Course descriptions

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COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University 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 / 7
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: 37

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., Ing. Silvia Gavliaková, PhD., MUDr. Peter Ďurdík, PhD.
Last change: 21.03.2022
Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

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

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

Number of credits: 1

Recommended semester: 7.

Educational level: I.II.

Prerequisites:

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

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

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

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

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

Languages necessary to complete the course:
English language

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

Past grade distribution
Total number of evaluated students: 404

A	ABS0	B	C	D	E	FX
81,68	0,0	11,88	3,71	1,49	0,99	0,25

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

Last change: 24.03.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.PK/J-S-VL-625/18	Communication in Clinical Practice (1)

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

Number of credits: 1

Recommended semester: 8.

Educational level: I.II.

Prerequisites: JLF.PK/J-S-VL-532/17 - Medical Psychology and Basics of Communication

Course requirements:
Requirements for evaluation:
1. The participation in practicals is compulsory for at least 5-times (10 hours, especially from 1st to 10th week)
2. Check in the course of practicals:
- Evaluation till the end of 14th week: active participation in practicals; permanent study check (control question); examination of patients, structured case reports and analysis – "PESS" - communication problem-etiology-symptoms-solving
Evaluation of the results of running controls:
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 %

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
Communication in medicine – characteristic and meaning.

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

Recommended literature:

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

Languages necessary to complete the course:
english

Notes:

Past grade distribution
Total number of evaluated students: 357

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

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

Last change: 06.04.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

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

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

Number of credits: 3

Recommended semester: 7.

Educational level: I.II.

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

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: 415

A	ABS0	B	C	D	E	FX
64,34	0,0	27,71	6,02	1,45	0,48	0,0

Lecturers: doc. MUDr. Mária Janíčková, PhD., MPH, MUDr. Igor Malachovský, PhD., MUDr. Katarína Mikušková, PhD., MDDr. Sarah Kalmanová, MDDr. Michaela Smatanová, PhD.

Last change: 06.04.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

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

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

Number of credits: 5

Recommended semester: 7.

Educational level: I.II.

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

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

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

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

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

Recommended literature:

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

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 513

A	ABS0	B	C	D	E	FX
85,38	0,0	12,48	1,75	0,39	0,0	0,0

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

Last change: 06.04.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

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

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

Number of credits: 2

Recommended semester: 8.

Educational level: I.II.

Prerequisites:

Course requirements:

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

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

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

Languages necessary to complete the course:
English language

Notes:

Past grade distribution

Total number of evaluated students: 5

ABS0	M
100,0	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. Martina Šutovská, PhD., prof. MUDr. Mgr. Juraj Mokrý, PhD., doc. MUDr. Marta Jošková, PhD., PharmDr. Martin Kertys, PhD., MUDr. Ladislav Šutiak, PhD., prof. MUDr. Ľudovít Laca, PhD., MUDr. Michal Hošala, PhD., MUDr. Ján Janík, PhD., doc. MUDr. Marek Smolár, PhD., MPH, MUDr. Marek Malík, PhD., prof. MUDr. Branislav Kolarovszki, PhD., MBA, MUDr. Romana Richterová, PhD., prof. MUDr. Lukáš Plank, CSc., prof. MUDr. Katarína Adamicová, PhD., MUDr. Tomáš Balhárek, PhD., MUDr. Jozef Mičák, PhD., MUDr. Petra Kolenčíková, PhD., MUDr. Jaroslav Fábry, PhD., prof. MUDr. Ján Staško, PhD., prof. MUDr. Peter Kubisz, DrSc., MUDr. Lenka Lisá, PhD., doc. MUDr. Juraj Sokol, PhD., MUDr. Lucia Stančiaková, PhD., MUDr. Tomáš Šimurda, PhD., RNDr. Jana Žolková, PhD., prof. MUDr. Henrieta Hudečková, PhD., MPH, prof. MUDr. Tibor Baška, PhD., doc. Ing. Viera Jakušová, PhD., MPH, Ing. Stanislav Kuka, PhD., prof. MUDr. Viera Švihrová, CSc., PhDr. Marta Tkáčová, PhD., Mgr. Róbert Čecho, PhD., Mgr. Eva Malobická, PhD., Mgr. Martin Novák, PhD., Mgr. Miroslava Sovičová, PhD., Mgr. Eliška Štefanová, PhD., Mgr. Mária Tatarková, PhD., doc. MUDr. Vladimír Čalkovský, PhD., prof. MUDr. Andrej Hajtman, PhD., prof. MUDr. Mirko Zibolen, CSc., prof. MUDr. Katarína Maťašová, PhD., MUDr. Tomáš Jurko, PhD., prof. MUDr. Egon Kurča, PhD., FESO, doc. MUDr. Vladimír Nosáľ, PhD., FESO, doc. MUDr. Štefan Sivák, PhD., doc. MUDr. Ema Kantorová, PhD., MUDr. Monika Turčanová Koprušáková, PhD., prof. MUDr. Dušan Meško, PhD., prof. MUDr. Miloš Tatár, CSc., prof. MUDr. Renata Péčová, PhD., MPH, prof. MUDr. Jana Plevková, PhD., MUDr. Tomáš Buday, PhD., prof. RNDr. Mariana Brozmanová, PhD., MUDr. PhDr. Igor Hrtánek, PhD., MUDr. Miloslav Oppa, PhD., RNDr. Veronika Mešťanová, PhD., MUDr. Jan Hudeček, CSc., MUDr. Anna Bobčáková, MUDr. Ján Červeň, MUDr. Ľuboš Hamada, MUDr. Ján Lazor, prof. MUDr. Eva Rozborilová, CSc., doc. MUDr. Robert Vyšehradský, PhD., MUDr. Ivana Žiačiková, MUDr. Róbert Rosoľanka, PhD., doc. MUDr. Katarína Šimeková, PhD., doc. MUDr. Peter Bánovčin, PhD., MBA, MUDr. Martin Ďuriček, PhD., MUDr. Peter Hyrdel, PhD., prof. MUDr. Rudolf Hyrdel, CSc., MUDr. Martin Schnierer, PhD., doc. MUDr. Kamil Biringer, PhD., prof. MUDr. Ján Danko, CSc., MUDr. Michaela Hrtánková, PhD., MUDr. Ivana Chmúrna, PhD., MUDr. Petra Kasajová, PhD., MUDr. Štefan Krivuš, CSc., doc. MUDr. Erik Kúdela, PhD., MUDr. Zuzana Laučeková, PhD., MUDr. Jana Siváková, PhD., MUDr. Imrich Žigo, CSc.

Last change: 08.03.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

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

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

Number of credits: 1

Recommended semester: 8.

Educational level: I.II.

Prerequisites:

Course requirements:
Evaluation of students is provided through attending, running (10 items - max. 50 p.) and final written (10 items - max. 50 p.) tests.
Minimal level to pass the subject: 65 %.
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:
Obligatory literature:
ONDRUŠ, P., ONDRUŠOVÁ, I. A KOL. Manažment a financovanie v zdravotníctve: príručka zdravotníckeho manažéra Bratislava: Matica slovenská, 2017. 320 s.

