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University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: KF/ Course name: Ancient Philosophy and Present Times AFS/05 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: 2 Recommended semester/trimester of the course: 2.** Course level: II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 31 C A В D Ε FX 80.65 6.45 6.45 0.0 6.45 0.0 Provides: Doc. PhDr. Peter Nezník, CSc. Date of last modification: 17.09.2020 Approved: prof. Ing. Marián Antalík, DrSc.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ Cour

Course name: Biochemical Analytical Methods

BAM1/00

Course type, scope and the method: Course type: Lecture / Practice

Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14

Course method: present

**Number of ECTS credits: 4** 

#### Recommended semester/trimester of the course:

Course level: I., II.

## **Prerequisities:**

## **Conditions for course completion:**

Written examination

## **Learning outcomes:**

#### **Brief outline of the course:**

General principles of analytical biochemistry. Introduction to biomolecules. Application of spectroscopy. Centrifugation and separation. Chromatography of biomolecules. Principles and application of electrophoresis. Application of mass spectrometry. Immunochemical techniques Ions, electrodes and biosensors.

#### **Recommended literature:**

D. J. Holme, H. Peck: Analytical Biochemistry, 1998

S. R. Mikkelsen, E. Cortón: Bioanalytical Chemistry, 2004

V. A. Gault, N. H. McClenaghan: Understanding Bioanalytical Chemistry: Principles and applications, 2009

C 1

## Course language:

#### **Notes:**

#### Course assessment

Total number of assessed students: 65

A	В	С	D	Е	FX
41.54	21.54	13.85	20.0	3.08	0.0

Provides: RNDr. Rastislav Varhač, PhD.

Date of last modification: 04.02.2016

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚCHV/ Course name: Biochemistry and Clinical Biochemistry BCHKBCH/14 Course type, scope and the method: **Course type:** Recommended course-load (hours): Per week: Per study period: Course method: present **Number of ECTS credits: 4 Recommended semester/trimester of the course:** Course level: II. Prerequisities: ÚCHV/BFC1a/01, ÚCHV/KLB1/03, ÚCHV/BFC1b/03 **Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 51 C A В D Ε FX 49 02 29.41 15.69 3.92 1.96 0.0 **Provides:** Date of last modification: 03.05.2015 Approved: prof. Ing. Marián Antalík, DrSc.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ Cou

**Course name:** Biochemistry of Microorganisms

BCM/04

Course type, scope and the method:

Course type: Lecture / Practice

Recommended course-load (hours): Per week: 2 / 2 Per study period: 28 / 28

Course method: present

**Number of ECTS credits: 6** 

Recommended semester/trimester of the course:

Course level: II.

**Prerequisities:** 

**Conditions for course completion:** 

2 tests test

**Learning outcomes:** 

The aim of biochemistry of microorgamism teaching is to acquire knowledge in the field of microorganisms.

#### **Brief outline of the course:**

Structure and physiology of microorganisms; microbial nutrition, growth and control; microbial molecular biology and genetics; medical microbiology; immunology and applied microbiology; microbial diseases and their control.

## Recommended literature:

McCall D., Stock D., Achrey P., Introduction to Microbiology, Blackwell Science, USA, 2001 Willey, J.M., Sherwood L.M., Woolverton C.J., Prescott, Harley, and Klein's Microbiology, McGraw-Hill Int. Ed., USA, 2008

Black J.G., Microbiology, John Wiley and Sons, USA, 2008

### Course language:

## **Notes:**

#### Course assessment

Total number of assessed students: 164

A	В	С	D	Е	FX
51.22	25.0	16.46	6.71	0.61	0.0

Provides: doc. RNDr. Mária Kožurková, CSc.

Date of last modification: 03.05.2015

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/

Course name: Biochemistry of Physiological Processes

BFP/04/08

Course type, scope and the method:

Course type: Lecture

Recommended course-load (hours): Per week: 2 Per study period: 28

Course method: present

**Number of ECTS credits: 4** 

Recommended semester/trimester of the course:

Course level: II.

**Prerequisities:** 

**Conditions for course completion:** 

**Learning outcomes:** 

#### **Brief outline of the course:**

Cell cycle; regulation mechanism of embryogenesis; apoptosis and degradation of biomacromolecules; regeneration processes; biochemical specialisation of inner cell particles; specialisation of body organs; metabolic functions of the liver and the kidney; the endocrine system, hormones; second messengers; generation and conduction of action potentials; synaptic transmission; immune system; blood sedimentation rate; communication between organisms; symbiosis; ecology.

### **Recommended literature:**

D. Voet, J.G. Voetová, Biochemie, Viktoria Publishing, Praha, 1994

Alberts a kol., Molecular Biology of The Cell, 3rd edition, Garland Publishing, New York, 1994 H. Tedeshi, Cell Physiology, www.cellphysiology.com

Articles from Journals

#### Course language:

Notes:

## Course assessment

Total number of assessed students: 107

A	В	С	D	Е	FX
44.86	26.17	15.89	8.41	4.67	0.0

Provides: prof. Ing. Marián Antalík, DrSc., RNDr. Nataša Tomášková, PhD.

Date of last modification: 03.05.2015

University: P. J. Šafá	rik University in Košice
Faculty: Faculty of S	cience
Course ID: ÚCHV/ BBA1/03	Course name: Bioenergetics and Bioelectronics
Course type, scope a Course type: Lectur Recommended cour Per week: 3 Per stu Course method: pre	re rse-load (hours): dy period: 42
Number of ECTS cr	edits: 5
Recommended seme	ster/trimester of the course:
Course level: II.	
Prerequisities:	
<b>Conditions for cours</b>	se completion:
Learning outcomes:	
Photosynthesis, bacter Oxidative phosphory ATPases. Membrane transport. ATP metabolism. Electron transport in Electric sources, batter Organic electric mater Photolysis of water Organic a biological Molecular films, nan-	P, polyphosphates. ain, mitochondria, chloroplast, chemoautotrops. eriorodopsin. lation, chemical gradient.  biomacromolecules. ery. erials. memories otechnology, Integrated system between neurons and electronics
M. Grätzel, ed., Ener 1983 L.A. Blumenfeld, Ph	á, Biochémie, Victoria Publishing, Praha, 1994 gy Resources throught photochemistry and catalysis, Academic Press, NY, ysics of bioenergetic processes, Springer-Verlag, Berlin, 1983 to J. L., Stryer L., Biochemistry, WH Freeman and Company, NY, 2007
Course language:	
Notes:	

Course assessment						
Total number o	f assessed studen	ts: 13				
A B C D E FX						
30.77	53.85	15.38	0.0	0.0	0.0	
Provides: prof. Ing. Marián Antalík, DrSc.						
Date of last modification: 03.05.2015						
Approved: prof	Approved: prof. Ing. Marián Antalík, DrSc.					

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ | Course name: Bioorganic chemistry

BOC/03

Course type, scope and the method:

Course type: Lecture

Recommended course-load (hours): Per week: 3 Per study period: 42

Course method: present

**Number of ECTS credits: 5** 

### **Recommended semester/trimester of the course:**

Course level: II.

## **Prerequisities:**

## **Conditions for course completion:**

Examinationn

## **Learning outcomes:**

Explanation of fundamental principles for the construction of bioorganic molecular models of biochemical precesses using the tools of organic chemistry.

#### **Brief outline of the course:**

- 1. Introduction: Basic consideration, proximity effects in biochemistry, Molecular adaptation, Molecular recognition at the supramolecular level.
- 2. Bioorganic Chemistry of amino acids and polypeptides: Chemistry of the living cells, Analogy between organic reactions and biochemical tranformations, Chemistry of the peptide bond, Nonribosomal peptide formation, Asymmetric synthesis od amino acids, Asymmetric synthesis with chiral organometalic catalysts, Transition state analogs, Antibodies as enzymes, Chemical mutations, Molecular recognition and Drug design.
- 3. Bioorganic Chemistry of the Phosphate groups and polynucleotides: Energy storage, DNA intercalates, RNA molecules as catalysts.
- 4. Enzyme Chemistry: Introduction to catalysis and enzymes, Multifuntional catalysis and Simple models, alfa-Chymotrypsin, Other hydrolytic enzymes, Strereoelectronic control in hydrolytic reactions, Immobilized enzymes, Enzymes in synthetic organic chemistry, Enzyme-Analog-Built polymers, Design of molecular clefts.
- 5. Enzyme Models: Host-Guest complexation chemistry, New development in crown ether chemistry, Membrane chemistry and micelles, Polymers, Cyclodextrins, Enzyme design using steroid template, Remote functionalisation reactions, Polyene biomimetic cyclisations.
- 6. Metal Ions: Metal ions in proteins and biological molecules, Carbopeptidase A, Hydrolysis of amino acid esters and peptides, Iron and oxygen transport, Cooper ion, Cobalt and vitamin B12 action, Oxidoreduction, Pyridoxal phosphate, Biotin.

#### **Recommended literature:**

Voet J.: Biochemistry, Springer Verlag, 1998

Dugas H.: Bioorganic Chemistry, Springer Verlag, 1999.

## Course language:

Notes:						
Course assessment Total number of assessed students: 157						
A	В	С	D	Е	FX	
82.8	5.1	7.01	3.82	1.27	0.0	
Provides: prof. RNDr. Jozef Gonda, DrSc.						
Date of last modification: 03.05.2015						
Approved: pro	f. Ing. Marián An	talík, DrSc.				

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ | Course name: Biophysical Chemistry I

BFC1a/01

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

**Course method:** present

**Number of ECTS credits: 5** 

Recommended semester/trimester of the course:

Course level: II.

**Prerequisities:** 

**Conditions for course completion:** 

Examination

## **Learning outcomes:**

#### **Brief outline of the course:**

Matter and its demonstration in living systems

Space and time connections in biological systems

Energy and mass connections in biological systems

Physicochemical properties of water and cell liquids

Reaction kinetics

Ligand binding

Nonequilibrium thermodynamics

Dynamics of conservative systems, chaos

Dissipative systems, attractors

Stability of biomacromolecules

Interfaces and membranes, membrane transports

Dynamics of complex biochemical process

Structuralization of biosystems induced by diffusion

#### Recommended literature:

Cantor, C.R., Schimmel, P.R. Biophysical Chemistry, W.H. Freeman and Co., S. Francisco, 1980 P.Glansdorff, I. Prigogine, Thermodynamics theory of structure, stability and fluctuations, Willey 1971

Voet, D. Voet, J.G. Biochemistry, John Willey @Sons, 1990

Kersal E. van Holde, W. Curtis Johnson, P. Shing Ho: Principles of Physical Biochemistry, Prentise Hall. 1998

Articles from Journals

Marschall, A.G., Biophysical Chemistry, John Wiley & Sons, N. York, 1978

Hoppe, W., Lohmann, W., Markl, H., Ziegler, H., (eds.), Biophysics, Springer V., Berlin, 1983

Peitgen, H. O., Jurgens, H., Saupe, D., Fractals for the Classroom, Springer-Verlag, NY, 1992

Avnir, D (ed.)., The Fractal Approach to Heterogeneous Chemistry, John Wiley &S., NY, 1989

Winfree, A. T., The Geometry of Biological Time, Springer-Verlag, NY, 1980

Harrison, L. G	., Kinetic Theory	of Living Pattrer	n, Cambridge Ui	niv. Pres., NY, 19	93
Course langua	ige:				
Notes:					
Course assess Total number	ment of assessed studen	its: 183			
A	В	С	D	Е	FX
11.48	16.94	36.07	22.95	12.57	0.0
Provides: prof	. Ing. Marián Anta	alík, DrSc.	ı		
Date of last m	odification: 03.05	5.2015			
Approved: pro	of. Ing. Marián Ar	ıtalík, DrSc.			

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚCHV/ Course name: Biophysical Chemistry II BFC1b/03 Course type, scope and the method: Course type: Lecture / Practice **Recommended course-load (hours):** Per week: 2 / 4 Per study period: 28 / 56 Course method: present **Number of ECTS credits: 8** Recommended semester/trimester of the course: Course level: IL Prerequisities: ÚCHV/BFC1a/01 **Conditions for course completion:** Examination **Learning outcomes: Brief outline of the course:** General laboratory work problem with biological systems Properties of materials and fields Cryoscopy, pressure, density, surface tension, osmometry Callorimetry, microgravimetry Transport a hydrodynamic analysis Conductivity, ion selective and enzyme electrodes, dielectric spectroscopy Absorption spectroscopy, circular dichroism Raman and infrared spectroscopy, Spectrofluorescence, chemiluminescence, rapid kinetic techniques, Mossebauer spectroscopy NMR, EPR spectroscopy Light, x-ray scattering Atomic field force measurements, tunneling spectroscopy Microscopy (electron, light, ultrasound) Recommended literature: Cantor, C.R., Schimmel, P.R. Biophysical Chemistry, W.H. Freeman and Co., S. Francisco, 1980 Kersal E. van Holde, W. Curtis Johnson, P. Shing Ho: Principles of Physical Biochemistry, Prentise Hall, 1998 Atkins PW. Physical Chemistry, Oxford Univ. Press, Oxford, 1998 Hoppe W, Lohmann W, Markl H, Ziegler H (ed.) Biophysics, Springer- Verlag, Berlin, 1983 Articles from Journals Course language:

Page: 13

**Notes:** 

Course assessment Total number of assessed students: 164					
A B C D E FX					
12.8	15.85	34.15	21.95	14.63	0.61
Provides: prof. Ing. Marián Antalík, DrSc.					
Date of last modification: 03.05.2015					
Approved: prof. Ing. Marián Antalík, DrSc.					

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ | Course name: Biotechnology Practical

PBT1/03

Course type, scope and the method:

Course type: Practice

Recommended course-load (hours): Per week: 5 Per study period: 70

Course method: present

**Number of ECTS credits: 6** 

## Recommended semester/trimester of the course:

Course level: II.

## **Prerequisities:**

## **Conditions for course completion:**

test

test

#### **Learning outcomes:**

Aim of practicals is to learn a variety of spectral and molecular-biology techniques, and obtain practical biotechniological skills from food and beverage production .

#### **Brief outline of the course:**

Characterization and practical application of lactic and alcohol fermentation, spectral methods. Food preservatives and their qualitative and quantitative evidence. Antibiotics - bacteriocins. Vitamins - antioxidant action of vitamin C. Production of cosmetics.

## **Recommended literature:**

M.Ferenčík, B. Škárka, Biochemical laboratory methods, ALFA 1981.

C.Fini, A.Floridi, V.N. Finelli, B.Wittman-Liebold, Laboratory Methodology in Biochemistry, CRC Press, Florida, 1990.

D. Sabolová, Návody na praktické cvičenia z biotechnológie, Košice, 2014, http://www.upjs.sk/pracoviska/univerzitna-kniznica/e-publikacia/#pf.

### Course language:

#### **Notes:**

#### Course assessment

Total number of assessed students: 129

A	В	С	D	Е	FX
68.99	24.03	5.43	0.78	0.78	0.0

Provides: RNDr. Danica Sabolová, PhD.

Date of last modification: 03.05.2015

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: KF/ Course name: Chapters from History of Philosophy of 19th and 20th KDF/05 Centuries (General Introduction) 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: 2 Recommended semester/trimester of the course: 2.** Course level: II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 10 C A В D Ε FX 50.0 20.0 10.0 0.0 10.0 10.0 Provides: doc. PhDr. Pavol Tholt, PhD., mim. prof. Date of last modification: 03.05.2015

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University: P. J. Šafárik University in Košice				
Faculty: Faculty of S	cience			
Course ID: ÚCHV/ RP/14	Course name: Class Projec	et		
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): y period:			
Number of ECTS cro	edits: 6			
Recommended seme	ster/trimester of the course	e: 2.		
Course level: II.				
Prerequisities:				
<b>Conditions for cours</b>	e completion:			
Learning outcomes:				
Brief outline of the c	ourse:			
Recommended litera	ture:			
Course language:				
Notes:				
Course assessment Total number of asses	ssed students: 164			
	abs	n		
	98.78	1.22		
Zuzana Vargová, Ph.D Juraj Kuchár, PhD., pr Dr. Yaroslav Bazeľ, D	D., RNDr. Martin Vavra, PhI rof. RNDr. Vladimír Zeleňá drSc., prof. Mgr. Vasil' Andr ondová, CSc., doc. Ing. Vier	Miroslava Matiková Maľarová, PhD., doc. RNDr. D., prof. RNDr. Juraj Černák, DrSc., doc. RNDr. k, DrSc., doc. RNDr. Ivan Potočňák, PhD., prof. uch, DSc., doc. RNDr. Katarína Reiffová, PhD., ra Vojteková, PhD., RNDr. Rastislav Serbin,		
Date of last modifica	tion: 03.05.2015			
Approved: prof. Ing. Marián Antalík, DrSc.				

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚCHV/ Course name: Clinical Biochemistry KLB1/03 Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14 Course method: present **Number of ECTS credits: 5** Recommended semester/trimester of the course: Course level: II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 181 C Α В D Ε FX 62.43 25.41 8.84 1.66 1.66 0.0 Provides: MUDr. Angela Molčányiová, PhD. Date of last modification: 03.05.2015 Approved: prof. Ing. Marián Antalík, DrSc.

University: P. J. Safá	University: P. J. Safárik University in Košice				
Faculty: Faculty of S	cience				
Course ID: Course name: Communication and Cooperation  KPPaPZ/KK/07					
Course type, scope a Course type: Practic Recommended cou Per week: 2 Per stu Course method: pre	ce rse-load (hours): dy period: 28 esent				
Number of ECTS cr					
Recommended seme	ster/trimester of th	ne course: 3.			
Course level: II.	,				
<b>Prerequisities:</b>					
Conditions for cours	se completion:				
Learning outcomes:			-		
Brief outline of the c	course:				
Recommended litera	nture:				
Course language:					
Notes:					
Course assessment Total number of asse	ssed students: 281				
abs					
98.22 1.78 0.0					
Provides: Mgr. Ondre	ej Kalina, PhD., Mg	r. Lucia Barbierik, P	hD.		
Date of last modifica	ntion: 16.02.2021				
Approved: prof. Ing.	Marián Antalík, Dr	Sc.			

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚCHV/ Course name: Diploma Thesis and its Defence DPO/14 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: II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 140 C Ε Α В D FX 65.71 25.0 5.71 2.14 1.43 0.0 **Provides:** Date of last modification: 03.05.2015 Approved: prof. Ing. Marián Antalík, DrSc.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ | Course name: Enzymology

ENZ/04

Course type, scope and the method:

Course type: Lecture

Recommended course-load (hours): Per week: 3 Per study period: 42

Course method: present

**Number of ECTS credits: 5** 

#### Recommended semester/trimester of the course:

Course level: II.

## **Prerequisities:**

## **Conditions for course completion:**

combination of written and oral examination

## **Learning outcomes:**

To learn to use the basic equations of enzyme kinetics. Ability to determine basic kinetic and thermodynamic parameters of enzyme catalyzed reaction from experimental measurement.

#### **Brief outline of the course:**

- 1. Introduction. Chemical catalysis theory of transition state.
- 2. Enzyme catalysis types and examples.
- 3. Cofactors. Active site lock and key, induced fit. Enzymes classification.
- 4. 3D structure of proteins. Noncovalent interactions. Secondary, tertiary and quaternary structures. Convergent and divergent evolution. Multienzyme complexes. Dyanmics of proteins.
- 5. Ligand binding. Thermodynamics and konetics. Techniques.
- 6. Chemical kinetics. Basic equations of enzyme kinetics.
- 7. Regulations of enzyme activity examples.
- 8. Conformational change, allosteric regulation. Regulation of metabolic pathways.
- 9. Experimental determination of enzyme activity. pH and temperature dependence of enzyme catalysis.
- 10. Determination of individual rate constants. Stop flow. Enzyme-substrate complementarities and the use of binding energy in enzyme catalysis.
- 11. Reversible inhibition.
- 12. Irreversible inhibition.
- 13. Specificity and control mechanisms. "Moonlighting" enzymes. Applications of enzymes (organic solvents). Catalytic antibodies. Extremophiles. Directed selection of enzymes. Enzymatic reactions with multiple substrates.

#### **Recommended literature:**

Alan Fersht "Structure and Mechanism in Protein Science: A Guide to Enzyme Catalysis and Protein Folding." (3rd Ed. W. H. Freeman and Company, 1999)

Robert A. Copeland: Enzymes (2nd edition), Wiley-VCH, 2000.

## Course language:

Notes:					
Course assessn Total number o	nent f assessed studen	ts: 143			
A	В	С	D	Е	FX
39.16	22.38	17.48	14.69	5.59	0.7
Provides: doc. RNDr. Erik Sedlák, DrSc.					
Date of last modification: 03.05.2015					
Approved: prof. Ing. Marián Antalík, DrSc.					

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/

**Course name:** Experimental Methods to Master's Thesis

EMDP/03

Course type, scope and the method:

**Course type:** Practice

Recommended course-load (hours): Per week: 6 Per study period: 84

Course method: present

**Number of ECTS credits: 6** 

Recommended semester/trimester of the course:

Course level: II.

**Prerequisities:** 

**Conditions for course completion:** 

**Learning outcomes:** 

**Brief outline of the course:** 

**Recommended literature:** 

**Course language:** 

**Notes:** 

Course assessment

Total number of assessed students: 378

A	В	С	D	Е	FX
94.18	3.7	0.79	0.53	0.79	0.0

Provides: RNDr. Martin Vavra, PhD., doc. RNDr. Peter Pristaš, CSc., doc. RNDr. Peter Javorský, DrSc., doc. RNDr. Ján Imrich, CSc., doc. RNDr. Mária Kožurková, CSc., prof. Ing. Marián Antalík, DrSc., prof. RNDr. Juraj Černák, DrSc., prof. RNDr. Jozef Gonda, DrSc., prof. RNDr. Andrej Oriňak, PhD., doc. RNDr. Zuzana Vargová, Ph.D., doc. RNDr. Taťána Gondová, CSc., doc. RNDr. Miroslava Martinková, PhD., prof. RNDr. Renáta Oriňaková, DrSc., doc. RNDr. Ivan Potočňák, PhD., doc. RNDr. Erik Sedlák, DrSc., prof. RNDr. Vladimír Zeleňák, DrSc., doc. RNDr. Viktor Víglaský, PhD., doc. RNDr. Katarína Reiffová, PhD., RNDr. Miroslava Matiková Maľarová, PhD., doc. RNDr. Juraj Kuchár, PhD., RNDr. Nataša Tomášková, PhD., RNDr. Andrea Morovská Turoňová, PhD., RNDr. Dušan Koščík, CSc., RNDr. Daniela Kladeková, CSc., RNDr. Slávka Hamuľaková, PhD., RNDr. Rastislav Varhač, PhD., RNDr. Daniea Sabolová, PhD., RNDr. Zuzana Kudličková, PhD., RNDr. Lívia Kocúrová, PhD., prof. Mgr. Vasiľ Andruch, DSc., prof. Dr. Yaroslav Bazeľ, DrSc., RNDr. Ladislav Janovec, PhD., doc. Ing. Viera Vojteková, PhD., RNDr. Miroslav Almáši, PhD., RNDr. Gabriel Žoldák, PhD.

Date of last modification: 03.05.2015

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: KF/ **Course name:** History of Philosophy 2 (General Introduction) DF2p/03 Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14 Course method: present **Number of ECTS credits: 4** Recommended semester/trimester of the course: Course level: I., II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 739 C A В D Ε FX 60.89 13.8 12.58 8.66 3.38 0.68 Provides: Doc. PhDr. Peter Nezník, CSc. Date of last modification: 25.03.2020 Approved: prof. Ing. Marián Antalík, DrSc.

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: KF/ Course name: Idea Humanitas 2 (General Introduction) IH2/03 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: 2 Recommended semester/trimester of the course:** 3. Course level: II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 9  $\mathbf{C}$ A В D Ε FX 88.89 11.11 0.0 0.0 0.0 0.0 Provides: Doc. PhDr. Peter Nezník, CSc. Date of last modification: 12.02.2021 Approved: prof. Ing. Marián Antalík, DrSc.

University: P. J. Šafá	University: P. J. Šafárik University in Košice			
Faculty: Faculty of S	Faculty: Faculty of Science			
Course ID: ÚCHV/ Course name: Laboratory Practice to Diploma Thesis LCDP/15				
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present				
Number of ECTS cr				
	ster/trimester of the cours	e: 3.		
Course level: II.				
Prerequisities:				
Conditions for cours	se completion:			
Learning outcomes:				
Brief outline of the c	ourse:			
Recommended litera	iture:			
Course language:				
Notes:				
Course assessment Total number of asse	ssed students: 51			
	abs	n		
98.04 1.96				
Viktor Víglaský, PhD		rof. Ing. Marián Antalík, DrSc., doc. RNDr. DrSc., RNDr. Nataša Tomášková, PhD., RNDr. PhD.		
Date of last modification:				
Approved: prof. Ing.	Marián Antalík, DrSc.			

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ | Course name: Modern Trends in Biochemistry and Molecular Biology

BMB1/03

Course type, scope and the method: Course type: Lecture / Practice

Recommended course-load (hours): Per week: 3 / 1 Per study period: 42 / 14

Course method: present

**Number of ECTS credits: 6** 

Recommended semester/trimester of the course:

Course level: II.

**Prerequisities:** 

**Conditions for course completion:** 

## **Learning outcomes:**

To give an overview on modern biochemistry and molecular biology methods and its application in practice

### **Brief outline of the course:**

Application of modern biochemistry and molecular biology methods for gene analysis, quantification of gene expression, nanotechnology and biotechnology.

## **Recommended literature:**

Alberts et al: Molecular Biology of the Cell, Garland Publishing, 1994

Watson et al., Recombinant DNA, New York, 1992

Bloomfield et al., Nucleic acids - structures, properties and function, Canada, 1999

#### **Course language:**

**Notes:** 

Course assessment

Total number of assessed students: 199

A	В	С	D	Е	FX
30.65	23.12	27.64	15.08	3.02	0.5

Provides: doc. RNDr. Viktor Víglaský, PhD.

Date of last modification: 03.05.2015

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚCHV/ Course name: Patobiochemistry PAT1/03 Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2/3 Per study period: 28/42 Course method: present **Number of ECTS credits: 7** Recommended semester/trimester of the course: Course level: II. Prerequisities: ÚCHV/KLB1/03 **Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 166 C A В D Ε FX 67.47 18.67 9 64 4.22 0.0 0.0 Provides: MUDr. Angela Molčányiová, PhD. Date of last modification: 03.05.2015 Approved: prof. Ing. Marián Antalík, DrSc.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ Cour

Course name: Proteins, Structure and Function

PSF/03

Course type, scope and the method:

Course type: Lecture

Recommended course-load (hours): Per week: 3 Per study period: 42

Course method: present

Number of ECTS credits: 5

#### Recommended semester/trimester of the course:

Course level: II.

## **Prerequisities:**

## **Conditions for course completion:**

Written examination

## **Learning outcomes:**

Ability to suggest/use suitable methods for determination of structural and functional properties of proteins.

#### **Brief outline of the course:**

Chemical properties of polypeptides. Detection of amino acids, peptides and proteins. Biosynthesis of proteins – procaryotes. Biosynthesis of proteins – eucaryotes. Topogenesis. Protein folding. Postranslational covalent modifications of polypeptide chains. Physical interactions that determine the properties of proteins. Conformational properties of polypeptide chains. Proteins in solution and in membranes. Interactions with other molecules. Allostery. Degradation. Extremophiles.

#### **Recommended literature:**

Creighton T. E.: Proteins: Structures and Molecular Properties (2. vyd.), 1992

Buxbaum E.: Fundamentals of Protein Structure and Function, 2007

Nölting B.: Protein Folding Kinetics: Biophysical Methods (2. vyd.), 2006

Nelson D. L., Cox M. M.: Lehninger Principles of Biochemistry (4. vyd.), 2004

Whitford D.: Proteins: Structure and Function, 2011

Kessel A., Ben-Tal N.: Introduction to Proteins: Structure, Function, and Motion, 2011

### Course language:

### **Notes:**

### Course assessment

Total number of assessed students: 187

A	В	С	D	Е	FX
33.16	20.86	20.32	15.51	9.63	0.53

Provides: doc. RNDr. Erik Sedlák, DrSc., RNDr. Rastislav Varhač, PhD.

Date of last modification: 04.02.2016

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: Course name: Psychology and Health Psychology (Master's Study)

KPPaPZ/PPZMg/12

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

Course method: present

**Number of ECTS credits: 4** 

#### **Recommended semester/trimester of the course:**

Course level: II.

### **Prerequisities:**

## **Conditions for course completion:**

- a) Active work during the whole semester (according to the ongoing instructions of the lecturer and instructors); continuous control of study results at seminars during the teaching part of the semester in the range of maximum 5 points. Preparation, presentation and discussion on a selected topic max. 15 points. A maximum of 2 absences are allowed.
- b) Written examination of the topics of lectures in the 9th week of the semester at the time and place of the lecture. The written examination will consist of 10 questions of a factual nature (1 question / 3 points) with a maximum of 30 points.

Conditions for admission to the exam: completion of seminars and obtaining at least 25 points.

c) Exam: written form (50 points / 10 questions of factual-evaluation character of 5 points each) You need to get at least half of the 50 points.

#### Rating:

65 and less FX;

66 - 72 E;

73 - 79 D;

80 - 86 C;

87 - 93 B;

94 - 100 A.

The final evaluation reflects the results obtained during the semester and in the exam:

A more detailed explanation of the assignment and the work schedule of students will be the subject of an agreement for the 1st exercise of the semester.

Any modifications to the implementation of the course in connection with the current order of the Rector are listed in the electronic board of the course.

#### **Learning outcomes:**

Students will be able to orient themselves in the basic concepts and theories of health psychology, which will be given an interesting and engaging explanation, accompanied by many examples from life. They will gain orientation in current topics, which are the content of health psychology or they are closely related to the issues not only of this discipline, but also of other psychological disciplines such as educational psychology, personality psychology and the like. Within the course, students are allowed to communicate freely with the teacher and discuss the topics with other classmates.

Students can practically apply the knowledge from the subject especially in the field of prevention of burnout syndrome and support of mental health in the work of a teacher.

#### **Brief outline of the course:**

- 1 Introduction to health psychology
- 2 Psychoimmunology
- 3 Personality factors and health
- 4 Social support as a protective factor in relation to health
- 5 Subjective well-being
- 6 Stress and stressful situations and ways to manage them
- 7 Burnout syndrome
- 8 Health-promoting behavior, mental hygiene
- 9 Health risk behavior
- 10 School as an important factor of health

#### **Recommended literature:**

Křivohlavý, J.: Psychologie zdraví. Portál, Praha 2001.

Křivohlavý, J.: Psychologie nemoci. Grada, Praha, 2002.

Křivohlavý, J.: Psychologie moudrosti a dobrého života. Grada, Praha, 2009.

Kebza, V.: Psychosociální determinanty zdraví. Academia, Praha 2005.

Kahneman, D., Diener, E., Schwarz, N.(Eds), Well-Being. The Foundations of Hedonic

Psychology. New York, Russell Sage Foundation, 2003.

Kaplan, R. M.: Zdravie a správanie človeka. SPN, Bratislava 1996.

Sarafino, E. P.: Health Psychology. Biopsychosocial interactions. John Wiley and sons 1994.

Baštecký, J., Šavlík, J., Šimek, J. 1993. Psychosomatická medicína. Praha: Grada

Tress, W., Krusse, J., Ott, J.: Základní psychosomatická péče. Portál, Praha 2008.

## Course language:

slovak

## **Notes:**

#### **Course assessment**

Total number of assessed students: 226

A	В	С	D	Е	FX
19.47	25.22	25.66	13.27	15.93	0.44

Provides: PhDr. Anna Janovská, PhD., Mgr. Lucia Barbierik, PhD.

Date of last modification: 16.02.2021

	COURSE INFORMATION LETTER				
University: P. J. Šafá	University: P. J. Šafárik University in Košice				
Faculty: Faculty of S	Faculty: Faculty of Science				
Course ID: ÚTVŠ/ ÚTVŠ/CM/13					
Course type: Practic Recommended cour Per week: Per stud	Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: Per study period: 36s Course method: combined, present				
Number of ECTS cr	edits: 2				
Recommended seme	ster/trimester of the cours	e:			
Course level: I., II.					
Prerequisities:					
	Conditions for course completion: Conditions for course completion: Attendance				
conditions actively a Students will acquire	nd their skills in work and	essibilities how to spend leisure time in seaside of communication with clients will be improved. It can be experienced for visitors.			
Brief outline of the course: Brief outline of the course:  1. Basics of seaside aerobics 2. Morning exercises 3. Pilates and its application in seaside conditions 4. Exercises for the spine 5. Yoga basics 6. Sport as a part of leisure time 7. Application of projects of productive spending of leisure time for different age and social groups (children, young people, elderly) 8. Application of seaside cultural and art-oriented activities in leisure time					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 41 abs n					
	400	11			

Page: 33

87.8

12.2

Provides: Mgr. Agata Horbacz, PhD.

Date of last modification: 15.03.2019

Approved: prof. Ing. Marián Antalík, DrSc.

University: P. J. Šafá	University: P. J. Šafárik University in Košice				
Faculty: Faculty of Science					
Course ID: ÚCHV/ SP1/14	Course ID: ÚCHV/ Course name: Semestral Project I P1/14				
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present					
Number of ECTS cre	edits: 4				
Recommended seme	ster/trimester of the cours	e: 1.			
Course level: II.					
Prerequisities:					
<b>Conditions for cours</b>	e completion:				
Learning outcomes:	Learning outcomes:				
Brief outline of the c	ourse:				
Recommended litera	ture:				
Course language:					
Notes:					
Course assessment Total number of asses	ssed students: 171				
	abs	n			
	99.42	0.58			
Provides: RNDr. Rastislav Serbin, PhD., doc. RNDr. Mária Kožurková, CSc., prof. Dr. Yaroslav Bazel', DrSc., prof. RNDr. Jozef Gonda, DrSc., doc. RNDr. Ján Imrich, CSc., doc. RNDr. Miroslava Martinková, PhD., doc. RNDr. Erik Sedlák, DrSc., RNDr. Nataša Tomášková, PhD., doc. RNDr. Viktor Víglaský, PhD., RNDr. Rastislav Varhač, PhD., RNDr. Danica Sabolová, PhD., RNDr. Jana Šandrejová, PhD., doc. RNDr. Ivan Potočňák, PhD., RNDr. Marián Fabián, CSc., RNDr. Miroslav Almáši, PhD., RNDr. Miroslava Matiková Maľarová, PhD., doc. RNDr. Zuzana Vargová, Ph.D., RNDr. Martin Vavra, PhD., prof. RNDr. Juraj Černák, DrSc., doc. RNDr. Juraj Kuchár, PhD., prof. RNDr. Vladimír Zeleňák, DrSc.					
Date of last modification: 03.05.2015					
Approved: prof. Ing. Marián Antalík, DrSc.					

University: P. J. Šafá	rik University in Košice	
Faculty: Faculty of S	cience	
Course ID: ÚCHV/ SP2/14	Course name: Semestral P	roject II
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): y period:	
Number of ECTS cro	edits: 6	
Recommended seme	ster/trimester of the cours	e:
Course level: II.		
Prerequisities:		
<b>Conditions for cours</b>	e completion:	
Learning outcomes:		
Brief outline of the c	ourse:	
Recommended litera	ture:	
Course language:		
Notes:		
Course assessment Total number of asses	ssed students: 123	
	abs	n
	100.0	0.0
Andruch, DSc., prof. Erik Sedlák, DrSc., do Fedorková, PhD., RN Martin Vavra, PhD., p Vladimír Zeleňák, Dr. RNDr. Katarína Reiffe PhD., RNDr. Danica S CSc., RNDr. Jana Šan Maľarová, PhD., doc. Juraj Kuchár, PhD.	Ing. Marián Antalík, DrSc., oc. RNDr. Miroslava Martin Dr. Monika Tvrdoňová, PhI orof. RNDr. Jozef Gonda, DrSc., doc. RNDr. Ján Imrich, ová, PhD., RNDr. Nataša ToSabolová, PhD., RNDr. Rastadrejová, PhD., RNDr. Miros RNDr. Zuzana Vargová, Ph	NDr. Mária Kožurková, CSc., prof. Mgr. Vasil' prof. Dr. Yaroslav Bazel', DrSc., doc. RNDr. ková, PhD., doc. RNDr. Andrea Straková D., doc. RNDr. Mária Ganajová, CSc., RNDr. rSc., doc. Ing. Viera Vojteková, PhD., prof. RNDr. CSc., doc. RNDr. Ivan Potočňák, PhD., doc. omášková, PhD., doc. RNDr. Viktor Víglaský, tislav Varhač, PhD., doc. RNDr. Peter Pristaš, slav Almáši, PhD., RNDr. Miroslava Matiková a.D., prof. RNDr. Juraj Černák, DrSc., doc. RNDr.
Date of last modifica	tion: 03.05.2015	

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ Cours

**Course name:** Seminar to Diploma Thesis

SDP/03

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: 2** 

Recommended semester/trimester of the course: 4.

Course level: II.

# **Prerequisities:**

## **Conditions for course completion:**

Consultations, discussions and presentations.

Assessment of student's work during the semester by supervisor.

## **Learning outcomes:**

Teach the student to prepare presentation of his own results, critical acceptation of information, participate in scientific discussion and formal requirements of written diploma work.

#### **Brief outline of the course:**

Presentation of literature information and own experimental results, scientific discussions and writing of scientific text.

#### **Recommended literature:**

According to the field of diploma work.

#### **Course language:**

#### **Notes:**

#### Course assessment

Total number of assessed students: 311

Α	В	С	D	Е	FX
96.14	2.25	0.96	0.32	0.0	0.32

**Provides:** RNDr. Martin Vavra, PhD., doc. RNDr. Andrea Straková Fedorková, PhD., doc. RNDr. Mária Kožurková, CSc., prof. RNDr. Juraj Černák, DrSc., prof. Dr. Yaroslav Bazeľ, DrSc., prof. RNDr. Andrej Oriňak, PhD., prof. RNDr. Vladimír Zeleňák, DrSc., doc. RNDr. Zuzana Vargová, Ph.D., doc. RNDr. Ivan Potočňák, PhD., doc. RNDr. Taťána Gondová, CSc., doc. RNDr. Katarína Reiffová, PhD., prof. Mgr. Vasiľ Andruch, DSc., prof. RNDr. Renáta Oriňaková, DrSc., RNDr. Miroslava Matiková Maľarová, PhD., doc. RNDr. Juraj Kuchár, PhD., RNDr. Andrea Morovská Turoňová, PhD., RNDr. Lívia Kocúrová, PhD., RNDr. Miroslav Almáši, PhD.

Date of last modification: 20.09.2017

University: P. J. Šafárik University in Košice Faculty: Faculty of Science **Course ID:** Course name: Social-Psychological Training of Coping with Critical Life KPPaPZ/SPVKE/07 Situations 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: 2 Recommended semester/trimester of the course:** 2. Course level: II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 126 abs n  $\mathbf{Z}$ 97.62 2.38 0.0 Provides: Mgr. Ondrej Kalina, PhD. Date of last modification: 11.02.2021 Approved: prof. Ing. Marián Antalík, DrSc.

University: P. J. Šafá	rik University in Košice
Faculty: Faculty of S	cience
Course ID: ÚTVŠ/ TVa/11	Course name: Sports Activities I.
Course type, scope a Course type: Practic Recommended cour Per week: 2 Per stu Course method: cor	ce rse-load (hours): dy period: 28
Number of ECTS cr	edits: 2
Recommended seme	ster/trimester of the course: 1.
Course level: I., I.II.,	II.
Prerequisities:	
Conditions for course Conditions for course Min. 80% of active p	•
0 1 1	condition and performance within individual sports. Strengthening the atts to the selected sports activity and its continual improvement.
University provides a floorball, yoga, pilate tennis, sports for unful In the first two seme and particularities of physical condition, condition, contact but not least, the means of a special prun In addition to these physical education tra	
Recommended litera	ture:
Course language:	

**Notes:** 

Course assessment							
Total number of assessed students: 14050							
abs	abs-A	abs-B	abs-C	abs-D	abs-E	n	neabs
88.48	0.07	0.0	0.0	0.0	0.04	7.51	3.9

**Provides:** Mgr. Dana Dračková, PhD., Mgr. Agata Horbacz, PhD., Mgr. Dávid Kaško, PhD., Mgr. Zuzana Küchelová, PhD., doc. PaedDr. Ivan Uher, PhD., Mgr. Marek Valanský, prof. RNDr. Stanislav Vokál, DrSc., Mgr. Marcel Čurgali, Mgr. Patrik Berta, Mgr. Ladislav Kručanica, PhD.

Date of last modification: 18.03.2019

	COURSE INFORMATION LETTER
University: P. J. Šafár	rik University in Košice
Faculty: Faculty of S	cience
Course ID: ÚTVŠ/ TVb/11	Course name: Sports Activities II.
Course type, scope a Course type: Practic Recommended cour Per week: 2 Per stu Course method: cor Number of ECTS cre	ce rse-load (hours): dy period: 28 mbined, present
Recommended seme	ster/trimester of the course: 2.
Course level: I., I.II.,	II.
Prerequisities:	
Conditions for course Conditions for course Final assessment and	<u>-</u>
0 1 5	condition and performance within individual sports. Strengthening the its to the selected sports activity and its continual improvement.
University provides a floorball, yoga, pilate tennis, sports for unfi In the first two semes and particularities of a physical condition, con Last but not least, the means of a special pro- In addition to these a physical education tra	
Recommended litera	ture:
Course language:	

**Notes:** 

Course ass	Course assessment							
Total number of assessed students: 11330								
abs	abs-A	abs-B	abs-C	abs-D	abs-E	n	neabs	
85.75	0.56	0.02	0.0	0.0	0.05	9.87	3.75	

**Provides:** Mgr. Dana Dračková, PhD., Mgr. Agata Horbacz, PhD., Mgr. Dávid Kaško, PhD., Mgr. Zuzana Küchelová, PhD., doc. PaedDr. Ivan Uher, PhD., Mgr. Marek Valanský, prof. RNDr. Stanislav Vokál, DrSc., Mgr. Marcel Čurgali, Mgr. Patrik Berta, Mgr. Ladislav Kručanica, PhD.

Date of last modification: 18.03.2019

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

**Course ID:** ÚTVŠ/ | **Course name:** Sports Activities III.

TVc/11

Course type, scope and the method:

**Course type:** Practice

Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: combined, present

**Number of ECTS credits: 2** 

Recommended semester/trimester of the course: 3.

Course level: I., I.II., II.

**Prerequisities:** 

**Conditions for course completion:** 

**Learning outcomes:** 

**Brief outline of the course:** 

**Recommended literature:** 

Course language:

**Notes:** 

Course assessment

Total number of assessed students: 8383

abs	abs-A	abs-B	abs-C	abs-D	abs-E	n	neabs
90.11	0.05	0.01	0.0	0.0	0.02	4.04	5.76

**Provides:** Mgr. Marcel Čurgali, Mgr. Dana Dračková, PhD., Mgr. Agata Horbacz, PhD., Mgr. Dávid Kaško, PhD., Mgr. Zuzana Küchelová, PhD., doc. PaedDr. Ivan Uher, PhD., Mgr. Marek Valanský, prof. RNDr. Stanislav Vokál, DrSc., Mgr. Patrik Berta, Mgr. Ladislav Kručanica, PhD.

Date of last modification: 03.05.2015

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚTVŠ/

TVd/11

Course name: Sports Activities IV.

Course type, scope and the method:

Course type: Practice

Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: combined, present

**Number of ECTS credits: 2** 

Recommended semester/trimester of the course: 4.

Course level: I., I.II., II.

**Prerequisities:** 

**Conditions for course completion:** 

**Learning outcomes:** 

**Brief outline of the course:** 

**Recommended literature:** 

Course language:

**Notes:** 

Course assessment

Total number of assessed students: 5101

abs	abs-A	abs-B	abs-C	abs-D	abs-E	n	neabs
85.2	0.29	0.04	0.0	0.0	0.0	6.76	7.7

Provides: Mgr. Marcel Čurgali, Mgr. Dana Dračková, PhD., Mgr. Agata Horbacz, PhD., Mgr. Dávid Kaško, PhD., Mgr. Zuzana Küchelová, PhD., doc. PaedDr. Ivan Uher, PhD., Mgr. Marek Valanský, prof. RNDr. Stanislav Vokál, DrSc., Mgr. Patrik Berta, Mgr. Ladislav Kručanica, PhD.

Date of last modification: 03.05.2015

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚCHV/ Course name: Students Scientific Conference - Seminar and Presentation SVKBCH/03 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: 4** Recommended semester/trimester of the course: Course level: II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 64  $\mathbf{C}$ A В D Е FX 100.0 0.0 0.0 0.0 0.0 0.0 Provides: doc. RNDr. Mária Kožurková, CSc. Date of last modification: 03.05.2015 Approved: prof. Ing. Marián Antalík, DrSc.

University: P. J. Šafárik University in Košice					
Faculty: Faculty of S	cience				
Course ID: ÚTVŠ/ LKSp/13	Course name: Summer Course-Rafting of TISA River				
Course type, scope a Course type: Practic Recommended cour Per week: Per stud Course method: con	ce rse-load (hours): y period: 36s				
Number of ECTS cro	edits: 2				
Recommended seme	ster/trimester of the course:				
Course level: I., II.					
Prerequisities:					
Conditions for course Conditions for course Attendance Final assessment: Rat	<u>-</u>				
Learning outcomes: Learning outcomes: Students have knowled	edge of rafts (canoe) and their control on waterway.				
5. Canoe lifting and c	ourse: Coulty of waterways Citing  ning using an empty canoe carrying In the water without a shore contact be out of the water				
Recommended litera	ture:				
Course language:					
Notes:					

Course assessment					
Total number of assessed students: 153					
abs n					
45.75	54.25				
Provides: Mgr. Dávid Kaško, PhD.	Provides: Mgr. Dávid Kaško, PhD.				
Date of last modification: 18.03.2019					
Approved: prof. Ing. Marián Antalík, DrSc.					

University: P. J. Šafá	rik University in Košice
Faculty: Faculty of S	cience
Course ID: ÚTVŠ/ KP/12	Course name: Survival Course
Course type, scope a Course type: Practic Recommended cour Per week: Per stud Course method: cor Number of ECTS cro	rse-load (hours): y period: 36s mbined, present
	ster/trimester of the course:
Course level: I., II.	
Prerequisities:	
Conditions for course Conditions for course Attendance Final assessment: cor	<u>-</u>
conditions as they wi and demanding situa	niliarized with principles of safe stay and movement in extreme natural ll obtain theoretical knowledge and practical skills to solve the extraordinary tions connected with survival and minimization of damage to health. The n work and students will learn how to manage and face the situations that of obstacles.
<ol> <li>Preparation and lea</li> <li>Objective and subjective and subjective and subjective and subjective and subjective are subjective and subjective and subjective are subjective and subjective and subjective and subjective and subjective are subjective and subjec</li></ol>	viour and safety for movement and stay in unknown mountains adership of tour ective danger in mountains ne and prevention of damage to health in extreme conditions in, orientation and navigation in terrain (compasses, GPS) rovised overnight stay d food preparation.
Recommended litera	ture:

Course language:

**Notes:** 

Course assessment				
Total number of assessed students: 393				
abs n				
44.53	55.47			
Provides: MUDr. Peter Dombrovský, Mgr. Marek Valanský				
Date of last modification: 15.03.2019				
Approved: prof. Ing. Marián Antalík, DrSc.				

University: P. J. Šafárik University in Košice Faculty: Faculty of Science **Course ID:** Course name: The Art of Aiding by Verbal Exchange KPPaPZ/UPR/03 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: 2** Recommended semester/trimester of the course: 4. Course level: II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 49 C Α В D Е FX 85.71 4.08 2.04 2.04 2.04 4.08 Provides: Mgr. Ondrej Kalina, PhD. Date of last modification: 18.03.2019 Approved: prof. Ing. Marián Antalík, DrSc.

Page: 50

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ Cour

Course name: Xenobiochemistry

XBCH/04

Course type, scope and the method:

Course type: Lecture

Recommended course-load (hours): Per week: 3 Per study period: 42

Course method: present

**Number of ECTS credits: 5** 

Recommended semester/trimester of the course:

Course level: II.

**Prerequisities:** 

**Conditions for course completion:** 

test

# **Learning outcomes:**

Students obtained modern knowledge of xenobiotics metabolism in living organisms

## **Brief outline of the course:**

Characterization of metabolism of xenobiotics in the liver. The basic types of biotransformation reactions - oxidation, reduction, hydrolysis, conjugation. Biotransformation enzymes. Free radicals and their effects, lipid peroxidation.

### **Recommended literature:**

Z. Ďuračková: Voľné radikály a antioxidanty v medicíne, Slovak akademik press 1998.

Z. Vodrážka: Biochémia, Praha, 1996.

A. Jindra: Biochémia, molekulárnobiologické a farmakologické aspekty, Praha, 1985.

## Course language:

**Notes:** 

#### Course assessment

Total number of assessed students: 77

A	В	С	D	Е	FX
61.04	19.48	9.09	5.19	5.19	0.0

Provides: prof. Ing. Marián Antalík, DrSc., RNDr. Danica Sabolová, PhD.

Date of last modification: 03.05.2015