CONTENT

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: Dek. LF UPJŠ/UDVPde/16	**Course name:** Active participation in domestic scientific events (Article in proceedings, extended abstract, abstract, first-authorshi
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 10	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment

Total number of assessed students: 199

abs	neabs
100.0	0.0

Provides:
Date of last modification:
Approved: prof. Ing. Mária Mareková, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: Dek. LF UPJŠ/UZVPde/16	**Course name:** Active participation in international scientific events
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 17	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment
Total number of assessed students: 71

abs	neabs
98.59	1.41

Provides:
Date of last modification:
Approved: prof. Ing. Mária Mareková, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: ULCHBKB/AMB-KBde/09	**Course name:** Analytical Methods in Biochemistry

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

Number of ECTS credits: 8

Recommended semester/trimester of the course:

Course level: III.

Prerequisities:

Conditions for course completion:
seminars, practical exercises, solving of assigned tasks, exam; more details: https://www.upjs.sk/public/media/25151/Doct_Requir_Analytical%20methods.pdf

Learning outcomes:
Students will master the analytical methods used in laboratories with a focus on application in clinical-biochemical diagnostics both theoretically and practically. They can analyze biological material (eg body fluids) using laboratory analytical techniques (eg spectrophotometry, fluorescence analysis, chromatography, electrophoresis).

Brief outline of the course:
Laboratory techniques. Optical methods. Insulation techniques. Electrophoretic techniques. Physico-chemical methods of separation and detection of substances. Immunoanalytical methods. More details:
https://www.upjs.sk/public/media/25151/Syllabus_Analytical%20methods_Doct.pdf

Recommended literature:
Lottspeich F., Engels J.W.:Bioanalytics: Analytical Methods and Concepts in Biochemistry and Molecular Biology, Willey, 2019
Locatelli M, Celia Ch.:Analytical Chemistry, NOVA, 2017
Current scientific and professional publications

Course language:
english, slovak

Notes:
x

Course assessment
Total number of assessed students: 10

Ne	Pr
0.0	100.0

Provides: doc. Ing. Katarína Dubayová, PhD., prof. Ing. Mária Mareková, CSc., doc. RNDr. Vladimíra Tomečková, PhD.
Date of last modification: 09.03.2022
Approved: prof. Ing. Mária Mareková, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: ULCHBKB/BNK-KBde/09	**Course name:** Analytical Methods in Biochemistry

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

Number of ECTS credits: 8

Recommended semester/trimester of the course:

Course level: III.

Prerequisities:

Conditions for course completion:
seminars, practical exercises, solving of assigned tasks, exam; more details: https://www.upjs.sk/public/media/25151/Doct_Requir_Bioch%20of%20NAs.pdf

Learning outcomes:
The graduate masters the theoretical and practical foundations of laboratory methods used in the study of nucleic acids (NA) and knows the current possibilities of gene therapy. Students are aware of the latest trends in the study of RNA molecules, including non-coding RNAs, which are increasingly contributing to the improvement of laboratory diagnostics of pathological conditions at the molecular level. The graduate is oriented in the possibilities of using NA for diagnostic and prognostic purposes, as molecular methods are becoming an essential part in the study of biochemical processes and in clinical-biochemical diagnostics.

Brief outline of the course:
DNA replication. Transcription. Proteosynthesis. Regulation of gene expression. Non-coding RNA. Isolation of NK from biological material. Molecular-biochemical methods (eg PCR, sequencing, hybridization). Basics of genetic material analysis. Use of special analyzes. The latest trends in medical laboratory diagnostics. More details: https://www.upjs.sk/public/media/25151/Syllabus_Bioch%20of%20NAs_Doct.pdf

Recommended literature:
Blanco G., Blanco A.: Medical Biochemistry, Academic Press, 2017
Waye M.M.Y.: Biochemistry and Molecular Biology, Nova Science Publishers Inc., 2015
Nussbaum R.L. et al.: Genetics in Medicine, Elsevier, 2015
Strachan T. et al.: Genetics and Genomics in Medicine, GS, 2014
Hunter B.D.: Molecular Genetics and Personalized Medicine, Humana Press Inc., 2014
Current scientific and professional publications

Course language:
english, slovak

Notes:
x

Course assessment Total number of assessed students: 6	
Ne	Pr
0.0	100.0
Provides: prof. Ing. Mária Mareková, CSc., doc. RNDr. Miroslava Rabajdová, PhD.	
Date of last modification: 09.03.2022	
Approved: prof. Ing. Mária Mareková, CSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: Dek. LF UPJŠ/SAUPTde/16	**Course name:** Authorship and co-authorship of teaching aids and texts
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 10	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 38	

abs	neabs
100.0	0.0

Provides:
Date of last modification:
Approved: prof. Ing. Mária Mareková, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: UPF/ZVPde/16	**Course name:** Basics of Scientific Work in Medicine
Course type, scope and the method: **Course type:** Lecture **Recommended course-load (hours):** **Per week:** 1 **Per study period:** 14 **Course method:** present	
Number of ECTS credits: 17	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 157	

Ne	Pr
0.0	100.0

Provides: doc. MUDr. Roman Beňačka, CSc., doc. Mgr. Zuzana Dankulincová, PhD., Mgr. Peter Kolarčik, PhD., MUDr. Martin Javorský, PhD., RNDr. Darina Petrášová, PhD.
Date of last modification: 14.10.2021
Approved: prof. Ing. Mária Mareková, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: Dek. LF UPJŠ/CITde/16	**Course name:** Citation of a paper (in domestic, international journals or SCI)
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 3	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment
Total number of assessed students: 33

abs	neabs
100.0	0.0

Provides:
Date of last modification:
Approved: prof. Ing. Mária Mareková, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: Dek. LF UPJŠ/RGPde/16	**Course name:** Co-investigator in a funded project (grant)
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 8	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 109	

abs	neabs
100.0	0.0

Provides:
Date of last modification:
Approved: prof. Ing. Mária Mareková, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: Dek. LF UPJŠ/UEVPde/16	**Course name:** Completion of defined stages of scientific work
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 8	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 123	

abs	neabs
100.0	0.0

Provides:
Date of last modification:
Approved: prof. Ing. Mária Mareková, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: Dek. LF UPJŠ/LPCde/16	**Course name:** Curative and preventive healthcare activity (per semester)
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 17	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment
Total number of assessed students: 312

abs	neabs
100.0	0.0

Provides:
Date of last modification:
Approved: prof. Ing. Mária Mareková, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: Dek. LF UPJŠ/ODZ/05	**Course name:** Defence of Doctoral Thesis

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

Number of ECTS credits: 20

Recommended semester/trimester of the course:

Course level: III.

Prerequisities:

Conditions for course completion:
All information about the doctoral study is specified on the faculty's website in the Doctoral Study section, including the conditions of completion, which are detailed in the State Examinations section. Students will find here all the necessary information, forms and documents, including information on the formal side of the dissertation, which are in accordance with Directive No. 1/2011 on the basic requirements of final theses and the PhD Study Regulations at UPJŠ in Košice. The submitted work must be in accordance with the Rector's Decision No. 5/2021, issuing the principles of good practice of scientific publication at UPJŠ in Košice and its parts, Rector's Decision No. 21/2021, on issuing rules for the assessment of plagiarism at UPJŠ in Košice and its parts, Rector's Decision No. 2/2022 which issues the principles of good research practice at UPJŠ in Košice and its parts.

Learning outcomes:
The dissertation has the character of a scientific work and the student demonstrates by this work extensive mastery of the theory and professional terminology from the field of study/study program, acquisition of knowledge, skills and competencies in accordance with the declared profile of the graduate, as well as the ability to apply them in an original way. The student demonstrates the ability of independent scientific work in terms of content, formal and ethical, ant the ability to present and critically analyses obtained results.

Brief outline of the course:

Recommended literature:

Course language:
english, slovak

Notes:

Course assessment
Total number of assessed students: 336

N	NNe	NU	NeO	O	P
0.0	0.0	1.79	0.0	93.75	4.46

Provides:
Date of last modification: 23.03.2022
Approved: prof. Ing. Mária Mareková, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: Dek. LF UPJŠ/DZS/05	**Course name:** Dissertation examination

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

Number of ECTS credits: 15

Recommended semester/trimester of the course:

Course level: III.

Prerequisities:

Conditions for course completion:
The condition for granting the dissertation examination is the completion of the study part in the prescribed composition of subjects and the acquisition of at least 90 credits in the external form, if the study in the four-year form and five-year in the external form.
The committee decides on the result of the examination in a non-public meeting by a majority of the members present. In the event of equality of votes, the vote of the President shall prevail.

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:
english, slovak

Notes:

Course assessment
Total number of assessed students: 564

N	P
0.18	99.82

Provides:

Date of last modification: 23.03.2022

Approved: prof. Ing. Mária Mareková, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: CJP/ LFAJDe/05	**Course name:** English Language for PhD Students of Faculty of Medicine

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

Number of ECTS credits: 17

Recommended semester/trimester of the course:

Course level: III.

Prerequisities:

Conditions for course completion:
Completion of e-course English for PhD Students (lms.upjs.sk), consultations (1-3).
Written assignments - Professional/Academic CV, Short Academic Biography.
Test. Final exam in accordance with the exam requirements: //www.upjs.sk/filozoficka-fakulta/cjp/poziadavky-na-skusku/

Learning outcomes:
The development of students´ language skills - reading, writing, listening, speaking, improvement of their linguistic competence - students acquire knowledge of selected phonological, lexical and syntactic aspects, development of pragmatic competence - students can efectively use the language for a given purpose, with focus on Academic English and English for specific/professional purposes, level B2.

Brief outline of the course:
Specific aspects of academic and professional English with focus on vocabulary development (formality, academic word-list), English grammar (passive voice, nominalisatio), language functions (expressing opinion, cause/effect, presenting arguments, giving examples, describing graphs/charts/schemes, writing Academic CV and short BIO, etc.). Cross-language interference. Academic communication (self-presentation, presenting at scientific meetings and conferences).

Recommended literature:
Moore, J.: Oxford Academic Vocabulary Practice. OUP, 2017.
Kolaříková, Z., Petruňová, H., Timková, R.: Angličtina v akademickom prostredí (cvičebnica). UPJŠ Košice, 2021.
Tomaščíková, S., Rozenfeld, J. Developing Academic English in Speaking and Writing. Vydavateľstvo ŠafárikPress, 2021.
McCarthy, M., O´Dell, F.: Academic Vocabulary in Use. CUP, 2008.
Štepánek, L., J. De Haff a kol.: Academic English-Akademická angličtina. Grada Publishing, a.s., 2011.
Armer, T.: Cambridge English for Scientists. CUP, 2011.

Course language:
English language, level B2, C1 according to CEFR

Notes:	
Course assessment Total number of assessed students: 368	
Ne	Pr
0.0	100.0
Provides: PhDr. Helena Petruňová, CSc.	
Date of last modification: 12.04.2022	
Approved: prof. Ing. Mária Mareková, CSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: ULCHBKB/ZBV-KBde/12	**Course name:** Fundamentals of Biochemistry Nutrition

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

Number of ECTS credits: 8

Recommended semester/trimester of the course:

Course level: III.

Prerequisities: ULCHBKB/LB-KBde/09

Conditions for course completion:
seminars, solving of assigned tasks, exam; more details: https://www.upjs.sk/public/media/25151/Doct_Requir_Nutrition.pdf

Learning outcomes:
The graduate will gain knowledge and will understand of human nutrition, including the importance of nutrition in disease prevention. He knows the process of digestion and resorption of essential nutrients, the importance of ballast substances in nutrition and the nutritional value of food. Students will get acquainted with the basics of proper nutrition, the specifics of artificial nutrition and alternative forms of diet. Graduates know the influence of nutrition on the emergence of diseases of civilization and get acquainted with nutrigenomics.

Brief outline of the course:
Introduction to human nutrition. Digestion, resorption and metabolism of essential nutrients. Ballast substances in nutrition and their relation to the intestinal microbiome. Nutritional value of food. Healthy nutrition and its contribution to reducing the risk of disease. The influence of nutrition on the emergence of diseases of civilization. Specifics of artificial nutrition and alternative forms of diet. Technological food processing. Nutrigenomics. More details: https://www.upjs.sk/public/media/25151/Syllabus_Nutrition_Doct.pdf

Recommended literature:
Kasper, H.: Výživa v medicíne a dietetika, Grada, Praha, 2015
Cox Ch.L.: Nutritional Biochemistry, CRC Press, 2015
Clarková, N.:Sportovní výživa, Grada, Praha, 2000
Current scientific and professional publications

Course language:
english

Notes:
x

Course assessment Total number of assessed students: 5	
Ne	Pr
0.0	100.0
Provides: doc. Ing. Katarína Dubayová, PhD.	
Date of last modification: 30.08.2021	
Approved: prof. Ing. Mária Mareková, CSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: Dek. LF UPJŠ/GLFde/16	**Course name:** Grant award for young scientists (medical school)
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 17	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 3	

abs	neabs
100.0	0.0

Provides:
Date of last modification:
Approved: prof. Ing. Mária Mareková, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: Dek. LF UPJŠ/ISLde/16	**Course name:** Individual study of scientific literature
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 1	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 325	

abs	neabs
100.0	0.0

Provides:
Date of last modification:
Approved: prof. Ing. Mária Mareková, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: ULCHBKB/VMKB-KBde/09	**Course name:** Laboratory Diagnostic Methods in Clinical Biochemistry

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

Number of ECTS credits: 17

Recommended semester/trimester of the course:

Course level: III.

Prerequisities: ULCHBKB/LB-KBde/09

Conditions for course completion:
practical exercises, seminars, solving of assigned tasks, exam; more details: https://www.upjs.sk/public/media/25151/Doct_Requir_Methods%20in%20Clin%20Bioch.pdf

Learning outcomes:
The graduates will gain theoretical and practical knowledge about the correct collection and processing of biological material. They know the basic laboratory methods used in the analysis of biological samples. They will get acquainted with the work in the clinical-biochemical laboratory and the used instrumentation (including automation and control) and will be able to apply the results obtained by clinical-biochemical examination in the diagnosis of diseases.

Brief outline of the course:
Introduction to clinical biochemistry. Collection of biological material and interpretation of results (physiological and pathophysiological values). Basic laboratory parameters in emergency medicine. Diabetes mellitus. Biochemical examinations in liver diseases. Kidneys. Inflammatory markers. Cardiac markers. Blood count. Coagulation examinations. Bone metabolism - markers of bone metabolism. Specialized investigation procedures. Automation and robotization in clinical-biochemical diagnostics. More details: https://www.upjs.sk/public/media/25151/Syllabus_Methods%20in%20Clin%20Bioch_Doct.pdf

Recommended literature:
Shweta Pandey et al.: Protocols in Biochemistry and Clinical Biochemistry, 2020
Marshall W.: Clinical Biochemistry: Metabolic and Clinical Aspects, Elsevier, 2014
Swaminathan R.: Handbook of Clinical Biochemistry, World Scientific Publishing Co Pte, 2011
McPherson R.A., Pincus M.R.: Henry´s Clinical Diagnosis and Management by Laboratory Methods, Elsevier, 2011
Current scientific and professional publications

Course language:
english, slovak

Notes:

Course assessment
Total number of assessed students: 16

Ne	Pr
0.0	100.0

Provides: prof. Ing. Mária Mareková, CSc., doc. RNDr. Miroslava Rabajdová, PhD., MUDr. Eva Ďurovcová, PhD.

Date of last modification: 09.03.2022

Approved: prof. Ing. Mária Mareková, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: Dek. LF UPJŠ/PSPde/16	**Course name:** Lecture at a professional seminar at the workplace
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 5	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 121	

abs	neabs
100.0	0.0

Provides:
Date of last modification:
Approved: prof. Ing. Mária Mareková, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: ULCHBKB/LB-KBde/09	**Course name:** Medical Biochemistry

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

Number of ECTS credits: 17

Recommended semester/trimester of the course: 1., 2..

Course level: III.

Prerequisities:

Conditions for course completion:
seminars, practical exercises, solving of assigned tasks, exam; more details: https://www.upjs.sk/public/media/25151/Doct_Requir_Med%20Bioch.pdf

Learning outcomes:
The graduate knows the functions of living organisms at the cellular level and the laws of regulation of biochemical processes in living systems. Knows the laws and mechanism of metabolism of essential nutrients (eg carbohydrates, lipids, proteins, NA) taking place in the human body. Can apply the acquired knowledge in various metabolic disorders, formulate conclusions and recommendations for clinical-biochemical diagnostics.

Brief outline of the course:
Enzymes and possibilities of their use in clinical-biochemical practice. Biochemical processes taking place at the cellular level (eg energy, metabolism, pathobiochemistry). Biochemistry of organs and tissues. Principles of regulation (eg hormones, gene expression). Biochemistry of body fluids and possibilities of their diagnostic use (eg acid-base regulation). Biochemical aspects of nutrition. Basics of drug chemistry and xenobiochemistry.
More details: https://www.upjs.sk/public/media/25151/Syllabus_Medic%20Biochem_Doct.pdf

Recommended literature:
Devlin T.M.: Textbook of Biochemistry, Willey, 2013
Murray R.K et al.: Harper´s Biochemistry, LANGE, 2012
Vasudevan D.M. et al.: Textbook of Biochemistry for Medical Students, JAYPEE, 2011
Current scientific and professional publications

Course language:
english, slovak

Notes:
x

Course assessment Total number of assessed students: 15	
Ne	Pr
0.0	100.0
Provides: doc. RNDr. Marek Stupák, PhD., doc. Ing. Katarína Dubayová, PhD., doc. Mgr. Peter Urban, PhD., prof. Ing. Mária Mareková, CSc.	
Date of last modification: 09.03.2022	
Approved: prof. Ing. Mária Mareková, CSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: ULCHBKB/LCH-KBde/09	**Course name:** Medical Chemistry

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

Number of ECTS credits: 8

Recommended semester/trimester of the course:

Course level: III.

Prerequisities:

Conditions for course completion:
seminars, solving of assigned tasks, exam; more details:
https://www.upjs.sk/public/media/25151/Doct_Requir_Med%20Chem.pdf

Learning outcomes:
Graduates will reveal the basics of bioenergetics and kinetics of biological processes. They will get acquainted with the chemistry of colloidal systems and the function of semipermeable membranes in living systems. Graduates will know the importance, possibilities of use and mechanism of action of selected organic and bioorganic compounds, including toxic substances, selected medicaments and drugs.

Brief outline of the course:
Chemistry of colloidal systems. Bioenergetics and kinetics of biological processes. Semipermeable membrans in living systems. Coordination compounds. Organic and bioorganic compounds and their significance in medicine. Toxic substances. More details: https://www.upjs.sk/public/media/25151/Syllabus_Med%20Chemisty_Dokct.pdf

Recommended literature:
Lemke T. L. a kol.: Foye´s Principles of Medicinal Chemistry, Lippincott Wiliams Wilkins, 2013
Timberlake, K.C.: Chemistry, Pearson Education, 2009
Current scientific publications

Course language:
slovak, english

Notes:

Course assessment
Total number of assessed students: 13

Ne	Pr
0.0	100.0

Provides: doc. RNDr. Marek Stupák, PhD., doc. Ing. Katarína Dubayová, PhD., doc. RNDr. Vladimíra Tomečková, PhD., prof. Ing. Mária Mareková, CSc.
Date of last modification: 09.03.2022
Approved: prof. Ing. Mária Mareková, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: Dek. LF UPJŠ/ICde/16	**Course name:** Other activities (eg. member of the organizing committee of a conference)
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 10	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment
Total number of assessed students: 59

abs	neabs
100.0	0.0

Provides:
Date of last modification:
Approved: prof. Ing. Mária Mareková, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: ULCHBKB/PB-KBde/09	**Course name:** Pathobiochemistry

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

Number of ECTS credits: 8

Recommended semester/trimester of the course:

Course level: III.

Prerequisities: ULCHBKB/LB-KBde/09

Conditions for course completion:
seminars, practical exercises, solving of assigned tasks, exam; more details:https://www.upjs.sk/public/media/25151/Doct_Requir_Pathobioch.pdf

Learning outcomes:
The absolvent has knowledge of basic pathobiochemical processes, including changes in biochemical processes in metabolic disorders and diseases of individual organs and tissues. The graduate is able to apply the knowledge of the study of pathobiochemical processes in the design of clinical-biochemical examinations, necessary for proper clinical diagnosis.

Brief outline of the course:
Metabolic and regulatory disorders (eg carbohydrates, lipids, amino acids, plasma proteins, porphyrins). Disorders of water and electrolyte balance. Acid-base balance. Digestive and resorption disorders. Disorders of the function of individual organs (eg liver, kidneys). More details: https://www.upjs.sk/public/media/25151/Syllabus_Pathobiochem_Doct.pdf

Recommended literature:
Oohashi T. et al.: Human Pathobiochemistry, Springer, 2019
Mandl J., Machovich:Medical Pathobiochemistry, Diderot, 2014
Chakraborti S.: Proteases in Health and Disease, Springer, 2013
Newsholme E., Leech T.: Functional Biochemistry in Health and Disease, Wiley, 2010
Current scientific and professional publications

Course language:
english

Notes:
x

Course assessment Total number of assessed students: 5	
Ne	Pr
0.0	100.0
Provides: MUDr. Eva Ďurovcová, PhD.	
Date of last modification: 30.08.2021	
Approved: prof. Ing. Mária Mareková, CSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: UPF/ PF-KBde/09	**Course name:** Pathological Physiology

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

Number of ECTS credits: 8

Recommended semester/trimester of the course:

Course level: III.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 1

Ne	Pr
0.0	100.0

Provides:

Date of last modification: 03.05.2015

Approved: prof. Ing. Mária Mareková, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: Dek. LF UPJŠ/PDSde/16	**Course name:** Preparation of the thesis for dissertation examination
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 8	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 68	

abs	neabs
100.0	0.0

Provides:
Date of last modification:
Approved: prof. Ing. Mária Mareková, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: Dek. LF UPJŠ/CKVPde/16	**Course name:** Presentation at the national conference of young scientists
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 17	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 15	

abs	neabs
100.0	0.0

Provides:
Date of last modification:
Approved: prof. Ing. Mária Mareková, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: ULCHBKB/SID-KBde/09	**Course name:** Processing and interpretation of measured data in clinical practice

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

Number of ECTS credits: 8

Recommended semester/trimester of the course:

Course level: III.

Prerequisities: ULCHBKB/VMKB-KBde/09

Conditions for course completion:
seminars, solving of assigned tasks, exam; more details: https://www.upjs.sk/public/media/25151/Doct_Requir_Data%20processing.pdf

Learning outcomes:
The graduate masters the basic statistical methods used in clinical biochemistry. Can correctly apply the acquired knowledge, e.g. test results in the diagnosis and treatment of various diseases and knows the factors influencing the result and interpretation of biochemical examination.

Brief outline of the course:
Laboratory tests. Statistical analysis. Descriptive statistical analysis. Statistical evaluation and data processing. Statistical testing. Clinical effectiveness of diagnostic test. Statistical testing.
More details: https://www.upjs.sk/public/media/25151/Syllabus_Data%20processing_Doct.pdf

Recommended literature:
Fang J.: Statistical Methods for Biomedical Research, World Scientific Pob Co Pte, 2021
Faltin F.: Statistical Methods in Healthcare, Willey, 2012
McPherson R.A., Pincus M.R.: Henry´s Clinical Diagnosis and Management by Laboratory Methods, Elsevier, 2011
Current scientific and professional publications

Course language:
english, slovak

Notes:
x

Course assessment
Total number of assessed students: 8

Ne	Pr
0.0	100.0

Provides: prof. Ing. Mária Mareková, CSc.

Date of last modification: 09.03.2022
Approved: prof. Ing. Mária Mareková, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: ULBF/ PAKV-KBde/12	**Course name:** Proteomic Analysis of Clinical Samples

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

Number of ECTS credits: 8

Recommended semester/trimester of the course:

Course level: III.

Prerequisities: ULCHBKB/LB-KBde/09

Conditions for course completion:
solving basic tasks, exam

Learning outcomes:
The content and aim of the course is to get acquainted with the workflow of proteomic analysis of clinical samples, including acquaintance with analytical, physico-chemical and biochemical procedures used in clinical sample processing, nano HPLC, basic principles of mass spectrometry and bioinformatics data processing.

Brief outline of the course:
- Preparation of the samples for proteomic analysis
- Separation methods used for the preparation of clinical samples
- Basic terms and principles of mass spectrometers
- Ionization techniques used in mass spectrometers
- Electron ionization, chemical ionization, atmospheric pressure ionization, atmospheric pressure photoionization, matrix laser ionization, electrospray ionization, choice of ionization technique and recording polarity
- Basic types of mass analyzers, high and low resolution, accuracy of m / z determination, quadrupole analyzer, triple quadrupole analyzer, 3D ion trap, linear ion trap, flight time analyzer (TOF), electrostatic orbital trap- Orbitrap, Fourier transform ion cyclotron resonance (FT-ICR), tandem mass spectrometry (MS / MS),
- Combination of mass spectrometry and separation techniques
- Bioinformatics analysis of proteomic data

Recommended literature:
Feist P., Hummon A.B.: Proteomic Challenges: Sample Preparation Techniques for Microgram-Quantity Protein Analysis from Biological Samples, Int. J. Mol. Sci. 2015, 16, 3537-3563; doi:10.3390/ijms16023537, International Journal of Molecular Sciences, ISSN 1422-0067
Twyman R. M.: Principles of Proteomics, ISBN: 9780815344728 2.Edition 2013, Garland Science
Sinitcyn P., Rudolph J.D., Cox J., Computational Methods for Understanding Mass Spectrometry–Based Shotgun Proteomics Data, Annual Review of Biomedical Data Science, Vol. 1, pp. 207-234, 2018

Morovič, M., Bioanalytické metódy v medicínskom výskume (časť Proteomika) ISBN 978-80-558-1515-2; p.č. 21407, Nitra 2020

Course language:

Notes:

Course assessment
Total number of assessed students: 0

Ne	Pr
0.0	0.0

Provides: doc. RNDr. Ján Sabo, CSc., univerzitný profesor, RNDr. Ivan Talian, PhD., RNDr. Miroslav Marcin, PhD., RNDr. Soňa Tkáčiková, PhD., RNDr. Imrich Géci, PhD.

Date of last modification: 11.05.2022

Approved: prof. Ing. Mária Mareková, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: Dek. LF UPJŠ/PDRCde/16	**Course name:** Publication in domestic peer-reviewed journals
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 17	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 135	

abs	neabs
100.0	0.0

Provides:
Date of last modification:
Approved: prof. Ing. Mária Mareková, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: Dek. LF UPJŠ/PZRCde/16	**Course name:** Publication in international peer-reviewed journals
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 34	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment
Total number of assessed students: 111

abs	neabs
100.0	0.0

Provides:
Date of last modification:
Approved: prof. Ing. Mária Mareková, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: Dek. LF UPJŠ/PDPde/16	**Course name:** Review of a student thesis
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 6	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment
Total number of assessed students: 54

abs	neabs
100.0	0.0

Provides:
Date of last modification:
Approved: prof. Ing. Mária Mareková, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: UPZ/ VKMP-EPIDde/14	**Course name:** Scientific communication and research projects management

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

Number of ECTS credits: 8

Recommended semester/trimester of the course:

Course level: III.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 16

Ne	Pr
12.5	87.5

Provides: prof. Mgr. Andrea Madarasová Gecková, PhD., Ing. Lucia Bosáková, PhD., univerzitný docent, doc. Mgr. Zuzana Dankulincová, PhD., Mgr. Daniela Fiľakovská, PhD., Mgr. Peter Kolarčik, PhD., PhDr. Ivana Skoumalová, PhD., Mgr. Daniela Husárová, PhD.

Date of last modification: 03.05.2015

Approved: prof. Ing. Mária Mareková, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: UFZ/ VKFP-KBde/12	**Course name:** Selected Chapters from Clinical Physiology and Pathophysiology
Course type, scope and the method: **Course type:** Seminar **Recommended course-load (hours):** **Per week:** 2 **Per study period:** 28 **Course method:** present	
Number of ECTS credits: 8	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 0	

Ne	Pr
0.0	0.0

Provides: prof. MUDr. Viliam Donič, CSc.
Date of last modification: 03.05.2015
Approved: prof. Ing. Mária Mareková, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: Dek. LF UPJŠ/ZSPde/16	**Course name:** Study stay abroad
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 34	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment
Total number of assessed students: 19

abs	neabs
100.0	0.0

Provides:
Date of last modification:
Approved: prof. Ing. Mária Mareková, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: Dek. LF UPJŠ/DSPde/16	**Course name:** Study stay domestic
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 8	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment
Total number of assessed students: 16

abs	neabs
100.0	0.0

Provides:
Date of last modification:
Approved: prof. Ing. Mária Mareková, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: Dek. LF UPJŠ/ODPde/16	**Course name:** Submission of dissertation thesis for defense
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 34	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 29	

abs	neabs
100.0	0.0

Provides:
Date of last modification: 10.03.2022
Approved: prof. Ing. Mária Mareková, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: Dek. LF UPJŠ/ZPBSde/16	**Course name:** Supervision of the final thesis of bachelor studies
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 17	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 20	

abs	neabs
100.0	0.0

Provides:
Date of last modification:
Approved: prof. Ing. Mária Mareková, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: Dek. LF UPJŠ/SVOCde/16	**Course name:** Supervision of undergraduate student research (ŠVOČ)
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 20	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 6	

abs	neabs
100.0	0.0

Provides:
Date of last modification:
Approved: prof. Ing. Mária Mareková, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Medicine	
Course ID: Dek. LF UPJŠ/PCDde/16	**Course name:** Teaching activities by PhD students (per semester)
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 17	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment
Total number of assessed students: 239

abs	neabs
100.0	0.0

Provides:
Date of last modification:
Approved: prof. Ing. Mária Mareková, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: ULCHBKB/VIDB-KBde/09	**Course name:** Usage of the Internet Databases in Biochemistry

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

Number of ECTS credits: 8

Recommended semester/trimester of the course:

Course level: III.

Prerequisities:

Conditions for course completion:
seminars, solving of assigned tasks, exam; more details:
https://www.upjs.sk/public/media/25151/Doct_Requir_Internet%20database.pdf

Learning outcomes:
The graduate knows internet databases usable in biochemistry, can work with them and use them in scientific research.

Brief outline of the course:
Universal databases. Databases based on NA data records. NA sequence databases. Protein sequence databases. Databases functional. Domain databases. Special purpose databases.
More details: https://www.upjs.sk/public/media/25151/Syllabus_Internet%20database_Doct.pdf

Recommended literature:
internet, current scientific and professional publications

Course language:
english, slovak

Notes:

Course assessment
Total number of assessed students: 7

Ne	Pr
0.0	100.0

Provides: prof. Ing. Mária Mareková, CSc.

Date of last modification: 09.03.2022

Approved: prof. Ing. Mária Mareková, CSc.