KOVÁČ E.: Zdravotné poistenie. Bratislava, Herba, 2009, s. 96, ISBN 978-80-89171-62-0
Zákon č. 580/2004 Z. z. v znení neskorších predpisov
Zákon č. 581/2004 Z. z. v znení neskorších predpisov
aktuálna Správa o stave vykonávania verejného zdravotného poistenia (Vestník ÚDZS)
materiály dostupné na: www.health.gov.sk, www.udzs.sk

Languages necessary to complete the course:
slovak

Notes:

Past grade distribution
Total number of evaluated students: 0

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

Lecturers: prof. MUDr. Viera Švihrová, CSc.

Last change: 10.03.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

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

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

Number of credits: 1

Recommended semester: 7.

Educational level: I.II.

Prerequisites:

Course requirements:
90% participation in seminars

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

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

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

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

Languages necessary to complete the course:
English language

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

Past grade distribution
Total number of evaluated students: 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. František Novomeský, PhD., prof. MUDr. Ľubomír Straka, PhD., MUDr. Veronika Rybárová, PhD.

Last change: 18.03.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

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

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

Number of credits: 4

Recommended semester: 7.

Educational level: I.II.

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

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

Learning outcomes:

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

Recommended literature:

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 431

A	ABS0	B	C	D	E	FX
24,13	0,0	43,62	26,22	5,34	0,7	0,0

Lecturers: prof. MUDr. Rudolf Hyrdel, CSc., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin, prof. MUDr. Peter Galajda, CSc., doc. MUDr. Jurina Sadloňová, CSc., doc. MUDr. Robert Vyšehradský, PhD., MUDr. Anna Bobčáková, MUDr. Ján Červeň, MUDr. Ľuboš Hamada, MUDr. Ivana Žiačiková, doc. MUDr. Peter Bánovčin, PhD., MBA, MUDr. Michal Demeter, PhD., MUDr. Martin Ďuriček, PhD., MUDr. Jakub Hoferica, MUDr. Peter Hyrdel, PhD., MUDr. Peter Lipták, PhD., MUDr. Lenka Nosáková, PhD., MUDr. Michal Prokopič, PhD., MUDr. Martin Schnierer, PhD., MUDr. Diana Vážanová, MUDr. Ľubomír Skladaný, PhD., MUDr. Jakub Benko, PhD., MUDr. Tomáš Bolek, PhD., MUDr. Kristína Brisudová, MUDr. Matej Stančík, PhD., MUDr. Ľudovít Šutarík, CSc., doc. MUDr. Milan Ochodnický, CSc., MUDr. Martin Jozef Péč

Last change: 06.04.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

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

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

Number of credits: 3

Recommended semester: 8.

Educational level: I.II.

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

Course requirements:
Credit tests

Learning outcomes:

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

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

Recommended literature:

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

Languages necessary to complete the course:
english

Notes:

Past grade distribution
Total number of evaluated students: 385

A	ABS0	B	C	D	E	FX
66,49	0,0	15,32	11,69	5,19	1,3	0,0

Lecturers: prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin, prof. MUDr. Rudolf Hyrdel, CSc., prof. MUDr. Peter Galajda, CSc., doc. MUDr. Jurina Sadloňová, CSc., doc. MUDr. Robert Vyšehradský, PhD., MUDr. Anna Bobčáková, MUDr. Ján Červeň, MUDr. Ľuboš Hamada, MUDr. Ivana Žiačiková, doc. MUDr. Peter Bánovčin, PhD., MBA, MUDr. Michal Demeter, PhD., MUDr. Martin Ďuriček, PhD., MUDr. Jakub Hoferica, MUDr. Peter Hyrdel, PhD., MUDr. Peter Lipták, PhD., MUDr. Lenka Nosáková, PhD., MUDr. Michal Prokopič, PhD., MUDr. Martin Schnierer, PhD., MUDr. Diana Vážanová, MUDr. Ľubomír Skladaný, PhD., doc. MUDr. Margita Belicová, PhD., MUDr. Jakub Benko, PhD., MUDr. Tomáš Bolek, PhD., MUDr. Kristína Brisudová, MUDr. Matej Stančík, PhD., MUDr. Ľudovít Šutarík, CSc., MUDr. Michal Mokáň, PhD., doc. MUDr. Milan Ochodnický, CSc., MUDr. Martin Jozef Péč, doc. MUDr. Dana Prídavková, PhD.

Last change: 06.04.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University 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:** 28 / 14
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 7.

Educational level: I.II.

Prerequisites: JLF.IKG/J-S-VL-537/17 - Internal Medicine Propedeutics (1) and JLF.ÚA/J-S-VL-503/16 - Anatomy (3)

Course requirements:
Attendance at least 6 practicals. Evaluation: A,B,C,D,E. Classification will be based on continual evaluation of knowledges. 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:
1. Central and peripheral paralysis – differential diagnosis. Pyramidal tract. Extrapyramidal motoric systems. Cerebellum.
2. Sensoric systems (vision, hearing, smell, taste, touch). Sensitive afferent systems. Cranial nerves.
3. Cerebral cortex and lobar syndromes (frontal, parietal, temporal and occipital). Equilibrium and space orientation (vestibular system, cerebellum, proprioception and visual system).
4. Stroke. Cerebral ischaemia. Thrombosis of cerebral veins and sinuses.
5. Intracranial bleeding (subarachnoideal and parenchymal). Interventional neuroradiology. Hydrocephalus.
6. Brain trauma. Intracranial hypertension. Spinal cord trauma. Peripheral nerves trauma.
7. Brain tumors. Meningeomas. Spinal cord tumors. Peripheral nerves tumors.

Recommended literature:
Mayer, S.A., Marshall,R.S. On Call Neurology E-Book. 4th ed. Elsevier, 2020. 579 s. eISBN 9780323611008

[https://ebookcentral.proquest.com%9Clib%9Cuniba-ebooks%9Cdetail.action?docID=6039439]https://ebookcentral.proquest.comúlibúuniba-ebooksúdetail.action?docID=6039439
Drobný, M. et al. Neurology Textbook. Reference Text and Study Guide. Martin: Profa-J. 2015. 656 s.
ISBN 978-80-972153-09
Daroff, R.B.et al. Bradleys Neurology in clinical in Clinical Practice, Saunders, 6th ed., Vol.2. 2013.
2544 s. ISBN-13:978-1437704341
Biller, J. Practical Neurology, LWW, 4th ed. 2012. 748 s. ISBN 978-1451142631
Mumenthaler, M. et al. Neurology. Stuttgart: Thieme, 2003. 1008 s. ISBN 3135239047

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 521

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., MUDr. Jana Dluhá, PhD., MUDr. Milan Grofik, PhD., MUDr. Babeta Hofericová, MUDr. Jana Olekšáková, MUDr. Róbert Ružinák

Last change: 06.04.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University 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:** 28 / 14
Form of the course: on-site learning

Number of credits: 4

Recommended semester: 8.

Educational level: I.II.

Prerequisites: JLF.NlK/J-S-VL-545/18 - Neurology (1) and JLF.IKG/J-S-VL-538/17 - Internal Medicine Propedeutics (2)

Recommended prerequisites:
Neurology 1, Internal Medicine Propedeutics 2

Course requirements:
Attendance 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:
1. Generalized and focal epilepsy. Status epilepticus. EEG and video-EEG investigation. Migraine and other types of headache
2. Parkinson disease. Essential tremor. Dystonias. Neuromodulation – deep brain stimulation.
3. Alzheimer disease and other dementias. Sleep disorders. Neuroinfections (bacterial and viral meningitis, brain abscess, parainfectious and postvaccination encephalitis, neurotropic viruses, mycotic, parasitic and opportunistic nervous system infections).
4. Multiple sclerosis and MS variants. MS therapeutic options in the 21st century. ADEM, NMOSD and anti-MOG syndromes. EP investigation.
5. Cervical, thoracic and lumbar pain syndromes. Radicular syndromes. Spinal stenosis. Spondylosurgery.
6. Guillain-Barré syndrome. EMG investigation. Myasthenia gravis. Muscular dystrophies and polymyositis.

Recommended literature:

Mayer, S.A., Marshall,R.S. On Call Neurology E-Book. 4th ed. Elsevier, 2020. 579 s. eISBN 9780323611008
[https://ebookcentral.proquest.com%9Clib%9Cuniba-ebooks%9Cdetail.action?docID=6039439]https://ebookcentral.proquest.comúlibúuniba-ebooksúdetail.action?docID=6039439
Drobný, M. et al. Neurology Textbook. Reference Text and Study Guide. Martin: Profa-J. 2015. 656 s.
ISBN 978-80-972153-09
Daroff, R.B.et al. Bradleys Neurology in clinical in Clinical Practice, Saunders, 6th ed., Vol.2. 2013.
2544 s. ISBN-13:978-1437704341
Biller, J. Practical Neurology, LWW, 4th ed. 2012. 748 s. ISBN 978-1451142631
Mumenthaler, M. et al. Neurology. Stuttgart: Thieme, 2003. 1008 s. ISBN 3135239047

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 388

A	ABS0	B	C	D	E	FX
46,39	0,0	22,68	15,21	5,93	6,7	3,09

Lecturers: prof. MUDr. Egon Kurča, PhD., FESO, doc. MUDr. Vladimír Nosáľ, PhD., FESO, doc. MUDr. Štefan Sivák, PhD., doc. MUDr. Ema Kantorová, PhD., MUDr. Monika Turčanová Koprušáková, PhD., MUDr. Jana Dluhá, PhD., MUDr. Milan Grofik, PhD., MUDr. Babeta Hofericová, MUDr. Jana Olekšáková, MUDr. Róbert Ružinák

Last change: 06.04.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KNM/J-S-VL-623/21	Nuclear Medicine

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

Number of credits: 1

Recommended semester: 8.

Educational level: I.II.

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

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

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

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

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

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 94

A	ABS0	B	C	D	E	FX
1,06	0,0	12,77	27,66	43,62	14,89	0,0

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

Last change: 06.04.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KHCh/J-S-VL-640/22	Oncology

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

Number of credits: 1

Recommended semester: 8.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Internal Medicine Propedeutics 2, Pathological Anatomy 2

Course requirements:
The condition for obtaining the credit is 66% (2/3) participation in the overall study (lectures + practical exercises), written test, minimum success rate: 60%. Rating: A: 95% - 100%, B: 88% - 94%, C: 77% - 87%, D: 66% - 76%, E: 60% - 65%, Fx: 60% and less.
Scale of assessment (preliminary/final): Test

Learning outcomes:
By completing the course the students will obtain data about the epidemiological situation of oncological diseases in Slovak Republic and in the world, knowledge of individual exogenous and endogenous risk factors. They will also get acquainted with proven genetic factors, their diagnosis as well as the basics of personalized treatment. Students will obtain an overview of basic diagnostic and therapeutic, as well as preventive methods in cancer diseases.

Class syllabus:
- Terminology, epidemiology of malignant tumors.
- Basics of etiopathogenesis of malignant tumors.
- Importance of molecular biology and genetics.
- TNM classification.
- Acquisition of basic skills in the examination of patients with cancer.
- Overview of the most common diagnostic methods for malignant tumors.
- Overview of treatment modalities with a multidisciplinary approach to determining treatment strategy.
- Basics of chemotherapy, radiotherapy, surgical and supportive treatment of tumors, complications.
- Screening and prevention of malignant tumors.
- In the field of special oncology - main aspects of epidemiology, etiopathogenesis, clinical picture,
diagnostics, therapy of the most common selected cancers.

Recommended literature:

Recommended selected chapters from the following publications:
DeVita, Hellman, and Rosenberg's.Cancer: Principles&Practice of Oncology, 11th Edition, WoltersKluwer 2018, ISBN/ISSN 9781496394637, 2432 p
Niederhuber, Armitage, Doroshow, Kastan and Tepper.Abeloff'sClinicalOncology 6th Edition, Elsevier2020, ISBN978-0-323-47674-4, 2072 p
Drilon, Postow, Vasan and Carlo. PocketOncology (Pocket Notebook) SecondEdition, WoltersKluwer 2018, ISBN :‍1496391039, 374 p

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. Anton Dzian, PhD.

Last change: 29.03.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

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

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

Number of credits: 1

Recommended semester: 7.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
Lectures

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

Learning outcomes:
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
Pathophysiology of diseases, Lange, 2010, 762s

Languages necessary to complete the course:

English

Notes:

Past grade distribution
Total number of evaluated students: 67

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: 18.03.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KDD/J-S-VL-547/22	Pediatric Propedeutics

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

Number of credits: 3

Recommended semester: 7.

Educational level: I.II.

Prerequisites: JLF.IKG/J-S-VL-537/17 - Internal Medicine Propedeutics (1) and JLF.ÚHE/J-S-VL-506/16 - Histology and Embryology (2) and JLF.ÚPF/J-S-VL-535/17 - Pathological Physiology (1)

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

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

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

Principles of examination in clinical immunology and allergology
Metabolisms of water and main electrolytes

Recommended literature:

Šagát, T., Šašinka, M., Kovács, L., Bánovčin, P. a kol. Pediatria I,II. Bratislava: Herba 2019. 1736 s. ISBN 978-80-89631-90-2
Jakušová Ľ., Buchanec, J., Bánovčin, P. a kol.: Dorastové lekárstvo. Martin: Osveta, 1: vydanie, 2014. ISBN 978-80-8063-419-3
Jeseňák, M., Bánovčin, P. a kol. Vrodené poruchy imunity. Bratislava: A-medi manažment s.r.o. 2014 580 s. ISBN 978-80-970825-6-7
K. Maťašová: Neonatológia nielen pre medikov, P+M Turany, 2021, 254s., ISBN: 9788089694808
L.Časnocha Lúčanová: Infekcie novorodencov. P+M Turany, 2019, 120s., ISBN: 9788089694600
Bánovčin, P., Zibolen, M. a kol. Základné informácie o materskom mlieku a dojčení pre pracovníkov v zdravotníctve. Bratislava: A-medi manažment s.r.o. 2016, 112 s. ISBN:978-80-89797-17-2
Fedor, M. a kol.: Intenzivní péče v pediatrii. Osveta, 2006, 461 s., ISBN 8080632170
European Resuscitation Council Guidelines 2021. voľne dostupný internetový zdroj: https://cprguidelines.eu/
Nichols, D.G. a kol.: Roger´s textbook of Pediatric Intensive Care. Fourth edition. Lippincott Williams Wilkins, 2008. 1839 s.
Časopis Pediatria /vyd. SAMEDI Bratislava

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 69

A	ABS0	B	C	D	E	FX
44,93	0,0	23,19	20,29	4,35	2,9	4,35

Lecturers: prof. MUDr. Peter Bánovčin, CSc., doc. MUDr. Ľubica Jakušová, PhD., doc. MUDr. Zuzana Havlíčeková, PhD., prof. MUDr. Mgr. Miloš Jeseňák, PhD., MBA, doc. MUDr. Slavomír Nosáľ, PhD., doc. MUDr. Miriam Kuricová, PhD., prof. MUDr. Mirko Zibolen, CSc., prof. MUDr. Katarína Maťašová, PhD., MUDr. Peter Ďurdík, PhD., MUDr. Anna Ďurdíková, PhD., MUDr. Stanislava Suroviaková, PhD., MUDr. Lenka Turoňová, PhD., MUDr. Jarmila Vojtková, PhD.

Last change: 06.04.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚFa/J-S-VL-529/21	Pharmacology (1)

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

Number of credits: 5

Recommended semester: 7.

Educational level: I.II.

Prerequisites: JLF.ÚPF/J-S-VL-535/17 - Pathological Physiology (1) and JLF.ÚLBch/J-S-VL-511/17 - Medical Biochemistry (2)

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

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

Class syllabus:
General Pharmacology:

- Introduction to pharmacology: basic definitions, kinds of therapy, the route of drug administrations; Drug metabolism: absorption, distribution, metabolism, elimination and excretion of drugs; The basic pharmacokinetic parameters; Basics of pharmacodynamics: mechanism of drug action, the drug action at the molecular level; Factors influencing pharmacokinetic and pharmacodynamic of drugs, endogenous and exogenous factors determined drug effect.
Basics of drugs prescription:
- Pharmacopoeia, classification and nomenclature of drugs, ways of administration, prescription, rules for drugs prescribing – trade products, extemporaneous drugs, opiates, antibiotics;
- Prescription of liquid drug forms – trade products, basics of extemporaneous drugs;
- Prescription of solid and soft drug forms – trade products, basics of extemporaneous drugs;
- Special Pharmacology:
- Pharmacology of ANS: parasympathomimetics, parasympatholytics; sympathomimetics; sympatholytic;
- Pharmacology of GIT: treatment of peptic ulcer disease and inflammatory bowel disease, antiemetics, emetics, prokinetic agent, spasmolytics, treatment of diarrhoea, laxatives, pancreatic enzymes, drugs affecting the function of the bile ducts;
- Pharmacology of respiratory system: treatment of asthma and COPD, antitussives and expectorants;
- Hormones: pancreatic hormones and antidiabetic drugs, adrenal hormones, sex hormones and contraceptives, the hypothalamus and pituitary hormones, thyroid hormones and antithyroid drugs;
- Drugs affecting homeostasis of minerals, bone metabolism, vitamins;
- Principles of anticancer pharmacotherapy;
- Pharmacology of autacoids (histamine antagonists, treatment of allergies, drugs affecting serotonin metabolism, CGRP, migraine treatment, drugs affecting prostaglandins);
- Fundamentals of immunopharmacology (immunosuppression, immunomodulation);
- Clinical trials of drugs;
- Practical lessons aimed at the application of acquired knowledge obtained from the subjects Pharmacology 1. in clinical cases.

Recommended literature:

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

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 227

A	ABS0	B	C	D	E	FX
48,02	0,0	43,61	7,05	0,88	0,44	0,0

Lecturers: prof. RNDr. Soňa Fraňová, PhD., prof. MUDr. Mgr. Juraj Mokrý, PhD., doc. MUDr. Martina Šutovská, PhD., doc. MUDr. Marta Jošková, PhD., PharmDr. Martin Kertys, PhD.

Last change: 06.04.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚFa/J-S-VL-530/21	Pharmacology (2)

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

Number of credits: 5

Recommended semester: 8.

Educational level: I.II.

Prerequisites: JLF.ÚFa/J-S-VL-529/21 - Pharmacology (1) and JLF.ÚPA/J-S-VL-534/17 - Pathological Anatomy (2) and JLF.ÚPF/J-S-VL-536/17 - Pathological Physiology (2)

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

Learning outcomes:
Graduate of the subject Pharmacology 2 masters: Pharmacotherapy of diseases of the cardiovascular system, CNS, management of pain, rational use of antimicrobial drugs. He masters the principles of pharmacotherapy of pain and inflammation, the basics of poison treatment, the specifics of pharmacotherapy in selected groups of patients. Individual parts of Special pharmacology are focused on the characteristics of representatives of selected pharmacological groups in terms of mechanism of action, indication, contraindications, adverse reactions, serious interactions, pharmacokinetic parameters and dosage.

Class syllabus:
Pharmacology of CNS: Classification of the receptor systems and drugs; Hypnotics and Sedatives; Anxiolytics; Antidepressants; Antimanics; Antipsychotics; Nootropic and Cognitive substances; Anticonvulsants; Antiparkinsonic drugs; Drugs used in anaesthesiology: General anaesthetics; Local anaesthetics; Muscle relaxants; Premedication.
- Pharmacology of CVS: Therapy of hypertension; Therapy of heart failure; Antiarrhythmic drugs; Treatment of angina pectoris; Peripheral vasodilators; Anticoagulants; Thrombolytics; Prevention and therapy of CVS diseases; Antithrombotics; Lipid-lowering agents; Pharmacotherapy of obesity.
- Antimicrobial substances: ATB (Inhibitors of bacterial cell wall synthesis, Inhibitors of protein and nucleic acid synthesis); Antituberculotics; Antifungal agents; Anthelmintics; Antimalarial; Antiviral drugs.

- Treatment of pain and inflammation: Opioid analgesics and adjuvant therapy; Non-opioid analgesics; Principles of pain treatment; NSAIDs, Antirheumatics, Antiuratic drugs.
- Principles of toxicology: Treatment of drug poisoning; Drug addiction and addiction therapy.
- Specifics of pharmacotherapy in selected groups of patients: Specifics of pharmacotherapy in Paediatrics, Geriatrics.
- Practical lessons aimed at the application of acquired knowledge obtained from the subjects Pharmacology 2. in clinical cases.

Recommended literature:

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

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 95

A	ABS0	B	C	D	E	FX
11,58	0,0	26,32	20,0	12,63	16,84	12,63

Lecturers: prof. RNDr. Soňa Fraňová, PhD., doc. MUDr. Martina Šutovská, PhD., prof. MUDr. Mgr. Juraj Mokrý, PhD., doc. MUDr. Marta Jošková, PhD., PharmDr. Martin Kertys, PhD.

Last change: 06.04.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University 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:** 28 / 14
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 8.

Educational level: I.II.

Prerequisites: JLF.PK/J-S-VL-532/17 - Medical Psychology and Basics of Communication and JLF.NlK/J-S-VL-545/18 - Neurology (1)

Course requirements:
1. The participation in practicals is compulsory for at least 10-times (especially from 1st to 10th week).
2. The participation in lectures is compulsory for at least 2-times
3. Check in the course of practicals:
- Evaluation till the end of 7th week: active participation in practicals; permanent study check (control question); examination of patients, case reports and analysis.
- Evaluation till the end of 14th week: written test – minimal success 60 %; examination of patients, case reports and analysis; permanent study check (control question).
Evaluation of the results during practicals
Rating: A/1 = 91 – 100 %; B/1,5 = 81 – 90 %; C/2 = 73 – 80 %; D/2,5 = 66 – 72 %; E/3 = 60 – 65 %, Fx = less than 60 %

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:

Literature:
x Geddes, J. et al. Psychiatry. 4th ed. Oxford: Oxford University Press Inc., New York 2012. 477 s. ISBN 978-0-19-923396-0 x Gelder, M. et al. Psychiatry. Oxford: Oxford University Press, 2006. 333 s. ISBN 0-19-852863-9 x Black, D.W., Andreasen, N.C. Introductory Textbook of Psychiatry. Washington: American Psychiatric Publishing, 5th ed., 2011. 717 s. ISBN 978-1-58562-382-2(alk.Paper), ISBN 978-1-58562-400-3 (pbk.: alk paper) Gelder, M. et al. Oxford Textbook of Psychiatry. Oxford: Oxford University Press, 1998. 944 s. ISBN 0-19-262501-2 Moore, D. P., Jefferson, J. W. Handbook of Medical Psychiatry. St. Louis: Mosby, 1996. 545 s. ISBN 0-8151-6484-X Andreasen, N. C., Black, D. W. Introductory Textbook of Psychiatry.Washington: American Psych. Press, 1991. 565 s. ISBN 0-88048-112-9 Kolibáš, E. Introduction to Clinical Psychiatry. Bratislava: EKOL, 1996. 107 s. ISBN 80-967610-0-5 Janicak, P.G. Handbook of Psychopharmacotherapy. Philadelphia: Lippincott Williams & Wilkins, 1999. 391 s. ISBN 0-683-30722-3 Stefan, M. et al. An Atlas of Schizophrenia. London: Parthenon Publ. Group, 2002. 98 s. ISBN 1-85070-074-5 Sartorius, N., Schulze, H. Reducing the Stigma of Mental Illness. Cambridge: Cambridge University Press, 2005. 238 s. ISBN 13: 978-0-521-54943-1

Languages necessary to complete the course:
english

Notes:

Past grade distribution
Total number of evaluated students: 374

A	ABS0	B	C	D	E	FX
88,77	0,0	6,15	3,21	1,34	0,53	0,0

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

Last change: 06.04.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023	
University: Comenius University Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.ÚVZ/J-S-VL-617/19	**Course title:** Public Health (1)
Educational activities: **Type of activities:** practicals / lecture **Number of hours:** **per week:** 3 / 1 **per level/semester:** 42 / 14 **Form of the course:** on-site learning	
Number of credits: 4	
Recommended semester: 7.	
Educational level: I.II.	
Prerequisites: JLF.ÚFy/J-S-VL-516/16 - Physiology (2) and JLF.IKG/J-S-VL-537/17 - Internal Medicine Propedeutics (1) and JLF.ÚO/J-S-VL-531/17 - Ethics in medicine	
Recommended prerequisites: Physiology 2, Internal Medicine Propedeutics 1, Medical Ethics	

Course requirements:

SCORING SYSTEM OF THE COURSE
a/ 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
*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!
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.
The teacher can assign max. 2 extra bonus points for outstanding activity of a student. In selected seminars, learned knowledge on issues dealt during the session can be evaluated via short tests.
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
KAWACHI, I. RICCIARDI, W.: Oxford Handbook of Public Health Practice (4 ed.). Oxford University Press. 2020, ISBN-13:9780198800125

Public Health Textbook. https://www.healthknowledge.org.uk/public-health-textbook
https://moodle.uniba.sk
RECOMMENDED LITERATURE
NAKLÁDALOVÁ, M. et al.: Occupational Musculoskeletal Diseases. Multimedia Guide fot the English Programme Students. https://www.occupational.diseases.upol.cz/book/
https://www.who.int/

Languages necessary to complete the course:
english

Notes:

Past grade distribution
Total number of evaluated students: 421

A	ABS0	B	C	D	E	FX
60,57	0,0	31,83	5,7	1,66	0,24	0,0

Lecturers: prof. MUDr. Tibor Baška, PhD., Mgr. Róbert Čecho, PhD., Mgr. Martin Novák, PhD., Mgr. Eliška Štefanová, PhD., Mgr. Mária Tatarková, PhD., RNDr. Jela Čajdová, PhD., prof. MUDr. Henrieta Hudečková, PhD., MPH

Last change: 06.04.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023	
University: Comenius University 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:** 21 / 21
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 8.

Educational level: I.II.

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

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

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

of image formation of computed tomography - To describe the scale of Hounsfield units (HU) and the principle of window centre and width - To list normal levels of attenuation (in HU) for various organs and common pathologies (e.g. haemorrhage, calcifications) - To describe the normal anatomy of the various organs on CT - To explain the relative value of a magnetic resonance imaging (MRI) examination for the various organ systems and indications - To describe the basic principles of image formation with MRI - To list the most commonly used pulse sequences in MRI (including T2-weighted sequences, T1-weighted sequences, fat suppressed sequences such as STIR sequences, FLAIR sequences, diffusion-weighted imaging) - To describe the absolute or relative contraindications against MR imaging - To explain the safety issues in the MR environment with regard to patients and staff - To describe the normal anatomy of the various organs on MRI - To explain the relative value of an ultrasound examination for various organ systems and indications - To describe the basic principles of image formation with ultrasonography and to list the tissue properties that determine it - To list the frequency of transmission and different types of transducers for various indications for ultrasonography - To be aware of the indications and contraindications for contrast-enhanced ultrasonography - To describe the principles of the Doppler effect - To describe the normal anatomy of the various organs on ultrasonography - To describe the principles of digital subtraction angiography (DSA) - To have a basic understanding of the different types and techniques of image-guided interventions - To describe the basic infrastructure of imaging informatics, including Picture Archiving and Communication Systems (PACS) and Radiological Information Systems (RIS) - To list the sources and properties of ionising radiation and radioactive decay - To describe the generation of X-rays and their interaction with matter - To describe the most important dose measures, including absorbed energy dose (Gy), organ and effective doses (Sv) - To be familiar with the principles of the dose length product (DLP) - To explain stochastic, deterministic and teratogenic radiation effects - To describe the effects of ionising radiation on cells, tissues and organs and to list the mechanisms of repair - To list types and magnitudes of radiation risk from radiation exposure in medicine and to compare it to radiation exposure from natural sources - To list concepts of dose measurement and the relevant dose limits - To understand the As Low As Reasonably Achievable (ALARA) principle - To list the factors influencing image quality and dose in diagnostic radiology - To describe the indications for the use of X-ray contrast media in the study of various organs/organ systems - To describe the indications for the use of CT contrast media in the study of various organs/organ systems - To list typical risks and side effects of commonly used of iodinated contrast media (X-ray and CT contrast media) - To describe the indications for the use of MR contrast media in the study of various organs/organ systems - To list typical risks and side effects of commonly used MRI contrast media - To have a basic understanding of contrast media for ultrasonography - To have a basic understanding of the various timing phases of contrast media application and their respective values according to the clinical problem - To describe risk factors of contrast media nephrotoxicity and to list measures to reduce it - To have a basic understanding of nephrogenic systemic fibrosis (NSF) and to list measures to reduce it 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
2. Heřman M., et al. Basics of Radiology Palacký University Olomouc 2021 ISBN 978-80-244-5697-3 e-book ISBN: 978-80-244-5837-3

Additional literature:

3. Adam A., et al. Grainger & Allison's Diagnostic Radiology, 6th Edition Churchill Livingstone Elsevier 2015 ISBN: 978-0-7020-4295-9 e-book ISBN: 978-0-7020-6128-8
4. Geschwind J., et al. Abrams' Angiography: Interventional Radiology - 3rd edition Lippincott Williams & Wilkins 2013 ISBN13: 978-1609137922
5. Zeleňák K., et. al. Radiology Imaging Techniques of Brain Tumours InTech 2013 DOI: 10.5772/53470
http://www.intechopen.com/books/clinical-management-and-evolving-novel-therapeutic-strategies-for-patients-with-brain-tumors/radiology-imaging-techniques-of-brain-tumours
6. Krajina A., et al. Therapeutic Embolization of Cranial Tumors, Diagnostic Techniques and Surgical Management of Brain Tumors InTech 2011 DOI: 10.5772/19639
http://www.intechopen.com/books/diagnostictechniques-and-surgical-management-of-brain-tumors/therapeutic-embolization-of-cranial-tumors
7. Zeleňák K, et. al. Atlas elementárnych rádiologických nálezov - I. diel (2. vydanie) P + M 2021 ISBN: 9788089694945
8. Zeleňák K, et. al. Atlas elementárnych rádiologických nálezov - II. diel P + M 2020 ISBN: 978-80-89694-68-6
9. Zeleňák K, et. al. How to Improve the Management of Acute Ischemic Stroke by Modern Technologies, Artificial Intelligence, and New Treatment Methods Life (Basel) 2021
DOI:
10.3390/life11060488
https://www.mdpi.com/2075-1729/11/6/488/pdf

Languages necessary to complete the course:
English language

Notes:

Past grade distribution
Total number of evaluated students: 418

A	ABS0	B	C	D	E	FX
32,54	0,0	26,32	14,83	6,94	5,5	13,88

Lecturers: doc. MUDr. Kamil Zeleňák, PhD., MUDr. Martin Števík, PhD., MUDr. Anna Lazorová, MUDr. Adam Krkoška, MUDr. Daniel Lozan, doc. Ing. Juraj Mužík, PhD., MUDr. Jakub Soršák, MUDr. Ján Sýkora, MUDr. Zuzana Trabalková, MUDr. Veronika Vajdová, MUDr. Štefánia Vetešková, MUDr. Martin Vorčák

Last change: 06.04.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

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

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

Number of credits: 1

Recommended semester: 8.

Educational level: I.II.

Prerequisites:

Course requirements:
Obligatory attendace in lectures (a 1 points. - max. 14 points.)
Excused two missed lectures (in accordance with Internal Study Regulations) – points are not included, unless the missed lecture is substituted (way of the substitution upon arrangement with respective teacher).
Processing of a model bibliographic search: (max. 43 points.)
Each student will demonstrate his/her ability to work with bibliogrpahic databases PubMed or SCOPUS through concise bibliographic search of original published scholar articles dealing with a chosen problem . The search should be submitted until the 7th week of the semester.
Critical evaluation of a quality of the retrieved literary resources: (max. 43 ponits.)
Each student will evaluate each resource in the bibliographic search considering its quality (reliabity): methods, design, strength of an evidence, weak and strong points. Developed critical evaluation will be submitted until end of the semester .
Overall evaluation of the course:
Achieved points Evaluation
100 - 91 A (1)
90 - 81 B (1, 5)
80 - 73 C (2)
72 - 66 D (2,5)
65 - 60 E (3)
59 and lessj Fx (4)
Scale of assessment (preliminary/final): 0/100

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

Class syllabus:

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

Recommended literature:

Obligatory literature:

Entrez PubMed (Medline). Available at: http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=PubMed

SCOPUS. Dostupné na: www.scopus.com

ŠTUDOVŇA GOOGLE. Dostupné na: https://scholar.google.sk/

McDonald, J.: Handbook of Biological Statistics. http://www.biostathandbook.com/

https://moodle.uniba.sk/

Recommended literature:

MEŠKO, D. a kol. Medinfo 1. Praktická príručka pre lekárov, zdravotníkov a študentov. Martin: Osveta, 2005, 152 s., ISBN: 80-8063-197-2

MEŠKO, D. a kol. Akademická príručka. 1. vyd. Martin: Osveta, 2004, 316 s.

Languages necessary to complete the course:

english

Notes:

Past grade distribution

Total number of evaluated students: 0

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

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

Last change: 18.03.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University 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:** 14 / 14
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 8.

Educational level: I.II.

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

Course requirements:
Seminar work. Evaluation of students - test. Minimum for test attainment: 50 %. Grading: A: 90–100 %, B: 80 %, C: 70 %, D: 60 %, E: 50 %, FX: 0-40 %
Scale of assessment (preliminary/final): Final evaluation

Learning outcomes:
Completing of the subject also contributes to forming a holistic view of human health and disease in relation to physical and physical activity. The student understands the basics, functions of the organism during the exercise; can solve the basic situations concerning individual types of reactions of the organism during the exercise; can apply the knowledge of physical activity influence in healthy and diseased organism; can analyze the basic pathological organism reactions to physical exertion; can identify non-physiological body reactions in a healthy and diseased organism.

Class syllabus:
Practical teaching
1. Basic preventive medical examination of athletes (history, physical examination, laboratory techniques, anthropometry, dynamometry, examination of the cardiovascular system, physiological murmur, contraindication for sport).
2. Assessment of physical and functional capacity (bicycle and treadmill exercise testing, indication, contraindication, first aid, evaluation of findings). Chest radiographic and echocardiographic examination, computer assistance in evaluation of findings (athletic heart, physiological enlargement of the heart). Movement - the basis of life. Regeneration and relaxation.
3. Electrocardiographic examination of athlete at rest and during exercise, physiological abnormalities of ecg, signs of trainability on ecg.
4. System of rational lifestyle of athlete (nutritional systems, drinking regimens, macrobiotic and vegetarian feeding, microelements, vitamins). Increase and decrease of body weight.
5. Functional-diagnostic examination in some diseases, prescription of physical exercise in some diseases.
6. Functional testing of respiratory system. Telemetric examination, heart-rate variability, Holter monitoring, sport-tester, sport-medical observation of athlete in sports environment. Doping, sudden death in athlete.

7. The influence of the cold, heat, water and altitude environment on the body.
Lectures:
1. Nutrition and dietetics in life-style in healthy people and athletes (basic diet, demands on protein, fat, carbohydrates and energy, vitamins, minerals, nutrition during age periods, energy output) part I.
2. Nutrition and dietetics in healthy people and athletes (increase and decrease of body weight, saccharide loading, nutrition before/during/after competition, multisuplementation) part II. Exercise in the prevention and management of internal disease. Cardiovascular effects of sports activity and physiological response to sports activity.
3. Exercise electrocardiographic testing (indication, contraindication, methods, evaluation of findings). Environmental conditions and sport (heat, cold, altitude, water). Sudden death in athlete. Doping and doping control.
4. The impact of regular training on human biological systems (musculoskeletal system, cardiovascular and respiratory system, metabolic capacity, central nervous and endocrine system). Differential diagnosis between hypertrophic cardiomyopathy and athletes` heart. Cardiovascular diseases and physical activity.
5. Physical activity in asthma bronchiale, obesity and diabetes mellitus. Hypertension and physical activity.
6. Prevention and management of sport injuries (causes of injuries, diagnostic principles, diagnosis and management of overuse injuries, principles of rehabilitation after injuries, micro/macro-trauma).
7. Physical activity in elder people (maintenance of physical fitness, relation to chronic disease, osteoporosis in elderly). Overtraining. Abstinence syndrome of athlete.

Recommended literature:
Marček, T.: Sports Medicine (Manual of Practical Sports Medicine)
web pages -
www.medinfo.sk (basic educational resource) + http://www.sportsmedicine.com/

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 366

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: 06.04.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚFa/J-S-VL-599/18	Student Scientific Activity (2)

Educational activities:
Type of activities: seminar
Number of hours:
per week: **per level/semester:** 50s
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 7.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
None

Course requirements:
Laboratory or clinical work under supervision of tutor at departments. Presentation of results at conference or publication of paper in a scientific journal (optional).
Scale of assessment (preliminary/final): 100/0

Learning outcomes:
The students obtains skills (under supervision of his/her tutor) in laboratory work, using various scientific methods, statistical analysis and presentation of results at scientific conferences. He/she learns how to prepare a scientific publication.

Class syllabus:
Work at departments/clinics under supervision of a tutor. The selection of topic is individual based on an interest of the student and on yeary updated offer (list of topics). The preparation and presentation of results at Student Scientific Conferences. Preparation of scientific papers.

Recommended literature:
Hanacek J, Javorka K et al. Introduction to scientific work. Martin, 2011, Jessenius Faculty of Medicine, Comenius University. ISBN 978-80-88866-95-4. p. 196.

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 3

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

Lecturers: doc. RNDr. Michal Šimera, PhD.

Last change: 29.03.2022
Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ÚFa/J-S-VL-600/18	Student Scientific Activity (3)

Educational activities:
Type of activities: seminar
Number of hours:
per week: **per level/semester:** 50s
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 8.

Educational level: I.II.

Prerequisites:

Recommended prerequisites:
None

Course requirements:
Laboratory or clinical work under supervision of tutor at departments. Presentation of results at conference or publication of paper in a scientific journal (optional).
Scale of assessment (preliminary/final): 100/0

Learning outcomes:
The students obtains skills (under supervision of his/her tutor) in laboratory work, using various scientific methods, statistical analysis and presentation of results at scientific conferences. He/she learns how to prepare a scientific publication.

Class syllabus:
Work at departments/clinics under supervision of a tutor. The selection of topic is individual based on an interest of the student and on yeary updated offer (list of topics). The preparation and presentation of results at Student Scientific Conferences. Preparation of scientific papers.

Recommended literature:
Hanacek J, Javorka K et al. Introduction to scientific work. Martin, 2011, Jessenius Faculty of Medicine, Comenius University. ISBN 978-80-88866-95-4. p. 196.

Languages necessary to complete the course:
English

Notes:

Past grade distribution
Total number of evaluated students: 2

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

Lecturers: doc. RNDr. Michal Šimera, PhD.

Last change: 29.03.2022
Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.IKG/J-S-VL-554/22	Summer Practice-Internal Medicine

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

Number of credits: 1

Recommended semester: 8.

Educational level: I.II.

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

Course requirements:
Personal student daily record about activities done signed by head/subhead of the department.

Learning outcomes:

Class syllabus:
Summer practice :
1/ practice aj patient bed under supervision of assistant (tutorň, examination of patient, patient chart (record) preparation, proposal of diagnostic procedures, proper use of forms used at the department
2/ ward round attendance, disease dynamics observation, consultation activity and therapeutic procedures under assistant supervision (tutor), evaluation of auxiliary examinations, taking care of 4-5 patients at ward
3/ daily patient record, diagnostic results, suggestion of home care, patient discharge,
4/ sampling: blood, urine, sputum, stool. Application: intravenous injections, gastric/duodenal probe, bladder catheterization,
5/ assistantship at: pleural/ abdominal puncture, liver/kidney/lymphatic node/bone marrow biopsy, endoscopic examination, x-ray picture evaluation. Independent basci examination : urine, urine sediment, blood count/differential count, ecg examination, 6/ indication/diagnostic procedures and administration of blood transfusion, 7/ information about work at Intesive Care Unit,
8/ patient adminission procedures (in-patient) and out- patient health care,
9/ attendance at health care service (acute admission/examination/diagnostic procedures, therap),
10/ health care education at ward,
preparation and presentation of seminar- paper.

Recommended literature:

Languages necessary to complete the course:
english

Notes:

Past grade distribution Total number of evaluated students: 12	
ABS0	M
100,0	0,0
Lecturers: prof. MUDr. Rudolf Hyrdel, CSc.	
Last change: 06.04.2022	
Approved by:	

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ChKTC/J-S-VL-554/22	Summer Practice-Surgery

Educational activities:
Type of activities: practice
Number of hours:
per week: **per level/semester:** 100s
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 8.

Educational level: I.II.

Prerequisites: JLF.ChKTC/J-S-VL-524/22 - Surgery (2)

Course requirements:
ABSO - Positive evaluation of the head of the surgical department.

Learning outcomes:
Graduated know the work of secondary doctors in the surgical ward.

Class syllabus:
Students are acquainted with the work of secondary doctors in the surgical ward.

Recommended literature:

Languages necessary to complete the course:
english language

Notes:

Past grade distribution
Total number of evaluated students: 12

ABS0	M
100,0	0,0

Lecturers: prof. MUDr. Ľudovít Laca, PhD., doc. MUDr. Marek Smolár, PhD., MPH, MUDr. Lukáš Spevák, MUDr. Adam Švec, PhD., MUDr. Matej Vnučák, PhD., MUDr. Michal Hošala, PhD., MUDr. Ján Janík, PhD., MUDr. Eva Kúdelová, PhD., MUDr. Peter Mikolajčík, PhD.

Last change: 06.04.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ChKTC/J-S-VL-523/22	Surgery (1)

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

Number of credits: 4

Recommended semester: 7.

Educational level: I.II.

Prerequisites: JLF.ChKTC/J-S-VL-522/22 - Surgical Propedeutics (1)

Course requirements:
Continuous assessment of students takes the form of a written examination-test, minimum threshold of success: 65 %. Evaluation: A: 91–100 %, B: 81–90 %, C: 73–80 %, D: 66–72 %, E: 60–65 %, FX: 64 % and less
Final assessment: test.
Scale of assessment (preliminary/final): english language

Learning outcomes:
The graduate masters the issue of abdominal emergencies, the principles of their diagnosis and treatment in adults and children. He knows the surgical diseases of the stomach, liver, gallbladder, bile ducts, pancreas and is familiar with indications and principles of their surgical treatment. He also knows the surgical diseases of the small and large intestine and their surgical treatment. He knows the principles of diagnosis and treatment of internal and external hernias.

Class syllabus:
Intestinal obstruction (classification, pathophysiology of disorders, diagnosis, treatment).
Acute abdomen – origin in inflammation. Classification, complications, diagnosis, treatment. Intestinal fistulas. Fluid and electrolytes disorders in peritonitis (diagnosis, differential diagnosis, treatment).
Gastrointestinal bleeding froum upper and lower GIT.
Acute abdomen in children. KDCH
Hernias. Internal hernias - inguinal, femoral and umbilical. Internal hernias –diaphragmatic and hiatal hernias.
Gastrointestinal neuroendocrine tumors – surgical treatment.
Stomach precanceroses. Malignant tumors of the stomach (diagnosis, surgical treatment).
Gastric and duodenal ulcers (complications, indications for surgical treatment). Post-resection syndrome and its therapy.
Metabolic syndrome. Principles of bariatric surgery.
Surgical diseases of the liver. Liver abscess, lives cysts, benign and malignant liver tumors.

Non-tumorous and tumorus diseases of the gallbladder and biliary tract. Cholecystolithiasis, choledocholithiasis, cholecystitis, cholangitis, Benign and malignantn tumors of gall bladder and biliary tract.
Acute and chronic pancreatitis.
Exocrine and endocrine tumors pancreas.
Tumorous diseases of the small intestine, large intestine and rectum.
Nontumorous diseases of the small intestine, large intestine and rectum. IBD, diverticulosis, diverticulitis, haemorhoids, perianal fistulas and abscesses.

Recommended literature:

Fischer J. et al.: Fischer´s Mastery of Surgery,seventh edition, 2018, Volume 1,2
Sabiston, D.C.: Textbook of Surgery 21st edition. The biological Basic of Modern Surgical Practice. Philadelphia: W.B. Saunders Comp. 2021, 2176 pp.
Liechty, D., Soper, R.T.: Fundamental of Surgery. Philadelphia: C.V.Mosby Comp., 1989, 646 pp.
Way, L.W.: Current Surgical Diagnosis and Treatment. New York: Lange Medical Books, 2006. 1453 pp.
Skinner, H.B.: Current Diagnosis and Treatment in Orthopedics. Norwalk: Appleton and Lange, 1995. 645 pp.
Madani A., Ferri L., Seely A.: Pocket Manual of General Thoracic Surgery, Springer 2015, 274 pages.
Chung K: Grabb and Smith Plastic Surgery, 8th Edition, 2019. 1108s.
Danovitch G.: Handbook of kidney transplantation, 6th edition 2017, 606pp.

Languages necessary to complete the course:
english language

Notes:

Past grade distribution
Total number of evaluated students: 1

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., doc. MUDr. Marek Smolár, PhD., MPH, MUDr. Lukáš Spevák, MUDr. Adam Švec, PhD., MUDr. Matej Vnučák, PhD., MUDr. Michal Hošala, PhD., MUDr. Ján Janík, PhD., MUDr. Eva Kúdelová, PhD., MUDr. Peter Mikolajčík, PhD., doc. MUDr. Juraj Miklušica, PhD.

Last change: 06.04.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.ChKTC/J-S-VL-524/22	Surgery (2)

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

Number of credits: 3

Recommended semester: 8.

Educational level: I.II.

Prerequisites: JLF.ChKTC/J-S-VL-523/22 - Surgery (1) and JLF.KVVTCh/J-S-VL-522a/22 - Surgical Propedeutics (2)

Course requirements:
Continuous assessment of students takes the form of a written examination-test, minimum threshold of success: 65 %. Evaluation: A: 91–100 %, B: 81–90 %, C: 73–80 %, D: 66–72 %, E: 60–65 %, FX: 64 % and less Final assessment: test.

Learning outcomes:
The graduate of the subject understands diseases of the mammary gland, diseases of the thoracic and mediastinal organs. He has knowledge of the basics of cardiac surgery, heart and vascular injuries. He masters the basic issues of vascular diseases and vascular approaches to hemodialysis. The graduate knows the concept, content and basics of plastic surgery, its surgical techniques, examination methods and therapeutic procedures. The graduate knows benign and malignant skin tumors, their division, diagnosis and surgical therapy. He has knowledge of the management of the burns, he knows the surgical therapy of the late consequences of burns.

Class syllabus:
Benignant and malignant diseases of the breast.
Congenital disease of gastrointestinal tract – surgical treatment.
Congenital disease of respiratory system – surgery treatment. Deformity of chest.
Surgical diseases of oesophageus and mediastinum.
Surgical diseases of thoracic cavity organs.
Basics of cardiosurgery. Heart and blood vessels injury.
Surgical diseases of aortal arch branches. Steal syndrome, thoracic outlet syndrome.
Surgical diseases of abdominal aorta an its branches.
Visceral ischemic syndrome. AAA.
Hemodialysis and vessel access for dialysis. Arteriovenous fistulas.
Surgical aspects of organ procrument and transplantation.
Content of plastic surgery. Skin lobes, transplants.
Malignant melanoma and other skin malignancies.
Burns, burn shock.

Recommended literature:

Fischer J. et al.: Fischer´s Mastery of Surgery,seventh edition, 2018, Volume 1,2
Sabiston, D.C.: Textbook of Surgery 21st edition. The biological Basic of Modern Surgical Practice. Philadelphia: W.B. Saunders Comp. 2021, 2176 pp.
Liechty, D., Soper, R.T.: Fundamental of Surgery. Philadelphia: C.V.Mosby Comp., 1989, 646 pp.
Way, L.W.: Current Surgical Diagnosis and Treatment. New York: Lange Medical Books, 2006. 1453 pp.
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Madani A., Ferri L., Seely A.: Pocket Manual of General Thoracic Surgery, Springer 2015, 274 pages.
Chung CK: Grabb and Smith Plastic Surgery, 8th Edition, 2019. 1108s.
Danovitch G.: Handbook of kidney transplantation, 6th edition 2017, 606pp.

Languages necessary to complete the course:
english language

Notes:

Past grade distribution
Total number of evaluated students: 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. Ľudovít Laca, PhD., doc. MUDr. Marek Smolár, PhD., MPH, MUDr. Lukáš Spevák, MUDr. Adam Švec, PhD., MUDr. Matej Vnučák, PhD., MUDr. Michal Hošala, PhD., MUDr. Ján Janík, PhD., MUDr. Eva Kúdelová, PhD., MUDr. Peter Mikolajčík, PhD., doc. MUDr. Juraj Miklušica, PhD.

Last change: 06.04.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Jessenius Faculty of Medicine in Martin

Course ID:	**Course title:**
JLF.KVVTCh/J-S-VL-523A/22	Surgery 1A

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

Number of credits: 4

Recommended semester: 7.

Educational level: I.II.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 121

A	ABS0	B	C	D	E	FX
2,48	0,0	41,32	43,8	9,92	0,0	2,48

Lecturers: doc. MUDr. Juraj Miklušica, PhD.

Last change:

Approved by: