JVL-564/17 - Gynecology and Obstetrics (3)	
Recommended prerequisites: Gynecology and obstetrics 3	
Course requirements: Practical and oral state exam. Scale of assessment (preliminary/final): Final.	
Learning outcomes: The student is able to complete the knowledge about gynecological and pediatric diseases, the student can deepen the practical skills of the gynecology and obstetrics principles, knows the principles of everyday care of the gynecological patient and the pregnant female, knows the principles of work on the gynecological and obstetrical clinic and the surgery room.	
Class syllabus: Practical and oral state exam.	
State exam syllabus: Practical and oral state exam.	
Recommended literature: Cunningham, F. et al.: Williams Obstetrics. McGraw-Hill Professional; 23rd ed., 2009, 1404 pages, ISBN-10: 0071497013. Hoffman, B. et al.: Williams Gynecology. McGraw-Hill Professional; 2nd ed., 2012, 1401 pages, ISBN-10: 0071716726.	
Languages necessary to complete the course: English.	
Last change: 11.01.2018	
Approved by:	

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

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

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 3 / 2 **per level/semester:** 45 / 30
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 9.

Educational level: I.II.

Prerequisites: JLF.ChKTC/J-S-VL-522/17 - Surgical Propedeutics

Recommended prerequisites:
Surgical propedeutics

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

Learning outcomes:
Credits

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

Recommended literature:

Cunningham, F. et al.: Williams Obstetrics. McGraw-Hill Professional; 23rd ed., 2009, 1404 pages, ISBN-10: 0071497013. Hoffman, B. et al.: Williams Gynecology. McGraw-Hill Professional; 2nd ed., 2012, 1401 pages, ISBN-10: 0071716726.

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 175

A	ABS0	B	C	D	E	FX
98,86	0,57	0,0	0,0	0,57	0,0	0,0

Lecturers: doc. MUDr. Kamil Biringer, PhD., doc. MUDr. Erik Kúdela, PhD.

Last change: 27.10.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

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

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 3 / 2 **per level/semester:** 45 / 30
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 10.

Educational level: I.II.

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

Recommended prerequisites:
Gynecology and Obstetrics 1

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

Learning outcomes:
Credits

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

Pelvic organ prolapse in females.
Urinary incontinence in females.
Tumors of the vulva and vagina.

Recommended literature:
Cunningham, F. et al.: Williams Obstetrics. McGraw-Hill Professional; 23rd ed., 2009, 1404 pages, ISBN-10: 0071497013. Hoffman, B. et al.: Williams Gynecology. McGraw-Hill Professional; 2nd ed., 2012, 1401 pages, ISBN-10: 0071716726.

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 86

A	ABS0	B	C	D	E	FX
98,84	0,0	0,0	0,0	1,16	0,0	0,0

Lecturers: doc. MUDr. Kamil Biringer, PhD., doc. MUDr. Erik Kúdela, PhD.

Last change: 27.10.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.GPK/2-JVL-564/17	Gynecology and Obstetrics (3)

Educational activities:
Type of activities: practicals
Number of hours:
per week: 13,33 **per level/semester:** 199,95
Form of the course: on-site learning

Number of credits: 5

Recommended semester: 11., 12..

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Gynecology and obstetrics 2, Summer practice - gynecology and obstetrics

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

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

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

Recommended literature:

Cunningham, F. et al.: Williams Obstetrics. McGraw-Hill Professional; 23rd ed., 2009, 1404 pages, ISBN-10: 0071497013. Hoffman, B. et al.: Williams Gynecology. McGraw-Hill Professional; 2nd ed., 2012, 1401 pages, ISBN-10: 0071716726.

Languages necessary to complete the course:
English.

Notes:

Past grade distribution
Total number of evaluated students: 383

A	ABS0	B	C	D	E	FX
72,32	0,0	19,06	4,96	1,31	2,09	0,26

Lecturers: doc. MUDr. Kamil Biringer, PhD., doc. MUDr. Erik Kúdela, PhD.

Last change: 11.01.2018

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

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

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 2 / 1 **per level/semester:** 30 / 15
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 10.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Internal disease II

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

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

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

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

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

Recommended literature:

1. Kubisz, P. a kol., Hematológia a transfuziológia. Bratislava: Grada Slovakia, 2006. 323 s. ISBN 80-8090-000-0
2. Mokáň, M. a kol., Vnútorné lekárstvo. 3.diel. Bratislava: UK, 2005. 322 s. ISBN 80-223-1895-7
3. Klener, P. a kol., Vnitřní lékařství. Praha: Galén, 2011. 1174 s. 14. kapitola Hematologie. ISBN 978-80-246-1986-6
4. Češka, R. a kol., Interna. Praha: Triton, 2010. 855 s. 16. kapitola Hematologie. ISBN 80-7387-423-7
5. Penka M. a kol., Hematologie a transfuzní lékařství I. Praha: Grada, 2011. 421 s. ISBN 9788024734590
6. Penka M. a kol., Hematologie a transfuzní lékařství II. Praha: Grada, 2012. 208 s. ISBN 9788024734606
7. Haferiach, T. a kol., Kapesní atlas hematologie. Praha: Grada, 2014. 232 s. ISBN 978-80-247-4787-3
8. Kačírková P., Campr V., Hematoonkologický atlas krve a kostní dřeně. Praha: Grada, 2007. 304 s. ISBN 978-80-247-1853-8
9. Štvrtinová, V. a kol., Venózny tromboembolizmus, prevencia, liečba. Bratislava: Herba, 2009. 240 s. ISBN 978-80-89171-63-7
10. Pospišilová, Š. a kol., Molekulární hematologie. Praha: Galén, 2013. 316 s. ISBN 9788072629428

11. Sakalová, A. a kol., Klinická hematológia. Martin: Osveta, 2011. 295 s. ISBN 9788080633240
12. Hrušovský, Š. a kol., Internistická propedeutika. Bratislava: Herba, 2013, 800s. ISBN 978-80-89171-72-9
13. Kliment, J. a kol., Základy klinickej onkológie. Martin: Osveta, 2016, 206s. ISBN 9788080634308
14. Kliment, J. a kol., Základy klinickej onkológie – špeciálna časť. Martin: Osveta, 2016, 248s. ISBN 9788080634377
15. Řeháček, V. a kol., Transfuzní lékařství. Praha: Grada, 2012, 264s., ISBN 9788024745343
16. Kubisz, P. a kol., Trombocyty a trombocytopatie. Martin: Osveta, 1987. 300 s.
17. 17. Sokol, J. a kol., Priame perorálne antikoagulanciá, Martin:Osveta, 2018, 265 p., ISBN 978-80-80-8063-463-6
18. 18. Štvrtinová, V. a kol., Venózny tromboembolizmus. Bratislava: Slovak Academic Press, 2018. 388 p. ISBN 978-80-89607-60-0

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 85

A	ABS0	B	C	D	E	FX
35,29	0,0	37,65	15,29	10,59	1,18	0,0

Lecturers: prof. MUDr. Ján Staško, PhD., prof. MUDr. Peter Kubisz, DrSc., MUDr. Lenka Lisá, PhD., doc. MUDr. Juraj Sokol, PhD., MUDr. Lucia Stančiaková, PhD., MUDr. Tomáš Šimurda, PhD.

Last change: 09.09.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚHE/J-S-VL-505/15	Histology and Embryology (1)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 4 / 2 **per level/semester:** 60 / 30
Form of the course: on-site learning

Number of credits: 6

Recommended semester: 2.

Educational level: I.II.

Prerequisites:

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

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

Class syllabus:
- Introduction to histology and embryology, role of histology and embryology in medical study. Cell in light microscopy and electron microscopy (review).
- Functional histology of epithelial tissue I and II - covering and glandular epithelia, clinical correlations.
- Functional histology of supporting / connective tissues - cells, extracellular matrix, fibers, types of connective tissues, clinical correlations.

- Functional histology of skeletal tissues - cartilages and bones, clinical correlations.
- Functional histology of bone marrow, peripheral blood, composition of plasma, stem cell, haematopoiesis topography, reactive elements, interstitium, clinical correlations.
- Functional histology of muscles - general characteristics, types of muscles, mechanism of contraction, connective tissue associated with muscles, regeneration of muscles, clinical correlations.
- Functional histology of nervous tissues - neuron synapses, division of nervous system, white and gray matter, degeneration and regeneration, clinical correlations.
- Central and peripheral nervous system - embryology, meninges and spaces, cerebrum, cerebellum, spinal cord, peripheral nerves, functional histology of CNS and PNS, cerebrospinal fluid, clinical correlations.
- Cardiovascular system I - embryology, general organization, structure of heard wall – endocard, myocard, epicard, conducting system, clinical correlations.
- Cardiovascular system II - embryology, arteries, veins, capillaries, lymphatics, clinical correlations.
- Respiratory system - embryology, general organization and subdivision, upper portion, trachea, bronchial tree, respiratory portion, BALT, clinical correlations.
- Differential diagnosis of human tissues and organs.

Recommended literature:

Junqueira, L. C., Carneiro, J., Kelly, R. O.: Basic Histology. London: Prentice - Hall Int. Inc., 1992. 518 pp. ISBN 0838505791

Adamkov M. et al.: Introduction to Functional Histology-textbook. Nakladatelství Barbara, 3rd edition, 2016, 439 s. ISBN 978-80-905518-7-9

Moore, K., L., Persaund, T., V., N.: Before we are born (Essentials of Embryology and Birth Defects). 6th Edition, Saunders, 2003.

Gartner, L., P., Hiatt, J., L.: Color Textbook of Histology, Philadelphia: W. B. Saunders comp., 2001. 577 pp. ISBN 0-7216-8806-3

Gartner, L., P., Hiatt, J., L.: Color Atlas of Histology. 3rd Edition, Lippincont Williams and Wilkins, 2000.

Languages necessary to complete the course:

English language

Notes:

Past grade distribution

Total number of evaluated students: 801

A	ABS0	B	C	D	E	FX
44,44	0,25	28,09	17,1	7,12	3,0	0,0

Lecturers: prof. MUDr. Marian Adamkov, DrSc., doc. MVDr. Soňa Bálentová, PhD., RNDr. Mária Kovalská, PhD., MUDr. Eva Ochodnická, CSc., RNDr. Veronika Mešťanová, PhD.

Last change: 12.12.2017

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

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

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 3 / 2 **per level/semester:** 45 / 30
Form of the course: on-site learning

Number of credits: 7

Recommended semester: 3.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Histology and embryology 1

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

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

Class syllabus:

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

Recommended literature:

Junqueira, L. C., Carneiro, J., Kelly, R. O.: Basic Histology. London: Prentice - Hall Int. Inc., 1992. 518 pp. ISBN 0838505791

Moore, K., L., Persaund, T., V., N.: Before we are born (Essentials of Embryology and Birth Defects). 6th Edition, Saunders, 2003.

Gartner, L., P., Hiatt, J., L.: Color Textbook of Histology, Philadelphia: W. B. Saunders comp., 2001. 577 pp. ISBN 0-7216-8806-3

Gartner, L., P., Hiatt, J., L.: Color Atlas of Histology. 3rd Edition, Lippincont Williams and Wilkins, 2000.
Adamkov M. et al.: Introduction to Functional Histology-textbook. Nakladatelství Barbara, 3rd edition, 2016, 439 s. ISBN 978-80-905518-7-9

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 597

A	ABS0	B	C	D	E	FX
20,44	0,0	18,76	23,12	17,09	15,41	5,19

Lecturers: prof. MUDr. Marian Adamkov, DrSc., MUDr. Eva Ochodnická, CSc., doc. MVDr. Soňa Bálentová, PhD.

Last change: 12.12.2017

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

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

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 1 / 1 **per level/semester:** 15 / 15
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 4.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Medical biology 2

Course requirements:
- it is obligatory to be present at practicals (1 absence is tolerated) - 1 test during the semester - 2 oral presentations according the schedule Exam: Written exam test or oral exam Written exam test - Presence on 2 lectures is evaluated with one point. The student can get points during the study period that will be added to the exam test if the minimal required value for passing (60%) is reached. Oral exam - The oral exam consists of 4 questions. Each one is evaluated separatly. No question could be graduated Fx for successfull exam
Scale of assessment (preliminary/final): 0% / 100%

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

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

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

2008, pp. 334. Murray PR et al. Medical Microbiology Seventh Edition. Philadelphia: Elsevier Saunders 2013; pp. 874. Greenwood D et al. Medical Microbiology Eighteenth Edition. Edinburgh: Elsevier Saunders 2012; pp. 778. Reading from MEFANET and faculty web site for immunology.

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 246

A	ABS0	B	C	D	E	FX
52,85	0,0	23,98	19,11	3,66	0,41	0,0

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

Last change: 26.09.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

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

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 3 / 1 **per level/semester:** 45 / 15
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 10.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
J-S-VL-546 Neurology 2, J-S-VL-518 Microbiology 2, J-S-VL-541 Internal Medicine 3

Course requirements:
Oral examination with minimal successfully 60%. Evaluation: A: 100%, B: 90%, C: 80%, D: 70%, E: 60%, Fx: 50%
Scale of assessment (preliminary/final): 1/3 S

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

Class syllabus:
Seminars 1. Introduction to the problems of infectious diseases, organisation of infectology department, principles of investigation and therapy Basic concept, taking samples, reporting of infectious diseases, prevention and prophylaxis etc. 2. Viral hepatitis syndrome (ethiology, clinical picture, diagnostics). Viral hepatitis and its differential diagnosis, epidemiology, prophylaxis and prevention, treatment. 3. Meningoencephalitis and meningitis Differential diagnosis of CNS infections, detailed analysis of infections caused by group C meningococci 4. Exanthematous diseases Classic exanthematous diseases, new nosological units, differential diagnosis, increased occurance of rashes with non-infectious ethiology 5. Toxoplasmosis Epidemiology, clinical symptoms, interpretation of antibody levels, treatment of toxoplasmosis, gravidity and toxoplasmosis, congenital toxoplasmosis. 6. Lymph-nodes enlargement syndrome Infectious causes of lymphadenitis and lymphadenophaty, differential diagnosis including haemathological and other causes. 7. Acute gastroenteritis Differential diagnosis, treatment and prevention of diarrhoeal diseases 8. Selected parasitic infections Epidemiology, clinical symptoms, diagnosis, treatment 9. Sepsis Most probable pathogenes, clinical picture, diagnosis, treatment possibilities 10. Hospital acquired infection Epidemiology, clinical symptoms, diagnosis, treatment 11. Antiinfectious therapy Antibiotics, antimycotics, PC/PK, indications, contraindications, dosages 12. Zoonosis Most serious zoonosis, their etiology, occurence, development, diagnosis and treatment 13. Infections caused by herpes viruses Etiology, clinical features and their variations, serious complications and their diagnosis, treatment. 14. Travel medicine Prevention of imported diseases Lectures 1. Viral hepatitis syndrome Viral hepatitis A, B, C, D, E a G, ethiology, epidemiology,

occurence, clinical picture, diagnostics and treatment 2. Neuroinfections Epidemiology, ethiology, clinical picture, diagnostics and treatment 3. Intestinal infections Bacterial, viral and parasitic ethiology, clinical picture, diagnostics and treatment 4. Hospital acquired infections Genesis, occurence, the most important ethiology, diagnostics and treatment, prognosis and prevention 5. Viral haemorrhagic fevers and other arbovirosis Fever Ebola, Lassa, Marburg, Zika, etc. (ethiology, epidemiology, clinical picture, diagnostics, possibilities of treatmet and prevention) 6. Travel medicine Globalization, spread of diseases, different health enviroment, health risks for travelers, vaccinology, prevention 7. HIV Epidemiology, possibilities of transmission, clinical picture, diagnostics and treatment

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

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 172

A	ABS0	B	C	D	E	FX
73,26	0,0	12,21	4,07	3,49	1,74	5,23

Lecturers: doc. MUDr. Katarína Šimeková, PhD.

Last change: 26.09.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.ÚFa/J-S-VL-631/19	**Course title:** Innovative Drugs in Pharmacotherapy
Educational activities: **Type of activities:** practicals / lecture **Number of hours:** **per week:** ,5 / 1 **per level/semester:** 7,5 / 15 **Form of the course:** on-site learning	
Number of credits: 1	
Recommended semester: 9.	
Educational level: I.II.	
Prerequisites:	
Recommended prerequisites: -	
Course requirements: Compulsory participation on the lectures, seminars and preparation of the final seminar work. The minimal limit of successfulness: 60 %. Assessment: A: 91–100 %, B: 81–90 %, C: 73–80 %, D: 66–72 %, E: 60–65 %, Fx: 60 % and lower. Scale of assessment (preliminary/final): 50/50	
Learning outcomes: By completing the subject, the student will gain knowledge of the advances in pharmacotherapy achieved over the last decades, the mines in the treatment of serious diseases and the importance of investing in science and research. The student will obtain actual information about innovative therapies in selected medical disciplines, their benefits for the patient, the risk of adverse reactions, complications in the introduction into clinical practice.	
Class syllabus: - The characteristics and significance of innovation in medicine (focus on Pharmacotherapy) - The research and development of new medicines with a focus on practical demonstrations of the importance of innovation for the patient, the doctor and society. - The characteristics of the most important drug development processes: Pre-clinical Research (laboratory tests, animal tests, safety tests), new technologies. -The characteristics of innovative pharmacological groups and medicines-biological drugs, antibodies, personalised treatment, stem cells, etc. -The practical examples of innovations in selected medical disciplines: 1. Oncology 2. Haematology 3. Immunology 4. Dermatology 5. Cardiology 6. Vaccines 7. Gastroenterology 8. Neurology, 9. Diabetology	
Recommended literature: www.efpia.eu/topics/innovation, www.ema.europa.eu, www.nice.org.uk, www.sukl.sk	
Languages necessary to complete the course: English	

Notes:

Past grade distribution
Total number of evaluated students: 0

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

Lecturers: prof. RNDr. Soňa Fraňová, PhD.

Last change: 03.09.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.KDAIM/J-S-VL-611/19	**Course title:** Intensive Medicine in Pediatrics
Educational activities: **Type of activities:** practicals / lecture **Number of hours:** **per week:** ,5 / ,5 **per level/semester:** 7,5 / 7,5 **Form of the course:** on-site learning	
Number of credits: 1	
Recommended semester: 10.	
Educational level: I.II.	
Prerequisites:	
Course requirements: Attendance of all lectures and practical lessons. Successful accomplisment of the practical part of simulation sessions(patient choking by foreign body/object, orotracheal intubation, thoracic drainage, CVC and PICC insertion, Basic Cardio-pulmonary resuscitation) more then 60% successful rate.	
Learning outcomes: Student by participance in a particular subject will obtain basic information about the diagnosis, differential diagnosis and therapeutical quidelines for critical cases they are common in Pediatric Intensive Care and Resuscitation. After repetitive practical simulation sessions participant will be able to apply an appropriate knowledge and she/he will be able to solve some urgent situation independently, such as Basic and Advanced Cardio-pulmonary resuscitation in children all ages; treat urgent situations such as tension pneumotorax, foreign body aspiration, secure the airways by supra and subglottis equipment (laryngeal mask and orotracheal intubation), secure CVC, AC and PICC insertion. As an addition a participant will become familiar with basics of pulmonary ventilation , specifically more devoted to protective regimens of pulmonary ventilation. The biggest benefit for each participant is probably becoming familiar and more skilled in various manual medical procedures.	
Class syllabus: Introduction into Study of Pediatric Intensive Care and Resuscitation Care. • Basic and Advanced Cardio-pulmonary resuscitation. • ARDS pathophysiology. • Basics of Artificial Pulmonary Ventilation in Pediatrics. Specificity of protective ventilation. Open lung tool strategy. • Pathophysiology, clinical onset and therapeutical possibilities in managing of foreign body aspiration in pediatrics. • Pathophysiology, clinical onset and therapeutical possibilities in managing of tension pneumotorax in pediatrics. • Central venous cathethers, arterial catheters, peripheral inserted central venous catheters, intraosseal needles in pediatrics. • Supraglottic and Subglottis method of securing opened airways in pediatrics.	
Recommended literature: Fedor, M. a kol.: Intenzívna starostlivosť v pediatrii. Osveta, 2001, 435 s. Fedor, M. a kol.: Intenzivní péče v pediatrii. Osveta, 2006, 461 s. Novák,I. a kol.: Intenzivní péče v pediatrii European resuscitation council guidelines for resuscitation 2010. internetový zdroj Trenkler, Š.	

a kol.: Kardiopulmonálna resuscitácia: podľa odporúčaní Európskej resuscitačnej rady 2010. Knihy Hanzluvka, 2011. 143 s. Nichols, D.G. a kol.: Roger´s textbook of Pediatric Intensive Care. Fourth edition. Lippincott Williams Wilkins, 2008. 1839 s. Gašparec, P. a kol.: Cievne prístupy.Osveta, 2009, 240 s.

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 9

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

Lecturers: doc. MUDr. Slavomír Nosáľ, PhD.

Last change: 15.10.2019

Approved by:

STATE EXAM DESCRIPTION

University: Comenius University in Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.IK1/2-JVL-SS52/17	**Course title:** Internal Medicine
Number of credits: 7	
Educational level: I.II.	
Course requirements: State final examination may be performed by student who completes the 100% of pre-state practice.	
Learning outcomes: Completion of training the student gains general informations-knowledge and practical skills from the whole area of internal diseases. The aim is to graduate syllabus can cope with patients in various conditions, able to apply theoretical knowledge, to analyse down working diagnosis, to plan the examinations and to recommend appropriated treatment	
Class syllabus: State exam consists of practical exam (medical record) and oral exam (2 theoretical questions). The practical part of state exam: Student will select one of the particular department JFMCU (Department of internal medicine I., Department of internal medicine – gastroenterology, Department of occupational medicine and toxicology, Department of pneumology and phthisiology, Department of hematology and transfusiology).usually the day before the date of the theoretical part where the student will perform practical part according to instructions of the responsible teacher. The practical part includes complete examination of the patient and processing the medical record (taking history, objective investigation, differential diagnosis, proposal examinations and treatment). The theoretical part of state exam: It will take place at the departments (Department of internal medicine I., Department of internal medicine – gastroenterology) before Examining board. Student will select by lot 2 theoretical questions from designated areas. After answering all questions and considering the result of the practical exam, the final evaluation will be recommended to the chairman by the members of the Examining board. Quustions: Chest pain - differential diagnosis. Dyspnoe - differential diagnosis. Edema - differential diagnosis. Unconsciousness (syncopes, coma) - cause, differential diagnosis, therapy. Cardiac arrest. Principles of cardiopulmocerebral resuscitation. Diagnostic methods in cardiology. Acute heart failure - pathogenesis, symptoms, therapy. Chronic cardiac insufficiency - pathogenesis, symptoms, diagnostic methods, treatment. Treatment of chronic heart failure. Arrythmias (abnormalities of automacity and conduction) - classification, clinical features, diagnostic methods, therapy. Chronic ischemic heart disease.	

Acute coronary syndrome.
Myocardial infarction.
Inflammatory heart diseases (endocarditis, myocarditis, pericarditis).
Cardiomyopathies - classification, clinical features, differential diagnosis, therapy.
Mitral valve diseases - etiopathogenesis, clinical features, diagnosis, therapy.
Aortic valve diseases - etiopathogenesis, clinical features, diagnosis, therapy.
Arterial hypertension - epidemiology, etiopathogenesis, classification, clinical features, diagnosis.
Therapy of arterial hypertension.
Secondary hypertension - epidemiology, etiopathogenesis, clinical features, therapy.
Hypertensive crisis - causes, clinical features, treatment.
Peripheral arterial disease of lower extremities.
Thrombophlebitis, insufficiency of the leg veins.
Venous thromboembolism, thrombophilic states.
Shock - pathogenesis, classification, differential diagnosis, symptoms, therapy.
Vasoneurosis - classification, clinical features, diagnostic methods, therapy.
Primary and secondary prevention of cardiovascular diseases.
Cough - etiology, differential diagnosis.
Hemoptoe - etiology, differential diagnosis, treatment.
Lower respiratory tract acute inflammations - etiology, pathogenesis, classification, clinical manifestation, treatment.
Chronic obstructive pulmonary disease - etiopathogenesis, clinical manifestation, treatment.
Bronchial asthma - etiopathogenesis, clinical manifestation, diagnosis, differential diagnosis, treatment.
Pneumonia, bronchopneumonia - classification, clinical manifestation, diagnosis, differential diagnosis, treatment, complications.
Sarcoidosis of the lower respiratory tract - etiopathogenesis, clinical manifestation, diagnosis, treatment.
Idiopathic interstitial pneumonia – classification, clinical manifestation, diagnosis, differential diagnosis, treatment.
Chronic respiratory failure - causes, clinical manifestation, treatment.
Pleural effusion - etiology, differential diagnosis, management.
Pneumothorax, pleural tumors.
Diseases of mediastinum (tumors, inflammatory processes) - differential diagnosis.
Epidemiology and pathogenesis of tuberculosis.
Clinical manifestation and X-ray features of tuberculosis, diagnosis and differential diagnosis.
Treatment of tuberculosis.
Bronchogenic carcinoma - etiopathogenesis, classification, clinical manifestation, diagnosis, differential diagnosis, treatment.
Sleep-related breathing disorders - clinical manifestation, diagnosis, treatment.
Pneumoconiosis (Silicosis, coal worker pneumoconiosis, asbestosis).
Professional allergic respiratory diseases (Extrinsic allergic alveolitis, occupational bronchial asthma).
Abdominal pain/ differential diagnosis.
General symptoms of diseases of the upper gastrointestinal tract.
General symptoms of diseases of the lower gastrointestinal tract.

Gastrointestinal bleeding - causes, differential diagnosis.
Diagnostic methods in gastroenterology.
Diseases of esophagus and inflammatory diseases of stomach.
Peptic ulcer disease of stomach and duodenum..
Esophageal and stomach tumors.
Malabsorption syndrome, celiac disease.
Non - specific inflammatory bowel diseases.
Functional disorders of gastrointestinal tract.
Tumors of the colon and rectum.
Jaundice - classification, differential diagnosis.
Hepatomegaly and splenomegaly – etiopathogenesis, differential diagnosis.
Portal hypertension. Ascites - etiopathogenesis, differential diagnosis, treatment.
Hepatic coma - pathophysiology, clinical manifestation, therapy.
Acute and chronic hepatitis. Toxic damage of the liver.
Cirrhosis of the liver.
Diseases of gallbladder and biliary tract.
Hepatic and biliary tumors.
Tumors of pancreas.
Acute pancreatitis.
Chronic pancreatitis.
Functional and morphological examinations of the kidney.
Proteinuria, hematuria, leucocyturia - differential diagnosis.
Acute and chronic renal insufficiency.
Acute and chronic glomerulonephritis.
Tubulointerstitial nephritis.
Nephrotic syndrome.
Tumors of kidney and urinary tract.
Disorders of water metabolism.
Disorders of mineral metabolism.
Disorders of acid-base balance (acidosis, alkalosis).
Poisoning - definition, classification, basics of diagnosis and therapy.
Poisoning by medicaments (analgesics, hypnotic drugs, depressants, addictive drugs).
Poisoning by ethylalcohol, methylalcohol and ethyleneglycol.
Poisoning by mushrooms.
Poisoning by pesticides (organophosphates, carbamates).
Poisoning by organic solvents (benzene and its homologues, chlorinated hydrocarbons).
Poisoning by carbon monoxide, hydrogen cyanide, potassium and sodium cyanide.
Poisoning due to metals - lead (Pb), mercury (Hg), chromium (Cr), arsenic (As).
Injury of organism by ionizing and electromagnetic radiation.
Professional diseases, definition, most frequent professional diseases in health service, machine industry and mining.
Diabetes mellitus - epidemiology, etiopathogenesis, classification, clinical manifestations, diagnosis.
Diabetes mellitus - therapy, prevention.
Acute and chronic complications of diabetes mellitus.
Dyslipidemia.

Obesity. Metabolic syndrome.
Gout and hyperuricemic syndrome.
Disorders of nutrition (undernutrition, cachexia). Principles of parenteral and enteral nutrition.
Porphyrias.
Disorders of hypothalamus and hypophysis.
Thyreotoxicosis.
Hypothyroidism.
Inflammatory and neoplastic diseases of thyroid gland.
Diseases of parathyroid glands. Disorders of calcium metabolism.
Disorders of adrenal glands.
Osteoporosis.
Glucocorticoids - indications, contraindications, adverse effects and their prevention.
Anemia - diagnostic approach and therapy.
Aplastic anemia. Myelodysplastic syndrome.
Myeloproliferative syndromes.
Acute leukemias.
Lymphoproliferative disorders - Malignant lymphomas. Multiple myeloma.
Hemorrhagic - bleeding disorders.
Principles of antithrombotic (fibrinolytic, anticoagulant and antiplatelet) treatment.
Blood transfusion - indications, contraindications, technique. Posttransfusion reactions.
Lymph node diseases - cause, differential diagnosis.
Arthralgia - differential diagnosis of degenerative and inflammatory joint diseases.
Joint diseases associated with infection (reactive arthropathies, rheumatic fever).
Systemic diseases of connective tissue - Rheumatoid arthritis.
Sepsis.
Fever - classification, differential diagnosis.
Antibiotics - classification, indications, contraindications.
Non-specific and specific symptoms of malignant tumors.
Human immunodeficiency virus infection.
Primary and secondary amyloidosis.

State exam syllabus:

Recommended literature:

Odporúčaná literatúra:
Mokáň M. a kol.:
Vnútorné lekárstvo. Bratislava, Univerzita Komenského, 1. diel, 2004, 206 s.
Mokáň M. a kol.:
Vnútorné lekárstvo. Bratislava, Univerzita Komenského, 2. diel, 2004, 254 s.
Mokáň M. a kol.:
Vnútorné lekárstvo. Bratislava, Univerzita Komenského, 3. diel, 2004, 322 s.
Klener, P.:
Vnitřní lékařství, Praha, Galén , Karolinum, 2011, 1 174 s.
Češka, R. a kol.
Interna. Praha: Triton, 2010, 855.
Souček, M. a kol.
Vnitřní lékařství. Praha: Grada, 2011, 1808 s.
Marek, J. a kol.

Farmakoterapie vnitřních nemocí. Prhja: Grada, 2010, 777 s.
Špinar, J. a kol.
Propedeutika a vyšetřovací metody vnitřních nemocí. Praha: Grada, 2008, 255 s.
Klener, P. a kol.
Propedeutika ve vnitřním lékařství. e-kniha. Praha: Galén, 2012.
Longo, D. L. et al.
Harrison´s Principles of Internal medicine: Vol. I.
New York, McGraw-Hill, 2012, 1796 pp.
Longo, D. L. et al.
Harrison´s Principles of Internal medicine: Vol. II.
New York, McGraw-Hill, 2012, 1797-3610 pp.
Kumar, P. Clark, M.
Kumar and Clark´s Clinical Medicine. Philadelphia: Saunders Ltd., 2012, 1352 s.
Colledge, N. R. et al.
Davidson´s Principles and Practice of Medicine. Edinburgh: Churchill Livingstone, 2010, 1376 s.
McPhee, S. J., Hammer, G. D.
Pathophysiology of Disease And Introduction to Clinical Medicine.
Nex York: McGraw-Hill Medical, 2010, 737 s.

Last change: 12.09.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.IKG/J-S-VL-539/19	**Course title:** Internal Medicine (1)
Educational activities: **Type of activities:** practicals / lecture **Number of hours:** **per week:** 2 / 2 **per level/semester:** 30 / 30 **Form of the course:** on-site learning	
Number of credits: 4	
Recommended semester: 7.	
Educational level: I.II.	
Prerequisites:	
Recommended prerequisites: Internal medicine propedeutics 2	
Course requirements: To obtain credit it is necessary to take part on 6 Practicals. 2 credit tests	
Learning outcomes:	
Class syllabus: Lectures 1. Ischemic heart disease. 2. Hypertension. Differential diagnosis of primary and secondary hypertension. 3. Arrhythmias. 4. Systolic and diastolic heart failure. 5. Inflammatory heart diseases (endocarditis, myocarditis, pericarditis). Cardiomyopathies. 6. Most important heart valve disorders (inborn, acquired). Neurocirculatory asthenia. 7. Tromboembolic disease. 8. Diseases of the arteries and veins of the extremities. New trends in the treatment. 9. Bronchial asthma. 10.Chronic obstructive pulmonary disease (COPD). 11.Lung tumors. 12. Diseases of pleura and mediastinum. 13. Sarcoidosis. Fibrosis. Lung mycoses. Parasitary lung diseases. 14. Disorders of the body fluids volume and mineral balance. Disorders of electrolytes and acidobasis balance. Practical lessons: 1. Ischemic heart disease, myocardial infarction. Examination of patient. Evaluation of pathological ECG curves. 2. Hypertension disease - primary, secondary hypertension. Principles of antihypertensive therapy. Examination of the patient. 3. Infammatory heart diseases (endocarditis, myocarditis, pericarditis). Cardiomyopathies. Most important heart valve disorders. Examination of the patient. 4. Systolic and diastolic heart failure. Arrhythmias. Demonstration of the patients. Evaluation of pathological ECG curves. 5. Examination of the patients with diseases of the arteries and veins in the extremities. Peripheral atherosclerosis of lower extremities. Thromboembolic disease. 6. Functional examination of lungs. Practical demonstration. Examination of the patient with chronic bronchitis, asthma bronchiale. 7. Examination of patients with pneumonia and lung tumors.	
Recommended literature:	
Languages necessary to complete the course: English	
Notes:	

Past grade distribution
Total number of evaluated students: 197

A	ABS0	B	C	D	E	FX
27,41	0,0	32,49	30,46	8,63	1,02	0,0

Lecturers: prof. MUDr. Rudolf Hyrdel, CSc., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin, prof. MUDr. Peter Galajda, CSc., doc. MUDr. Jurina Sadloňová, CSc., doc. MUDr. Robert Vyšehradský, PhD.

Last change: 20.11.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

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

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 2 / 2 **per level/semester:** 30 / 30
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 8.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Internal Medicine 1

Course requirements:
Credit tests

Learning outcomes:

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

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

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

Languages necessary to complete the course:
english

Notes:

Past grade distribution
Total number of evaluated students: 286

A	ABS0	B	C	D	E	FX
57,34	0,0	18,88	15,03	6,99	1,75	0,0

Lecturers: prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin, prof. MUDr. Rudolf Hyrdel, CSc., prof. MUDr. Peter Galajda, CSc., doc. MUDr. Jurina Sadloňová, CSc., doc. MUDr. Robert Vyšehradský, PhD.

Last change: 14.02.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

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

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 2 / 1 **per level/semester:** 30 / 15
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 9.

Educational level: I.II.

Prerequisites:

Course requirements:
The conditions for successful passing the subject and obtaining credits are as follows:
Presence at 12 practical lessons (absence of two practical lessons must be justified).
Successful passing of 2 tests. Substitution of other missing practical lessons (according to the study order of JFMCU as well as to the Dean´s direction) is possible only in case of less than 20 % of missing practical lessons (2) with the approval of the head of department. In serious cases, the substitution of more than 20% of practical lessons can be proposed by the head of department and will be allowed after approval of the Dean.

Learning outcomes:
Completion of training the student gains general informations – knowledge and practical skills from nephrology, to get acquainted with the most important kidney diseases with their diagnosis, differential diagnosis including laboratory and special investigative techniques and therapy. Additional knowledge and practical skills the student acquires of the most common intoxications in internal medicine, including their correct diagnosis and subsequent therapeutic solutions, further issues of metabolic syndrome, calcium metabolism disorders, disturbances of intrinsic environment and the principles of antibiotic treatment and treatment by glucocorticoids.

Class syllabus:
Examinations of patients with acute and chronic glomerulonephritis.
Examinations of patients with tubulointerstitial nephritis.
Functional methods in nephrology.
Examinations of patients with chronic kidney disease. Uremic syndrome.
Organization of the hemodialysis unit, examination and care of patients in chronic dialysis programme. Peritoneal dialysis and other elimination methods,
Acute intoxications – diagnosis, differential diagnosis general principles of therapy.
Indications of acute hemodialysis and hemoperfusion.
Obesity, dyslipidemia and prediabetic states.
Metabolic syndrome and risk factors of cardiovascular diseases.
Disorders of calcium metabolism.
Osteoporosis. Examination of patients with bone diseases.
Principles of glucocorticoid therapy.

Dehydration. Principles of treatment.
Disturbances in intrinsic environment - metabolic and mineral dysbalance.
Examination of patients with septic states, differential diagnosis of febrile states.
Principles of antibiotic therapy.

Recommended literature:

Longo, D. L. et al.
Harrison´s Principles of Internal medicine: Vol. I.
New York, McGraw-Hill, 2012, 1796 pp.
Longo, D. L. et al.
Harrison´s Principles of Internal medicine: Vol. II.
New York, McGraw-Hill, 2012, 1797-3610 pp.
Kumar, P. Clark, M.
Kumar and Clark´s Clinical Medicine. Philadelphia: Saunders Ltd., 2012, 1352 pp.
Colledge, N. R. et al.
Davidson´s Principles and Practice of Medicine. Edinburgh: Churchill Livingstone, 2010, 1376 pp.
McPhee, S. J., Hammer, G. D.
Pathophysiology of Disease And Introduction to Clinical Medicine.
Nex York: McGraw-Hill Medical , 2010, 737 pp.

Languages necessary to complete the course:
English language.

Notes:

Past grade distribution
Total number of evaluated students: 175

A	ABS0	B	C	D	E	FX
27,43	0,57	32,0	22,29	12,0	5,71	0,0

Lecturers: prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin, doc. MUDr. Margita Belicová, PhD., prof. MUDr. Peter Galajda, CSc., doc. MUDr. Milan Ochodnický, CSc., doc. MUDr. Jurina Sadloňová, CSc.

Last change: 12.09.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

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

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 2 / 2 **per level/semester:** 30 / 30
Form of the course: on-site learning

Number of credits: 4

Recommended semester: 10.

Educational level: I.II.

Prerequisites:

Course requirements:
The conditions for successful passing the subject and obtaining credits are as follows:
Presence at 12 practical lessons (absence of two practical lessons must be justified).
Successful passing of 2 tests. Substitution of other missing practical lessons (according to the study order of JFMCU as well as to the Dean´s direction) is possible only in case of less than 20% of missing practical lessons (2) with the approval of the head of department. In serious cases, the substitution of more than 20% of practical lessons can be proposed by the head of department and will be allowed after approval of the Dean.
The final evaluation for internal medicine is based on the successful passing of 2 tests, presence at 12 practical lessons and oral examination which consists of 2 questions.

Learning outcomes:
Completion of training the student gains general informations – knowledge and practical skills from area of the acute states in internal medicine in its individual branches such as cardiology, gastroenterology and hepatology, endocrinology, diabetology and disorders of metabolism and nutrition, hematology and of comatose states. Acquire the basic knowledge on the management of cancer patients.

Class syllabus:
Acute states in cardiology – organization of coronary unit.
Functional methods in cardiology – evaluation of findings.
Cardiogenic shock and principles of cardiopulmonary resuscitation.
Principles of pharmacotherapy in cardiology.
Video conference – cardiologic topic.
Comatose states.
Acute states in gastroenterology.
Bleeding from gastrointestinal tract .
Acute states in hematology – hemorrhagic states.
Acute states in endocrinology.
Acute states in diabetology – acute hyperglycemic and hypoglycemic states.
Acute states in nephrology – acute kidney injury.
Examination and care of oncologic patients.

Recommended literature:

Longo, D. L. et al.
Harrison´s Principles of Internal medicine: Vol. I.
New York, McGraw-Hill, 2012, 1796 pp.
Longo, D. L. et al.
Harrison´s Principles of Internal medicine: Vol. II.
New York, McGraw-Hill, 2012, 1797-3610 pp.
Kumar, P. Clark, M.
Kumar and Clark´s Clinical Medicine. Philadelphia: Saunders Ltd., 2012, 1352 pp.
Colledge, N. R. et al.
Davidson´s Principles and Practice of Medicine. Edinburgh: Churchill Livingstone, 2010, 1376 pp.
McPhee, S. J., Hammer, G. D.
Pathophysiology of Disease And Introduction to Clinical Medicine.
Nex York: McGraw-Hill Medical , 2010, 737 pp.

Languages necessary to complete the course:
English language.

Notes:

Past grade distribution
Total number of evaluated students: 171

A	ABS0	B	C	D	E	FX
40,94	0,0	26,32	15,79	9,94	7,02	0,0

Lecturers: prof. MUDr. Rudolf Hyrdel, CSc., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin, doc. MUDr. Margita Belicová, PhD., prof. MUDr. Peter Galajda, CSc., doc. MUDr. Milan Ochodnický, CSc., doc. MUDr. Jurina Sadloňová, CSc.

Last change: 12.09.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.IK1/2-JVL-543/17	Internal Medicine (5)

Educational activities:
Type of activities: practicals
Number of hours:
per week: 29,33 **per level/semester:** 439,95
Form of the course: on-site learning

Number of credits: 13

Recommended semester: 11., 12..

Educational level: I.II.

Prerequisites:

Course requirements:
The conditions for successful passing the subject and obtaining credits are as follows:
student must complete the 100 % of pre-state practice.

Learning outcomes:
Completion of training the student gains general informations-knowledge and practical skills from the whole area of internal diseases. The aim is to graduate syllabus can cope with patients in various conditions, able to apply theoretical knowledge, to analyse down working diagnosis, to plan the examinations and to recommend appropriated treatment

Class syllabus:
Within the practice of pre-state block at Department of Internal Medicine, student doing practical work under leadership of the treating physician in the range of the consumables houseman. He has allocated a room, hire and fire patients, suggests diagnostic and therapeutic procedure. Improve his practical skills and mastery of diagnostic and therapeutic management in hospitalized patients with various internal diseases. In addition he participates in vision and special workshops.
Practice lasted for 9 weeks, fundament the 5 – weeks stay at the Department of Ist Internal Medicine and at the Department of Gastroenterology, week on the coronary and metabolic unit where getting to know the basic diagnostic and therapeutic procedures in dealing with acute conditions. Further completed 1 week at Department of Hematology and Transfusiology,1 week at Department of Pneumophtisiology and 1 week at Department of Occupational Medicine and Toxicology.

Recommended literature:
Longo, D. L. et al.
Harrison´s Principles of Internal medicine: Vol. I.
New York, McGraw-Hill, 2012, 1796 pp.
Longo, D. L. et al.
Harrison´s Principles of Internal medicine: Vol. II.
New York, McGraw-Hill, 2012, 1797-3610 pp.
Kumar, P. Clark, M.
Kumar and Clark´s Clinical Medicine. Philadelphia: Saunders Ltd., 2012, 1352 pp.
Colledge, N. R. et al.

Davidson´s Principles and Practice of Medicine. Edinburgh: Churchill Livingstone, 2010, 1376 pp.
McPhee, S. J., Hammer, G. D.
Pathophysiology of Disease And Introduction to Clinical Medicine.
Nex York: McGraw-Hill Medical , 2010, 737 pp.

Languages necessary to complete the course:
ENGLISH

Notes:

Past grade distribution
Total number of evaluated students: 377

A	ABS0	B	C	D	E	FX
71,62	0,0	15,65	7,16	2,92	2,65	0,0

Lecturers: prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin, doc. MUDr. Margita Belicová, PhD., prof. MUDr. Peter Galajda, CSc., doc. MUDr. Milan Ochodnický, CSc., doc. MUDr. Jurina Sadloňová, CSc.

Last change: 12.09.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

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

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 3 / 2 **per level/semester:** 45 / 30
Form of the course: on-site learning

Number of credits: 5

Recommended semester: 5.

Educational level: I.II.

Prerequisites:

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

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

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

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

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

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 428

A	ABS0	B	C	D	E	FX
50,23	0,0	20,79	11,21	12,62	5,14	0,0

Lecturers: prof. MUDr. Rudolf Hyrdel, CSc., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin, doc. MUDr. Margita Belicová, PhD., prof. MUDr. Peter Galajda, CSc., doc. MUDr. Milan Ochodnický, CSc., doc. MUDr. Jurina Sadloňová, CSc., doc. MUDr. Robert Vyšehradský, PhD.

Last change: 20.03.2018

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.IKG/J-S-VL-538/17	**Course title:** Internal Medicine Propedeutics (2)
Educational activities: **Type of activities:** practicals / lecture **Number of hours:** **per week:** 3 / 2 **per level/semester:** 45 / 30 **Form of the course:** on-site learning	
Number of credits: 6	
Recommended semester: 6.	
Educational level: I.II.	
Prerequisites:	
Course requirements: To attend both practicals. 2. To pass through the final evaluation. The final evaluation is performed by menans of a written test. The pass-through criterion: 65%. Evaluation: A:93-100%, B:86-92%, C:79-86%, D:72-78%,E: 65-71%, Fx:64%	
Learning outcomes: Obtaining of practical skills and theoretical knowledge in the field of Internal Medicine Propedeutics. Ability to perform complete history taking and physical examination and proposal of diagnostic plan with laboratory and auxilliary diagnostic methods in the fields of gastroenterology, endocrinology, diabetology, hematology, occupational medicine and genetics.	
Class syllabus: Lectures: 1. Examination of the abdomen and the abdominal organs. 2. Examination of the patients with diseases of gastrointestinal tract. 3. Auxiliary and functional examination methods in gastroenterology and hepatology. 4. Examination of the liver and diagnostics methods in hepatology. 5. Examination of the kidneys and patients with kidney diseases. 6. Auxiliary examination methods and laboratory tests in nephrology.- 7. Examination of the patients with diabetes mellitus. 8. Examination of the joints, muscles and spine. 9. Hematology I. 10. Hematology II. 11. Examination of the patients with endocrine diseases, auxiliary examination methods in endocrinology. 12. Reliability of laboratory methods and basic conditions of their. 13. Examination of the patients with occupational diseases and acute intoxications (alcohol, medicaments, drugs). 14. Examination of the genetic patients. Laboratory and auxiliary examinations. Practicals: 1. Training of the examination of the abdomen and abdominal organs (physiological findings). 2. Examination of the patients with diseases of gastrointestinal tract and evaluation of the results.	

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

Recommended literature:

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

Languages necessary to complete the course:

English language

Notes:

Past grade distribution

Total number of evaluated students: 438

A	ABS0	B	C	D	E	FX
29,68	0,0	37,67	25,34	5,25	2,05	0,0

Lecturers: prof. MUDr. Rudolf Hyrdel, CSc., prof. MUDr. Dušan Meško, PhD., doc. MUDr. Oto Osina, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin, doc. MUDr. Margita Belicová, PhD., prof. MUDr. Peter Galajda, CSc., doc. MUDr. Milan Ochodnický, CSc., doc. MUDr. Jurina Sadloňová, CSc., doc. MUDr. Robert Vyšehradský, PhD.

Last change: 15.10.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.BioMed/J-S-VL-628/19	**Course title:** Introduction to medical data analysis

Educational activities:
Type of activities: practicals
Number of hours:
per week: 1 **per level/semester:** 15
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 10.

Educational level: I.II.

Prerequisites:

Course requirements:

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

Class syllabus:
1st seminar Case study 1 (Indicators of Prostate Biopsy Results): Experiment vs observation study. Case-control study. Data types (qualitative, quantitative). Descriptive statistics (mean, median, standard deviation, interquartile range; frequency table, contingency table). Data visualization (histogram, boxplot; mosaicplot). 2nd seminar Case study 1, continued (Indicators of Prostate Biopsy Results): What is a biomarker? Diagnostic accuracy of a biomarker. Sensitivity, specificity, ROC curve, AUC, Youden index. Pravalence. Positive predictive value, negative predictive value – the key information for a physician and a patient. Diagnostic accuracy of PSA (prostate-specific antigen) for prostate cancer. 3rd seminar Case study 1, continued (Indicators of Prostate Biopsy Results): How to take into account the difference in the age composition of patients and controls? Logistic regression. Odds Ratio, risk. Confidence interval. P-value and statistical significance. 4th seminar Case study 2 (Identification of Risk Factors for Death after Carinal Resection): Selection of important predictors: does prior surgery matters? Akaike Information Criterion. Confidence band for ROC curve. 5th seminar Case study 3 (Effect of Protase Inhibitors on Pulmonary Admissions): Contingency tables. Independence test. Statistical significance versus scientific (medical) importance. Case study 4 (Effectiveness of a Drug in Reducing Nausea After Gallbladder Removal): Test of trend in contingency table. Is there a statistically significant difference in the decrease of nausea rating between the drug and placebo? 6th seminar Case study 5 (Laryngectomy

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

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

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 0

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

Lecturers: doc. Mgr. Marián Grendár, PhD.

Last change: 20.11.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚMBl/J-S-VL-597/17	Laboratory Practicals in Molecular Biology

Educational activities:
Type of activities: practicals
Number of hours:
per week: 1 **per level/semester:** 15
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 6.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Subject Molecular biology (JLF.ÚMB/J-S-VL-590/17)

Course requirements:
Participation on laboratory examinations and delivery of laboratory protocol.
Scale of assessment (preliminary/final): Sum of preliminary results determines the final grade

Learning outcomes:
The graduate acquires the basic practical skills in molecular biology methods – DNA extraction, PCR, real-time PCR, Sanger sequencing and fragment analysis design, pipetting and interpretation.

Class syllabus:
Practical exercise: Basic methods of molecular biology applied in molecular diagnostics – isolation of DNA, basics of primer design, Ensembl database, preparation of PCR protocol, preparation of real time PCR protocol, preparation of dideoxysequecning workflow, pipetting of PCR, real-time PCR and dideoxysequencing, interpretation of PCR, real-time PCR, dideoxysequencing and fragment analysis experiments.

Recommended literature:
Fast Real-Time PCR System http://www3.appliedbiosystems.com/cms/groups/mcb_support/documents/generaldocuments/cms_041436.pdf p. -9-14, 33-47.
DNA sequencing and capillary electrophoresis http://www3.appliedbiosystems.com/cms/groups/mcb_support/documents/generaldocuments/cms_041003.pdf p. 2-14

Languages necessary to complete the course:
English

Notes:
No.

Past grade distribution
Total number of evaluated students: 0

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

Lecturers: doc. RNDr. Zora Lasabová, PhD.
Last change: 15.03.2018
Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

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

Educational activities:
Type of activities: practicals
Number of hours:
per week: 1 **per level/semester:** 15
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 10.

Educational level: I.II.

Prerequisites:

Course requirements:
Attendance 7x4 p. (max. 28 p.)
studying selected legal issues (max. 36 points)
clear publication of the selected topic (max. 36 points)
Evaluation: A: 93–100 %, B: 86–92 %, C: 79–85 %, D: 72–78 %, E: 65–71 %, FX: 64 % and less.
Scale of assessment (preliminary/final): 0/100

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

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

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

Languages necessary to complete the course:
slovak

Notes:

Past grade distribution
Total number of evaluated students: 0

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

Lecturers: prof. MUDr. Viera Švihrová, CSc., prof. MUDr. František Novomeský, PhD.

Last change: 27.09.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

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

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 3 / 2 **per level/semester:** 45 / 30
Form of the course: on-site learning

Number of credits: 5

Recommended semester: 3.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Medical chemistry 2

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

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

Class syllabus:
The principles of oxidation and reduction in the body. Respiratory chain, ATP production, redox potential, electron transport in mitochondria. Intermedial metabolism, citric cycle, the role of acetyl CoA in metabolism. Glycolysis under aerobic and anaerobic conditions. Carbohydrate metabolism, carbohydrate digestion, absorption and transport, glycogenolysis, glycogenesis, principles and regulation. Gluconeogenesis, principles and regulation. Pentose phosphate pathway, pentoses and NADPH production. Fructose, galactose and glucuronic acid metabolism. Proteoglycans and glycoproteins. Lipid metabolism, lipid digestion and absorption, fatty acid synthesis and degradation, regulation. Metabolism of triacylglycerols, membrane lipids and phospholipids. Cholesterol metabolism, acetyl CoA as a steroid precursor, Bile acid metabolism and blood. Lipoprotein metabolism, lipoproteinemias. Ketone bodies synthesis and degradation.
Integration of carbohydrate and lipid metabolism, hormone regulation and clinical aspects in metabolic disorders.

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

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

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 605

A	ABS0	B	C	D	E	FX
4,46	0,17	28,93	34,88	24,96	5,95	0,66

Lecturers: prof. MUDr. Dušan Dobrota, CSc., prof. RNDr. Peter Kaplán, CSc., doc. Mgr. Monika Kmeťová Sivoňová, PhD.

Last change: 16.03.2018

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

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

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 4 / 4 **per level/semester:** 60 / 60
Form of the course: on-site learning

Number of credits: 10

Recommended semester: 4.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Medical chemistry 2

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

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

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

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

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

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 396

A	ABS0	B	C	D	E	FX
9,34	0,0	18,43	32,32	12,12	20,71	7,07

Lecturers: prof. MUDr. Dušan Dobrota, CSc., prof. RNDr. Peter Kaplán, CSc., prof. RNDr. Ján Lehotský, DrSc., doc. Mgr. Monika Kmeťová Sivoňová, PhD.

Last change: 16.03.2018

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚLBl/J-S-VL-512/17	Medical Biology (1)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 2 / 2 **per level/semester:** 30 / 30
Form of the course: on-site learning

Number of credits: 6

Recommended semester: 1.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
The aim of Medical Biology 1 is to give students a good knowledge in general cytology, cell physiology and cell pathology.

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

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

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

Recommended literature:
Halašová E., Bukovská E., Franeková M.: Medical Biology Practicum, Bratislava, Univerzita Komenského 2012, 136 pp.
Karp G.: Cell and molecular biology, John Wiley and Sons, Inc., 2005, 780 pp.
Turnpenny P., Ellard S.: Emerys Elements of Medical Genetics, 2007, 423 pp.

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 572

A	ABS0	B	C	D	E	FX
5,07	0,52	7,69	14,69	18,71	51,4	1,92

Lecturers: prof. RNDr. Erika Halašová, PhD., RNDr. Mária Franeková, PhD.

Last change: 18.01.2018

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚLBl/J-S-VL-513/15	Medical Biology (2)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 3 / 2 **per level/semester:** 45 / 30
Form of the course: on-site learning

Number of credits: 7

Recommended semester: 2.

Educational level: I.II.

Prerequisites:

Course requirements:
Successful passing of two credit tests (not less than 60%), 100% attendance at practical classes, successful passing of oral exam
Scale of assessment (preliminary/final): 50/50

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

Class syllabus:
DNA replication. General laws of inheritance – Mendel´s laws, gene interactions, gene linkage. Genetics of blood groups. Mutations – gene, chomosomal, numerical. Population genetics. Pedigree analysis. Genetics of prokaryotes and viruses. Immunogenetics – HLA system. Cancer cell genetics – protooncogenes, oncogenes. Cytogenetic methods, methods of gene engineering.

Recommended literature:
- Halašová E., Bukovská E., Franeková M.: Medical Biology Practicum, Bratislava, Univerzita Komenského 2012, 136 pp.
- Karp G.: Cell and molecular biology, John Wiley and Sons, Inc., 2005, 780 pp.
- Turnpenny P., Ellard S.: Emerys Elements of Medical Genetics, 2007, 423 pp.

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 740

A	ABS0	B	C	D	E	FX
17,7	0,0	18,51	24,19	17,57	16,62	5,41

Lecturers: prof. RNDr. Erika Halašová, PhD., RNDr. Mária Franeková, PhD., prof. MUDr. Martin Péč, PhD.

Last change: 01.10.2015

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.ÚLBf/J-S-VL-504/15	**Course title:** Medical Biophysics

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 4 / 2 **per level/semester:** 60 / 30
Form of the course: on-site learning

Number of credits: 8

Recommended semester: 1.

Educational level: I.II.

Prerequisites:

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

Course requirements:
Evaluation of students is based on oral exam, credit test and results from practicals and seminars. The final evaluation of students before oral exam is given by addition of their particular points. This will assign them into the rank: A ≥ 450, B ≥ 390, C ≥ 330, D ≥ 270, E ≥ 210, Fx < 210
Scale of assessment (preliminary/final): 50/50

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

Class syllabus:
-Structure and function of cell membrane. Transport mechanisms. The resting membrane potential.
-The action potential, its origin and propagation. Synapse and synaptic transmission.
-Biophysical principles of muscle contraction. Skeletal, cardiac and smooth muscle. Biophysical basics of respiration. External and internal breathing, ventilation, distribution, diffusion and perfusion.
-Biophysics of the circulatory system. Heart as a force pump, structure, function, power output.
-Laminar and turbulent blood flow - basic laws. Blood pressure. Capillary blood flow, filtration in capillary loop, oedema.
-Biophysical mechanism of sensory perception. Biophysics of vision. Biophysics of hearing.
-Recording of electrical and nonelectrical biosignals.
-Interaction of mechanical and meteorological factors with living systems.

-Interaction of electrical and magnetic fields and nonionising radiation with living systems.
-Radioactivity and ionising radiation.
-Origin of ionizing radiation and the interaction of ionizing radiation, radiological quantities and units.
-Detection of ionising radiation. Interaction of ionising radiation with living systems.
-X-ray imaging techniques. Imaging techniques using radionuclides.
-Biophysical principles of some diagnostical and therapeutical methods in medicine.
-Biocybernetics. Simulation and modelling of biological processes. Theory of information.
-Controlled and regulated biological systems.

Recommended literature:

Nave, C.R., Nave, B.C.: Physics for the health sciences. Philadelphia, W.B. Saunders Comp. 1985,421 pp.
Tarjan, I., et al.: An introduction to biophysics with medical orientation. Budapest. Akademiai Kiado, 1999, 448 pp.
Hoppe, W.: Biophysics. Berlin, Springer Verlag 1983. 941 pp.
Jakuš, J., Poliaček, I., Simera M.: Practical Tasks in Medical Biophysics, Martin, Osveta, 2013, 144 pp.

Languages necessary to complete the course:

English language

Notes:

Past grade distribution

Total number of evaluated students: 836

A	ABS0	B	C	D	E	FX
9,93	0,0	19,74	30,62	18,66	18,66	2,39

Lecturers: prof. MUDr. Ján Jakuš, DrSc., prof. RNDr. Ivan Poliaček, PhD., doc. RNDr. Michal Šimera, PhD.

Last change: 05.12.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚLBch/J-S-VL-508/17	Medical Chemistry (1)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 1 / 1,5 **per level/semester:** 15 / 22,5
Form of the course: on-site learning

Number of credits: 4

Recommended semester: 1.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Lecture/Practical Extent (in hours) – per week: 1.5/1 Method - attendance form Number of credits: 3 credits

Course requirements:
Evaluation of students is performed as a written exam, minimal level to pass: 60 %. Evaluation: A: 91–100 % B: 81–90 % C: 73–80 % D: 66–72 % E: 60–65 % FX: 59 % and less
Scale of assessment (preliminary/final): 100/0

Learning outcomes:
After completion of the subject student gains essential informations about biologically important compounds and about rules of chemical processes in the living systems. Student understands the principles of bioenergetics and enzyme kinetics and rules for chemical reactions in aqueous solutions. Completion of the subject also contributes to understanding of relationship between structure and function of biologically important compounds. Student is able to apply knowledge gained on the lectures and seminars at learning of biological oxidations, metabolism of compounds and acid-base equilibrium of body fluids.

Class syllabus:
- Biologically important elements and their compounds. Weak noncovalent interactions and their importance for biopolymers and biological membranes. - Termodynamics and living systems. Entropy, Gibbs free energy and coupled reactions in living systems. - Rate of chemical reactions. Types of reactions and their importance in metabolic pathways. Kinetics of enzyme reactions, enzyme inhibition. - Properties of aqueous solutions. Chemical reactions in aqueous solutions: acid-base reactions, oxidation-reduction reactions, precipitation reactions, formation of coordination substances. Properties of colloid systems, biopolymers as colloids. - Chemical properties and biological importance of amino acids, peptides and proteins. Relationship between structure and function of proteins. - Chemical properties and biological importance of myoglobin and hemoglobin. - Chemical properties and biological importance of saccharides and their derivatives. - Chemical properties and biological importance of triacylglycerols, phospholipids, sphingolipids and steroids.

Recommended literature:

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

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 567

A	ABS0	B	C	D	E	FX
2,82	0,35	15,34	26,98	31,75	22,4	0,35

Lecturers: prof. MUDr. Dušan Dobrota, CSc., doc. Mgr. Eva Babušíková, PhD., doc. Ing. Zuzana Tatarková, PhD., doc. RNDr. Jozef Hatok, PhD., prof. RNDr. Peter Račay, PhD.

Last change: 16.03.2018

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

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

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 1 / 1,5 **per level/semester:** 15 / 22,5
Form of the course: on-site learning

Number of credits: 4

Recommended semester: 2.

Educational level: I.II.

Prerequisites:

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

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

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

Class syllabus:
- Enzyme catalysis, regulations at the enzyme level – mechanisms of short-term and long-term control.
- Structure of biological membranes. Lipid and protein components of membranes, membrane fluidity. Synthetic membranes. Structural changes of membranes at pathological conditions.

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

Recommended literature:

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 730

A	ABS0	B	C	D	E	FX
17,12	0,0	24,79	25,62	14,93	13,84	3,7

Lecturers: prof. MUDr. Dušan Dobrota, CSc., doc. Ing. Zuzana Tatarková, PhD., doc. Mgr. Eva Babušíková, PhD., prof. RNDr. Peter Račay, PhD., doc. RNDr. Jozef Hatok, PhD.

Last change: 30.09.2015

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

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

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 1 / 1 **per level/semester:** 15 / 15
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 5.

Educational level: I.II.

Prerequisites:

Course requirements:
Active attendance on seminars. Two tests written successfully (min. 60%). Evaluation of subject (results of Test I. + Test II. / 2) will be according: A / 1 = 91 – 100 %; B / 1,5 = 81 – 90 %; C / 2 = 73 – 80 %; D / 2,5 = 66 – 72 %; E / 3 = 60 – 65 %; Fx = less than 60 %

Learning outcomes:
Completing the course the student obtains information about the fundamental questions of medical ethics. The student will understand the principles of medical ethics and its importance in education, practice and research in the field of medicine. Student is able to apply the knowledge to case studies, can analyze and identify dilemmas.
The subject also contributes to the formation of moral attitude towards medicine, patients and to other health professions within the team cooperation.

Class syllabus:
The introduction to ethics. Ethics and morality. Moral reasoning. Ethics and Law.
Introduction to medical ethics. Basic terminology of Medical ethics. Principles and rules of medical ethics. Code of medical ethics.
Patients' rights. Doctor - patient relationship. Paternalism and partnership.
Informed consent and the right to refuse treatment. Ethical aspects of providing information about the patient's condition.
Ethics at the beginning of human life (birth control, sterilization, assisted reproduction, abortion).
Basics of thanatology. Dying with dignity. Problems of euthanasia and assisted suicide.
Ethical aspects of biomedical research and publications. Ethics committees.

Recommended literature:
Beauchamp L.T., Childress, F.J. Principles of Biomedical Ethics. 6th. ed. New York, Oxford : Oxford University Press, 2009, 417 p. ISBN 978-0-19-533570-5.
Declaration on the Promotion of Patients´Rights in Europe [on-line]. Copenhagen : WHO Regional Office for Europe, 1994. http://infodoc.inserm.fr/ethique/Ethique.nsf/0/901e922bf0f1db42c12566ac00493be8?OpenDocument.
European Charter of Patients` Rights. Basis document [on-line]. Rome, November 2002. http://www.patienttalk.info/european_charter.pdf.

World Medical Association. Medical Ethics Manual [on-line]. http://www.wma.net/en/30publications/30ethicsmanual/pdf/ethics_manual_en.pdf.

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 420

A	ABS0	B	C	D	E	FX
69,52	0,0	18,57	9,52	1,19	1,19	0,0

Lecturers: doc. Mgr. Juraj Čáp, PhD.

Last change: 26.10.2017

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.PK/J-S-VL-532/17	**Course title:** Medical Psychology and Basics of Communication
Educational activities: **Type of activities:** practicals / lecture **Number of hours:** **per week:** 1 / 1 **per level/semester:** 15 / 15 **Form of the course:** on-site learning	
Number of credits: 2	
Recommended semester: 6.	
Educational level: I.II.	
Prerequisites:	
Recommended prerequisites: 0	
Course requirements: active participation in practicals - permanent study check (control question), favourable results during running controls, written test, oral exam – minimal success 65 %; rating: A/1 = 93 – 100 %; B/1,5 = 86 – 92 %; C/2 = 79 – 85 %; D/2,5 = 72 – 78 %; E/3 = 65 – 71 %, Fx = less than 65 % Scale of assessment (preliminary/final): 10/90	
Learning outcomes: After completion of the subject the student has a basic knowledge in psychological aspects in medicine aimed to psychological aspects of the disease and the sick person/patient, medical examinations, treatment and health environment. Student knows characteristics and assessment of mental functions, principles of psychosomatic and somatopsychic relations. He/she has basic knowledge in specifics of verbal and nonverbal communication in medicine.	
Class syllabus: Medical psychology – basic terms, characteristics and content of the field. Psychosomatic and psychophysiology, psychosomatic and somatopsychic relations. Psychopathogenesis. Bio-psycho-social model of disease. Mental functions – basic characteristics, methods of examination, issues of normality and pathology, behaviour and experiencing (externalizing and internalizing behavior), state and trait variables, psychopathology. Psychological aspects of the disease and the sick person/patient. Experiencing and elaboration of disease (adaptation to disease, disorder, illness). Pathopsychology. The issue of pain, aggravation, simulation, dissimulation, self-harm, deliberate induction of symptoms, alexithymia, types of patient´s behavior, problems of terminal states and dying. Psychological problems of medical examination, observation and interview as a diagnostic tool in medicine. Psychological diagnosis and its importance in medical practice. Psychological problems of treatment. Psychological methods of treatment, psychotherapy and its mechanisms. Psychological crisis, crisis intervention. Psychological problems of health environment, outpatient and inpatient care.	

Psychological aspects of the doctor´s work and other health professionals. The issue of burnout, coping with the burden and frustrating experiences, problems of cooperation and rivalry. Medical ethics. Iatropathogenesis.
Mental hygiene, prevention, specific psychohygienic problems.
Verbal and nonverbal communication and its importance in medicine. Communication with specific groups of patients. Patient noncompliance.
Specifics of communication in different developmental stages. Communication with pediatric patient, geriatric patient. Communication with seriously ill and dying patients.
Communication with patients with acute and non-acute mental disorder, with physical, sensory and intellectual disabilities.

Recommended literature:

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

Languages necessary to complete the course:
english

Notes:

Past grade distribution
Total number of evaluated students: 426

A	ABS0	B	C	D	E	FX
57,98	0,0	23,47	13,38	2,58	2,58	0,0

Lecturers: doc. MUDr. Igor Ondrejka, PhD., MUDr. PhDr. Igor Hrtánek, PhD.

Last change: 09.10.2017

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚVZ/J-S-VL-594/19	Medicine of Catastrophies

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 1 / 1 **per level/semester:** 15 / 15
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 10.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Public Health 1

Course requirements:
Requirements to successfully complete the course:
To compete the course, two basic conditions should be fulfilled:
1. active attendance: compulsory attendance – in case of absence, the student should substitute the missing through consultation with the respective teacher 14x2 (28 points)
2. two well arranged preparations from the proposed themes (as PowerPoint presentations) and their presentation during the practicals (each 36 points; 72 points in total)
Final evaluation (max. 100 points):
Achieved points
Evaluation
100 – 91 A (excellent - 1)
90 – 81 B (very good – 1.5)
80 – 73 C (good - 2)
72 – 66 D (satisfactory – 2.5)
65 – 60 E (sufficient - 3)
59 and less Fx (fail - 4)
At least 60 points in total evaluation are needed to compete the course.
Scale of assessment (preliminary/final): 0/100

Learning outcomes:
After completion of the subject the student understands
- kinds of injuries in natural and man-made disasters
- risks of emergent situation on local, regional, national and international level
- problem of preparedness and public health measures to deal with emergent situations as well as their management
-international health regulations
-basic characteristics of flu pandemic preparedness

Class syllabus:
Public health and disaster medicine.

Management in emergent situations.
Planned measures in Slovak Republic in a case of event liable to international regulations.
Pandemic preparedness and international cooperation in emergent situations.
Disasters with predominant chemical effect. Psychological impact of disasters, human stampede, ethical aspect of disaster medicine.
War medicine and terrorism. Nuclear, industrial, natural and humanitarian disasters.

Recommended literature:

OBLIGATORY LITERATURE:
KLEMENT CYRIL a kol: Mimoriadne udalosti vo verejnom zdravotníctve. Banská Bystrica: PRO, 2011, 664 s., ISBN: 978-80-89057-29-0
KLEMENT CYRIL a kol: Medzinárodné zdravotné predpisy. Banská Bystrica: PRO, 2009. 438 s., ISBN: 978-80-89057-24-5
KLEMENT CYRIL, MEZENCEV, ROMAN a kol: Biologické zbrane. Bratislava: BONUS, 2008, 380 s., ISBN: 978-80-969733-2-3
Recommended:
Prymula R. a kol.: Biologický a chemický terorizmus. Praha: Grada, 2001. 152 s.
http://www.who.int/topics/
www.ecohealth101.org
http://www.ecdc.europa.eu

Languages necessary to complete the course:

english

Notes:

Past grade distribution

Total number of evaluated students: 7

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

Lecturers: prof. MUDr. Henrieta Hudečková, PhD., MPH

Last change: 24.08.2020

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

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

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 2 / 2 **per level/semester:** 30 / 30
Form of the course: on-site learning

Number of credits: 5

Recommended semester: 4.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Medical biology 2

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

End study evaluation of students is based on written test, cut off for pass is 60%. Presence on 3 lectures is evaluated with one point. The student can get points during the study period that will be added to the exam test if the minimal required value for passing (60%) is reached.
Scale of assessment (preliminary/final): 0% / 100%

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

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

Recommended literature:

Murray, P.R., Rosenthal, K.S., Pfaller, M.A. Medical Microbiology. 7th ed. Philadelphia: Elsevier Saunders, 2013. 874 s. ISBN 978-0-323-08692-9.

Murray, P.R., Rosenthal,K.S., Pfaller, M.A. Medical Microbiology. 8th ed. Philadelphia: Elsevier Saunders, 2016. 836 s. ISBN 978-0323-299956-5

Harvey, R. A., Champe, P.C., Fischer, B.D. Lippincott´s Illustrated Review Microbiology. Lippincott Williams&Wilkins, 2007. 438 s. ISBN 13: 978-0-7817-8215-9

Greenwood, D., Barer, M., Slack, R., Irwing, W. Medical Microbiology. 18.ed. Edinburgh: Elsevier Saunders, 2012.778 s. ISBN 978-0-7020-4089-4

Reading from MEFANET and faculty web site for microbiology

Languages necessary to complete the course:

English language

Notes:

Past grade distribution

Total number of evaluated students: 491

A	ABS0	B	C	D	E	FX
49,69	0,0	23,01	16,09	8,96	2,24	0,0

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

Last change: 10.12.2018

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚMI/J-S-VL-518/17	Microbiology (2)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 3 / 3 **per level/semester:** 45 / 45
Form of the course: on-site learning

Number of credits: 5

Recommended semester: 5.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Microbiology 1

Course requirements:
- it is obligatory to be present at practicals (1 absence is tolerated)
- 1 test during the semester
- 2 oral presentations according the schedule

Exam:
Written exam test or oral exam
Written exam test - Presence on 2 lectures is evaluated with one point. The student can get points during the study period that will be added to the exam test (written form) if the minimal required value for passing (60%) is reached.
Oral exam - The oral exam consists of 4 questions. Each one is evaluated separatly. No question could be graduated Fx for successfull exam.
Scale of assessment (preliminary/final): 0% / 100%

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

Class syllabus:
Bacteriology G + cocci staphylococci. streptococci
Bacteriology G – cocci neisseria, haemophilus
Bacteriology, G - rods, enterobacteriaceae

Bacteriology, G - rods, nonfermenting rods
Strana: 2
Bacteriology, G + rods, anaerobes
Spirochetales, chlamydia, mycoplasma
Introduction to virology
Virology, DNA viruses , RNA viruses
Hepatitis viruses, prions, HIV
Medical mycology, medical parasitology
RTI, STI, GIT and UGT infection – ethiology
CNS, blood infection, bacterial intoxication – ethiology
Ethiology of infections of newborne, old patient, fetus infection
Hospital infection and opportunistic infections ethiology
Direct and indirect diagnostical methods
New approaches in identification of infectious ethiology

Recommended literature:

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

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 426

A	ABS0	B	C	D	E	FX
18,78	0,0	32,39	30,28	11,03	7,28	0,23

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

Last change: 10.12.2018

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚMBl/J-S-VL-590/17	Molecular Biology

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 1 / 1 **per level/semester:** 15 / 15
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 5.

Educational level: I.II.

Prerequisites:

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

Course requirements:
100% participation on seminars and practical, class-in-presentation, two tests
Scale of assessment (preliminary/final): Sum of preliminary results determines the final grade.

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

Class syllabus:
Organization of the human genome, human genome sequencing projects, basic free accessible databases in medicine. Regulation of human gene expression and application of this knowledge in medicine. Instability of the human genome, malfunctions of DNA repair and cancerogenesis. Methods of molecular biology in medicine and diagnostics – PCR, real-time PCR, droplet digital PCR, fragment analysis, detection of short tandem repeats for human identification, DNA sequencing, next-generation sequencing (NGS), whole exome sequencing, whole genome sequencing. Mutation classification according to sequence change and the effect, nomenclature for describing mutations, gain of function mutations, loss of function mutations. Molecular diagnostics of monogenic disorders, usage of free accessible internet resources and databases (OMIM, ClinVAr, dbSNP). The evolution of cancer, multistep model carcinogenesis on the example of colorectal, inheritance of cancer, cancer critical genes, driver and passenger mutations. Detection of genetic changes for diagnosis, prognosis and therapy prediction in different cancer, methods of molecular biology used in diagnosis and follow-up of cancer, microsatellite instability. Non-invasive molecular diagnostics from circulation – cancer, prenatal testing. Genetically heterogenic diseases – molecular diagnostics based on NGS, complexity and limits of the result interpretation, clinical exome sequencing. Targeted personalized and gene therapy – application of NGS, possibilities and perspectives Annotation of practical lecture. Practical lectures are carried out in form of seminars with practical demonstrations. Methods of molecular biology – principles

of electrophoretic separation of DNA, polymerase chain reaction (PCR), real-time PCR whole-genome sequencing for non-invasive prenatal testing. PCR protocol, PCR preparation. SNP and point mutation analysis using PCR, result interpretation from agarose electrophoresis, comparison with systems TaqMan and digital PCR. DNA sequencing according Sanger, using Chromas and BLAST, description and interpretation results, sequencing analysis of point mutation, small deletion and insertion. Examples of molecular diagnostic and result interpretation of monogenic diseases and cancer, working with OMIM, ClinVAr.

Recommended literature:

T . Strachan, J. Goodship, P. Chinnery: Genetics and Genomics in Medicine, 2015 by Garland Science, Taylor and Francis Group, NewYork and London (selected chapters) ISBN 978-0-8153-4480-3
www.ncbi.nlm.nih.gov/omim/ - Online Medelian Inheritance in Man
Zora Lasabová: Molekulová biológia v medicíne a genetike. Vysokoškolské učebné texty. vydanie. Vydavateľstvo Asklepios 2011. ISBN 978-80-7167-164-0

Languages necessary to complete the course:
English

Notes:
No.

Past grade distribution
Total number of evaluated students: 426

A	ABS0	B	C	D	E	FX
70,89	0,0	21,83	7,28	0,0	0,0	0,0

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

Last change: 15.03.2018

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

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

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 1 / 1 **per level/semester:** 15 / 15
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 9.

Educational level: I.II.

Prerequisites:

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

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

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

Recommended literature:

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 3

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

Lecturers: prof. MUDr. Mirko Zibolen, CSc., MUDr. Tomáš Jurko, PhD.

Last change: 24.10.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

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

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

Number of credits: 1

Recommended semester: 10.

Educational level: I.II.

Prerequisites:

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

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

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

Recommended literature:

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 56

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

Lecturers: prof. MUDr. Mirko Zibolen, CSc., MUDr. Tomáš Jurko, PhD.

Last change: 24.10.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.NlK/J-S-VL-545/18	Neurology (1)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 2 / 1 **per level/semester:** 30 / 15
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 7.

Educational level: I.II.

Prerequisites:

Course requirements:
Commitment of documentation and advocacy of examined patient.

Learning outcomes:
After completion of the subject the student understands basic information about Neurology, about basic examination principles and the ways of the patients examination. Student is able to apply knowledge from the neuroanatomy and physiology of the peripheral and central nervous system. Student will be informed about the way of examination of the particular neurology systems. Student has overview, basic knowledge and principles of the correct indication of the ancillary diagnostic methods in neurology. Student is able to do individual patient examination, basic analysis of the pathological findings, correct syndrome identification and supposed pathology localization. Completion of the subject forms general basic clinical skills.

Class syllabus:
Introduction to neurology. Neurological examination – personal history, status presens generalis and status presens specialis neurologicus.
Cranial nerves. Roots and nerves of the spinal cord. Structure and function of the spinal cord.
Sensory system.
Central and peripheral type of the palsy.
Central control of the movement.
Cortical syndromes. Symbolic functions.
Limbic system and behavioral neurology. Memory.
Vegetative nervous system.
Extrapyramidal syndromes. Cerebellar and vestibular syndromes.
Introduction to the special neurology.

Recommended literature:
Bradley, W.G., Gibbs, S.R. Year Book of Neurology and Neurosurgery. London: Mosby Inc., 1998. 410 pp.
Mumenthaler, M., Mattle, H. Neurology. Stuttgart: Thieme, 2003. 1008 s.
Gunderson, H. C.Essentials of Clinical Neurology. New York: Raven Press, 1990. 550 pp.
Drobny, M., Annamarie Neurology Lectures References Text and Study Guide. Martin:1997. 284 pp.

Daroff, R.B., Fenichel, G.M., Jankovic, J., Mazziotta, J.c. Bradleys Neurology in Clinical Practice, Saunders, 6th edition, 2013, 2 Volume, ISBN-13: 978-1437704341, 2544 pages
Biller, J. Practical Neurology, LWW, 4th edition, 2012, ISBN-13:978-1451142631, 748 pages

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 289

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

Lecturers: prof. MUDr. Egon Kurča, PhD., FESO, doc. MUDr. Ema Kantorová, PhD., doc. MUDr. Vladimír Nosáľ, PhD., FESO, doc. MUDr. Štefan Sivák, PhD., MUDr. Monika Turčanová Koprušáková, PhD., prof. MUDr. Michal Drobný, DrSc.

Last change: 11.09.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.NlK/J-S-VL-546/18	Neurology (2)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 2 / 1 **per level/semester:** 30 / 15
Form of the course: on-site learning

Number of credits: 4

Recommended semester: 8.

Educational level: I.II.

Prerequisites:

Course requirements:
ttendance at least 6 practicals. Classification: A,B,C,D,E,Fx will be based on continual evaluation of knowledges.
Passing through examination test – minimum 70%. Oral examination. A,B,C,D,E,Fx

Learning outcomes:
After completion of the subject the student understands epidemiology, etiology, pathophysiology, clinical picture, diagnosis, differential diagnosis and treatment of the most common neurological disorders.
Student is able to apply all knowledge learned at Neurology (1). Very important is practical application of the knowledge during examination of the patient or during casuistic model evaluation. Student is able to manage the most frequent emergency situations in neurology.

Class syllabus:
Stroke. Subarachnoid hemorhage. Trauma of the brain, spinal cord, and periferal nerves. Headache. Disorders of the spinal cord. Coma. Differential diagnosis of the syndrome of the intracranial hypertension. Hydrocephalus. Tumors of the CNS. Infections of the CNS. Human and animal prion diseases. Multiple sclerosis. Alzheimer's dementia and other dementias. Parkinson's disease and other Movement disorders. Epilepsy. Differential diagnosis of the unconsciousness. Sleep disorders. Developmental disorders of the nervous system. Neuromuscular disorders. Selected hereditary disorders. Functional stereotactic neurosurgery. Selected interventions in invasive radiology.

Recommended literature:
Bradley, W.G., Gibbs, S.R. Year Book of Neurology and Neurosurgery. London: Mosby Inc., 1998. 410 pp.
Mumenthaler, M., Mattle, H. Neurology. Stuttgart: Thieme, 2003. 1008 s.
Gunderson, H. C.Essentials of Clinical Neurology. New York: Raven Press, 1990. 550 pp.
Drobny, M., Annamarie Neurology Lectures References Text and Study Guide. Martin:1997. 284 pp.
Daroff, R.B., Fenichel, G.M., Jankovic, J., Mazziotta, J.c. Bradleys Neurology in Clinical Practice, Saunders, 6th edition, 2013, 2 Volume, ISBN-13: 978-1437704341, 2544 pages
Biller, J. Practical Neurology, LWW, 4th edition, 2012, ISBN-13:978-1451142631, 748 pages

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 206

A	ABS0	B	C	D	E	FX
52,91	0,0	19,9	14,56	5,34	5,34	1,94

Lecturers: prof. MUDr. Egon Kurča, PhD., FESO, doc. MUDr. Ema Kantorová, PhD., doc. MUDr. Vladimír Nosáľ, PhD., FESO, doc. MUDr. Štefan Sivák, PhD., MUDr. Monika Turčanová Koprušáková, PhD., prof. MUDr. Michal Drobný, DrSc.

Last change: 11.09.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.NchK/J-S-VL-619/19	Neurosurgery (1)

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

Number of credits: 1

Recommended semester: 9.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Surgery 3, Neurology 2

Course requirements:
The condition for the obtaining the credits from neurosurgery is the 2/3 (66%) attendance of the lectures and practical seminars at Clinic of Neurosurgery. Evaluation: A: 93–100 %, B: 86–92 %, C: 79–85 %, D: 72–78 %, E: 65–71 %, FX: 64 % and less

Learning outcomes:
Student knows degenerative diseases of the spine, has an overview of diagnostic and treatment methods for this condition. Know the spine and spinal cord injuries, tumors of the spine and spinal cord and peripheral nerve tumors. Understand the issue of craniocerebral injury and peripheral nerve injury.

Class syllabus:
Degenerative disease of the spine. The lecture and practical seminars deal with the pathophysiology and biomechanics of the spine affected by degenerative process. Part of the lecture is an overview of the diagnostic methods of their use in neurosurgery and spinal surgical procedures overview. Spine and spinal cord injuries. The lecture and seminars provide students an overview of the mechanics, pathophysiology and classification of spinal injuries and spinal cord. The clinical features, diagnosis and treatment of spinal cord injury and an overview of basic surgical procedures are presented. Tumors of the spine and spinal cord. Peripheral nerve injury, entrapment syndromes, peripheral nerve tumors. The lectures and seminars deal with tumors of the spine and spinal cord and peripheral nerve damage issues from the perspective of a neurosurgeon with an overview of neurosurgical surgery. Craniocerebral injury. The aim of the lecture and seminars is to provide students an overview of the management of brain injury, based on understanding the pathophysiology and biomechanics of intracranial space and brain injury. The lecture deals with the classification of head injury, intracranial hypertension, diagnosis and treatment of brain injuries. Part of the lecture is an overview of basic neurosurgical procedures in patients with head injury.

Recommended literature:
Greenberg, Mark S. Handbook of Neurosurgery. New York: Thieme Medical Publishers,7th edition, 2010, s. 1338, ISBN: 978-1-60406-326-4 www.eans.org www.wfns.org

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 179

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

Lecturers: doc. MUDr. Branislav Kolarovszki, PhD., MUDr. Romana Richterová, PhD.

Last change: 19.11.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.NchK/J-S-VL-620/19	Neurosurgery (2)

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

Number of credits: 1

Recommended semester: 10.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
neurosurgery 1

Course requirements:
The condition for the obtaining the credits from neurosurgery is the 2/3 (66%) attendance of the lectures and practical seminars at Clinic of Neurosurgery. Evaluation: A: 93–100 %, B: 86–92 %, C: 79–85 %, D: 72–78 %, E: 65–71 %, FX: 64 % and less

Learning outcomes:
The graduate is familiar with the problematic of brain and skull tumors, knows the diagnostic anf surgical methods of treatment of brain tumors. The student knows the infectious diseases of brain and skull. He knows the basic principles of cerebrovascular and pediatric neurosurgery.

Class syllabus:
Brain and skull tumors – classification, clinical picture, diagnostics and treatment, peroperative neuromonitoring and neuroimaging. Infectious diseases of brain and skull. The review of surgical procedures. Cerebrovascular and pediatric neurosurgery. Spontaneous subarachnoid bleeding, intracerebral haemorrhage, intracranial aneurysms and arteriovenous malformations. The review of microsurgical and endovascular methods. The management of congenital anomalies of brain, spine and spinal cord.

Recommended literature:
Greenberg, Mark S. Handbook of Neurosurgery. New York: Thieme Medical Publishers,7th edition, 2010, s. 1338, ISBN: 978-1-60406-326-4 www.eans.org www.wfns.org

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 88

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

Lecturers: doc. MUDr. Branislav Kolarovszki, PhD., MUDr. Romana Richterová, PhD.
Last change: 19.11.2019
Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KNM/J-S-VL-623/18	Nuclear Medicine

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

Number of credits: 1

Recommended semester: 7.

Educational level: I.II.

Prerequisites:

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

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

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

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

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 287

A	ABS0	B	C	D	E	FX
24,04	0,0	33,1	25,09	11,85	5,92	0,0

Lecturers: MUDr. Hubert Poláček, PhD., doc. MUDr. Kamil Zeleňák, PhD.

Last change: 03.02.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

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

Educational activities:
Type of activities: practicals
Number of hours:
per week: 1 **per level/semester:** 15
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 9.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
internal medicine 3

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

Learning outcomes:

Class syllabus:
1. Professional diseases - definition, overview, list of occupational diseases. System for the assessment, reporting and compensation of occupational diseases. The job description of department or clinic of occupational medicine, the role of occupational health service in the system of care for the health of employees. Preventive medical examinations.
Occupational diseases of the respiratory system - Pneumoconiosis.
2. Overview of diseases after exposure to physical factors of the working environment - occupational diseases from long-term, excessive and repetitive load of limbs, diseases form vibrations.
Health damage from over noise and ionizing radiation. Electromagnetic fields in daily life, application of mobile telecommunication means, effects on human organism.
3. Occupational diseases after exposure to toxic metals and organic solvents. Chemical damage in accidents and terrorist use.
4. Occupational cancers. Professional allergic diseases - rhinitis, asthma bronchiale, hypersensitive pneumonitis.
5. Examination, diagnosis and treatment of patients with professional health damage.

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

4. Osina, O., Sadloňová, J.: Toxikológia - vybrané kapitoly. Vysokoškolské skriptá, 2016
5. Pelclová, D. a kol.: Nemoci z povolání a intoxikace. Praha, Karolinum. 2002, 207 s.
6. Rom, W.N. : Environmental and Occupational Medicine, Philadelphia, 2007, 1884 s.
7. Harbison, R.D. (Editor): Hamilton and Hardy´s Industrial Toxicology. N.J.: John Wiley and Sons, 6th ed., 2015, 1339 s.
8. Levy, Barry, S.: Occupational and Environmental Health. Oxford: Oxford University Press, 6th ed., 2011, 854s.

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 174

A	ABS0	B	C	D	E	FX
75,29	0,0	14,94	8,05	1,15	0,57	0,0

Lecturers: doc. MUDr. Oto Osina, PhD.

Last change: 24.10.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.ÚVZ/J-S-VL-608/19	**Course title:** Occupational-Health Service

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

Number of credits: 1

Recommended semester: 9.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Public health 1

Course requirements:
ppt 1 (max. 50 p.), ppt 2 (max. 50 p.) Evaluation: A: 93–100 %, B: 86–92 %, C: 79–85 %, D: 72–78 %, E: 65–71 %, FX: 64 % and less
Scale of assessment (preliminary/final): 0/100

Learning outcomes:
After completion of the subject the student understands problems of supervision of occupational health services (OHS) on working conditions, methods mapping and assessing the health risks caused by different factors of the working environment, basic procedures of supervision of OHS on health of workers. He/she is able to identify various types of medical preventive checkups to evaluate correctly the health ability in various working activities. He/she understands basic principles of organization of the first aid in industrial accidents

Class syllabus:
Brief historical insight in health related to occupation. Basic roles of OHS. Composition and qualification of a OHS team. Organization of activities of OHS, legislation in the Slovak Republic. Preliminary audit, assessment of factors of working environment and level of working conditions with focus on identification of risks, monitoring of exposure of the employees to factors of work and working conditions harmful to health. Summary of qualitative-quantitative assessment of health risks. Monitoring and assessment of health condition of employees in relation to occupation. Opinions on health ability for work. Contents of preventive occupational medical checkups. Organization of the first aid in factories. Providing counselling for employees and employers. Activities of OHS in elaboration of programs of protection and support of health of the employees.

Recommended literature:
Recommended literature: 1. Buchancová, J. a kol.: Pracovné lekárstvo a toxikológia, Osveta, Martin 2003, 1133 s. 2. TUČEK, M., CIKRT, M., PELCLOVÁ, D.: Pracovní lékařství pro praxi. Grada Praha, 2005; 328. 3. BUCHANCOVÁ, J.: Profesionálne ochorenia infekčného pôvodu. V: Szilágyiová,M., Šimeková,K. et al.: Infektológia pre prax. Herba Bratislava, 2010; 241-270. ISBN 978-80-89171-66-8. 4. Aktuálna legislatíva v PZS

Languages necessary to complete the course:
english

Notes:

Past grade distribution
Total number of evaluated students: 0

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

Lecturers: prof. MUDr. Henrieta Hudečková, PhD., MPH, prof. MUDr. Janka Buchancová, CSc.

Last change: 27.09.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.OK/J-S-VL-568/19	Ophthalmology

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 3 / 1 **per level/semester:** 45 / 15
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 9.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Anatomy 3, Physiology 2

Course requirements:
The student assessment is undertaken with oral examination consisting of 3 questions. The assessment of answer is A, B, C, D, E, FX. Minimum threshold of success: E.

Learning outcomes:
After completion of the subject the student fully understands the anatomy and physiology of the eye, its peri-ocular structures and visual pathways. The student understands the theory and is able to apply knowledge in the basics of ophthalmic anamnesis in children, adults and elderly patients. The student is able to analyze and identify special diagnostic techniques in ophthalmology as well as imaging methods (CT, MRI, ultrasound). The graduated student deeply understands issues of refractive errors and its correction with lenses and surgery.
After completion of the subject the student is able to identify the mechanisms leading to a decline in visual function caused by pathological changes of the eye and visual pathways. The student fully understands the pathophysiology, diagnosis, treatment and prognosis of the most prevalent retinal diseases like diabetic retinopathy, age related macular degeneration and retinal detachment.
After completing the course the graduate is able to apply knowledge based on the history and basic tests to diagnose the most common eye diseases and different types of injuries or trauma.
After completion of the subject the student understands the therapeutic principles of ocular diseases and ophthalmic surgical treatment and is able to identify the early signs of post operative complications like infections, haemorrhages and hypertension. The graduate understands and is able to practice first aid for eye injuries, including burns and perforations.

Class syllabus:
1. Anatomy and physiology of the eye and orbit, refractive errors and correction.
Basics in refraction, retinoscopy, Keratometry, assesement of visual acuity with and without correction. ETDRS optotyps. Theory and practise with slit lamp.
2. Diseases of cornea, sclera and conjuctiva.
Examination of the cornea and conjuctiva with the slit lamp, Placido rings
keratoscopy. Swab collection techniques for conjunctival samples.
3. Uveitis (anterior, intermediate and posterior). Ophthalmic presentations of HIV.

Examination of anterior chamber and vitreous with slit lamp, fundoscopy, direct and indirect ophthalmoscopy.
4. Disease of the orbit, eyelids and tear ducts.
Eyelids examination and function assessment of m.levator palp.sup., exophthalmometry, syringing of the tear ducts. Tear film assessment – Schirmer and B.U.T. test.
5. Disease of the retina (hereditary, diabetic retinopathy, hypertension retinopathy, Age related macular degeneration, Full thickness macular hole, Central serous chorioretinopathy, Retinopathy of prematurity). Ophthalmoscopy, optical coherence tomography, fluorescein angiography, Amsler chart, Colour vision test.
6. Disease of the transparent media, crystalline lens and cataract surgery.
Examination of the red papillary reflex and transparent media. Optic and ultrasound biometry, phacoemulsification.
7. Glaucoma. Dynamic and static perimetry. Tonometry (Goldman, Schiotz, non-contract). Gonioscopy. HRT II, GDx, OCT RNFL.
8. Red eye syndrome – dif. dg.(hyposphagma, Conjunctivitis, Uveitis, acute glaucoma).
Slit lamp examination, first AID for eye injury and caustication, eyelid evertion.
9. Neuro-ophthalmology and paediatric ophthalmology, optic neuropathy, and defects of visual pathways. Pupillary defects. Strabismus. Amblyopia. Children ophthalmic examination and screening. VEP, EMG, external ocular motility, examination of diplopia and strabismus.
10. Retinal detachment, ocular tumours, dif.dg. of

Recommended literature:

- Jack Kanski, Brad Bowling. Clinical Ophthalmology: A Systematic Approach, 7th Edition. Saunders 2011.
-Adam T. Gerstenblith, Michael P. Rabinowitz et al. The wills eye manual. 6th edition. Lippincott Williams & Wilkins, Philadelphia 2012
- David J. Spalton et al. Atlas of clinical optalmology. 3rd edition. Oxford, Mosby 2005.
- Myron Yanoff, Jay S. Duker. Ophthalmology. 3rd edition. Mosby 2009.

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 172

A	ABS0	B	C	D	E	FX
51,16	0,0	37,79	8,72	1,16	1,16	0,0

Lecturers: MUDr. Peter Žiak, PhD., MUDr. Juraj Halička, PhD.

Last change: 15.10.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.OTK/J-S-VL-570/19	Ortopedics

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 1,5 / 1 **per level/semester:** 22,5 / 15
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 10.

Educational level: I.II.

Prerequisites:

Course requirements:
Evaluation takes the form of graded credit. Requires 100% participation in practicals.

Learning outcomes:
Students gain an overview of diseases and injuries of the musculoskeletal system. Become familiar with developmental and acquired diseases, specificities of developmental diseases, their diagnosis and treatment options, focusing on prevention and screening examinations, become familiar with terapeutical options of skeletal trauma, can separately consider the possible therapeutic approaches based on the interpretation of X-ray findings. Acquire a basic algorithms of treatment of acute skeletal trauma. After completing the course student is able to diagnose basic degenerative diseases of the skeleton and suggest possible treatment. Has a complete overview of the current state of knowledge and surgical treatment options, as well of reconstructive and acute orthopedics.

Class syllabus:
Introduction to clinical examination of the musculoskeletal system, basic inspection, manual examination and special examination methods. - Principles of conservative treatment - neurophysiological effects, physiotherapy, occupational therapy, ortho-prosthetics. - Principles of surgical treatment. - Pathophysiology of fractures, therapeutic procedures and principles of treatment. - Diagnosis and treatment of tumors of bones, muscles and tendons by anatomical site. - Diagnosis and treatment of congenital and acquired diseases of skeletal system. - Diagnosis and treatment of diseases of the upper limb, including damage to muscles, tendons and fractures. - Diagnosis and treatment of pelvic disease - congenital dysplasia (DDH), conservative and surgical treatment. - Diagnosis and treatment of diseases of the lower limb, including damage to muscles, tendons and fractures. - Basic principles of arthroplasty. - Congenital deformities of the spine and rib cage, their diagnosis and treatment. - Degenerative diseases of the spine, diagnosis - possibilities of conservative and surgical treatment. - Diagnosis and treatment of diseases of the musculoskeletal system in children. - Orthopedic diseases of senile age, treatment options.

Recommended literature:
Essential Orthopaedics and Trauma, 5th Edition, David J. Dandy and Dennis J. Edwards, Imprint: Churchill Livingstone, ISBN: 978-0-443-06718-, Copyright: 200, 504 Pages Review of Orthopaedics, 6th Edition, Mark D. Miller, Stephen R. Thompson and Jennifer Hart, Reference Imprint: Saunders, ISBN: 978-1-4377-2024-2, Copyright: 2012, 896 Pages Handbook

of Fractures, Kenneth A. Egol, Kenneth J. Koval, Joseph David Zuckerman, Philadelphia: Lippincott Williams & Wilkins, 2006. ISBN: 0-7817-9009-, 3 Pp. 685 Oxford Handbook of Orthopaedics and Trauma, Gavin Bowden, Martin McNally, Simon Thomas, and Alexander Gibson, ISBN: 978-0-19-856958-9, 02 September 2010, 656 pages,

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 175

A	ABS0	B	C	D	E	FX
61,71	0,0	36,0	2,29	0,0	0,0	0,0

Lecturers: MUDr. Libor Nečas, PhD., MUDr. Marek Rovňák

Last change: 19.11.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KORL/J-S-VL-569/19	Otorhinolaryngology

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 3 / 1 **per level/semester:** 45 / 15
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 9.

Educational level: I.II.

Prerequisites:

Course requirements:
Student Assessment conducted by a practical exam, test with 10 questions a final oral answer – 2 questions. Overall Rating A, B, C, D, E, Fx. Minimum threshold for success: E.

Learning outcomes:
Completing the course the student obtains detailed information about the anatomy and physiology of the external nose, nasal cavity, pharynx, larynx, statoacoustic organ, oesophagus and tracheobronchial area / ENT organs /. Theory and in practice will become familiar with the basics of history and special investigative techniques in Otorhinolaryngology / ENT / and using imaging methods (CT, MRI, ultrasound) in diseases of ENT organs. Graduated understand the possibilities of diagnosis, treatment and prognosis of diseases of ENT organs. After completing the course can based on the history and basic ENT examination to diagnose the disease. Graduated understand the principles of therapy of ENT diseases, including the most common types of surgical treatment. He is able to understands and is able to practice first aid in acute diseases of ENT organs.

Class syllabus:
1./Nasal and paranasal cavities - anatomy, physiology, pathology, history, exammnation, therapy
2./Pharynx and oral cavity - anatomy, physiology , pathology, history, exammnation, therapy
3./Larynx - anatomy, physiology, pathology, history, exammnation, therapy
4./Suffocation in E.N.T. , E.N.T. surgery
5./ Ear I - anatomy, physiology, pathology, history, exammnation, therapy
6./ Ear II - hearing examination /speech, tuning forks, audiometry/ , vestibular system
7./ E.N.T.endoscopy
8./ Medical record ,individual work with patient,varia
9./ Operation room, varia
10./ Medical record ,individual work with patient,varia

Recommended literature:
Becker,W. et al.: Ear, Nose, and Throat Diseases , Thieme,1994 ,583pp.
Colman, H.B.: Hall Colman´s Diseases of the nose, Throat and Ear,and Head and neck.,Churchill Livingstone,1992293 pp.
Hajtman, A. , Koval' J.:Otorhinolaryngology Comenius University,1995,166 pp.

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 169

A	ABS0	B	C	D	E	FX
56,21	0,0	22,49	12,43	5,92	2,37	0,59

Lecturers: prof. MUDr. Andrej Hajtman, PhD., doc. MUDr. Vladimír Čalkovský, PhD.

Last change: 15.10.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚPA/J-S-VL-533/17	Pathological Anatomy (1)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 4 / 3 **per level/semester:** 60 / 45
Form of the course: on-site learning

Number of credits: 6

Recommended semester: 5.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Anatomy 3, Histology and Embryology 2

Course requirements:
I. to absolve succesfully at least 13 of 14 practical lectures/seminars. Student has to appologize the absence immediatelly and personally. Appologized absences (more than 1) require to absolve given practicum in the last compensatory 15th week of the WS, II. successful completing of the central test at the level of at least 12 of 20 available points (i.e. 60%) a III. successful completing of all 6 „small“ tests at the level of at least 18 of 30 available points (i.e. 60%).
Scale of assessment (preliminary/final): Tests

Learning outcomes:

Class syllabus:
Introduction to pathology. Methods in pathology. Death and post.mortal changes. Regressive changes: Necrosis, apoptosis, atrophy. Intracellular and extracellular errors of metabolism of lipids, carbohydrates and proteins. Pathology of inflammation: causes, manifestations, types. Exsudative superficial and interstitial inflammation. Alterative inflammation. Proliferative inflammation. Healing and reparative processes. Progressive changes: Hypertrophy, hyperplasia, metaplasia, adaptation.Granulomatous and „specific“ inflammation. Global circulatory disorders: causes and manifestations. Local circulatory disorders. Introduction to oncological pathology I.: terminology, histogenesis, oncogenesis. Introduction to oncological pathology II.: dignity, grading, staging. Epithelial tumors – classification, typing and grading. Mesenchymal tumors – classification, typing and grading. Praecanceroses. Dysplasias of the squamous and glandular epithelium. Neuroectodermal tumorus:classification, typing and grading. Teratomas. Melanocytic proliferations and neoplasms. Immunopathology: classification, immune defects, autoimmune diseases. Transplantation pathology. Immunity of neoplastic diseases. Hyperergic immunopathologic diseases – connective tissue diseases. Tumours of the blood, haematopoietic and lymphoid tissues – introduction. Myelodysplastic syndromes and myeloproliferative neoplasias.

Recommended literature:
• Underwood J.C.E.: General and systematic pathology. Edinbourgh, Churchill Livingstone 2000
• Rubin E., Farber J.L.: Pathology. J.B.Lippincott, Philadelphia 1994

• Harish Mohan: Textbook of Pathology, seventh edition, ISBN 9789351523697, 2015
• Vinary Kumar, M.D., Abul K. Abbas, Jon C. Aster: Rubin´s Basic Pathology, ISBN 978-0-8089-2432-6
• Milikowski C., Berman I.: Color atlas of basic histopathology. Appleton and Lange, Stamford 1997
• Damjanov I., Linder J.: Pathology. A Color Atlas. Mosby, 2000
• Cotran R. S., Robbins S.L., Kumar V.: Basic Pathology. Philadelphia: W.B. Saunders, 2002, ISBN
0-7216- 5122-4
• Mačák J.: General Pathology. Masaryk University 2008, ISBN 978-80-210-4549-1

Languages necessary to complete the course:
english languageovak

Notes:

Past grade distribution
Total number of evaluated students: 440

A	ABS0	B	C	D	E	FX
9,09	0,0	20,91	26,59	27,5	15,68	0,23

Lecturers: prof. MUDr. Lukáš Plank, CSc., MUDr. Tomáš Balhárek, PhD.

Last change: 30.11.2017

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚPA/J-S-VL-534/17	Pathological Anatomy (2)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 5 / 4 **per level/semester:** 75 / 60
Form of the course: on-site learning

Number of credits: 10

Recommended semester: 6.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Pathological Anatomy 1

Course requirements:
Test
Scale of assessment (preliminary/final): Credit Test

Learning outcomes:

Class syllabus:
Malignant lymphomas. Pathology of the heart I. (ICHS, myocardial infarction, valvular anomalies). Pathology of the heart II. (Hypertrophy and dilatation of the heart and cardiomyopathy). Atherosclerosis - causes, pathogenesis, manifestations and complications. Inflammatory bronchial and pulmonary diseases (focal and diffuse pneumonias). Interstitial lung diseases, fibrosis of the lungs. Tumours of the lungs. Diseases of the oral cavity, salivary glands and oesophagus. Diseases of the stomach and duodenum (inflammations, peptic ulcer disease, tumours). Diseases of the small and large bowel (malabsorption, inflammations, tumours). Diseases of the liver (hepatitis, cirrhosis, tumours) and exocrine pancreas. Pathology of the breast (non-neoplastic and neoplastic diseases). Glomerulonephritis (etiology, pathogenesis, classification). Interstitial nephritis (etiology, pathogenesis, classification). Tumours of the kidney. Pathology of the cervix and corpus uteri (non-neoplastic and neoplastic diseases). Pathology of the ovary and Fallopian tube (non-neoplastic and neoplastic diseases). Pathology of the prostate, urinary bladder, testis. Non-neoplastic blood disorders. Pathology of the endocrine system. Pathology of the skin. Pathology of the CNS I (ischaemia, bleeding, vascular changes). Pathology of the CNS II (prion´s diseases, degenerative diseases). Pathology of HIV infection and of AIDS. Pathology of selected clinical conditions. Pathology of the pregnancy. Perinatal pathology. Disorders of the bones and joints.

Recommended literature:

• Underwood J.C.E.: General and systematic pathology. Edinbourgh, Churchill Livingstone 2000
• Rubin E., Farber J.L.: Pathology. J.B.Lippincott, Philadelphia 1994
• Harish Mohan: Textbook of Pathology, seventh edition, ISBN 9789351523697, 2015
• Vinary Kumar, M.D., Abul K. Abbas, Jon C. Aster: Rubin´s Basic Pathology, ISBN 978-0-8089-2432-6

• Milikowski C., Berman I.: Color atlas of basic histopathology. Appleton and Lange, Stamford 1997
• Damjanov I., Linder J.: Pathology. A Color Atlas. Mosby, 2000
• Cotran R. S., Robbins S.L., Kumar V.: Basic Pathology. Philadelphia: W.B. Saunders, 2002, ISBN
0-7216- 5122-4
• Mačák J.: General Pathology. Masaryk University 2008, ISBN 978-80-210-4549-1

Languages necessary to complete the course:
english language

Notes:

Past grade distribution
Total number of evaluated students: 349

A	ABS0	B	C	D	E	FX
15,47	0,0	20,34	24,93	16,62	11,17	11,46

Lecturers: prof. MUDr. Lukáš Plank, CSc., MUDr. Tomáš Balhárek, PhD.

Last change: 30.11.2017

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚLBch/J-S-VL-555/18	Pathological Biochemistry

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 1 / 1 **per level/semester:** 15 / 15
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 7.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Lectures

Course requirements:
Evaluatuation of students is accomplished by written examination, minimal success level: 65 %. Evaluation : A: 91–100 %, B: 81–90 %, C: 73–80 %, D: 66–72 %, E: 60–65 %, FX: 59 % and less

Learning outcomes:
Passing subject student gets larger knowledge about patobiochemical mechanisms and definition of molecular changes leading to main types of inhereted and aquired clinically relevant disorders. Student will be familiarized with the principles of disorders linked with regulation of metabolic pathways and will understand rules of disordered cellular homeostasis. Passing the subject also contributes to undestanding of relations between altered regulation and clinico-biochemical indentification of pathological processes.The knowledges obtained from lectures and practicals can be applied by student in the study of ethiology, diagnosis and therapy of main human diseases.

Class syllabus:
-Molecular basis of cell death and cancer
-Molecular methods of detection of DNA and protein disorders
-Inherited metabolic disorders
-Pathobiochemistry of diabetes mellitus and atherosclerosis
-Ischemia of CNS
-Pathobiochemistry of neuro-degenerative diseases
-Pathobiochemistry of heart and circulation
-Pathobiochemistry of acid-base regulation,inflammation and conective tissue

Recommended literature:
Patronos G.P., Ansorge W.J. Molecular Diagnostics, Elsevier, 2010, 598s
Harpers Biochemistry, McGraw Hill, 2000
Cecils Texbook of medicine, Saunders, 1992

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 59

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

Lecturers: prof. MUDr. Dušan Dobrota, CSc., prof. RNDr. Ján Lehotský, DrSc.

Last change: 14.02.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.ÚPF/J-S-VL-535/17	**Course title:** Pathological Physiology (1)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 3 / 2 **per level/semester:** 45 / 30
Form of the course: on-site learning

Number of credits: 5

Recommended semester: 5.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Physiology 2

Course requirements:
Assessment of the students knowledge and skills will be done by writen test on computer. Minimal percentage necessary for passing the test with sucess is 74. Assessment scale is: A:100 – 96%, B: 95 – 90%, C: 89 – 85%, D: 84 – 79%, E: 78 – 74%, FX: 73% and less

Learning outcomes:
After completion of the subject student understand mechanisms involved in induction, development and finishing pathological processes related to disturbances of homeostasis, changes of body reactivity, diabetes mellitus, and cerebral ischemia. He/she will be able to solve independently pathomechanisms leading to development the most frequent symptoms and signs present in disturbances of homeostasis by using casuistics/case reports of real/virtual patients. He/she will be able independently to evaluate physiologic ECG record. Knowledge obtained at practical sessions and seminars, and by individual study will be able to apply in analysis of health problems of patients, by name with disturbances of homeostasis, immunity, thermoregulation, SIRS, pain, circulatory shock, and disturbances o consciousness. He /she are able to identify essential and most important pathomechanisms above mentioned diseased processes.

Class syllabus:
- Introduction to study of pathophysiology, health and disease, pathophysiology of ageing, and terminal states
- General etiopathogenesis of diseases, noxae, consequences of human being exposure to polutants
- role of changed body reactivity in pathogenesis of diseses, stress – its role in development pathological processes and diseses, roles of changed imunity in pathogenesis of diseases
- Pathophxsiology of thermoregulation – fever, hyperthermia, hypothermia
- Disturbances of homeostasis – changed volum and content of body fluids, changed acid-base balance
- Pathophysiology of pain – pathomechanisms involved in development pathologic forms of pain
- Pathophysiology of metabolic processes – changes in lipids, proteins, aminoacids, purins and carbohydrates metabolism; pathophysiology of nourishment

- Pathophysiology of diabetes mellitus – pathomechanisms involved in disease induction and development, main symptoms and signs, acute and chronic complications
- Systemic inflammatory response syndrome (SIRS)
- Pathophysiology of circulatory shock
- Pathophysiology of brain ischemia
- Ischemic heart diseases (IHDs)- mechanisms responsible for diseases induction, pathomechanisms involved in development of electrical and mechanical disturbances of heart funsction, atherosclerosis as one of the most important mechanism of IHD development, forms of IHD, positive and negative consequence of reperfusion of ischemic myocardium
- Pathophysiology of heart failure (HF)– mechanisms involved in induction and development of HF, systolic and diastolic forms of HF, differences in mechanisms involved in acute and chronic heart failure, right and left sided HF – mechanisms involved in symptoms and signs development
- Disturbances in blood pressure control – systemic arterial hypertension, mechanisms involved in primary and secondary arterial hypertension development, complications of arterial hypertension-consequences for functions of different organs and systems
- Essentials in evaluation of ECG record

Recommended literature:

McPhee, S. J. et al.: Pathophysiology of Disease – An Introduction to Clinical Medicine. London, Prentice Hall Int. Inc. 1995. 521 p.
Tatár, M., Hanáček, J.: Pathophysiology – Topics for Seminars. Bratislava, Comenius University 2001. 220 p.
Price, S. A., Wilson, L. M.: Pathophysiology – Clinical Concepts of Disease Processes. St. Louis, Mosby 1992. 1137 p.
Dubin, D.. Rapid Interpretation of EKG´s – a Programmed Course. Tampa, Cover Publ. Comp. 1989. 311 p.
Kaufman, Ch. E., McKee, P.A.: Essentials of Pathophysiology. Boston, Little Brown and Comp. 1996. 799 p.

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 426

A	ABS0	B	C	D	E	FX
15,96	0,0	49,3	28,17	5,16	1,41	0,0

Lecturers: prof. MUDr. Miloš Tatár, CSc., prof. MUDr. Renata Péčová, PhD., prof. MUDr. Jana Plevková, PhD., prof. MUDr. Ján Hanáček, CSc., MUDr. Tomáš Buday, PhD.

Last change: 30.11.2017

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.ÚPF/J-S-VL-536/17	**Course title:** Pathological Physiology (2)
Educational activities: **Type of activities:** practicals / lecture **Number of hours:** **per week:** 3 / 3 **per level/semester:** 45 / 45 **Form of the course:** on-site learning	
Number of credits: 7	
Recommended semester: 6.	
Educational level: I.II.	
Prerequisites:	
Recommended prerequisites: Pathological physiology 1	
Course requirements: To pass all seminars and practical sessions. State days off and rectors/deans days off are taken as student pass the seminars /practical sesions planned for these days. Student should also pass tests No 1 and No 2. Student should show ability to do pathogenetic analysis of ECG record, and should present semestral work. Student should to pass final exam.	
Learning outcomes: After completion the second part of Pathological Physiology student will understand mechanisms responsible for induction, development and finishing pathological processes related to disturbances of coronary blood flow, blood circulation in lower extremities, pulmonary and visceral circulation, obstructive pulmonary diseases and respiratory insufficiency, diseases of kidney leading to renal failure, essential hepatal, endocrine, gastrointestinal, and hematopoietic systems disorders. He/she will be able independently solve ECG records with most important disorders of electrical function of the heart-by name dysrhythmias, myocardial ischemia and ventricular and atrial hypertrophy, will be able to solve essential pathological forms of spirographic records. Student will be able to apply theoretical knowledge obtained at seminars and lectures on pathophysiology into pathogenesis of diseases at clinical departments. He/she will be able to to analyse pathomechanisms involved in development of heart failure, disturbances of external ventilation, development of hypoxia and ischemia, and glomerular and tubular dysfunctions. Student is also able to analyse main causes and mechanisms responsible for development symptoms and signs of cardiovascular, respiratory and renal diseases. Graduate from Pathophysiology 2 is able to identify essential and most important pathomechanisms above mentioned pathological processes. He/she are able to prepare semestral report in which will show ability to identify pathomechanisms of symptoms and signs in real patient.	
Class syllabus: Brief sylabus of lectures: - Pathophysiology of arterial and venous circulation in lower extremities (LE) – pathogenetic processes involved in disturbances development; disturbances of arterial circulation – ischemic changes and their manifestations and consequences, changes of venous circulations - their	

manifestations and consequences, chronic venous insufficiency in LE – mechanisms involved in its development and consequences
- Pathophysiology of pulmonary and visceral circulation – pathogenesis of pulmonary hypertension, pulmonary thromboembolic disease, intrapulmonary shunts; Pathogenesis of changes in visceral circulation, their consequences for organism
- Pathomechanisms of the most frequent symptom and signs of cardiovascular diseases,
- Disturbancesof external ventilation – pathomechanism and causes involved in development disturbances of ventilation, distribution, diffusion, perfusion and in ventilation perfusion ratio – their consequences for gases exchange in the lung and for changes of blood gases; Pathophysiology of obstructive lung diseases –bronchial asthma, chronic obstructive lung diseases (COPD)-mechanisms responsible for disturbances of gases exchange, main symptoms and signs
- Hypoxie – causes and mechanisms leading to hypoxia, types of hypoxie, compensatory mechanisms developed for compensation of hypoxie, consequences of hypoxie for function of organs and systems of the body; Hyperoxia – causes involved in its development, consequences for tissue and organs function
- Respiratory insufficiency (RINS) – causes and mechanisms leading to RINS, types of RINS, symptoms and signs, consequences for organs and systems of the organism
- Main types of respiratory system dysfunctions- their manifestations by symptoms and signs
- Pathophysiology of renal glomerular and tubular functions – main causes, mechanisms, main consequences of glomerular and tubular dysfunctions for the organism; Nephrotic syndrome
- Pathophysiology of acute and chronic renal insufficiency/failure – causes of the disorders, consequences – chnges of homeostasis, uremic syndrome, multiorgan dysfunctions,mechanisms involved in development main symptoms and signs of renal insufficiency
- Pathophysiology of liver – causes and mechanisms leading to development liver insufficiency/ failure, metabolic, circulatory, hormonal, neural and other consequences; Portal hypertension, hepatopulmonary
syndrome
- Pathophysiology of most omportant disorders of endocrine system – general mechanisms involved in disturbances of endocrine system; Pathophysiology of hypothalamo-pituitary system, thyroid gland and parathyroid gland
- Pathophysiology of hematopoietic system – anemiae, polycytemiae, leukemia, disturbances of coagulation, consequences for organism
- Pathophysiology of gastrointestinal system – ulcer disese of stomach and duodenum, main types of disturbances of small and large intestine
Brief syllabus of seminars and practical sessions
- Practical session:Pathogenetic analysis of ECG records with disturbances of impuls creation
- Practical session: Pathogenetic analysis of ECG records with disturbances in conduction system (heart blocks)
- Practical session: : Pathogenetic analysis of ECG records with myocardial infarction, chronic IHD, hypertrophy of heart atrias and ventricles
- Practical session: Individual evaluation of ECG
- Seminar: Pathophysiology of valvular heart diseases and heart failure
- Seminar: Causes and mechanisms involved in disturbances of arterial and venous circulation in lower extremities, disturbancesof pulmonary and visceral circulation
- Practical session: Lung function tests – spirography, parameters of normal and pathologic spirographic records, evaluation and interpretation of pathologic data: discussion on disturbances of external breathing
- Seminar: Defensive mechanisms of respiratory system –types, causes and mechanisms oftheir insufficiency/failure, consequences for function of respiratory system

- Seminar: Hypoxie - disturbances of oxygen and carbon dioxide transport mechanisms. Pathophysiology of respiratory insufficiency/failure
- Seminar: Manifestation of glomerular and tubular disturbances – mechanisms responsible for their development. Etiopathogenesis of nephritic sxndrome.
- Seminar: Pathophysiology of acute and chronic renal insufficiency/failure Seminár: Patofyziológia ikterov
- Presentation of semestral work – symptoms and signs of real/virtual patient, their pathophysiologic interpretation

Recommended literature:

McPhee, S. J. et al.: Pathophysiology of Disease – An Introduction to Clinical Medicine. London, Prentice Hall Int. Inc. 1995. 521 p.
Tatár, M., Hanáček, J.: Pathophysiology – Topics for Seminars. Bratislava, Comenius University 2001. 220 p.
Price, S. A., Wilson, L. M.: Pathophysiology – Clinical Concepts of Disease Processes. St. Louis, Mosby 1992. 1137 p.
Dubin, D.. Rapid Interpretation of EKG´s – a Programmed Course. Tampa, Cover Publ. Comp. 1989. 311 p.
Kaufman, Ch. E., McKee, P.A.: Essentials of Pathophysiology. Boston, Little Brown and Comp. 1996. 799 p.

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 327

A	ABS0	B	C	D	E	FX
39,14	0,0	21,71	19,27	11,93	7,65	0,31

Lecturers: prof. MUDr. Miloš Tatár, CSc., prof. MUDr. Renata Péčová, PhD., prof. MUDr. Jana Plevková, PhD., prof. MUDr. Ján Hanáček, CSc., MUDr. Tomáš Buday, PhD.

Last change: 30.11.2017

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.KDD/J-S-VL-547/18	**Course title:** Pediatric Propedeutics

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 2 / 2 **per level/semester:** 30 / 30
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 8.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Histology and embryology 2,n Pathological physiology 2. Internal propedeutics 2

Course requirements:
90% attendance at lectures and practical and theoretical exam
Scale of assessment (preliminary/final): practical and theoretical exam

Learning outcomes:
: Student will get the knowledge about the growth physiology, child development and the nutrition in particular age categories. He will know theoretically and practically the principles of basic examination of paediatric patient in all the age categories and he will be able to detect the physiological and pathological findings by physical examination of the body systems. The student after the subject attendance will get the skills to describe particular laboratory and imaging techniques and tests used in paediatrics and we will know the normal values of basic biochemical and haematological examinations in childhood.

Class syllabus:
Principles of physical examination in paediatrics and peculiarities of paediatric documentation
First examination and nursing of new-born
Screening examination in neonatal age
New-born classification
Examination of child with cardiovascular disease
Examination of child with respiratory disease
Examination of child with gastrointestinal disease
Examination of child with diseases of endocrine system
Examination of child with uropoetic disease
Examination of child with disease of musculoskeletal system
Basic principles of neurologic examination of child, indications and evaluation of cerebrospinal liquor sampling
Basic diagnostic and therapeutic algorithms in paediatric, vascular accesses, punctures, lavages, infusions, transfusions
Basic laboratory tests interpretation
Principles of examination in clinical immunology and allergology

Metabolisms of water and main electrolytes

Recommended literature:

Kliegman, R.M., Jenson, H.B. et.al. Nelson Textbook of Pediatrics. Philadelphia: W. B. Saunders Comp., 2011.,2610 s. ISBN 978143770755
Lissauer, T., Clayden, G. Illustrated textbook of Paediatrics. 2004. 410 s. ISBN 0-7234-3178-7
Kovács, L. Peditaric Propedeutics EN. Wooorkbook for medical students: Bratislav: BUX.2014,116 s. ISBN 978-80-970624-3-9
Maťašová, K Neonatológia I. Bratislava: UK, 2012.155 s. ISBN 978-80-223-3172-2

Languages necessary to complete the course:

English language

Notes:

Past grade distribution

Total number of evaluated students: 217

A	ABS0	B	C	D	E	FX
21,2	0,0	13,36	34,56	23,5	5,99	1,38

Lecturers: prof. MUDr. Peter Bánovčin, CSc., doc. MUDr. Ľubica Jakušová, PhD., doc. MUDr. Miriam Kuricová, PhD., doc. MUDr. Zuzana Havlíčeková, PhD., prof. MUDr. Mgr. Miloš Jeseňák, PhD., MBA, doc. MUDr. Slavomír Nosáľ, PhD., prof. MUDr. Mirko Zibolen, CSc., doc. MUDr. Katarína Maťašová, PhD.

Last change: 16.10.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KDCh/J-S-VL-586/19	Pediatric Surgery

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

Number of credits: 1

Recommended semester: 10.

Educational level: I.II.

Prerequisites:

Course requirements:

Learning outcomes:
To provide characteristics of the pediatric surgeryopportunities of frequent surgical diseases in childhood,operative treatment and principes of perioperative management.Specificity of surgical approach in neonate,infant early and late childhood.

Class syllabus:
Neonatal surgery Surgery of congenital malformations in neonate,infants and children Surgery of acquired diseases Acute abdomen in childhood Miniinvasive surgery in pediatric patient

Recommended literature:
Papers and seminars Script in preparation Ashcraft,K.W.:Pediatric surgery, W.B.Saunders Company,2000

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 60

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

Lecturers: doc. MUDr. Milan Dragula, PhD., MUDr. Marián Molnár, PhD., MBA, doc. MUDr. Dalibor Murgaš, PhD.

Last change: 19.11.2019

Approved by:

STATE EXAM DESCRIPTION

University: Comenius University in Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.KDD/2-JVL-SS54/17	**Course title:** Pediatrics
Number of credits: 4	
Educational level: I.II.	
Recommended prerequisites: Pediatrics 3	
Course requirements: The student will answer three theoretical questions in front of an examining committee.	
Learning outcomes: A graduate masters the basics of medical examination with the use of simple instruments, basic laboratory and examination methods and interpretation of their results, diagnostics, differential diagnostics and therapy of most common illnesses of child age. In case of life threatening conditions a graduate knows the basics of administering qualified help.	
Class syllabus: A graduate has good theoretical and practical clinical skills, which will help him/her to provide medical care at inpatient/in house children ward as a secondary doctor/resident under the expert guidance of experienced doctor. The curriculum places importance on most important and most common differential diagnostic problems in pediatric medicine as well as recognition of most common birth defects of child age and pathological conditions of newborns.	
State exam syllabus:	
Recommended literature: Behrman, R. E. Kliegman, R.M., Jenson, H.B. Nelson Textbook of Pediatrics. Philadelphia: W. B. Saunders Comp., 2011. ISBN 978143770755 Lissauer, T., Clayden, G. Illustrated textbook of Paediatrics. 2004. 410 s. ISBN 0-7234-3178-7 Behrman, R.E. Essentials of Pediatrics. Philadelphia: W.B.Saunders Comp., 2000. 795 pp. Allen, Hugh D. et al. Moss and Adams´ Heart Disease in Infants, Children and Adolescents, Including the Fetus and Young Adult. Philadelphia: Lippincott Williams & Wilkins, 2001. 1468 pp.	
Languages necessary to complete the course: English language	
Last change: 15.02.2019	
Approved by:	

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KDD/J-S-VL-571/19	Pediatrics (1)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 2 / 2 **per level/semester:** 30 / 30
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 9.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Pediatric propedeutics

Course requirements:
90% attendance of the practicals; elaboration of the complete medical record at the last practical lesson with the active discussion about the patients's evaluation with the teacher
Scale of assessment (preliminary/final): monitoring student activity

Learning outcomes:
The student acquires the basic theoretical and clinical knowledge in the diagnosis and treatment of diseases referred in Brief syllabus, with focusing on their specifications in different age periods.

Class syllabus:
Gastroesophageal reflux disease, diagnosis and treatment Physiological newborn Acute conditions in endocrinology Vasculitis and differential diagnosis of arthralgia in childhood Acute dehydration - etiology and treatment in children Malabsorption and malnutrition in childhood Valvular heart diseases in childhood Fever in children, differential diagnosis and treatment

Recommended literature:
Behrman, R. E. Nelson Textbook of Pediatrics. Philadelphia: W. B. Saunders, 2000. 2618 pp. ISBN 0-7216-9556-6 Kliegman, R.M. Nelson Textbook of Pediatrics. Philadelphia: W. B. Saunders, 2007. 3200 pp. ISBN 978-1416024507 Loeches-Martin I. Bronchitis. InTech, 2011. 190 s. ISBN 978-953-307-889-2 Dostupné na internete: http://www.intechopen.com/books/bronchitis Rigobelo, E.C. Diabetes – Damages and Treatments. InTech, 2011. 348 s. ISBN 978-953-307-652-2 Dostupné na internete: http://www.intechopen.com/books/diabetes-damages-and-treatments Chesterton, C.M. Food Allergies: New Research. Nova Science Publ.,Inc., 2008. 223 s. ISBN 978-1-60456-978-0 De Cristofaro,R. Microangiopathy. InTech, 2012. 82 s. ISBN 978-953-51-0419-3 Dostupné na internete: http://www.intechopen.com/books/microangiopathy

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 172

A	ABS0	B	C	D	E	FX
98,84	0,58	0,0	0,58	0,0	0,0	0,0

Lecturers: prof. MUDr. Peter Bánovčin, CSc., doc. MUDr. Ľubica Jakušová, PhD., prof. MUDr. Mgr. Miloš Jeseňák, PhD., MBA

Last change: 15.10.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KDD/J-S-VL-572/19	Pediatrics (2)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 3 / 2 **per level/semester:** 45 / 30
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 10.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
pediatrics 1

Course requirements:
90% attendance at practicals, medical record work out at last practical and active discussion with the teacher during practicals
Scale of assessment (preliminary/final): monitoring of student´s activity

Learning outcomes:
Student will get the theoretical and practical knowledge in diagnosis, differential diagnosis and treatment of selected disorder with attention to their special features in different age periods.

Class syllabus:
Vomiting and abdominal pain – differential diagnosis Inflammatory bowel disorders Inflammatory heart disease Acute respiratory insufficiency, ARDS Acute states in pediatrics: acute renal failure, acute liver failure, acute pancreatitis, diabetic ketoacidosis Chnges in complete blood count, anemias an trombocytopenias in childhood Autoimmune disorders in childhood, Immune system in childhood ant itd disorders Intensive care in neonatology

Recommended literature:
Behrman, R. E.
Kliegman, R.M.,
Jenson, H.B. Nelson Textbook of Pediatrics. Philadelphia: W. B. Saunders Comp., 2011. ISBN 978143770755
Lissauer, T.,
Clayden, G. Illustrated textbook of Paediatrics. 2004. 410 s. ISBN 0-7234-3178-7
Behrman, R.E. Essentials of Pediatrics. Philadelphia: W.B.Saunders Comp., 2000. 795 pp.
Allen, Hugh D.
et al. Moss and Adams´ Heart Disease in Infants, Children and
Adolescents, Including the Fetus and Young Adult. Philadelphia:
Lippincott Williams & Wilkins, 2001. 1468 pp.

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 170

A	ABS0	B	C	D	E	FX
99,41	0,0	0,0	0,59	0,0	0,0	0,0

Lecturers: prof. MUDr. Peter Bánovčin, CSc., doc. MUDr. Ľubica Jakušová, PhD., prof. MUDr. Mgr. Miloš Jeseňák, PhD., MBA

Last change: 15.10.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KDD/2-JVL-573/17	Pediatrics (3)

Educational activities:
Type of activities: practicals
Number of hours:
per week: 16 **per level/semester:** 240
Form of the course: on-site learning

Number of credits: 6

Recommended semester: 11., 12..

Educational level: I.II.

Prerequisites:

Course requirements:
Exam consist of practical part - medical record work out at last practical and active discussion with the teacher during practicals

Learning outcomes:
Absolvent has practical skills in child care, from admittion to the hospital to discharge. Separate implementation of the history and physical examination. Proposal for diagnostic procedures, their interpretation, differential diagnosis. &work with medical documentation. Graduate knows basic diagnostic and treatment algorithms for the most common pediatric diseases.

Class syllabus:
Work at the department and in ambulance. Assisting in numerous diagnostic and therapeutics procedures. Work with documentation, admittion and discharge of patients. Evaluation of laboratory findings, biochemical tests, X-rays and ECG. Active participation in ward rounds, seminars and two duties within six hours.

Recommended literature:
Behrman, R. E.
Kliegman, R.M.,
Jenson, H.B. Nelson Textbook of Pediatrics. Philadelphia: W. B. Saunders Comp., 2011. ISBN 978143770755
Lissauer, T.,
Clayden, G. Illustrated textbook of Paediatrics. 2004. 410 s. ISBN 0-7234-3178-7
Behrman, R.E. Essentials of Pediatrics. Philadelphia: W.B.Saunders Comp., 2000. 795 pp.
Allen, Hugh D.
et al. Moss and Adams´ Heart Disease in Infants, Children and
Adolescents, Including the Fetus and Young Adult. Philadelphia:
Lippincott Williams & Wilkins, 2001. 1468 pp.

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 381

A	ABS0	B	C	D	E	FX
79,0	0,0	13,39	3,41	1,84	2,1	0,26

Lecturers: prof. MUDr. Peter Bánovčin, CSc., doc. MUDr. Ľubica Jakušová, PhD., prof. MUDr. Mgr. Miloš Jeseňák, PhD., MBA

Last change: 14.02.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚFa/J-S-VL-529/19	Pharmacology (1)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 2 / 2 **per level/semester:** 30 / 30
Form of the course: on-site learning

Number of credits: 5

Recommended semester: 7.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Pathological physiology II.

Course requirements:
1. To participate actively on the practical sessions;
2. To pass 2 written tests during the semester or one final test in the end of semester.
The minimal limit of successfulness: 60 %. Assessment: A: 91–100 %, B: 81–90 %, C: 73–80 %, D: 66–72 %, E: 60–65 %, Fx: 60 % and lower.
Scale of assessment (preliminary/final): 50/50

Learning outcomes:
The student graduated a subject knows:
The basic pharmacokinetic principles (absorption, distribution, biotransformation and elimination of drugs) and factors influencing the fate of drugs in organism;
The essential of pharmacodynamics –mechanisms of drugs action from the molecular to the level of the organism;
Drugs prescription – the basic rules and methods for prescription of brand products (HVLP) as well individually prepared medicinal products (ILP);
The following special pharmacology topics: Pharmacological groups of agents influencing vegetative nervous system; Respiratory system; Gastrointestinal system; Anticancer agents and essential of Immunopharmacology; Drugs influencing the metabolism of hormones, homeostasis of minerals, bone metabolism and Pharmacology of vitamins.
The main properties of drugs classified as members of different pharmacological groups from the following point of view: mechanism of action, indications, contraindications, side effects, important interactions and dosage.

Class syllabus:
General Pharmacology:
Introduction to pharmacology: basic definitions, kinds of therapy, the route of drug administrations; Drug metabolism: absorption, distribution, metabolism, elimination and excretion of drugs; The basic pharmacokinetic parameters; Basics of pharmacodynamics: mechanism of drug action, the drug action at molecular level; Factors influencing pharmacokinetic and pharmacodynamic of drugs, endogenous and exogenous factors determined drug effect.

Basics of drugs prescription:
Pharmacopoeia, classification and nomenclature of drugs, ways of administration, prescription, rules for drugs prescribing – trade products, extemporaneous drugs, opiates, antibiotics;
Prescription of liquid drug forms – trade products, basic extemporaneous drugs;
Prescription of solid and soft drug forms – trade products, basic extemporaneous drugs;
Special Pharmacology:
Pharmacology of ANS – parasympathomimetics, parasympatholytics; sympathomimetics; sympatholytics;
Pharmacology of GIT - treatment of peptic ulcer disease and inflammatory bowel disease, antiemetics, emetics, prokinetic agent, spasmolytics, treatment of diarrhoea, laxatives, pancreatic enzymes, drugs affecting the function of the bile ducts;
Pharmacology of respiratory system - treatment of asthma and COPD, antitussives and expectorants;
Hormones: pancreatic hormones and antidiabetic drugs, adrenal hormones, sex hormones and contraceptives, the hypothalamus and pituitary hormones, thyroid hormones and antityroidal drugs;
Drugs affecting homeostasis of minerals, bone metabolism, vitamins;
Principles of anticancer pharmacotherapy;
Fundamentals immunopharmacology (immunosuppression, immunomodulation);
Clinical trials of drugs;
Practical lessons aimed at the application of acquired knowledge obtained from the subjects Pharmacology 1. in clinical cases.

Recommended literature:

Rang HP, Dale MM, Ritter JM.: Pharmacology. 7th ed., Churchill Livingstone, 2012.
Rang HP, Dale MM: Pharmacology. 8th ed., Churchill Livingstone, 2015.
Katzung, B.G.: Basic Clinical Pharmacology, 12th edition, New York : McGraw-Hill, 2015.
Katzung, B.G.: Basic Clinical Pharmacology, 11th edition, New York : McGraw-Hill, 2013.

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 192

A	ABS0	B	C	D	E	FX
8,33	0,0	25,52	31,77	20,83	13,54	0,0

Lecturers: prof. RNDr. Soňa Fraňová, PhD., prof. MUDr. Mgr. Juraj Mokrý, PhD., doc. MUDr. Martina Šutovská, PhD.

Last change: 03.09.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.ÚFa/J-S-VL-530/18	**Course title:** Pharmacology (2)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 2 / 2 **per level/semester:** 30 / 30
Form of the course: on-site learning

Number of credits: 5

Recommended semester: 8.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Pharamcology I.

Course requirements:
During semester: The successful passing three written tests or one final test.
Final exam: Written test and oral examination (Content of final exam: General and Special Pharmacology, Drug prescription)
The minimal limit of successfulness: 60 %. Assessment: A: 91–100 %, B: 81–90 %, C: 73–80 %, D: 66–72 %, E: 60–65 %, Fx: 60 % and lower.
Scale of assessment (preliminary/final): 30/70

Learning outcomes:
The graduate of Pharmacology 2. acquire the extensive knowledge concerning the pharmacology of drugs affecting the functions of the central and peripheral nervous systems. After graduation of the subject, students gain detailed information about the pharmacotherapy of the cardiovascular system diseases, pain and inflammation, rational use of antibiotics and chemotherapeutic agents and poisoning treatment. Each part of the special pharmacology is aimed at pharmacological properties of selected representatives in terms of mechanism, indications, contraindications, side effects, serious interactions, dosage and pharmacokinetic parameters.

Class syllabus:
Pharmacology of CNS: classification of the receptor systems and drugs; Sedatives; Anxiolytics; Antidepressants; Antimanics; Neuroleptics; Nootropic and cognitive substances; Anticonvulsants; Antiparkinsonic drugs;
Drugs used in anaesthesiology: General anaesthetics; Local anaesthetics; Muscle relaxants;
Pharmacology of CVS: Therapy of hypertension; Therapy of heart failure; Antiarrhythmic drugs; Treatment of angina pectoris; Peripheral vasodilators; Anticoagulants; Thrombolytics; Prevention and therapy of CVS diseases; Antithrombotics, Lipid-lowering agents; Pharmacothepy of obesity;
Antibiotics and chemotherapeutics: Inhibitors of bacterial cell wall synthesis, Inhibitors of protein and nucleic acid synthesis; Antituberculotic drugs; Antifungal agents; Anthelmintics; Antimalarial; Antivirals drugs;
Treatment of pain and inflammation: Opioid analgesics and adjuvant therapy; Non-opioid analgesics; Principles of pain treatment; NSAIDs and Antirheumatic drugs;

Principles of toxicology: Treatment of drug poisoning; Drug addiction and addiction therapy; Pharmacology of autacoids;
Practical lessons aimed at the application of acquired knowledge obtained from the subjects Pharmacology 1. and Pharmacology 2. in clinical cases.

Recommended literature:

Lincová, D., Farghali, H. A kol.: Základní a aplikovaná farmakologie, II. vydání. Galén, 2007.
Mirossay, L., Mojžiš, J. a kol.: Základná farmakológia a farmakoterapia, Equilibria, 2006.
Hrková, V. a kol.: Receptúrna propedeutika, Martin, Osveta, 1993.
Rang HP, Dale MM, Ritter JM.: Pharmacology. 7th ed., Churchill Livingstone, 2012. Rang HP, Dale MM: Pharmacology. 8th ed., Churchill Livingstone, 2015. Katzung, B.G.: Basic Clinical Pharmacology, 12th edition, New York : McGraw-Hill, 2015. Katzung, B.G.: Basic Clinical Pharmacology, 11th edition, New York : McGraw-Hill, 2013.

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 241

A	ABS0	B	C	D	E	FX
28,22	0,0	22,82	20,75	12,86	10,79	4,56

Lecturers: prof. RNDr. Soňa Fraňová, PhD., doc. MUDr. Martina Šutovská, PhD., prof. MUDr. Mgr. Juraj Mokrý, PhD.

Last change: 28.01.2020

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.KPF/J-S-VL-561/19	**Course title:** Phthisiology
Educational activities: **Type of activities:** practicals / lecture **Number of hours:** **per week:** ,5 / ,5 **per level/semester:** 7,5 / 7,5 **Form of the course:** on-site learning	
Number of credits: 1	
Recommended semester: 10.	
Educational level: I.II.	
Prerequisites:	
Recommended prerequisites: -S-VL-518 Microbiology 2, J-S-VL-530 Pharmacology 2, J-S-VL-541 Internal Medicine 3	
Course requirements: 1. To attend both practicals. 2. To pass through the final evaluation. The final evaluation is performed by means of a written test. The pass-through criterion: 17%. Evaluation: A: 100%, B: 83%, C: 67%, D: 50%, E: 33%, Fx: 17% Scale of assessment (preliminary/final): 0,5/0,5 C (1 credit)	
Learning outcomes: Student learns the current knowledge on epidemiology, clinical picture, diagnostics, differential diagnostics, treatment, and prevention of tuberculosis.	
Class syllabus: Lectures: 1. Pulmonary Tuberculosis: Etiology, Epidemiology, Pathogenesis and Pathology, Clinical Manifestation. 2. Pulmonary Tuberculosis: Diagnostics, Treatment. 3. Pulmonary Tuberculosis Combined with Other Severe Diseases. Extrapulmonary Tuberculosis. Control of Tuberculosis. Practicals: 1. Pulmonary Tuberculosis: Etiology, Epidemiology, Clinical Manifestation, Examination of Patients. 2. Pulmonary Tuberculosis: Diagnostics, Treatment, Examination of Patients.	
Recommended literature: Harrison, a kol.aut.: Princípy Internej Medicíny. USA, 1994, Vol.1., 1143 p. Tuberculosis: p. 710-736. Frieden, T.: Toman,s Tuberculosis. Case Detection, Treatment and Monitoring. Second edition, 2004, 350 p.	
Languages necessary to complete the course: english	

Notes:

Past grade distribution
Total number of evaluated students: 167

A	ABS0	B	C	D	E	FX
86,23	0,0	11,98	1,8	0,0	0,0	0,0

Lecturers: doc. MUDr. Robert Vyšehradský, PhD.

Last change: 16.03.2020

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚTV/J-S-VL-TV1/15	Physical Training (1)

Educational activities:
Type of activities: practicals
Number of hours:
per week: 2 **per level/semester:** 30
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 1.

Educational level: I.II.

Prerequisites:

Course requirements:
presence

Learning outcomes:
The graduate of this subject personify his attitude to the necessity of healthy life style. He will understand the health sense of active movement for the human health. He will bring into his attitude and conviction the role of active movement, sport as a effective prevention against civilization illnesses of today as a part of therapy to improve the state of health of the whole population. He will become own surely about the importance of sport and motion activities by harmonic young human character progress.

Class syllabus:
Deepen the base of collective games knowledge (basketball, volleyball, football, floorball, hockeyball). Explain and show the rules on examples. Collective games needs integration of individual ability and skills for its profit to the whole collective. All listed games support the active life style and offer progress of balance between physical and mental work of students at medical faculty.

Recommended literature:
Lubor Tománek , Teória a didaktika basketbalu
Ludmila Zapletalová, Vladimír Přidal, Peter Mačura, 1996 Teória a didaktika volejbalu

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 238

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

Lecturers: PaedDr. Jozef Šimeček

Last change: 19.03.2018

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚTV/J-S-VL-TV2/15	Physical Training (2)

Educational activities:
Type of activities: practicals
Number of hours:
per week: 2 **per level/semester:** 30
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 2.

Educational level: I.II.

Prerequisites:

Course requirements:
presence

Learning outcomes:
The graduate of this subject personify his attitude to the necessity of healthy life style. He will understand the health sense of active movement for the human health. He will bring into his attitude and conviction the role of active movement, sport as a effective prevention against civilization illnesses of today as a part of therapy to improve the state of health of the whole population. He will become own surely about the importance of sport and motion activities by harmonic young human character progress.

Class syllabus:
Deepen the base of collective games knowledge (basketball, volleyball, football, floorball, hockeyball). Explain and show the rules on examples. Collective games needs integration of individual ability and skills for its profit to the whole collective. All listed games support the active life style and offer progress of balance between physical and mental work of students at medical faculty.

Recommended literature:
Lubor Tománek , Teória a didaktika basketbalu
Ludmila Zapletalová, Vladimír Přidal, Peter Mačura, 1996 Teória a didaktika volejbalu

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 183

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

Lecturers: PaedDr. Jozef Šimeček

Last change: 19.03.2018

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚTV/J-S-VL-TV3/16	Physical Training (3)

Educational activities:
Type of activities: practicals
Number of hours:
per week: 2 **per level/semester:** 30
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 3.

Educational level: I.II.

Prerequisites:

Course requirements:
presence

Learning outcomes:
The graduate of this subject personify his attitude to the necessity of healthy life style. He will understand the health sense of active movement for the human health. He will bring into his attitude and conviction the role of active movement, sport as a effective prevention against civilization illnesses of today as a part of therapy to improve the state of health of the whole population. He will become own surely about the importance of sport and motion activities by harmonic young human character progress.

Class syllabus:
Deepen the base of collective games knowledge (basketball, volleyball, football, floorball, hockeyball). Explain and show the rules on examples. Collective games needs integration of individual ability and skills for its profit to the whole collective. All listed games support the active life style and offer progress of balance between physical and mental work of students at medical faculty.

Recommended literature:
Lubor Tománek , Teória a didaktika basketbalu
Ludmila Zapletalová, Vladimír Přidal, Peter Mačura, 1996 Teória a didaktika volejbalu

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 164

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

Lecturers: PaedDr. Jozef Šimeček

Last change: 19.03.2018

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚTV/J-S-VL-TV4/16	Physical Training (4)

Educational activities:
Type of activities: practicals
Number of hours:
per week: 2 **per level/semester:** 30
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 4.

Educational level: I.II.

Prerequisites:

Course requirements:
presence

Learning outcomes:
The graduate of this subject personify his attitude to the necessity of healthy life style. He will understand the health sense of active movement for the human health. He will bring into his attitude and conviction the role of active movement, sport as a effective prevention against civilization illnesses of today as a part of therapy to improve the state of health of the whole population. He will become own surely about the importance of sport and motion activities by harmonic young human character progress.

Class syllabus:
Deepen the base of collective games knowledge (basketball, volleyball, football, floorball, hockeyball). Explain and show the rules on examples. Collective games needs integration of individual ability and skills for its profit to the whole collective. All listed games support the active life style and offer progress of balance between physical and mental work of students at medical faculty.

Recommended literature:
Lubor Tománek , Teória a didaktika basketbalu
Ludmila Zapletalová, Vladimír Přidal, Peter Mačura, 1996 Teória a didaktika volejbalu

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 141

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

Lecturers: PaedDr. Jozef Šimeček

Last change: 19.03.2018

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.ÚFy/J-S-VL-515/16	**Course title:** Physiology (1)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 5 / 4 **per level/semester:** 75 / 60
Form of the course: on-site learning

Number of credits: 9

Recommended semester: 3.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Medical Biophysics

Course requirements:
1. To participate actively on the practical sessions, to take part at 93 % of practicals
2. To pass 2 credit tests by minimum of 60% (Physiology of blood, Physiology of cardiovascular system)
3. To prepare and present one physiological topic (seminar)
Scale of assessment (preliminary/final): 100/0

Learning outcomes:
After completion of the subject the student obtains knowledge and recognizes the principles of the human body functions on the different levels: molecular, subcellular, cellular, tissue, organ and systemic. The major emphasize is on the mechanisms and regulations of functions. The principles are applied in the complex interactions between the systems maintaining the constant internal environment (homeostasis) and external environment. In Physiology 1 the student understands the functions of Blood, Cardiovascular System and Respiratory System. The student reaches deep knowledge by means of interactive lectures, case studies analysis and simulation technologies.
The student becomes experienced in examinations of the human body functions by modern clinical methods during practical training.

Class syllabus:
Physiology of blood (volume, composition, erythrocytes, ESR, leukocytes, platelets, hemostasis, blood groups, transfusion, principles of immunophysiology). Cardiovascular system (physiology of the heart, cardiac cycle and output, heart sounds, methods for examinations of the heart and vessels, regulation, reflexes, hemodynamics, circulation in the special regions, lymphatic circulation, ontogenetic aspects of the cardiovascular system from intrauterine life up to the elderly). Respiratory system (ventilation, mechanics of breathing, function tests, gas exchange, gas transport, pulmonary surfactant, oxygen therapy, artificial ventilation, regulation of the breathing, ontogenetic aspects).

Recommended literature:

Barett KE et al.: Ganong´s Review of Medical Physiology. 23rd Edition. New York: McGraw-Hill 2010, 800 pp. ISBN: 978-007-127066-3.
Guyton AC, Hall JE.: Textbook of Medical Physiology. 11th Edition. Philadelphia: Elsevier Saunders, 2006, 1152 pp. ISBN: 978-0-7216-0240-0.
Javorka, K. et al.: Medical Physiology. Laboratory manual.Bratislava: Comenius University, 2013, 160 pp. ISBN: 978-80-223-3485-3
Koeppen BM, Stanton BA: Berne & Levy Physiology. 6th Edition. Philadelphia: Mosby/Elsevier, 2008, 864 pp. ISBN: 978-0-323-04582-7.

Languages necessary to complete the course:
english

Notes:

Past grade distribution
Total number of evaluated students: 603

A	ABS0	B	C	D	E	FX
23,88	0,33	19,07	36,32	15,26	5,14	0,0

Lecturers: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Kamil Javorka, DrSc., prof. MUDr. Michal Javorka, PhD., prof. MUDr. Daniela Mokrá, PhD., prof. MUDr. Ingrid Tonhajzerová, PhD.

Last change: 15.03.2018

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚFy/J-S-VL-516/16	Physiology (2)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 5 / 4 **per level/semester:** 75 / 60
Form of the course: on-site learning

Number of credits: 10

Recommended semester: 4.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Physiology 1

Course requirements:
1. To participate actively on the practical sessions, to take part at 93 % of practicals
2. To pass 2 credit tests by minimum of 60% (Physiology of respiratory system, Physiology of GIS, Physiology of nervous system, senses and muscles)
3. To prepare and present one physiological topic (seminar)
Scale of assessment (preliminary/final): 50/50

Learning outcomes:
After completion of the subject the student obtains knowledge and recognizes the principles of the human body functions on the different levels: molecular, subcellular, cellular, tissue, organ and systemic. The major emphasize is on the mechanisms and regulations of functions. The principles are applied in the complex interactions between the systems maintaining the constant internal environment (homeostasis) and external environment. In Physiology 2 the student understands the functions of Gastrointestinal system, Muscles, Reproductive System, Endocrine System and Neural System. The student reaches deep knowledge by means of interactive lectures, case studies analysis and simulation technologies.
The student becomes experienced in examinations of the human body functions by modern clinical methods during practical training.

Class syllabus:
Physiology of gastrointestinal system (physiology of the mouth, esophagus, stomach, liver and biliary system, digestion and absorption). Renal physiology. Physiology of muscles (skeletal and smooth). Thermoregulation and fever. Physiology of the nervous system (peripheral, autonomic and central). Physiology of the endocrine system. Ontogenetic aspects of the systems. Ageing.

Recommended literature:
Barett KE et al.: Ganong´s Review of Medical Physiology. 23rd Edition. New York: McGraw-Hill 2010, 800 pp. ISBN: 978-007-127066-3.
Guyton AC, Hall JE.: Textbook of Medical Physiology. 11th Edition. Philadelphia: Elsevier Saunders, 2006, 1152 pp. ISBN: 978-0-7216-0240-0.

Javorka, K. et al.: Medical Physiology. Laboratory manual.Bratislava: Comenius University, 2013, 160 pp. ISBN: 978-80-223-3485-3.
Koeppen BM, Stanton BA: Berne & Levy Physiology. 6th Edition. Philadelphia: Mosby/Elsevier, 2008, 864 pp. ISBN: 978-0-323-04582-7.

Languages necessary to complete the course:
english

Notes:

Past grade distribution
Total number of evaluated students: 613

A	ABS0	B	C	D	E	FX
25,12	0,0	26,43	17,13	13,54	9,46	8,32

Lecturers: prof. MUDr. Andrea Čalkovská, DrSc., prof. MUDr. Kamil Javorka, DrSc., prof. MUDr. Michal Javorka, PhD., prof. MUDr. Daniela Mokrá, PhD., prof. MUDr. Ingrid Tonhajzerová, PhD.

Last change: 15.03.2018

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.PK/J-S-VL-548/18	Psychiatry (1)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 2 / 1 **per level/semester:** 30 / 15
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 8.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Medical psychology and basics of communication, neurology 1

Course requirements:
Requirements for Psychiatry I evaluation. 1. The participation in practicals is compulsory for at least 13-times (especially from 1st to 13th week). 2. Check in the course of practicals: - Evaluation till the end of 7th week: active participation in practicals; permanent study check (control question); examination of patients, case reports and analysis. - Evaluation till the end of 14th week: written test – minimal success 60 %; examination of patients, case reports and analysis; permanent study check (control question).

Learning outcomes:
After completion of the subject the student has a knowledge in basics of general psychiatry – student is able to understand content of the subject, etiopathogenesis, diagnostic methods and treatment of psychiatric disorders and general psychopathology, with an emphasis on communication with patients with impaired mental functions. Student is able to perform basic examination aimed to patient´s history and disturbed mental functions.

Class syllabus:
Characteristics and content of this scientific branch
Etiopathogenesis of psychiatric disorders
General psychopathology / disturbances of perception, gnostic disorders, disturbances of emotivity, thinking, volitional acting, consciousness, memory, intelect and personality/
Diagnostics of psychiatric disorders
Treatment and rehabilitation of psychiatric disorders
Some organizational, law and ethical aspects

Recommended literature:
Compulsory literature
Gelder, M. et al. Psychiatry. 3rd. ed. Oxford: Oxford University Press, 2006, 333 pp. ISBN 0-19-852863-9
Recommended literature

Gelder, M. et al.: Oxford Textbook of Psychiatry. Oxford: Oxford University Press, 1998, 944 pp. ISBN 0-19-262501-2
Moore, D. P., Jefferson, J. W.: Handbook of Medical Psychiatry. St. Louis: Mosby, 1996, 545 pp. ISBN 0-8151-6484-X
Andreasen, N. C., Black, D. W.: Introductory Textbook of Psychiatry. Washington: American Psychiatric Press, 1991, 565 pp. ISBN 0-88048-112-9
Kolibáš, E.: Introduction to Clinical Psychiatry. Bratislava: Ekol, 1996, 107 pp. ISBN 80-967610-0-5
Janicak, P.G.: Handbook of Psychopharmacotherapy. Philadelphia: Lippincott Williams & Wilkins, 1999, 391 pp. ISBN 0-683-30722-3
Stefan, M., Travis, M., Murray, R.M.: An Atlas of Schizophrenia. London: Parthenon Publishing Group, 2002, 98 pp. ISBN 1-85070-074-5
Sartorius, N., Schulze, H.: Reducing the Stigma of Mental Illness. Cambridge: Cambridge University Press, 2005, 238 pp. ISBN-13: 978 0 521 54943 1

Languages necessary to complete the course:
englich

Notes:

Past grade distribution
Total number of evaluated students: 279

A	ABS0	B	C	D	E	FX
86,74	0,0	7,53	3,23	1,79	0,72	0,0

Lecturers: doc. MUDr. Igor Ondrejka, PhD., MUDr. PhDr. Igor Hrtánek, PhD.

Last change: 20.08.2018

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.PK/J-S-VL-549/19	Psychiatry (2)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 2 / 1 **per level/semester:** 30 / 15
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 9.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
psychiatry 1, neurology 2

Course requirements:
1. Evaluation till the end of 7th week: active participation in practicals; permanent study check (control question), examination of patients, case reports and analysis.
2. Evaluation till the end of 14th week: written test – minimal success 60 %; examination of patients, case reports and analysis.
Rating: A/1 = 91 – 100 %; B/1,5 = 81 – 90 %; C/2 = 73 – 80 %; D/2,5 = 66 – 72 %; E/3 = 60 – 65 %, Fx = less than 60 %
Scale of assessment (preliminary/final): 20/80

Learning outcomes:
After completion of the subject the student has a knowledge in basics of special psychiatry – student is able to understand specific mental disorders. Student is skilled in basic diagnostics, differential diagnostics and therapy of specific groups of mental disorders, in principles of first aid in psychiatry. He/she has knowledges about legal status of mentally ill. Student fulfils requirements for basics of communication with mentally ill patients and communication with another specialists and psychiatrists.

Class syllabus:
Programme of Lectures in Psychiatry
1. Affective disorders I. Depressive disorders.
2. Affective disorders II. Manic disorders. Bipolar affective disorders. /
3. Schizophrenia, schizotypal disorder, persistent delusional disorders, schizoaffective disorder.
4. Reactive disorders, neurotic disorders. Posttraumatic stress disorders. Adjustment disorders. Somatoform disorders. Eating disorders. Sleep disorders.
5. Psychoactive substance use disorders. Psychoactive substance dependence due to alcohol and other drugs. Abuse and harmful use, dependence, intoxication, withdrawal state.
6. Organic and symptomatic mental disorders. Old age psychiatry.
7. Child and adolescent psychiatry.
Programme of Practical Sessions in Psychiatry
1. Affective disorders I. Depressive disorders.

2. Affective disorders II. Manic episode. Bipolar affective disorder.
3. Persistent affective states. Other affective disorders and affective disorders not otherwise specified. Differential diagnosis and treatment of affective disorders.
4. Schizophrenia.
5. Persistent delusional disorders. Delusional disorders (paranoia), paraphrenia.
6. Schizotypal disorder. Schizoaffective disorders.
7. Reactive disorders, neurotic disorders. Posttraumatic stress disorder. Adjustment disorder. Neurosis, somatoform disorders
8. Personality disorders and conduct disorders. Specific personality disorders.
9. Alcoholism. Clinical findings, complication, alcoholic psychoses.
10. Other drug dependences. Clinical findings, intoxication, and withdrawal phenomena.
11. Symptomatic mental disorders. Symptomatic and organic mental disorders. Basic concepts, clinical features, diagnosis, treatment.
12. Organic mental disorders. Dementias and other organic mental disorders. Mental retardation.
13. Child psychiatry. Mental disorders of childhood and adolescence. Diagnosis and treatment. Psychiatric sexology.
14. Some legal aspects and matters of organization in psychiatry. Practical aspects of care in psychiatry. Forensic services.

Recommended literature:

Compulsory literature:

Gelder, M. et al.: Psychiatry. 3rd. Ed. Oxford: Oxford University Press, 2006, 333 pp. ISBN 0-19-852863-9

Recommended literature:

Gelder, M. et al.: Oxford Textbook of Psychiatry. Oxford: Oxford University Press, 1998, 944 pp. ISBN 0-19-262501-2
Moore, D. P., Jefferson, J. W.: Handbook of Medical Psychiatry. St. Louis: Mosby, 1996, 545 pp. ISBN 0-8151-6484-X
Andreasen, N. C., Black, D. W.: Introductory Textbook of Psychiatry. Washington: American Psychiatric Press, 1991, 565 pp. ISBN 0-88048-112-9
Kolibáš, E.: Introduction to Clinical Psychiatry. Bratislava: Ekol, 1996, 107 pp. ISBN 80-967610-0-5
Janicak, P.G.: Handbook of Psychopharmacotherapy. Philadelphia: Lippincott Williams & Wilkins, 1999, 391 pp. ISBN 0-683-30722-3
Stefan, M., Travis, M., Murray, R.M.: An Atlas of Schizophrenia. London: Parthenon Publishing Group, 2002, 98 pp. ISBN 1-85070-074-5
Sartorius, N., Schulze, H.: Reducing the Stigma of Mental Illness. Cambridge: Cambridge University Press, 2005, 238 pp. ISBN-13: 978 0 521 54943 1

Languages necessary to complete the course:
english

Notes:

Past grade distribution
Total number of evaluated students: 176

A	ABS0	B	C	D	E	FX
57,95	0,0	22,73	18,75	0,57	0,0	0,0

Lecturers: doc. MUDr. Igor Ondrejka, PhD., MUDr. PhDr. Igor Hrtánek, PhD.

Last change: 04.12.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.ÚVZ/J-S-VL-617/19	**Course title:** Public Health (1)

Educational activities:
Type of activities: practicals / seminar
Number of hours:
per week: 3 / 1 **per level/semester:** 45 / 15
Form of the course: on-site learning

Number of credits: 4

Recommended semester: 7.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Physiology 2, Propedeutics of internal diseases 1, Medical ethics

Course requirements:
SCORING SYSTEM OF THE COURSE a/ 100% obligatory attendance according to the schedule – 13 seminars / 1 seminar for 2 point in total max. 26 points b/ two ppt presentations – students will prepare individually their presentations * 7 points for presentation / in total 14 points c/ written exam – /2 questions / 1 question for 30 points max 60 points - structured concise elaboration of answers The teacher can assign max. 2 extra bonus points for outstanding activity of a student. In selected practicals, learned knowledge on issues dealt during the session can be evaluated via short tests. *Each student chooses the theme of the presentation from the given list so that each student will prepare and present two themes. Students should prepare the presentations and upload them into the moodle e-learning system until deadlines stated specifically in each theme to be presented in the relevant practical. In accordance with Internal Regulation of Comenius University in Bratislava (No.8/2013, Part IV Study organization at CU, Art. 21 par. 9): student´s absence in educational activities may be excused if the student has been ill or if there are other obstructions on the side of the student (public post, civic duties carried out in public interest, maternity or parental leave, quarantine, sick family member care, medical examination or treatment, birth of a child to the student´s wife, accompanying a family member to a health care facility, death of a family member, student´s wedding or a wedding of a student´s close relative, unexpected traffic collapse or delays in regular public transport, moving) that will be proved by the student by respective documents. Requirements for assignment for the pre-term exam (terms before Christmas): • 2 ppt presentations prepared and presented during practicals • 100% attendance at practicals. Only one excused missing practical is allowed! The teacher can assign max. 2 extra bonus points for outstanding activity of a student. In selected practicals, learned knowledge on issues dealt during the session can be evaluated via short tests. Excuse of missing seminars (according to the Study order of JFMCU as well as to the Dean´s direction) is possible only in case of less than 20% of missing seminars (3 seminars). In case of 1 missing seminar student can be excused without compensation or substitution but doesn´t get points for missing seminar.* In case of more than one missing seminar (i.e. 2 or 3 missed seminars), these should be either substituted (i.e. to come with other group during the given week) or compensated. Compensation means preparation of the short thesis on the topic of the missing seminar during compensation classes (substitution week = 14th week of semester).

*Excused seminar does not mean student gets points. Student can get points only upon substitution or compensation of the missing seminars. In the case of more than 20% (4 and more) of missing seminars their excuse is possible only upon a written request and the approval of the dean of the faculty.
Total evaluation (max. 100 points): Acquired points Evaluation
100 – 91 A (excellent - 1)
90 – 81 B (very good - 1, 5)
80 – 73 C (good - 2)
72 – 66 D (satisfying - 2,5)
65 – 60 E (enough - 3)
59 ....----- and less Fx (not enough - 4)
For a successful completion of the course, at least 20 points for the written exam and 60 points in total evaluation are required.
Scale of assessment (preliminary/final): 100/100

Learning outcomes:
After completion of the subject the student understands the role of hygiene (as a preventive medical branch) within public health in prevention, health promotion and protection. The student is able to apply theoretical knowledge in practice. The student is able to identify risk factors influencing health status of individuals and population. The student is able to apply health and preventive strategies on a community level to improve health of different population groups living in different conditions and environments. The student is able to analyse methods of monitoring of population health, its indicators, morbidity, mortality, social determinants of health, and health statistics. The student understands importance of health promoting and preventive programs, basic principles of health care economy, health care systems, and organization of health care in the world. The student is able to apply knowledge to consistent preventive thinking and to act in health related issues and in relevant research, to interpret and implement health promotion and protection, and prevention of diseases.

Class syllabus:
Public Health. Prevention, health protection and promotion. Environmental hygiene. Hygiene of children and adolescent. Occupational Health. Radiation hygiene. Nutritional hygiene. Social medicine - history, research methods. World Health Organization (WHO), Red Cross Movement , European Centre for Disease Control (ECDC) Prevention and control of chronic diseases. Basic demographic indicators. Indicators of population health. Social determinants of health. Healthcare systems in the world – definitions, models. Health care facilities, health care economy and policy. Health inequalities, equity in health. Quality in health care. Evidence-based health care. Modeling and simulation in medical and health sciences.

Recommended literature:
Obligatory literature:
RIMÁROVÁ, K.: Environmental Medicine – Hygiene. Košice, Univerzita Pavla Jozefa Šafárika, 2006, 150 p. ISBN: 8070976462
KOSTIČOVÁ et al. An Introduction to Social Medicine. Asklepios, Bratislava 2011 ISBN: 978-80-7167-153-4
Recommended literature:
BENCKO,V. et al.: Hygiene & Epidemiology. Selected chapters. Prague: The Karolinum Press, 2004, 270 p.
LEVY, B.C. et al.: Occupational and Environmental Health IV. Ed, Lippincott Wiliams and Wilkins, Philadelphia, 2006, 773 p. ISBN: 978-0-7817-5551-1
http://www.who.int/phe/health_topics/en/

Keeping healthy. ECDC, 2010. http://www.ecdc.eu.int/
Protecting Health in Europe. ECDC, 2010. http://www.ecdc.eu.int/
SIGN50. Scottish Intercollegiate Guidelines Network, 2008. Revised Edition. (http://www.sign.ac.uk/guidelines/fulltext/50/index.html)
PENCHEON, D. et al.: Oxford Handbook of Public Health Practice. Oxford University Press, 2006, 691 p. ISBN 978-0-19856655-7
WEBSTER-GANDY, J. et al.: Oxford Handbook of Nutrition and Dietetics. Oxford University Press, 2006, 731 s. ISBN 978–0–19–856725–7.
https://moodle.uniba.sk

Languages necessary to complete the course:
english

Notes:

Past grade distribution
Total number of evaluated students: 195

A	ABS0	B	C	D	E	FX
55,9	0,0	31,28	10,26	2,56	0,0	0,0

Lecturers: prof. MUDr. Henrieta Hudečková, PhD., MPH, prof. MUDr. Tibor Baška, PhD.

Last change: 21.08.2020

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚVZ/J-S-VL-618/19	Public Health (2)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 1 / 1 **per level/semester:** 15 / 15
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 10.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Public Health 1

Course requirements:
EVALUATION OF THE COURSE
1. Active attendance (100%) at the practicals: 2 points for each session (max. 10 points)
2. Multi-choice test : 15 questions – 2 points each (max. 30 points)
3. Final oral examination (the student draws 2 questions) (max. 60 points)
Final evaluation (max. 100 points):
Achieved points
Evaluation
100 – 91 A (excellent - 1)
90 – 81 B (very good – 1.5)
80 – 73 C (good - 2)
72 – 66 D (satisfactory – 2.5)
65 – 60 E (sufficient - 3)
59 and less Fx (fail - 4)
For successful completion of the course, at least 20 points for oral exam and 60 points in final evaluation are needed. Only students attending all practicals are eligible to sign for preterm exam.
Scale of assessment (preliminary/final): 100/100

Learning outcomes:
After completion of the subject the student understands epidemiological methods, basic terms of medical statistics, features of epidemic process, immunization and vaccination, disinfection, disinsection, rodent control, main characteristics of communicable diseases occurrence, epidemiology of chronic non-communicable diseases and their primary, secondary and tertiary prevention, essential terms of tropical and travel medicine

Class syllabus:
Epidemiology – historical introduction, basic terms of epidemiology of communicable diseases (source, infectious agent, outbreak area, epidemic process and its conditions, features), principles of control of communicable diseases, preventive and repressive measures (measures in outbreak area), Epidemic measures in practice Prevention of hospital infections Epidemiological classification of

infectious diseases, international cooperation in communicable disease control Epidemiological method, population approach in study of diseases, descriptive methods, population and sample, determining of normality and abnormality, validity of diagnostic methods Analytic epidemiological studies (observational studies, intervention studies), screening, introduction to clinical epidemiology, principles of evidence based medicine Vaccinology - epidemiological importance, trends and perspectives. Vaccination schedule Essentials of travel and tropical medicine Epidemiology of chronic diseases, population intervention methods of prevention and health promotion Population health in Slovakia, Europe and World Multifactorial ethiology of non-communicable diseases. Risk factors and their evaluation Evaluation of cardiovascular risk Epidemiology and prevention of oncologic diseases. Current problems of epidemiology in European and Global context, a role of international institutions (WHO, ECDC)

Recommended literature:

OBLIGATORY LITERATURE:

Beaglehole, R., Bonita, R., Kjellsröm, T. Basic epidemiology. 2nd edition, Geneva:WHO, 2006. 213 pp. ISBN 92-4-154707-3

https://moodle.uniba.sk

recommended:

Preventing Chronic Diseases. A Vital Investment. WHO Global Report. Ženeva:WHO, 182 s. ISBN 92-4-156300-1

https://www.who.int/chp/chronic_disease_report/contents/en/

Global Status Report on NCDs. 2014 Geneva: World Health Organization. ISBN: 978 92 4 156485 4 : https://www.who.int/nmh/publications/ncd-status-report-2014/en/

Global health risks. 2009 Geneva: World Health Organization. http://www.who.int/healthinfo/global_burden_disease/global_health_risks/en/index.html

ECDC. Immunisation and vaccines. https://www.ecdc.europa.eu/en/immunisation-and-vaccines

Centers for Disease Control and Prevention http://www.cdc.gov/

World Health Organization www.who.int

Languages necessary to complete the course:

english

Notes:

Past grade distribution

Total number of evaluated students: 176

A	ABS0	B	C	D	E	FX
58,52	0,0	29,55	10,8	1,14	0,0	0,0

Lecturers: prof. MUDr. Henrieta Hudečková, PhD., MPH, prof. MUDr. Tibor Baška, PhD.

Last change: 24.08.2020

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.RK/J-S-VL-622/18	**Course title:** Radiology

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 1,5 / 1,5 **per level/semester:** 22,5 / 22,5
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 8.

Educational level: I.II.

Prerequisites:

Course requirements:
1. Mandatory requirements are: 100 % attendance of clinical practices and at least 7 lectures. It is necessary to write an essay for each missed practicum (the same topic; at least 2000 words). 2. During semester, students can be evaluated by short written test anytime (at least 60 % success rate is mandatory; A: 95 % - 100 %, B: 88 % - 94 %, C: 77 % - 87 %, D: 66 % - 76 %, E: 60 % - 65 %). 3. Practical exam (last practicum) – interpretation of basic pathological findings on X-Ray, ultrasound, CT, MR, DSA and MMG images. 4. Final oral exam (3 questions). No question can be graduated by FX to pass the exam successfully.

Learning outcomes:
During the course, medical students should become familiar with: 1. PRINCIPLES OF RADIOLOGICAL TECHNIQUES, PRINCIPLES OF RADIATION BIOLOGY AND RADIATION PROTECTION, CONTRAST MEDIA IN RADIOLOGY Origin of ionizing radiation and interaction of ionizing radiation, radiological quantities and units, fundamentals of ionizing radiation detection, physical characteristics of radiological devices used for diagnostics and therapy, basics of radiobiology, basic principles of radiation protection, radiation protection of health care workers when working with sources of radiation, radiation protection of patients , justification of medical exposures, medical exposure optimization, diagnostic reference levels for medical exposure, radiation exposure of patients in radiodiagnostics, special requirements for ensuring radiation protection of children and pregnant women, emergency situations and accidents. A student is capable to do the following: - To list the components of an X-ray unit and explain the process of X-ray generation - To describe the principles of and common indications for fluoroscopy - To list and describe the factors affecting image quality and dose in radiography and fluoroscopy - To describe the principles of soft tissue radiography in mammography - To describe the positioning of the patient for common radiographic techniques (e.g. chest X-ray) - To describe the normal anatomy of the various organs on radiographic images - To explain the concept of spatial, temporal and contrast resolution - To explain the principle of contrast in the different imaging modalities - To describe the relative diagnostic value of a computed tomography (CT) examination for the various organ systems and indications - To explain the physical basis of image formation of computed tomography - To describe the scale of Hounsfield units (HU) and the principle of window centre and width - To list normal levels of attenuation (in HU) for various organs and common pathologies (e.g. haemorrhage, calcifications) - To describe the normal

anatomy of the various organs on CT - To explain the relative value of a magnetic resonance imaging (MRI) examination for the various organ systems and indications - To describe the basic principles of image formation with MRI - To list the most commonly used pulse sequences in MRI (including T2-weighted sequences, T1-weighted sequences, fat suppressed sequences such as STIR sequences, FLAIR sequences, diffusion-weighted imaging) - To describe the absolute or relative contraindications against MR imaging - To explain the safety issues in the MR environment with regard to patients and staff - To describe the normal anatomy of the various organs on MRI - To explain the relative value of an ultrasound examination for various organ systems and indications - To describe the basic principles of image formation with ultrasonography and to list the tissue properties that determine it - To list the frequency of transmission and different types of transducers for various indications for ultrasonography - To be aware of the indications and contraindications for contrast-enhanced ultrasonography - To describe the principles of the Doppler effect - To describe the normal anatomy of the various organs on ultrasonography - To describe the principles of digital subtraction angiography (DSA) - To have a basic understanding of the different types and techniques of image-guided interventions - To describe the basic infrastructure of imaging informatics, including Picture Archiving and Communication Systems (PACS) and Radiological Information Systems (RIS) - To list the sources and properties of ionising radiation and radioactive decay - To describe the generation of X-rays and their interaction with matter - To describe the most important dose measures, including absorbed energy dose (Gy), organ and effective doses (Sv) - To be familiar with the principles of the dose length product (DLP) - To explain stochastic, deterministic and teratogenic radiation effects - To describe the effects of ionising radiation on cells, tissues and organs and to list the mechanisms of repair - To list types and magnitudes of radiation risk from radiation exposure in medicine and to compare it to radiation exposure from natural sources - To list concepts of dose measurement and the relevant dose limits - To understand the As Low As Reasonably Achievable (ALARA) principle - To list the factors influencing image quality and dose in diagnostic radiology - To describe the indications for the use of X-ray contrast media in the study of various organs/organ systems - To describe the indications for the use of CT contrast media in the study of various organs/organ systems - To list typical risks and side effects of commonly used of iodinated contrast media (X-ray and CT contrast media) - To describe the indications for the use of MR contrast media in the study of various organs/organ systems - To list typical risks and side effects of commonly used MRI contrast media - To have a basic understanding of contrast media for ultrasonography - To have a basic understanding of the various timing phases of contrast media application and their respective values according to the clinical problem - To describe risk factors of contrast media nephrotoxicity and to list measures to reduce it - To have a basic understanding of nephrogenic systemic fibrosis (NSF) and to list measures to reduce it 2. NEURORADIOLOGY - To describe the normal anatomy and physiology of the brain, skull, skull base, spine, spinal cord and nerve roots on cross-sectional imaging - To describe the relative values of and indications for radiography, ultrasonography, CT and MRI in neuroradiology - To explain when to refer a patient to ultrasonography/Doppler sonography, CT or MRI in neuroradiology - To list typical imaging features of ischaemic and haemorrhagic stroke on cross-sectional imaging - To describe common imaging features of traumatic brain injury and spinal trauma on cross-sectional imaging - To list typical imaging features of white matter disease, inflammation and degeneration on cross-sectional imaging - To describe typical imaging features of the most common tumours of the brain and spine - To describe the anatomy and to describe typical imaging features of pathologies of pontocerebellar angle - To describe the acute headache imaging management and to describe typical imaging features of related diseases - To identify and describe the imaging features of brain complications: mass effect, infiltration, engagement, oedema, contrast enhancement - To have a basic knowledge of neuroradiological interventions including revascularisation and coiling - To have a basic understanding of the common indications, contraindications and limitations

in neuroradiology 3. HEAD AND NECK IMAGING - To describe the normal anatomy and physiology of the head and neck on cross-sectional imaging - To describe the relative values of and indications for radiography, fluoroscopy, ultrasonography, CT and MRI in head and neck imaging - To explain when to refer a patient to radiography, ultrasonography, CT or MRI of the head and neck - To describe common imaging manifestations of trauma, inflammation and infection of the head and neck region - To describe typical imaging manifestations of tumours of the head and neck region - To have a basic understanding of the common indications, contraindications and limitations in head and neck imaging 4. CARDIOVASCULAR RADIOLOGY - To describe the normal anatomy and physiology of the heart and vessels on radiographs, ultrasonography/ Doppler sonography, CT and MRI - To describe the relative values of and indications for radiography, ultrasonography, CT and MRI in cardiovascular imaging - To explain when to refer a patient to radiography, ultrasonography/Doppler sonography, CT or MRI of the cardiovascular system - To describe the different types of cardiac configuration on chest radiography - To explain which chambers form the border of the cardiac silhouette on chest radiography - To have a basic understanding of congenital heart disease and the diagnostic features on conventional radiographs - To differentiate radiological features and causes of cardiac enlargement, including acquired valvular disease and pericardial disease - To describe radiological features of vascular occlusion, stenosis and thrombosis - To explain the diagnostic evaluation of ischaemic heart disease - To describe the normal dimensions of the aorta and classify aortic aneurysms and dissections - To have a basic understanding of the common indications, contraindications and limitations in cardiovascular imaging 5. EMERGENCY RADIOLOGY - To have an understanding when to refer a patient to radiography, ultrasonography/Doppler sonography, CT, MRI or DSA in emergencies in adult and child age 6. INTERVENTIONAL RADIOLOGY - To describe the normal anatomy and physiology of the arterial and venous system and have an understanding of its relevance to interventional radiology - To list typical endovascular approaches to common disorders in interventional radiology - To list typical approaches for image-guided biopsy taking, placement of drainages and ablative techniques - To have an understanding of the risk involved in common interventional techniques - To list the standard procedure in emergency situations, including resuscitation techniques - To have a basic understanding of the common indications, contraindications and limitations in interventional radiology 7. CHEST RADIOLOGY AND BREAST IMAGING - To describe the anatomy and physiology of the respiratory system, heart and vessels, mediastinum and chest wall on radiographs and CT - To describe the relative values of and indications for radiography and CT in thoracic imaging - To explain when to refer a patient to radiography, CT or MRI of the chest - To have an understanding of imaging patterns in chest radiology including consolidations, nodules, hyperlucencies, hyperinflation - To describe the chest radiography signs, including silhouette sign, air bronchogram, air crescent sign, deep sulcus sign - To describe the imaging appearance of monitoring and support devices (“tubes and lines”) including endotracheal tubes, central venous catheters, nasogastric tubes, chest drains, pacemakers - To list the typical chest radiography appearances and common causes of pleural effusion - To describe the clinical and imaging features of pneumothorax and tension pneumothorax - To list typical imaging features of pneumonia on radiographs and CT - To list typical imaging features of emphysema on radiographs and CT - To describe the typical imaging appearances of bronchiogenic carcinoma and pulmonary metastases on radiographs and CT - To list the typical imaging patterns of mediastinal masses on radiographs and CT - To have an understanding of the clinical work-up of lung nodules - To describe the imaging signs of pulmonary embolism - To have a basic understanding of the common indications, contraindications and limitations in thoracic imaging - To be aware of the differences between high resolution CT (HRCT) of the chest, CT angiography of the pulmonary arteries and staging CT of the chest - To describe the normal anatomy and physiology of the female breast, axilla and associated structures and how they

change with age - To have a basic understanding of the main radiological techniques employed in breast imaging (including mammography, ultrasonography and MRI) as well as their indications and relative diagnostic value - To know when to refer a patient for mammography, ultrasound and/or MRI of the breast - To have a basic understanding of the appearance of common benign diseases and of breast cancer on mammography - To have a basic understanding of techniques of ultrasound of the breast and of the appearance of common breast pathologies on ultrasound - To have a basic understanding of MRI of the breast - To have a basic understanding of the common indications, contraindications and limitations in breast imaging 8. GASTROINTESTINAL AND ABDOMINAL RADIOLOGY - To describe the normal anatomy and physiology of the internal viscera, abdominal organs, omentum, mesentery and peritoneum on conventional radiology, CT, ultrasound and MRI - To describe the relative values of and indications for radiography, fluoroscopy, ultrasonography, CT and MRI in gastrointestinal and abdominal imaging - To explain when to refer a patient to radiography, ultrasonography, CT or MRI of the abdomen - To list typical imaging features of acute abdominal conditions, including perforation, haemorrhage, inflammation, infection, obstruction, ischaemia and infarction on radiographs, ultrasound and CT - To list typical imaging features of colon tumours, diverticulitis, and inflammatory bowel diseases - To describe typical imaging features of primary and secondary tumours of the solid abdominal organs and of the gastrointestinal tract - To have a basic understanding of the common indications, contraindications and limitations in gastrointestinal and abdominal imaging 9. UROGENITAL RADIOLOGY, GYNAECOLOGICAL AND OBSTETRIC RADIOLOGY - To describe the normal anatomy and physiology of the retroperitoneum, kidneys, ureters, bladder, urethra and genital tract on ultrasonography and cross-sectional imaging - To describe the relative values of and indications for radiography, ultrasonography, CT and MRI in urogenital radiology - To explain when to refer a patient to radiography, CT or MRI of the urogenital system - To have an understanding of contrast medium management in renal failure - To list typical imaging features of the most common diseases of the kidneys and of the urinary tract - To list typical imaging features of the most common pathologies of the prostate, seminal vesicles and testes - To have a basic understanding of the common indications, contraindications and limitations in urogenital imaging - To describe the normal anatomy and physiology of the female reproductive organs on ultrasound, CT and MRI - To describe the relative values of and indications for radiography, ultrasonography, CT and MRI in gynaecological and obstetric imaging - To explain when to refer a patient to radiography, ultrasonography/Doppler sonography, CT or MRI in gynaecological and obstetric imaging - To explain how the female reproductive organs change with age and during pregnancy - To list typical imaging features of benign and malignant tumours of the female reproductive organs - To describe the typical imaging features of the most common disorders associated with pregnancy and delivery - To list techniques to reduce exposure doses for radiographic and CT examinations of the female reproductive organs - To have a basic understanding of the common indications, contraindications and limitations in gynaecologic and obstetric imaging 10. PAEDIATRIC RADIOLOGY - To describe normal paediatric anatomy and physiology and how it changes with age on conventional radiology, ultrasonography and cross-sectional imaging - To describe the relative values of and indications for radiography, ultrasound, radiography CT and MRI in children - To explain when to refer a child to radiography, ultrasonography/Doppler sonography, CT or MRI - To explain the increased vulnerability of children to ionizing radiation - To have a basic understanding of the typical imaging manifestations of accidental and non-accidental trauma - To list basic imaging features of the most common disorders of the brain, spine, chest, gastrointestinal tract and abdomen, urogenital system and musculoskeletal system in neonates, infants, children and adolescents - To have a basic understanding of the common indications, contraindications and limitations in paediatric imaging 11. MUSCULOSKELETAL IMAGING - To describe the normal anatomy and physiology of the musculoskeletal system on conventional

radiology and cross-sectional imaging - To describe the relative values of and indications for radiography, ultrasonography, CT and MRI in musculoskeletal imaging - To explain when to refer a patient to radiography, ultrasonography, CT or MRI of the musculoskeletal system - To list common imaging presentations of trauma involving the skeleton on conventional radiographs - To list typical imaging presentations of degenerative disorders of the musculoskeletal system on conventional radiographs - To describe common imaging manifestations of musculoskeletal infection and inflammation, metabolic diseases, including osteoporosis, and common bone tumours - To have a basic understanding of the common indications, contraindications and limitations in musculoskeletal imaging

Class syllabus:

1. Introduction to radiology (the physical basis of image formation including conventional x-ray, computed tomography, angiography, MMG, magnetic resonance imaging and ultrasound). Principles of radiation protection. PACS. Contrast media. 2. Neuroradiology I. – Brain. 3. Neuroradiology II. - Spine; Radiology of head and neck. 4. Cardiac and vascular radiology. 5. Emergency radiology. 6. Interventional radiology. 7. Radiology of thorax. Breast radiology. 8. Abdominal radiology. 9. Urogenital radiology. 10. Paediatric radiology. 11. Musculoskeletal radiology.

Recommended literature:

Mandatory literature:

1.Breistenseher M,et al. :Textbook of Clinical Radiology, University Publisher 3.0, 2012,ISBN 978-3-9503296-7-4

Additional literature:

2.Adam A.,et al.:Grainger and Alisonś Diagnostic Radiology,6th edition,Churchill Livingstone Elsevier,2015,ISBN 978-0-7020-4295-9,ebook ISBN 978-0-7020-6128-8
3.Geschwind J.,et al:Abramś Angiography:Interventional Radiology-3rd edition,Lippincott Williams and Wilkins,2013,ISBN13:978-1609137922
4.Zeleňák K,et al.:Radiology Imaging Techniques of Brain Tumors, InTech,2013,DOI:10.5772/53470
5.Krajina A.,et al.:Therapeutic Embolization of Cranial Tumors,Diagnostic Techniques and Surgical Management of Brain Tumors,InTech,2011,DOI:10.5772/19639
6.Zeleňák K.et al.:Atlas elementárnych rádiologických nálezov-I.diel,P +M,2017,ISBN:9788089694297

Languages necessary to complete the course:

English language

Notes:

Past grade distribution

Total number of evaluated students: 265

A	ABS0	B	C	D	E	FX
30,94	0,0	29,81	12,45	7,55	5,66	13,58

Lecturers: doc. MUDr. Kamil Zeleňák, PhD., MUDr. Martin Ševík, PhD.

Last change: 23.01.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚPF/J-S-VL-592/19	Research Preparation

Educational activities:
Type of activities: lecture
Number of hours:
per week: 2 **per level/semester:** 30
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 8.

Educational level: I.II.

Prerequisites:

Course requirements:
Attendavce (14x2=28 points). Evaluation of students is provided through development of a bibliographic search of original research articles (36 points) and critical appraisal analysis of the references (36 points).
Evaluation:
Achieved points Evaluation
100 - 91 A (1)
90 - 81 B (1, 5)
80 - 73 C (2)
72 - 66 D (2,5)
65 - 60 E (3)
59 and lessj Fx (4)
Scale of assessment (preliminary/final): 0/100

Learning outcomes:
After completion of the subject the student understands principles of the scientific dealing with problems in laboratory, clinical and population research in medical sciences. He/she is able to retrieve and critically appraise scientific information, he/she knows basic methods of empiric data collection, study design, standard formal structure of the scientific work and understands principles of scientific communication and scientometry.

Class syllabus:
Fundaments and structure of a modern science Scientific and non-scientific methods – kinds and characteristics Methods of scientific data collection Methods of processing and analyzing scientific information Research process and its phases Kinds of research and development of research project Ethics of scientific work and presentation of results Evidence based medicine Types of scientific and expert publications Student scientific and expert work at the Jessenius Faculty of Medicine, Comenius University in Martin

Recommended literature:
Hanacek J, Javorka K and co-workers. Introduction to Scientific Work. Textbook for Medical Students, Comenius University, Jessenius Faculty of Medicine in Martin 2011, 196 pp. https://moodle.uniba.sk/ https://www.ncbi.nlm.nih.gov/pubmed/ www.scopus.com

Languages necessary to complete the course:
english

Notes:

Past grade distribution
Total number of evaluated students: 0

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

Lecturers: prof. MUDr. Jana Plevková, PhD., prof. MUDr. Tibor Baška, PhD.

Last change: 24.08.2020

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.ÚCJ/J-S-VL-SJ1/15	**Course title:** Slovak Language (1)/Foreign Language (1)
Educational activities: **Type of activities:** practicals **Number of hours:** **per week:** 3 **per level/semester:** 45 **Form of the course:** on-site learning	
Number of credits: 2	
Recommended semester: 1.	
Educational level: I.II.	
Prerequisites:	
Course requirements: 2 written tests percentage to pass is 60% Evaluation: A: 91-100%, B: 90-81%, C: 80-73%, D: 72-66%, E: 65-60%, FX: less than 60% Scale of assessment (preliminary/final): Tests - min. 60%	
Learning outcomes:	
Class syllabus: Slovak language Unit 1: Titles. Greetings. Polite phrases. Conversation: How are you? Who is it? Introduce yourself, please. Getting to know each other. In the restaurant. Grammar: Making questions: Who is it? Is Mr. Horák a teacher? Yes/No answers. Verb to be. Negation. Numbers 1 – 10. Nominative of adjectives. Unit 2: Describing a person. Marital status. Characteristics. Slovak calendar. Conversation: Visiting a friend. He has flu, I have an exam. Grammar: Substantives – nominative singular. Nominative of adjectives. Opposites. Soft ending adjectives. Negation of adjectives. Number “1”. Demonstratives. Possessive adjectives. Cardinal numbers 11 and above. Possessive pronouns. Verb conjugation. Unit 3:.Our family. Members of family. Description of members of family. Conversation: Dialogue. Grammar: Accusative of singular. Substantives – nominative of plural. Adjectives – nominative of plural. Verb conjugation – present tense. Adverbials of time – when? In the morning, in the noon. Making questions. Unit 4: Student Robert Jesenský. Conversation: Dialogue. Grammar: Substantives – nominative of plural. Adjectives – nominative of plural. Verb conjugation – present tense. Adverbials of time.	

TEST I.
Unit 5: In our house. Colours. Advertisements.
Conversation: Names of rooms, pieces of furniture. Activities in the flat.
Grammar: Ordinal numbers. Reflexive verbs. Verb conjugation –
present tense. Personal pronouns in accusative. Accusative of plural.
Unit 6: Clothes – pieces of clothes, materials. Colours. Date.
Weather and seasons of the year.
Conversation: Trying clothes. At a doctor. At X-ray.
Grammar: Verb conjugation. Prepositions.
Unit 7: At medical faculty. Time.
Conversation: For the first time in the study department. At the reception.
Grammar: Modal verbs. Time. Verb I like, I like doing.
TEST II.

Recommended literature:

Slovak language:

Kolektív autorov: Slovak for foreign students. Bratislava: Univerzita Komenského 2015. 224 s.

German language:

Ivanová, A., Hromadová, K.: Deutsch für medizinische Berufe. Bratislava: UK,
2010. 262 s.
Dusilová, D. a kol.: Sprechen Sie Deutsch? Učebnice němčiny pro zdravotnické
odbory. Praha: Polyglot, 2004. 357 s.

Languages necessary to complete the course:

Slovak language, English language, German language

Notes:

Past grade distribution

Total number of evaluated students: 841

A	ABS0	B	C	D	E	FX
43,04	0,12	26,52	17,48	7,25	5,59	0,0

Lecturers: PhDr. Mária Bujalková, CSc., Mgr. Bojana Ladrová, PhD.

Last change: 06.10.2015

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚCJ/J-S-VL-SJ2/15	Slovak Language (2)/Foreign Language (2)

Educational activities:
Type of activities: practicals
Number of hours:
per week: 3 **per level/semester:** 45
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 2.

Educational level: I.II.

Prerequisites:

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

Learning outcomes:
The result of Slovak language teaching at Jessenius Faculty of Medicine is to teach foreign students the vocabulary of spoken Slovak in everyday situations in Slovak environment as well as basic medical terminology necessary for communication with Slovak patient. Slovak language student should be able to use all four language skills - reading, listening comprehension, spearing and writing.

Class syllabus:
Slovak language:
Unit 8: At the Slovak lesson
Conversation: Dialogues 1 – 3
Grammar: Imperative. Irregular imperative. Locative of singular.
Personal pronouns in locative.
Unit 9: Yesterday I did an exam
Conversation: Dialogues. Services.
Grammar: Past tense. Irregular past tense. Instrumental of singular.
Future tense. Irregular future tense. Adjectives
Unit 10: Leisure time, hobbies. Cardinal directions.
Conversation: Invitation to an ice-hockey match.
Invitation to the theater. At the cash desk.
Grammar: Locative of plural. Indefinite pronouns. Negative pronouns.
Multiple negation
Unit 11: We talk about food. Groceries. Potatoes pancakes recipe.
Conversation: Invitation to a restaurant. In the restaurant.
Grammar: Instrumental of plural. Personal pronouns in instrumental.
Questions in instrumental. Irregular adjectives.
TEST III.

Unit 12: Traveling.
Conversation: At the cash desk in the railway station. In the coach.
Ordering taxi. In the taxi. Traveling by plane.
Grammar: Adverbs. Irregular adverbs. Dative of singular.
Dative of plural. Personal pronouns in dative.
Unit 13: Services – Post office – Pharmacy – Fitness-center
Conversation: Parcel notice. In the post office. In the pharmacy.
Grammar: Comparison of adjectives. Irregular adjectives. Aspect.
Unit 14: Shopping.
Conversation: In the groceries. Fruit, vegetable. Clothes. Drugstore.
Grammar: Genitive of singular. Genitive of plural.
Personal pronouns in genitive.
TEST IV.

Recommended literature:

Slovak language:

Collective of authors: Slovak for foreign students. Bratislava: Comenius University 2015. 224 pp.

German language:

Ivanová, A., Hromadová, K.: Deutsch für medizinische Berufe. Bratislava: UK, 2010. 262 s.
Dusilová, D. a kol.: Sprechen Sie Deutsch? Učebnice němčiny pro zdravotnické odbory. Praha: Polyglot, 2004. 357 s.

Languages necessary to complete the course:
Slovak language, English language, German language

Notes:

Past grade distribution
Total number of evaluated students: 809

A	ABS0	B	C	D	E	FX
58,71	0,12	24,85	9,52	4,33	2,47	0,0

Lecturers: PhDr. Mária Bujalková, CSc., Mgr. Bojana Ladrová, PhD.

Last change: 06.10.2015

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚCJ/J-S-VL-SJ3/16	Slovak Language (3)/Foreign Language (3)

Educational activities:
Type of activities: practicals
Number of hours:
per week: 2 **per level/semester:** 30
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 3.

Educational level: I.II.

Prerequisites:

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

Learning outcomes:
The result of Slovak language teaching at Jessenius Faculty of Medicine is to teach foreign students the vocabulary of spoken Slovak in everyday situations in Slovak environment as well as basic medical terminology necessary for communication with Slovak patient. Slovak language student should be able to use all four language skills - reading, listening comprehension, spearing and writing.

Class syllabus:
Slovak language:
Unit 1: The human body
- characteristics, the parts of body
- dialogues: tonsillitis, cough, sore throat
Unit 2: Martin hospital
- departments and jobs in the hospital
- prepositions with genitive, accusative and locative
Unit 3: At the doctor
- questions: What is your problem? What happened to you?
- dialogue: The medical check-up at the doctor
- in the accident and emergency department
Unit 4: Family and personal history
- types of diseases
- taking medical history in practice
TEST I.
Unit 5: Medical examination
- instructions and command during examination
- dialogues: taking blood, allergy, gastroscopy, at the surgeon
Unit 6: Drugs

- kinds and ways of taking drugs
- dialogue: in the pharmacy
- verb: I should
Unit 7: The contagious diseases
- bacterial and virus diseases
- tonsillitis and flu
- dialogues: At the doctor
TEST II.
German language:
1. Soziale Einrichtungen
Träger von sozialen Diensten (Schema)
Hilfsorganisationen in der BRD und in der Slowakei
Aktion „Patenschaften“
2. Mobil sein
Lust auf freiwilliges Engagement
Anders lernen – sich anderswo bilden
Programme Sokrates, Leonardo, Jugend
3. Versicherungssysteme
Soziale Vorsorge
Zweige der Sozialversicherung
Gesetzliche Kranken-, Renten-, Arbeitslosen-,Unfall- und Pflegeversicherung
4. Vorsorge – Gesundheitsangebote und Maßnahmen
Gesetzliche Pflegeversicherung am Beispiel alter Menschen
Individuelle Privatversicherungen
5. Beratung und Betreuung in der Arztpraxis
Gesundheitsberufe
Umgang mit dem Patienten
Arzt-Patient-Dialoge
6. In der Arztpraxis
Telefonieren; Buchstabiertafel
Notfall- und Unfallmeldungen
Gespräche in der Anmeldung
7. Kommunikation in Arztpraxen
Eine Arzthelferin erzählt
Verwaltungstechnische Abläufe
Patientenkarte, Patientenkartei
8. Kommunikation im Krankenhaus
Patientenaufnahmebogen
Arztbrief, Überweisungsschein
9. Das Rezept
Privatrezept und kassenärztliches Rezept
Arzneiformen und Arzneigruppen
Umgang mit Arzneimitteln
10. Notfälle
Zuordnung von Notfällen den Fachgebieten
Rettungskette
Fallstudie – Hypoglykämie

Recommended literature:
Slovak language:

Kolektív autorov: Lekárska slovenčina pre zahraničných študentov. Medical Slovak for foreign students. UK Bratislava 2016. 204 s. ISBN 978-80-223-4077-9
German language:
Autorenkoll.: Kommunikation in sozialen und medizinischen Berufen. Pilsen und München: Fraus, 2003. 152 s.

Languages necessary to complete the course:
Slovak language
English language
German language

Notes:

Past grade distribution
Total number of evaluated students: 601

A	ABS0	B	C	D	E	FX
55,91	0,17	27,45	11,98	4,33	0,17	0,0

Lecturers: PhDr. Mária Bujalková, CSc., Mgr. Bojana Ladrová, PhD.

Last change: 30.10.2017

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚCJ/J-S-VL-SJ4/16	Slovak Language (4)/Foreign Language (4)

Educational activities:
Type of activities: practicals
Number of hours:
per week: 2 **per level/semester:** 30
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 4.

Educational level: I.II.

Prerequisites:

Course requirements:
2 written tests - minimum percentage to pass is 60% Evaluation: A: 91-100%, B: 90-81%, C: 80-73%, D: 72-66%, E: 65-60%, FX: less than 60%

Learning outcomes:
The result of Slovak language teaching at Jessenius Faculty of Medicine is to teach foreign students the vocabulary of spoken Slovak in everyday situations in Slovak environment as well as basic medical terminology necessary for communication with Slovak patient. Slovak language student should be able to use all four language skills - reading, listening comprehension, spearing and writing.

Class syllabus:
Slovak language:
Unit 8: In the urology
- the parts of urinary system
- the urologic examination

Unit 9: Accidents, injuries, emergency
- emergency admission
- patient´s medical record
- in the accident and emergency department
- first aid

Unit 10: Cardiovascular diseases
- dialogue: heart examination
- angina pectoris, heart attack, stroke

Unit 11: Diseases of digestive system
- peptic ulcer, appendix inflamation
- dialogue: at the doctor
- a good advice for everyone

TEST III.
Unit 11: Gynaecology and obstetrics
- gynaecological examination
- tumours in gynaecology, risk factors

- breast illnesses, pregnancy course
Unit 13: Paediatrics
- stages of child´s development and health problems
- infection diseases of children
Unit 14: Orthopedics
- bones, fractures, problems of locomotive system
- osteoarthritis, osteoporosis,
- rehabilitation exercises
Unit 15: Two cases in internal medicine
- anamnesis: Diabetes Melitus B, acute pancreatitis
TEST IV.
German language:
1. Menschen, die Hilfe brauchen
Not hat viele Gesichter – Begriffe und Erläuterungen
Geschichte von Menschen auf den Fotos – Versprachlichung von Schaubildern
2. Hilfe und Angebote für Senioren und Pflegebedürftige
Häufigste Beschäftigungen älterer Menschen
Veranstaltungen im Seniorenzentrum
3. Sozialstation
Klienten und Träger der Sozialstationen
Dienstleistungen in den Sozialstationen
4. Dinge, die den Senioren den Alltag erleichtern
Einkäufe in einem Sanitätshaus
Die Gerontotechnik – neue seniorengerechte Produkte entwerfen (Projekt)
5. Leben und Wohnen im Alter
Was würden Sie im Alter am liebsten tun?
Wohnformen für Seniorinnen und Senioren
6. Wohnen und Leben im Alten- und Pflegeheim
Altenzentrum Sankt Lukas stellt sich vor
Ein Tag im Leben einer Altenpflegerin
7. Soziale Probleme bei Jugendlichen
Suchtkrankheiten
Drogen – ihre Charakteristik und Risiken
8. Soziale Probleme bei Jugendlichen
Ess-Störungen
Magersucht und Essbrechsucht – Tendenz steigend
9. Soziale Probleme bei Jugendlichen
AIDS
HIV-Übertragungswege
10. Arbeitslos – obdachlos
Worterläuterungen zum Thema aus der Umgangssprache
Gründe der Arbeits- und Obdachlosigkeit – Diskussion
11. Berufe im Sozialwesen
Soziale Arbeit – Definition des Begriffes
Charakteristik der Berufe im Bereich Sozialwesen

Recommended literature:

Slovak language: Kolektív autorov: Lekárska slovenčina pre zahraničných študentov. Medical Slovak for foreign students. UK Bratislava 2016. 204 s. ISBN 978-80-223-4077-9

German language: Autorenkoll.: Kommunikation in sozialen und medizinischen Berufen. Pilsen und München: Fraus, 2003. 152 s.

Languages necessary to complete the course:
Slovak language
English language
German language

Notes:

Past grade distribution
Total number of evaluated students: 529

A	ABS0	B	C	D	E	FX
55,77	0,0	24,76	11,91	5,29	2,27	0,0

Lecturers: PhDr. Mária Bujalková, CSc., Mgr. Bojana Ladrová, PhD.

Last change: 30.10.2017

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚVZ/J-S-VL-614/19	Social and Ethical Aspects in Health Care

Educational activities:
Type of activities: practicals
Number of hours:
per week: 2 **per level/semester:** 30
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 9.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Public Health 1

Course requirements:
ppt (max. 50 p.), test (max. 50 p.)
Evaluation: A: 91–100 %, B: 81–90 %, C: 73–80 %, D: 66–72 %, E: 60–65 %, FX: 59 % and less
Scale of assessment (preliminary/final): 0/100

Learning outcomes:
After completion of the subject the student is able to solve social and ethical problems related to health care providing. The student is able to apply social communication among health care workers and in physician-patient relations. The student understands the importance of respect of human life since conception to death.

Class syllabus:
Social and ethical problems of communication in health care providing. Social and ethical aspects of health care providing to woman, mother and child. Social and ethical aspects of health care providing in geriatrics. Social and ethical aspects of health care providing to handicapped patients. Social and ethical aspects of health care providing to dying patients. Social and ethical aspects of transplantations and blood donorship.

Recommended literature:
Recommended literature: VAJDA J.: Úvod do etiky, ENIGMA Nitra, 2004, s. 251, ISBN 80-89132-12-X MUNZAROVÁ M.: Lékařský výzkum a etika, GRADA Praha, 2005, s. 120, ISBN 80-247-0924-4 TATE P.: Komunikace pro lékaře, GRADA Praha, 2005, s. 164, ISBN 80-247-0911-2

Languages necessary to complete the course:
english

Notes:

Past grade distribution
Total number of evaluated students: 0

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

Lecturers: PhDr. Marta Tkáčová, PhD.

Last change: 21.08.2020

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KTL/J-S-VL-553/18	Sport Medicine

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 1 / 1 **per level/semester:** 15 / 15
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 8.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
J-S-VL-538 Internal Medicine Propedeutics 2

Course requirements:
Seminar work. Evaluation of students - test. Minimum for test attainment: 50 %. Grading: A: 90–100 %, B: 80 %, C: 70 %, D: 60 %, E: 50 %, FX: 0-40 %
Scale of assessment (preliminary/final): Final evaluation

Learning outcomes:
Completing of the subject also contributes to forming a holistic view of human health and disease in relation to physical and physical activity. The student understands the basics, functions of the organism during the exercise; can solve the basic situations concerning individual types of reactions of the organism during the exercise; can apply the knowledge of physical activity influence in healthy and diseased organism; can analyze the basic pathological organism reactions to physical exertion; can identify non-physiological body reactions in a healthy and diseased organism.

Class syllabus:
Practical teaching
1. Basic preventive medical examination of athletes (history, physical examination, laboratory techniques, anthropometry, dynamometry, examination of the cardiovascular system, physiological murmur, contraindication for sport).
2. Assessment of physical and functional capacity (bicycle and treadmill exercise testing, indication, contraindication, first aid, evaluation of findings). Chest radiographic and echocardiographic examination, computer assistance in evaluation of findings (athletic heart, physiological enlargement of the heart). Movement - the basis of life. Regeneration and relaxation.
3. Electrocardiographic examination of athlete at rest and during exercise, physiological abnormalities of ecg, signs of trainability on ecg.
4. System of rational lifestyle of athlete (nutritional systems, drinking regimens, macrobiotic and vegetarian feeding, microelements, vitamins). Increase and decrease of body weight.
5. Functional-diagnostic examination in some diseases, prescription of physical exercise in some diseases.

6. Functional testing of respiratory system. Telemetric examination, heart-rate variability, Holter monitoring, sport-tester, sport-medical observation of athlete in sports environment. Doping, sudden death in athlete.
7. The influence of the cold, heat, water and altitude environment on the body.
Lectures:
1. Nutrition and dietetics in life-style in healthy people and athletes (basic diet, demands on protein, fat, carbohydrates and energy, vitamins, minerals, nutrition during age periods, energy output) part I.
2. Nutrition and dietetics in healthy people and athletes (increase and decrease of body weight, saccharide loading, nutrition before/during/after competition, multisuplementation) part II. Exercise in the prevention and management of internal disease. Cardiovascular effects of sports activity and physiological response to sports activity.
3. Exercise electrocardiographic testing (indication, contraindication, methods, evaluation of findings). Environmental conditions and sport (heat, cold, altitude, water). Sudden death in athlete. Doping and doping control.
4. The impact of regular training on human biological systems (musculoskeletal system, cardiovascular and respiratory system, metabolic capacity, central nervous and endocrine system). Differential diagnosis between hypertrophic cardiomyopathy and athletes` heart. Cardiovascular diseases and physical activity.
5. Physical activity in asthma bronchiale, obesity and diabetes mellitus. Hypertension and physical activity.
6. Prevention and management of sport injuries (causes of injuries, diagnostic principles, diagnosis and management of overuse injuries, principles of rehabilitation after injuries, micro/macro-trauma).
7. Physical activity in elder people (maintenance of physical fitness, relation to chronic disease, osteoporosis in elderly). Overtraining. Abstinence syndrome of athlete.

Recommended literature:
Marček, T.: Sports Medicine (Manual of Practical Sports Medicine)
web pages -
www.medinfo.sk (basic educational resource) + http://www.sportsmedicine.com/

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 181

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

Lecturers: prof. MUDr. Dušan Meško, PhD.

Last change: 29.01.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.KSMCh/J-S-VL-552/19	**Course title:** Stomatology

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: ,5 / 1 **per level/semester:** 7,5 / 15
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 7.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Prerequisites: Anatomy III, Surgical Propedeutics

Course requirements:
Attendance on practical exercises 80%. Continuous assessment test form, minimum level succes 65 %, maximum number of points are 20, minimum number of points are 13. Final evaluation in the final test form, maximum number of points are 30, minimum level succes 65 %, 19 points.
Scale of assessment (preliminary/final): Final evaluation in the final test form, maximum number of points are 30, minimum level succes 65 %, 19 points.

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

Class syllabus:
A brief outline of the history of dentistry, branches of dentistry. Anatomy, physiology and development of oro-maxillofacial region, development of the dentition, developmental disorders in oro-maxillofacial region. Dental caries, definition, classification, etiology, pathogenesis, diagnosis, prevention, prophylaxis, treatment and complications. Dental pulp diseases, classification, etiology, pathogenesis, diagnosis, prevention, treatment and complications. Apical periodontitis, classification, etiology, pathogenesis, diagnosis, prevention, treatment and complications. Periostitis of the jaws, subperiostal and submucosal odontogenic abscesses, etiology, pathogenesis, diagnosis, prevention, treatment and complications. Osteomyelitis of the jaws, classification, etiology, pathogenesis, diagnosis, prevention, treatment and complications. Dentogenous (odontogenic) inflammations – spred through head and neck spaces, etiology, pathogenesis, diagnosis, prevention, treatment and complications. Diseases of periodontal tissues

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

Recommended literature:

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

Languages necessary to complete the course:

english language

Notes:

Past grade distribution

Total number of evaluated students: 190

A	ABS0	B	C	D	E	FX
58,42	0,0	26,84	10,53	3,16	1,05	0,0

Lecturers: doc. MUDr. Dagmar Statelová, CSc., doc. MUDr. Mária Janíčková, PhD., MPH

Last change: 24.09.2020

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚFa/J-S-VL-598/17	Student Scientific Activity (1)

Educational activities:
Type of activities: practicals
Number of hours:
per week: 3,33 **per level/semester:** 49,95
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 6.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
None.

Course requirements:
Laboratory or clinical work under supervision of tutor at departments. Presentation of results at conference or publication of paper in a scientific journal (optional).
Scale of assessment (preliminary/final): 100/0

Learning outcomes:
The students obtains skills (under supervision of his/her tutor) in laboratory work, using various scientific methods, statistical analysis and presentation of results at scientific conferences. He/she learns how to prepare a scientific publication.

Class syllabus:
Work at departments/clinics under supervision of a tutor. The selection of topic is individual based on an interest of the student and on yeary updated offer (list of topics). The preparation and presentation of results at Student Scientific Conferences. Preparation of scientific papers.

Recommended literature:
Hanacek J, Javorka K et al. Introduction to scientific work. Martin, 2011, Jessenius Faculty of Medicine, Comenius University. ISBN 978-80-88866-95-4. p. 196.

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 0

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

Lecturers: prof. MUDr. Mgr. Juraj Mokrý, PhD.

Last change: 15.03.2018

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚFa/J-S-VL-599/18	Student Scientific Activity (2)

Educational activities:
Type of activities: seminar
Number of hours:
per week: 3,33 **per level/semester:** 49,95
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 7.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
None

Course requirements:
Laboratory or clinical work under supervision of tutor at departments. Presentation of results at conference or publication of paper in a scientific journal (optional).
Scale of assessment (preliminary/final): 100/0

Learning outcomes:
The students obtains skills (under supervision of his/her tutor) in laboratory work, using various scientific methods, statistical analysis and presentation of results at scientific conferences. He/she learns how to prepare a scientific publication.

Class syllabus:
Work at departments/clinics under supervision of a tutor. The selection of topic is individual based on an interest of the student and on yeary updated offer (list of topics). The preparation and presentation of results at Student Scientific Conferences. Preparation of scientific papers.

Recommended literature:
Hanacek J, Javorka K et al. Introduction to scientific work. Martin, 2011, Jessenius Faculty of Medicine, Comenius University. ISBN 978-80-88866-95-4. p. 196.

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 3

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

Lecturers: prof. MUDr. Mgr. Juraj Mokrý, PhD.

Last change: 25.01.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚFa/J-S-VL-600/18	Student Scientific Activity (3)

Educational activities:
Type of activities: seminar
Number of hours:
per week: 3,33 **per level/semester:** 49,95
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 8.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
None

Course requirements:
Laboratory or clinical work under supervision of tutor at departments. Presentation of results at conference or publication of paper in a scientific journal (optional).
Scale of assessment (preliminary/final): 100/0

Learning outcomes:
The students obtains skills (under supervision of his/her tutor) in laboratory work, using various scientific methods, statistical analysis and presentation of results at scientific conferences. He/she learns how to prepare a scientific publication.

Class syllabus:
Work at departments/clinics under supervision of a tutor. The selection of topic is individual based on an interest of the student and on yeary updated offer (list of topics). The preparation and presentation of results at Student Scientific Conferences. Preparation of scientific papers.

Recommended literature:
Hanacek J, Javorka K et al. Introduction to scientific work. Martin, 2011, Jessenius Faculty of Medicine, Comenius University. ISBN 978-80-88866-95-4. p. 196.

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 2

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

Lecturers: prof. MUDr. Mgr. Juraj Mokrý, PhD.

Last change: 25.01.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚFa/J-S-VL-601/19	Student Scientific Activity (4)

Educational activities:
Type of activities: seminar
Number of hours:
per week: 3,33 **per level/semester:** 49,95
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 9.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
None

Course requirements:
Práca pod dohľadom školiteľa na pracoviskách. Prezentácia výsledkov na konferencii alebo publikácia článku vo vedeckom/odbornom časopise (nepovinný výstup)!
Scale of assessment (preliminary/final): 100/0

Learning outcomes:
The students obtains skills (under supervision of his/her tutor) in laboratory work, using various scientific methods, statistical analysis and presentation of results at scientific conferences. He/she learns how to prepare a scientific publication.

Class syllabus:
Work at departments/clinics under supervision of a tutor. The selection of topic is individual based on an interest of the student and on yeary updated offer (list of topics). The preparation and presentation of results at Student Scientific Conferences. Preparation of scientific papers.

Recommended literature:
Hanacek J, Javorka K et al. Introduction to scientific work. Martin, 2011, Jessenius Faculty of Medicine, Comenius University. ISBN 978-80-88866-95-4. p. 196.

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 3

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

Lecturers: prof. MUDr. Mgr. Juraj Mokrý, PhD.

Last change: 26.09.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚFa/J-S-VL-602/19	Student Scientific Activity (5)

Educational activities:
Type of activities: seminar
Number of hours:
per week: 3,33 **per level/semester:** 49,95
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 10.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
None

Course requirements:
Laboratory or clinical work under supervision of tutor at departments. Presentation of results at conference or publication of paper in a scientific journal (optional).
Scale of assessment (preliminary/final): 100/0

Learning outcomes:
The students obtains skills (under supervision of his/her tutor) in laboratory work, using various scientific methods, statistical analysis and presentation of results at scientific conferences. He/she learns how to prepare a scientific publication.

Class syllabus:
Work at departments/clinics under supervision of a tutor. The selection of topic is individual based on an interest of the student and on yeary updated offer (list of topics). The preparation and presentation of results at Student Scientific Conferences. Preparation of scientific papers.

Recommended literature:
Hanacek J, Javorka K et al. Introduction to scientific work. Martin, 2011, Jessenius Faculty of Medicine, Comenius University. ISBN 978-80-88866-95-4. p. 196.

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 2

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

Lecturers: prof. MUDr. Mgr. Juraj Mokrý, PhD.

Last change: 26.09.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚO/J-S-VL-520/19	Summer Practice - Nursing Practice

Educational activities:
Type of activities: practice
Number of hours:
per week: 5,33 **per level/semester:** 79,95
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 4.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Basic Nursing Techniques

Course requirements:
To complete the subject (ABS0) student must meet the following conditions
completion of 80 hours of nursing practice under the supervision of a nurse in real conditions of clinical nursing practice (2 week, 8 hours per day)
submission of following documents to responsible teacher:
- confirmation about safety regulations and record of arrivals and departures to/from workplace,
- confirmed allocation sheet for Nursing practice
- list of practical outputs (for check) – student is obliged to perform each output at least 3 times during nursing practice.

Learning outcomes:
Within completion of the subject student applies fundamental principles of nursing care provision and standard procedures of selected nursing techniques and interventions while providing nursing care to the patients in real conditions of clinical nursing practice. Student implements reliable evidence-based information for safe healthcare practice. Acquired clinical competences together with ability to argue for and justify the method / technique of the procedure chosen will be the basis for the ability to manage basic and frequently occurring clinical nursing situations and react to them correctly in real clinical practice in the future.
After completion of this subject while performing nursing procedures student will be able to:
- argue for and justify the method / technique of the procedure chosen,
- prepare equipment and supplies necessary to carry out the procedure,
- assess the patient in relation to the procedure,
- provide instructions and support the patient prior to the procedure,
- prepare the patient for the procedure from physical perspective,
- perform hand hygiene (hand washing and hygienic / surgical disinfection)
- carry out the procedure independently while following clinical standards and guidelines, respecting the principles of asepsis,
- communicate with the patient during the procedure,
- record and document the procedure and value assessed,

- provide patient education / instruction after the procedure,
- process all the equipment and items used (decontamination).

Class syllabus:

Handling patient care articles, equipment and supplies. Disinfection of surfaces, articles, surgical instruments and mechanical equipment, disinfection of skin and hands. Preparing articles and supplies to sterilization process (pre-sterilization preparation).
Bed-making. Assistive, safety and support devices of a bed. Manipulation with clean and polluted personal clothes and bed linen. Bed making for infants and toddlers.
Personal hygiene, hygienic care and practices. Oral hygiene – mouth care (care of intact oral cavity, special oral care, caring for artificial dentures), importance of dental care. Skin care practices – morning and evening hygienic care, bathing a patient, complete bed bath, prevention of sores and pressure ulcers. Hair and nail care – brushing and combing hair, shampooing hair, shaving, hair care in special needs – nits (pediculosis) delousing. Dressing a patient with disabled extremity.
Mobility and immobility. Preventive positioning of an immobile patient. Basic chest exercises / chest physiotherapy and leg exercises. Applying compression bandage of lower extremities / elastic compression stockings.
Therapeutic use of heat and cold.
Measuring, assessing and recording vital signs (body temperature, pulse, respiration, blood pressure, oxygen saturation), obtaining an electrocardiogram (ECG).
Nutrition care. Dietary system, serving meals, assisting patients with eating, feeding the patients. Fluid intake and output, intake and output record.
Managing urinary and bowel elimination – insertion of a straight / indwelling urinary catheter in a female, assistance in urinary catheterization in a male, administering an enema.
Administering oral medications (including buccal and sublingual administration). Topical administration of medications – to the skin (including transdermal patch) and mucosa, instillation of eye and ear medications, nasal instillations, application to body cavities (vaginal medications and instillations, rectal medications, bladder irrigation).
Oxygen therapy and respiratory inhalation (nebulization, inhalations).
Parenteral medications – injections. Preparing and administering subcutaneous injections (s.c. – LMWH, insulin) and intramuscular injections (i.m.). Preparing and assisting in administration of intravenous injection (i.v.). Insertion of peripheral intravenous access device, caring for peripheral and central intravenous access devices.
Parenteral nutrition and blood transfusions – preparing and assisting in application of intravenous solutions and infusions. Preparing and assisting in blood transfusions – care of a patient prior, during and after blood transfusion.
Diagnostic and laboratory testing – taking venous blood samples, capillary blood samples (blood sugar analysis, blood gas analysis (CBG), urine specimen collection (screening for chemical properties, culture and sensitivity test), taking stool specimens, sputum specimen collection, swabs / cultures (mucosa, skin, wounds). Eevaluation of laboratory results.
Wound care – changing the wound dressing in aseptic / septic / chronic wounds, assisting in wound care, care of a patient with drain / drainage system.
Establishing and maintaining a sterile field. Assisting in small surgeries.

Recommended literature:

Dingová, M., Lepiešová, M., Rosenberg, A. et al.: Basics of Nursing. Textbook for Medical and Nursing Students. Martin : Comenius University in Bratislava, Jessenius Faculty of Medicine in Martin, 2011. 283 p. ISBN 978-80-88866-6-88-6.
Lepiešová, M., Dingová, M., Nemcová, J., Ovšonková, A., Miertová, M., Tabaková, M., Tomagová, M.: Basics of nursing presentations. Martin : JLFUK – portal MEFANET, 2012,

419 p. [online] ISBN 1337-7396ISSN 1337-7396. Available at: http://portal.jfmed.uniba.sk/articles.php?aid=187https://stella.uniba.sk/epc/JL/2012/vtls000257495.pdf
Kozier, B., Berman, A., Erb, G., Snyder, S. J.: Fundamentals of Nursing: Concepts, Process and Practice. 7th ed. Pearson Prentice Hall, 2004. 1500 p. ISBN 0130455296.
Perry, A. G., Potter, P. A., Ostendorf W.: Clinical Nursing Skills & Techniques. 8th ed. St. Louis, Missouri: Mosby/Elsevier, 2013. 1196 p. ISBN 978-0-323-08383-6.

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 0

ABS0	M
0,0	0,0

Lecturers: prof. Mgr. Katarína Žiaková, PhD., Mgr. Anna Ovšonková, PhD.

Last change: 03.10.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.GPK/J-S-VL-579/19	Summer Practice-Gynecology and Obstetrics

Educational activities:
Type of activities: practice
Number of hours:
per week: 5,33 **per level/semester:** 79,95
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 10.

Educational level: I.II.

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

Recommended prerequisites:
Gynecology and Obstetrics 2

Course requirements:
Clinical practice at the department of gynecology and obstetrics at the hospital-type department as a secondary physician for 2 weeks (80 hours in total).
Scale of assessment (preliminary/final): Continuous.

Learning outcomes:
Credits

Class syllabus:
Clinical practice in the range of basic diagnostic and therapeutic procedures, assistance in childbirth, caesarean sections, and gynecological surgery.

Recommended literature:

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 91

ABS0	M
100,0	0,0

Lecturers: doc. MUDr. Kamil Biringer, PhD., doc. MUDr. Erik Kúdela, PhD.

Last change: 27.10.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.IKG/J-S-VL-554/18	**Course title:** Summer Practice-Internal Medicine
Educational activities: **Type of activities:** practice **Number of hours:** **per week:** 5,33 **per level/semester:** 79,95 **Form of the course:** on-site learning	
Number of credits: 1	
Recommended semester: 8.	
Educational level: I.II.	
Prerequisites:	
Recommended prerequisites: Internal Medicine 2	
Course requirements: Personal student daily record about activities done signed by head/subhead of the department.	
Learning outcomes:	
Class syllabus: Summer practice : 1/ practice aj patient bed under supervision of assistant (tutorň, examination of patient, patient chart (record) preparation, proposal of diagnostic procedures, proper use of forms used at the department 2/ ward round attendance, disease dynamics observation, consultation activity and therapeutic procedures under assistant supervision (tutor), evaluation of auxiliary examinations, taking care of 4-5 patients at ward 3/ daily patient record, diagnostic results, suggestion of home care, patient discharge, 4/ sampling: blood, urine, sputum, stool. Application: intravenous injections, gastric/duodenal probe, bladder catheterization, 5/ assistantship at: pleural/ abdominal puncture, liver/kidney/lymphatic node/bone marrow biopsy, endoscopic examination, x-ray picture evaluation. Independent basci examination : urine, urine sediment, blood count/differential count, ecg examination, 6/ indication/diagnostic procedures and administration of blood transfusion, 7/ information about work at Intesive Care Unit, 8/ patient adminission procedures (in-patient) and out- patient health care, 9/ attendance at health care service (acute admission/examination/diagnostic procedures, therap), 10/ health care education at ward, preparation and presentation of seminar- paper.	
Recommended literature:	
Languages necessary to complete the course: english	
Notes:	

Past grade distribution Total number of evaluated students: 181	
ABS0	M
99,45	0,55
Lecturers: prof. MUDr. Rudolf Hyrdel, CSc.	
Last change: 14.02.2019	
Approved by:	

COURSE DESCRIPTION

University: Comenius University in Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.KDD/J-S-VL-580/19	**Course title:** Summer Practice-Pediatrics
Educational activities: **Type of activities:** practice **Number of hours:** **per week:** 5,33 **per level/semester:** 79,95 **Form of the course:** on-site learning	
Number of credits: 1	
Recommended semester: 10.	
Educational level: I.II.	
Prerequisites:	
Recommended prerequisites: Pediatrics 2	
Course requirements: activity evaluation, credit Scale of assessment (preliminary/final): to master basic diagnostic and therapeutic procedures in pediarics, to become familiar with the administrative procedures in pediatric clinic	
Learning outcomes: to master basic diagnostic and therapeutic procedures in pediarics, to become familiar with the administrative procedures in pediatric clinic	
Class syllabus: dispenzarization, immunization, rutine preventive physical examinations, therapeutics, medical records	
Recommended literature: Behrman, R. E. Kliegman, R.M., Jenson, H.B. Nelson Textbook of Pediatrics. Philadelphia: W. B. Saunders Comp., 2011. ISBN 978143770755 Lissauer, T., Clayden, G. Illustrated textbook of Paediatrics. 2004. 410 s. ISBN 0-7234-3178-7 Behrman, R.E. Essentials of Pediatrics. Philadelphia: W.B.Saunders Comp., 2000. 795 pp. Allen, Hugh D. et al. Moss and Adams´ Heart Disease in Infants, Children and Adolescents, Including the Fetus and Young Adult. Philadelphia: Lippincott Williams & Wilkins, 2001. 1468 pp.	
Languages necessary to complete the course: English language	
Notes: VL students can have a summer practice: 1. at the Department of Children and Adolescents of JLF UK 2. at the Department of Pediatric Tuberculosis and Respiratory Diseases at ŠUDTaRCH in Dolný Smokovec 3. in hospitals with which JLF UK has a contract 4. Abroad, subject to prior agreement with subject guarantor	

Past grade distribution Total number of evaluated students: 90	
ABS0	M
100,0	0,0
Lecturers: prof. MUDr. Peter Bánovčin, CSc., doc. MUDr. Ľubica Jakušová, PhD., prof. MUDr. Mgr. Miloš Jeseňák, PhD., MBA	
Last change: 16.10.2019	
Approved by:	

COURSE DESCRIPTION

University: Comenius University in Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.ChKTC/J-S-VL-554/18	**Course title:** Summer Practice-Surgery
Educational activities: **Type of activities:** practice **Number of hours:** **per week:** 6,66 **per level/semester:** 99,9 **Form of the course:** on-site learning	
Number of credits: 1	
Recommended semester: 8.	
Educational level: I.II.	
Prerequisites:	
Recommended prerequisites: Surgery 2	
Course requirements: ABSO - Positive evaluation of the head of the surgical department.	
Learning outcomes: Graduated know the work of secondary doctors in the surgical ward.	
Class syllabus: 1. Students are acquainted with the work of secondary doctors in the surgical ward. 2. Practical mastery of washing before surgery, dressing surgeon before surgery. The preparation of the surgical field, positioning and covering of the patient. 3. Assistance in operations, using of surgical instruments. 4. Mastering wound changing and minor surgery (incision, excision, suturing). Use of local anesthesia, drainage technique in a small surgery. 5. Practical working knowledge of first-aid equipment (Desault , capistrum spiky , Testudo , etc.). Casting technique, self- management under the supervision of a plaster cast. 6. Examination of the surgical patient, medical history, pre-operative and preoperative preparation (pharmaceutical, dietary, psychological). 7. The department administering intramuscular injections, venous injections for assistance, Assistance blood transfers. Mostly surgical wounds. 8. Two night service.	
Recommended literature:	
Languages necessary to complete the course: English language	
Notes:	

Past grade distribution Total number of evaluated students: 174	
ABS0	M
100,0	0,0
Lecturers: prof. MUDr. Ľudovít Laca, PhD.	
Last change: 25.01.2019	
Approved by:	

STATE EXAM DESCRIPTION

University: Comenius University in Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.ChKTC/2-JVL-SS51/17	**Course title:** Surgery
Number of credits: 6	
Educational level: I.II.	
Course requirements: Practical and theoretical state exam	
Learning outcomes: Studnet can complete knowledge of surgical diseases, can enhance the practical skills of surgical propedeutics principles, knows the principles of daily care of the surgical patient, knows the principles of work at the surgical ambulance and operating room. Listed knowledge can applicate to other surgical fields / orthopedics, traumatology, urology, plastic surgery, neurosurgery, pediatric surgery, anaesthesiology and intensive medicine /.	
State exam syllabus:	
Recommended literature: Siman, J. a kol..: Princípy chirurgie Bratislava: SAP, 2007,923 s. ISBN 80-8910-494-0 Ferko, A. a kol.: Chirurgie v kostca. Praha: Grada, 2002. 596 s, isbn 80-2470-304 Way L.W. a kol.: Současná chirurgická diagnostika a léčba I;II. Praha, Grada 1998. 1659 s. Muller, M. a kol : Chirurgie pro studium a praxi. Praha: Publ., 1997, 441s, www.chirweb.cz Laca, Ľ.: Ochorenia pečene žlčových ciest a pankreasu. Učebné texty z chirurgie pre št. odbor VL Martin: JLF UK, 2009, 120s, ISBN 978-80-970159-4-7. Schein,M., Rogers, P.N. : Urgentní břišni chirurgie. Praha: Grada,2011, 448s. Černý, Ján.: Chirurgia tráviacej rúry. Martin: Osveta, 1988, 512.	
Languages necessary to complete the course: slovak language	
Last change: 06.12.2017	
Approved by:	

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ChKTC/J-S-VL-523/17	Surgery (1)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 2 / 2 **per level/semester:** 30 / 30
Form of the course: on-site learning

Number of credits: 4

Recommended semester: 6.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Surgical propedeutics

Course requirements:
Assesment of students is performed by written exam, minimal level of successfulness.
Assesment: A 93 – 100%, B: 86 – 92 %, C: 79 – 85 %, D: 72 – 78%, E: 65 – 71 %, Fx: 64 % and less

Learning outcomes:
The student understands the principles of diagnosis and surgical treatment of endocrine diseases, breast diseases, diseases of the chest wall and the organs of the thoracic and abdominal cyvity, arterial and venous system. The student is able to solve problems of differential diagnosis and by the analysis of disease symptomatology and auxiliary examinations can identify surgical diseases of organs and systems. Become familiar with the principles of organ procurement and transplantation, as well as the problems of surgery in senile age.

Class syllabus:
Diseases of the thyroid, parathyroid, adrenal gland and thymus.
Benign and malignant breast disease
Surgical diseases of the organs of the thoracic cavity
Surgical diseases of the esophagus and mediastinum
Surgical disease of the aortic arch branches. Steal syndrome, thoracic outlet syndrome
Surgical diseases of the abdominal aorta branches
Abdominal Aortic Aneurysm
Acute and chronic ischemic limb syndrome
Basics of Cardiac Surgery
Surgical aspects of diagnosis and treatment of Diabetes mellitus. Diabetic foot
Surgical diseases of venous and lymphatic system
Thromboembolic disease, embolism to pulmonary artery. Anticoagulant and thrombolytic therapy
Hemodialysis and vascular access for hemodialysis.
Organ donation and transplantation programme
Surgical problems of senile age

Recommended literature:

Zeman M. a kol.: Chirurgická propedeutika, Praha, Grada 2000, 516s.
Way L. W. a kol.: Současná chirurgická diasgnostika a léčba I;II.Praha, Grada 1998. 1659 s.
Marko L. a kol.: Chirurgia pažeráka a žalúdka. Banská Bystrica, Marko BB s.r.o.2007.214 s.
Štvrtinová V. a kol.: Choroby ciev. Bratislava, SAP 2008, 896 s.
Siman J. a kol.: Princípy chirurgie I. Slovac academic Press 2007, 923 s.
Haruštiak S. a kol.: Princípy chirurgieII. Slovac academic Press 2010, 923 s.
Černý J. a kol.: Špeciálna chirurgia III. Martin, Osveta 1995 645 s.

Languages necessary to complete the course:
slovak language

Notes:

Past grade distribution
Total number of evaluated students: 429

A	ABS0	B	C	D	E	FX
17,02	0,0	49,42	27,51	5,13	0,47	0,47

Lecturers: prof. MUDr. Ľudovít Laca, PhD.

Last change: 06.12.2017

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ChKTC/J-S-VL-524/18	Surgery (2)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 2 / 2 **per level/semester:** 30 / 30
Form of the course: on-site learning

Number of credits: 4

Recommended semester: 7.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Surgery 1

Course requirements:
Continuous assessment of students takes the form of a written examination-test, minimum threshold of success: 60 %. Evaluation: A: 95–100 %, B: 85–90 %, C: 75–80 %, D: 65–70 %, E: 60 %, FX: less than 60 %

Learning outcomes:
Student knows the problematics of acute abdomen, principles of diagnosis and treatment in adults and children. Also is familiar with surgical diseases of the stomach and duodenum, and indications for surgical treatment. Student knows surgical disease of the liver, gallbladder, bile ducts and pancreas and principles of surgical treatment. Is familiar with the surgical diseases of the small and large intestine and their surgical treatment. Studnet knows hernias and the principles of their surgical treatment. Is familiar with particularities of pediatric surgery.

Class syllabus:
Acute abdomen- definition, Division of acute abdomen, especially errors in diagnosis. Principles of diagnosis and treatment of acute abdomen. Bowel obstruction, inflammatory acute abdomen, gastrointestinal bleeding, portal hypertension. Acut abdomen in children. Ulcer disease of the stomach and duodenum, complications, indications for surgical treatment. Surgical diseases of the liver, gallbladder and biliary tract. Surgical diseases of the pancreas. Tumor and non-neoplastic diseases of the small and large intestine and rectum. Hernia. Particularities of Pediatric Surgery.

Recommended literature:
Sabiston, D.C.: Textbook of Surgery. The biological Basic of Modern Surgical Practice. Philadelphia: W.B. Saunders Comp. 1997, 2318 pp.
ISBN 0-7216-5887-3
Liechty, D., Soper, R.T.: Fundamental of Surgery. Philadelphia: C.V.Mosby Comp., 1989, 646 pp.
ISBN 0-8016-2962-4
Way, L.W.: Current Surgical Diagnosis and Treatment. New York: Lange Medical Books, 2003. 1468 pp.
ISBN 0-07-112444-6

Skinner, H.B.: Current Diagnosis and Treatment in Orthopedics. Norwalk: Appleton and Lange, 1995. 645 pp.
ISBN 0838510094

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 291

A	ABS0	B	C	D	E	FX
13,06	0,0	39,18	35,05	11,0	1,03	0,69

Lecturers: prof. MUDr. Ľudovít Laca, PhD.

Last change: 25.01.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ChKTC/J-S-VL-525/19	Surgery (3)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 2 / 2 **per level/semester:** 30 / 30
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 8.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Chirurgia 2

Course requirements:
Scale of assessment (preliminary/final): Priebežné hodnotenie študentov prebieha formou písomnej skúšky- testu, minimálna hranica úspešnosti: 60 %. Hodnotenie: A: 95–100 %, B: 85–90 %, C: 75–80 %, D: 65–70 %, E: 60 %, FX: menej ako 60 %.

Learning outcomes:
Absolvent ovláda problematiku neuroendokrinných nádorov GIT-u, problematiku hernií, vrodených chýb tráviaceho systému, ovláda princípy miniinvazívnej chirurgie, pozná nové technológie v chirurgii. Ovláda základné diagnostické a terapeutické postupy pri ošetrovaní polytraumy. Pozná diagnostiku a princípy liečby poranení hrudníka, vnútro hrudníkových orgánov a orgánov dutiny brušnej a retroperitonea. Pozná osobitosti traumatológie detského veku. Ovláda diagnostiku a princípy liečby poranenia srdca a ciev. Pozná zásady perioperačnej starostlivosti pri úrazoch.

Class syllabus:
Neuroendokrinné nádory GIT-u, ich chirurgická liečba. Hernie. Vrodené chyby tráviaceho systému a ich chirurgická liečba. Miniinvazívna chirurgia. Nové technológie v chirurgii.Polytrauma, diagnostické a terapeutické postupy, priority ošetrenia. Poranenie hrudníka a vnútro hrudníkových orgánov. Poranenie vnútro brušných orgánov a retroperitonea. Osobitosti traumatológie detského veku. Poranenie srdca a ciev. Popáleniny. Perioperačná starostlivosť pri úrazoch.

Recommended literature:
Sabiston, D.C.: Textbook of Surgery. The biological Basic of Modern Surgical Practice. Philadelphia: W.B. Saunders Comp. 1997, 2318 pp.
ISBN 0-7216-5887-3
Liechty, D., Soper, R.T.: Fundamental of Surgery. Philadelphia: C.V.Mosby Comp., 1989, 646 pp.
ISBN 0-8016-2962-4
Way, L.W.: Current Surgical Diagnosis and Treatment. New York: Lange Medical Books, 2003. 1468 pp.
ISBN 0-07-112444-6

Skinner, H.B.: Current Diagnosis and Treatment in Orthopedics. Norwalk: Appleton and Lange, 1995. 645 pp. ISBN 0838510094

Languages necessary to complete the course:
anglický jazyk

Notes:

Past grade distribution
Total number of evaluated students: 190

A	ABS0	B	C	D	E	FX
2,63	0,0	13,68	39,47	35,26	8,95	0,0

Lecturers: prof. MUDr. Ľudovít Laca, PhD.

Last change: 27.09.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ChKTC/J-S-VL-526/19	Surgery (4)

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

Number of credits: 1

Recommended semester: 9.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Surgery 3

Course requirements:
Scale of assessment (preliminary/final): The condition for the obtaining the credits is the 2/3 (66%) attendance of the lectures and practical seminars.Evaluation: A: 93–100 %, B: 86–92 %, C: 79–85 %, D: 72–78 %, E: 65–71 %, FX: 64 % and less

Learning outcomes:
Student knows the concept, content and basics of the plastic surgery, its operational techniques, diagnostic methods and therapeutic procedures, knows basic nosological entity in the field of plastic surgery. From practical skills student knows basic examination of the hand.Student is familiar with transplant program.

Class syllabus:
Contents and operational techniques in plastic surgery, wound healing, scars, keloids, skin grafts and flaps ,
species distribution, use. Hand surgery - Dupuytren's contracture , carpal tunnel syndrome. Transplantation from dead or living donors.

Recommended literature:
Grab, Smith: Plastic Surgery, 6th Edition, 2006. Sabiston, D.C.: Textbook of Surgery. The biological Basic of Sabiston, D.C.: Textbook of Surgery. The biological Basic of Modern Surgical Practice. Philadelphia: W.B. Saunders Comp. 1997, 2318 pp.
ISBN 0-7216-5887-3
Liechty, D., Soper, R.T.: Fundamental of Surgery. Philadelphia: C.V.Mosby Comp., 1989, 646 pp.
ISBN 0-8016-2962-4
Way, L.W.: Current Surgical Diagnosis and Treatment. New York: Lange Medical Books, 2003. 1468 pp.
ISBN 0-07-112444-6
Skinner, H.B.: Current Diagnosis and Treatment in Orthopedics. Norwalk: Appleton and Lange, 1995. 645 pp.
ISBN 0838510094

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 174

A	ABS0	B	C	D	E	FX
99,43	0,0	0,0	0,57	0,0	0,0	0,0

Lecturers: prof. MUDr. Ľudovít Laca, PhD.

Last change: 30.09.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.ChKTC/J-S-VL-527/19	**Course title:** Surgery (5)

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

Number of credits: 1

Recommended semester: 10.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Surgery 4

Course requirements:
Scale of assessment (preliminary/final): The condition for the obtaining the credits is the 2/3 (66%) attendance of the lectures and practical seminars.Evaluation: A: 93–100 %, B: 86–92 %, C: 79–85 %, D: 72–78 %, E: 65–71 %, FX: 64 % and less

Learning outcomes:
The graduate is familiar with the problematics of benign and malign dermal tumors – the classification, diagnostics and treatment options. The student has knowledge about burn injury – the late consequences of burn injury, diagnostics and treatment of hand trauma .The lesion of extensors, flexors, dilacerative injuries and congenital anomalies of hand. Practical skills – the assessment of hand injury. Student is familiar with principles of care about transplanted patients.

Class syllabus:
Benign and malignant tumors of the skin and their surgical treatment. Burn injury – the late consequences of burn injury, diagnostics and treatment of hand trauma .Tthe lesion of extensors, flexors, dilacerative injuries and congenital anomalies of hand.Complications in transplant surgery.

Recommended literature:
Grab, Smith: Plastic Surgery, 6th Edition, 2006. Sabiston, D.C.: Textbook of Surgery. The biological Basic of Sabiston, D.C.: Textbook of Surgery. The biological Basic of Modern Surgical Practice. Philadelphia: W.B. Saunders Comp. 1997, 2318 pp.
ISBN 0-7216-5887-3
Liechty, D., Soper, R.T.: Fundamental of Surgery. Philadelphia: C.V.Mosby Comp., 1989, 646 pp.
ISBN 0-8016-2962-4
Way, L.W.: Current Surgical Diagnosis and Treatment. New York: Lange Medical Books, 2003. 1468 pp.
ISBN 0-07-112444-6
Skinner, H.B.: Current Diagnosis and Treatment in Orthopedics. Norwalk: Appleton and Lange, 1995. 645 pp.
ISBN 0838510094

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 173

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

Lecturers: prof. MUDr. Ľudovít Laca, PhD.

Last change: 30.09.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ChKTC/2-JVL-528/17	Surgery (6)

Educational activities:
Type of activities: practicals
Number of hours:
per week: 26,66 **per level/semester:** 399,9
Form of the course: on-site learning

Number of credits: 12

Recommended semester: 11., 12..

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Surgery 5

Course requirements:
Completition of practice before state board exam

Learning outcomes:
Studnet can complete knowledge of surgical diseases, can enhance the practical skills of surgical propedeutics principles, knows the principles of daily care of the surgical patient,
knows the principles of work at the surgical ambulance and operating room. Listed knowledge can applicate to other surgical fields / orthopedics, traumatology, urology, plastic surgery, neurosurgery, pediatric surgery, anaesthesiology and intensive medicine

Class syllabus:
Daily participation in the work at the surgical ward, ambulance and operating room under the supervision of the designated doctor. Write daily records of treatment of a patient, perform small surgery / removal of stitches, wound dressing, assisting in simple surgeries

Recommended literature:
Siman, J. a kol..: Princípy chirurgie Bratislava: SAP, 2007,923 s. ISBN 80-8910-494-0
Ferko, A. a kol.: Chirurgie v kostca. Praha: Grada, 2002. 596 s, isbn 80-2470-304
Way L.W. a kol.: Současná chirurgická diagnostika a léčba I;II. Praha, Grada 1998. 1659 s.
Muller, M. a kol : Chirurgie pro studium a praxi. Praha: Publ., 1997, 441s, www.chirweb.cz
Laca, Ľ.: Ochorenia pečene žlčových ciest a pankreasu. Učebné texty z chirurgie pre št. odbor VL Martin: JLF UK, 2009, 120s, ISBN 978-80-970159-4-7.
Schein,M., Rogers, P.N. : Urgentní břišni chirurgie. Praha: Grada,2011, 448s.
Černý, Ján.: Chirurgia tráviacej rúry. Martin: Osveta, 1988, 512

Languages necessary to complete the course:
slovak language

Notes:

Past grade distribution
Total number of evaluated students: 383

A	ABS0	B	C	D	E	FX
83,55	0,0	12,27	2,87	1,04	0,26	0,0

Lecturers: prof. MUDr. Ľudovít Laca, PhD.

Last change: 06.12.2017

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ChKTC/J-S-VL-522/17	Surgical Propedeutics

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 3 / 2 **per level/semester:** 45 / 30
Form of the course: on-site learning

Number of credits: 6

Recommended semester: 5.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Anatomy 3, Physiology 2

Course requirements:
Continuous assessment of students takes the form of a written examination-test, minimum threshold of success: 65 %. Evaluation: A: 93–100 %, B: 86–92 %, C: 79–85 %, D: 72–78 %, E: 65–71 %, FX: 64 % and less
Final assessment: test, practical and theoretical exam.

Learning outcomes:
Student is familiar with the contents in the field of surgery, ranging from historical aspects to present. Knows the basic surgical techniques and procedures respecting the principles of asepsis and antisepsis. Knows the principles of indications for surgical treatment, can determine operational risk and specify the principles of preoperative, intraoperative and postoperative care. Is familiar with the principles of diagnosis and treatment of locomotor system injuries, burns, frostbite. Is familiar with the principles of diagnosis and treatment of surgical infection. Is familiar with the principles of diagnosis and surgical treatment of malignant disease. Know the basic issue of minimally invasive surgery and transplantation.

Class syllabus:
History of Surgery (breakthrough period, important personalities in surgery). Division of surgery and
principles of surgical treatment, indications for surgical treatment. Basic surgical techniques and procedures. Minimally invasive surgery. Asepsis, antisepsis, sterilization, disinfection. History and physical examination of the surgical patient. Invasive and non-invasive diagnostic methods in the investigation of the surgical patient. Operational risk. Principles of preoperative preparation. Reaction of the organism to injuries and surgical trauma. Changes in the homeostasis of the organism after injury and surgery. Post-operative care and post-operative complications - (CNS, cardiovascular, pulmonary, renal, GI, wound et al.). Shock - definition, classification, and pathophysiology of shock. Monitoring. Prevention and treatment of shock. Nutritional disorders in surgical patients. Enteral and parenteral nutrition. Complications of parenteral nutrition. Hemostatic mechanism and its failure in surgical patients. Antiplatelet, anticoagulant and fibrinolytic therapy. Blood transfusion, blood derivates, alternative solutions. Indications,

risks and complications of blood transfusions and blood products. Infections in surgery - surgical sources of infection. Nosocomial infections. Bacteremia, sepsis, SIRS, multiorgan failure in sepsis. Factors affecting the occurrence and course of infection. Prevention, diagnosis and treatment of surgical infections. Chemotherapy and antibiotic treatment, the principle of prophylactic and therapeutic administration of antibiotics. Bacteriological monitoring. Pyogenic infections of wounds , lymphangoitis, lymphadenitis, hidrosadenitis, cellulitis, abscess, osteomyelitis, anaerobic infection, gas phlegmon, folliculitis, furuncle, carbuncle, cheilitis. Post-operative infections. Inflammatory diseases of the fingers and hand. Growth and spread of malignant tumors, diagnosis, treatment, primary and secondary prevention of tumors. Basics of the oncological surgery. Classification of tumors. Ethical problems in surgery, legal aspects in surgery, surgical assessment activities. Blood transfusion, blood derivates, alternative solutions. Indications, risks and complications of administration transfusion and blood derivatives. Infections in surgery - surgical sources of infection. Nosocomial infections. Bacteremia, sepsis, SIRS, multiorgan failure in sepsis. Factors affecting the occurrence and course of infection. Prevention, diagnosis and treatment of surgical infections. Chemotherapy and antibiotic treatment, the principle of prophylactic and therapeutic administration of antibiotics. Bacteriological monitoring. Pyogenic wound infections, lymphangoitis, lymphadenitis, hidrosadenitis, cellulitis, abscess, osteomyelitis, anaerobic infection, gas cellulitis, folliculitis, furuncle, carbuncle, cheilitis. Post-operative infections. Inflammatory diseases of the fingers and hand. Growth and spread of malignant tumors, diagnosis, treatment, primary and secondary prevention of tumors. Basics of the oncological surgery. Classification of tumors. Ethical problems in surgery, legal aspects in surgery, surgical assessment activities.

Recommended literature:

Siman, J. a kol.: Princípy chirurgie. Bratislava: SAP, 2007, 923 s. ISBN 80-8910-494-0
Zeman, M.: Chirurgická propedeutika. Praha: Grada. 2006, 524 s.,ISBN 80-7169-705-2
Kolektív autoru, ČR: Chirurgická propedeutika. Praha, Grada 2000. 516 s.
Way L.W. a kol.: Současná chirurgická diagnostika a léčba I;II. Praha, Grada 1998. 1659 s

Languages necessary to complete the course:

slovak language

Notes:

Past grade distribution

Total number of evaluated students: 429

A	ABS0	B	C	D	E	FX
26,57	0,0	18,41	19,81	19,11	15,85	0,23

Lecturers: prof. MUDr. Ľudovít Laca, PhD., prof. MUDr. Alexander Ferko, CSc., MUDr. Michal Hošala, PhD., MUDr. Ján Janík, PhD., MUDr. Marek Smolár, PhD., MPH

Last change: 06.12.2017

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚVZ/J-S-VL-589/19	Tropical Medicine

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 1 / 1 **per level/semester:** 15 / 15
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 10.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Public Health 1

Course requirements:
• Active attendance at the practicals: 3 points for each session (max. 24 points)
• Compilation of health-travel characteristics of a country of student's choice situated in Africa, Asia or Latin America (max. 38 points) until end of the 7th week of the semester
The characteristics in extend of 1-2 pages should contain items as follows:
o general characteristics of the country (climate, cultural, economic and political characteristics)
o specific health-related risks
o recommended and required vaccinations
o malaria (risk, possibly areas under risk and seasons, effective chemoprophylaxis)
o other health-related risks
• Written test: 19 questions – 2 points each (max. 38 points)
Final evaluation (max. 100 points):
Achieved points Evaluation
100 – 91 A (excellent - 1)
90 – 81 B (very good – 1.5)
80 – 73 C (good - 2)
72 – 66 D (satisfactory – 2.5)
65 – 60 E (sufficient - 3)
59 and less Fx (fail - 4)
Scale of assessment (preliminary/final): 0/100

Learning outcomes:
After completion of the subject the student understands of tropical medicine, specific features of epidemiology and management of communicable and non-communicable diseases in conditions of tropical and subtropical zones, health aspects of travelling

Class syllabus:
Definitions of terms and classification
Specific features of epidemiology and management of communicable and non-communicable diseases in tropical and subtropical zones

Intestinal infections in the tropics and subtropics
Respiratory infections (airborne infections) in the tropics and subtropics
Skin and external mucosae diseases in the tropics and subtropics
Blood infections in the tropics and subtropics
The most important parasitic diseases and tropic and subtropical zones
Health disorders caused by heat and sun radiation
Nutrition associated diseases in developing countries
Essentials of travel medicine – vaccination of travellers, recommendations and counselling, topical information resources, international regulations (International Health Regulations - IHR).

Recommended literature:
Obligatory:
https://moodle.uniba.sk/
CDC: Traveller's health. http://wwwn.cdc.gov/travel/default.asp
WHO: International Travel and Health. http://www.who.int/ith/en/
Recommended:
WHO: Tropical diseases. http://www.who.int/topics/tropical_diseases/en/

Languages necessary to complete the course:
english

Notes:

Past grade distribution
Total number of evaluated students: 0

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

Lecturers: prof. MUDr. Tibor Baška, PhD.

Last change: 24.08.2020

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.UK/J-S-VL-578/19	Urology

Educational activities:
Type of activities: practicals
Number of hours:
per week: 2,5 **per level/semester:** 37,5
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 9.

Educational level: I.II.

Prerequisites:

Course requirements:
Credit

Learning outcomes:
Basic knowledge of urology: embryology, anatomy, physiology, pathology, pathophysiology, etiology, pathogenesis, diagnosis and treatment of urogenital diseases

Class syllabus:
Examination of urological patient, symptoms of urogenital disorders, urine sampling and analysis Instrumentation in urology, acute urinary retention, basic andrology (infertility, erectile dysfunction, sperm bank) Radiological, ultrasonographic and radionuclide examination in urology. Basic urodynamic investigation. Differential diagnosis of hematuria Differential diagnosis of urological disorders. Emergency in urology. Treatment of urinary tract infection. Cadaverous program, hemodialysis and kidney transplantation

Recommended literature:

Languages necessary to complete the course:
English Language

Notes:

Past grade distribution
Total number of evaluated students: 173

A	ABS0	B	C	D	E	FX
98,84	0,58	0,0	0,58	0,0	0,0	0,0

Lecturers: doc. MUDr. Ján Ľupták, PhD., prof. MUDr. Ján Kliment, CSc., prof. MUDr. Ján Švihra, PhD.

Last change: 19.11.2019

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.ÚVZ/J-S-VL-610/19	**Course title:** Vaccinology
Educational activities: **Type of activities:** practicals / lecture **Number of hours:** **per week:** ,5 / ,5 **per level/semester:** 7,5 / 7,5 **Form of the course:** on-site learning	
Number of credits: 1	
Recommended semester: 10.	
Educational level: I.II.	
Prerequisites:	
Recommended prerequisites: Public Health 1	
Course requirements: Requirements to successfully complete the course: To compete the course, three basic conditions should be fulfilled: 1. active attendance in seminars: compulsory attendance in seminars – in case of absence, the student should substitute the missing seminars through consultation with the respective teacher 7x4 (28 points) 2. well arranged preparation of the 1st theme in a form of an ppt presentation (max. 36 points) until mid of the semseter 3. well arranged preparation of the 2nd theme in a form of an ppt presentation (max. 36 points) until end of the semester Final evaluation (max. 100 points): Achieved points Evaluation 100 – 91 A (excellent - 1) 90 – 81 B (very good – 1.5) 80 – 73 C (good - 2) 72 – 66 D (satisfactory – 2.5) 65 – 60 E (sufficient - 3) 59 and less Fx (fail - 4) At least 60 points in total evaluation are needed to compete the course. Scale of assessment (preliminary/final): 0/100	
Learning outcomes: After completion of the subject the student understands basic principles of prevention by vaccination, the effect of vaccines in individuals on herd immunity, public health significance of vaccination strategies and their implication in the society.	
Class syllabus: Public Health importance of vaccination in Slovakia. Legislation related to vaccination in Slovakia, the National Immunization Program. Composition, types and kinds of vaccines. The principles	

of appropriate immunization and appropriate vaccination techniques. Management of vaccination. Management of vaccines. Post vaccination reactions and contraindications. Vaccination of specific population groups. Current trends in vaccinology. Evaluation of immunization strategies, monitoring and control of vaccination.

Recommended literature:

Obligatory:

PLOTKIN, S.A. Vaccine Fact Book 2013. Washington: PhRMA, September 2013. 102 p. dostupné na internene: http://www.phrma.org/sites/default/files/pdf/PhRMA_Vaccine_FactBook_2013.pdf

World Health Organization www.who.int

http://www.ecdc.europa.eu

Recommended:

HUDEČKOVÁ, H., ŠVIHROVÁ, V.: Očkovanie. Martin, Osveta, 2013, 221 s. ISBN 978-80-80633-96-7

CDC. Epidemiology and Prevention of Vaccine-Preventable Diseases. The Pink Book. http://www.cdc.gov/nip/publications/pink/

Centers for Disease Control and Prevention http://www.cdc.gov/

Languages necessary to complete the course:

english

Notes:

Past grade distribution

Total number of evaluated students: 0

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

Lecturers: prof. MUDr. Henrieta Hudečková, PhD., MPH

Last change: 24.08.2020

Approved by:

COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚTV/J-S-VL-TV5/15	Winter Practice in Physical Education

Educational activities:
Type of activities: practicals
Number of hours:
per week: 4 **per level/semester:** 60
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 1.

Educational level: I.II.

Prerequisites:

Course requirements:
presence

Learning outcomes:
The graduate of this subject personify his attitude to the necessity of healthy life style. He will understand the health sense of active movement for the human health. He will bring into his attitude and conviction the role of active movement, sport as a effective prevention against civilization illnesses of today as a part of therapy to improve the state of health of the whole population. He will become own surely about the importance of sport and motion activities by harmonic young human character progress.

Class syllabus:

Recommended literature:
Sjezdové lyžování Příbramský M., Maršík J

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 11

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

Lecturers: PaedDr. Jozef Šimeček

Last change: 19.03.2018

Approved by: