COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KFaDF/AFS/05	**Course name:** Antique Philosophy and Present Times

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 credits: 2

Recommended semester/trimester of the course: 2.

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: 30

A	B	C	D	E	FX
83.33	6.67	6.67	0.0	3.33	0.0

Provides: doc. PhDr. Pavol Tholt, PhD., mim.prof., Doc. PhDr. Peter Nezník, CSc.

Date of last modification: 26.01.2014

Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ BBA1/03	**Course name:** Bioenergetics and Bioelectronics

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 credits: 5

Recommended semester/trimester of the course:

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:
Cell metabolism, ATP, polyphosphates.
Electron transport chain, mitochondria, chloroplast, chemoautotrops.
Photosynthesis, bacteriorodopsin.
Oxidative phosphorylation, chemical gradient.
ATPases.
Membrane transport.
ATP metabolism.
Electron transport in biomacromolecules.
Electric sources, battery.
Organic electric materials.
Photolysis of water
Organic a biological memories
Molecular films, nanotechnology, Integrated system between neurons and electronics

Recommended literature:
D. Voet, J. G. Voetová, Biochémie, Victoria Publishing, Praha, 1994
M. Grätzel, ed., Energy Resources throught photochemistry and catalysis, Academic Press, NY, 1983
L.A. Blumenfeld, Physics of bioenergetic processes, Springer-Verlag, Berlin, 1983
Berg, J. M., Tymoczko J. L., Stryer L., Biochemistry, WH Freeman and Company, NY, 2007
Articles from Journals

Course language:

Notes:

Course assessment
Total number of assessed students: 8

A	B	C	D	E	FX
50.0	37.5	12.5	0.0	0.0	0.0

Provides: prof. Ing. Marián Antalík, DrSc.

Date of last modification: 03.02.2014

Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ BAM1/00	**Course name:** Biochemical Analytical Methods

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 credits: 4

Recommended semester/trimester of the course:

Course level: II.

Prerequisities:

Conditions for course completion:
Test

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

Course language:

Notes:

Course assessment
Total number of assessed students: 31

A	B	C	D	E	FX
67.74	16.13	12.9	3.23	0.0	0.0

Provides: RNDr. Rastislav Varhač, PhD.

Date of last modification: 03.02.2014

Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ BCHKBCH/14	**Course name:** Biochemistry and Clinical Biochemistry

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

Number of credits: 4

Recommended semester/trimester of the course:

Course level: II.

Prerequisities: ÚCHV/BFC1a/01 and ÚCHV/KLB1/03 and 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: 9

A	B	C	D	E	FX
33.33	66.67	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 10.06.2014

Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ BCM/04	**Course name:** Biochemistry of Microorganisms

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 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: 116

A	B	C	D	E	FX
55.17	22.41	12.93	8.62	0.86	0.0

Provides: doc. RNDr. Mária Kožurková, CSc.

Date of last modification: 03.02.2014

Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ BFP/04/08	**Course name:** Biochemistry of Physiological Processes

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 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: 63

A	B	C	D	E	FX
55.56	19.05	11.11	7.94	6.35	0.0

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

Date of last modification: 03.02.2014

Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ BOC/03	**Course name:** Bioorganic chemistry

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 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: 123

A	B	C	D	E	FX
90.24	3.25	1.63	3.25	1.63	0.0

Provides: prof. RNDr. Jozef Gonda, DrSc.

Date of last modification: 03.02.2014

Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚCHV/ BFC1a/01	**Course name:** Biophysical Chemistry I

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 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 Pattrern, Cambridge Univ. Pres., NY, 1993

Course language:

Notes:

Course assessment
Total number of assessed students: 128

A	B	C	D	E	FX
14.84	18.75	32.03	21.88	12.5	0.0

Provides: prof. Ing. Marián Antalík, DrSc.

Date of last modification: 03.02.2014

Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚCHV/ BFC1b/03	**Course name:** Biophysical Chemistry II
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 credits: 8	
Recommended semester/trimester of the course:	
Course level: II.	
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:	
Notes:	

Course assessment
Total number of assessed students: 119

A	B	C	D	E	FX
14.29	19.33	32.77	19.33	13.45	0.84

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

Date of last modification: 03.02.2014

Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/PBT1/03	**Course name:** Biotechnology Practical

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 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: 83

A	B	C	D	E	FX
75.9	20.48	1.2	1.2	1.2	0.0

Provides: RNDr. Danica Sabolová, PhD.

Date of last modification: 03.02.2014

Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚCHV/ RP/14	**Course name:** Class Project
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of credits: 6	
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: 51

abs	n
100.0	0.0

Provides: prof. RNDr. Jozef Gonda, DrSc., doc. RNDr. Miroslava Martinková, PhD., RNDr. Monika Tvrdoňová, PhD., RNDr. Martin Walko, PhD., RNDr. Ladislav Janovec, PhD., RNDr. Mariana Budovská, PhD., doc. RNDr. Erik Sedlák, PhD., prof. Ing. Marián Antalík, DrSc., doc. RNDr. Viktor Víglaský, PhD., RNDr. Nataša Tomášková, PhD., doc. RNDr. Mária Kožurková, CSc., RNDr. Rastislav Varhač, PhD., prof. Dr. Yaroslav Bazeľ, DrSc.

Date of last modification: 05.02.2014

Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ KLB1/03	**Course name:** Clinical Biochemistry

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 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: 125

A	B	C	D	E	FX
60.8	27.2	8.0	2.4	1.6	0.0

Provides: MUDr. Angela Molčányiová, PhD.

Date of last modification: 03.02.2014

Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPPaPZ/KK/07	**Course name:** Communication and Cooperation

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 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: 281

abs	n	z
98.22	1.78	0.0

Provides: Mgr. Ondrej Kalina, PhD.

Date of last modification: 04.02.2014

Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ DPO/14	**Course name:** Diploma Thesis and its Defence

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

Number of 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: 28

A	B	C	D	E	FX
71.43	21.43	3.57	0.0	3.57	0.0

Provides:

Date of last modification: 17.02.2014

Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ ENZ/04	**Course name:** Enzymology

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 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 assessment
Total number of assessed students: 91

A	B	C	D	E	FX
38.46	23.08	15.38	12.09	8.79	2.2

Provides: doc. RNDr. Erik Sedlák, PhD.

Date of last modification: 03.02.2014

Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ EMDP/03	**Course name:** Experimental Methods to Master´s Thesis

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 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: 225

A	B	C	D	E	FX
95.56	2.22	0.89	0.89	0.44	0.0

Provides: doc. RNDr. Peter Javorský, DrSc., doc. RNDr. Peter Pristaš, CSc., doc. RNDr. Ján Imrich, CSc., doc. RNDr. Mária Kožurková, CSc., prof. RNDr. Katarína Györyová, DrSc., prof. Ing. Marián Antalík, DrSc., prof. RNDr. Juraj Černák, CSc., prof. RNDr. Andrej Oriňák, PhD., prof. RNDr. Jozef Gonda, DrSc., doc. RNDr. Taťána Gondová, CSc., doc. RNDr. Mária Reháková, CSc., doc. RNDr. Zuzana Vargová, Ph.D., doc. RNDr. Vladimír Zeleňák, PhD., doc. RNDr. Renáta Oriňáková, PhD., doc. RNDr. Viktor Víglaský, PhD., doc. RNDr. Katarína Reiffová, PhD., doc. RNDr. Miroslava Martinková, PhD., doc. RNDr. Erik Sedlák, PhD., doc. RNDr. Ivan Potočňák, PhD., RNDr. Daniela Kladeková, CSc., RNDr. Dušan Koščík, CSc., RNDr. Andrea Morovská Turoňová, PhD., RNDr. Rastislav Varhač, PhD., RNDr. Danica Sabolová, PhD., RNDr. Slávka Hamuľaková, PhD., RNDr. Zuzana Kudličková, PhD., RNDr. Lívia Kocúrová, PhD., doc. Mgr. Vasiľ Andruch, CSc., RNDr. Nataša Tomášková, PhD., RNDr. Martin Vavra, PhD., Mgr. Vladimír Komanický, PhD., RNDr. Andrea Straková Fedorková, PhD.

Date of last modification: 03.02.2014

Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KFaDF/KDF/05	**Course name:** Chapters from History of Philosophy of 19th and 20th 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 credits: 2

Recommended semester/trimester of the course: 2.

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: 10

A	B	C	D	E	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: 26.01.2014

Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: R UPJŠ/ IB10/14	**Course name:** IB10 - Medzinárodný certifikát ECo-C
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of credits: 16	
Recommended semester/trimester of the course:	
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: 0

abs	n	neabs
0.0	0.0	0.0

Provides:
Date of last modification: 11.08.2014
Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: R UPJŠ/ IB11/14	**Course name:** IB11 - Medzinárodný certifikát ECDL
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of credits: 14	
Recommended semester/trimester of the course:	
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: 0

abs	n	neabs
0.0	0.0	0.0

Provides:
Date of last modification: 11.08.2014
Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: R UPJŠ/ IB12/14	**Course name:** IB12 - Používanie, administrácia a vývoj v systéme SAP
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of credits: 54	
Recommended semester/trimester of the course:	
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: 0

abs	n	neabs
0.0	0.0	0.0

Provides:
Date of last modification: 11.08.2014
Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: R UPJŠ/ IB1/14	**Course name:** IB1 - Etika v biomedicínskych vedách pre zdravotnícku prax
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of credits: 16	
Recommended semester/trimester of the course:	
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: 0

abs	n	neabs
0.0	0.0	0.0

Provides:
Date of last modification: 11.08.2014
Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: R UPJŠ/ IB2/14	**Course name:** IB2 - Právne minimum – súkromnoprávne aspekty
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of credits: 16	
Recommended semester/trimester of the course:	
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: 0

abs	n	neabs
0.0	0.0	0.0

Provides:
Date of last modification: 11.08.2014
Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: R UPJŠ/ IB3/14	**Course name:** IB3 - Právne minimum – verejnoprávne aspekty
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of credits: 16	
Recommended semester/trimester of the course:	
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: 0

abs	n	neabs
0.0	0.0	0.0

Provides:
Date of last modification: 11.08.2014
Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: R UPJŠ/ IB4/14	**Course name:** IB4 - Projektový manažment
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of credits: 20	
Recommended semester/trimester of the course:	
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: 0

abs	n	neabs
0.0	0.0	0.0

Provides:
Date of last modification: 11.08.2014
Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: R UPJŠ/ IB5/14	**Course name:** IB5 - Manažérska ekonomika
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of credits: 16	
Recommended semester/trimester of the course:	
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: 0

abs	n	neabs
0.0	0.0	0.0

Provides:
Date of last modification: 11.08.2014
Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: R UPJŠ/ IB6/14	**Course name:** IB6 - Riešenie konfliktných a krízových situácií v školskej praxi
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of credits: 16	
Recommended semester/trimester of the course:	
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: 0

abs	n	neabs
0.0	0.0	0.0

Provides:
Date of last modification: 11.08.2014
Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: R UPJŠ/ IB7/14	**Course name:** IB7 - Štatistika pre prax
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of credits: 16	
Recommended semester/trimester of the course:	
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: 0

abs	n	neabs
0.0	0.0	0.0

Provides:
Date of last modification: 11.08.2014
Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: R UPJŠ/ IB8/14	**Course name:** IB8 - Environmentálne aspekty záťaže životného prostredia
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of credits: 16	
Recommended semester/trimester of the course:	
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: 0

abs	n	neabs
0.0	0.0	0.0

Provides:
Date of last modification: 11.08.2014
Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: R UPJŠ/ IB9/14	**Course name:** IB9 - Medzinárodný certifikát TOEFL
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of credits: 17	
Recommended semester/trimester of the course:	
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: 0

abs	n	neabs
0.0	0.0	0.0

Provides:
Date of last modification: 11.08.2014
Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KFaDF/IH2/03	**Course name:** Idea Humanitas 2 (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 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: 4

A	B	C	D	E	FX
75.0	25.0	0.0	0.0	0.0	0.0

Provides: Doc. PhDr. Peter Nezník, CSc.

Date of last modification: 26.01.2014

Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/LMB/08	**Course name:** Laboratory Practicals of Molecular Biology

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

Number of credits: 5

Recommended semester/trimester of the course:

Course level: II.

Prerequisities: ÚCHV/BFC1a/01

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 100

A	B	C	D	E	FX
30.0	26.0	29.0	14.0	1.0	0.0

Provides: doc. RNDr. Peter Javorský, DrSc., doc. RNDr. Viktor Víglaský, PhD.

Date of last modification: 03.02.2014

Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ BMB1/03	**Course name:** Modern Trends in Biochemistry and Molecular Biology

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 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: 136

A	B	C	D	E	FX
37.5	19.12	29.41	10.29	2.94	0.74

Provides: doc. RNDr. Peter Javorský, DrSc., doc. RNDr. Peter Pristaš, CSc., doc. RNDr. Viktor Víglaský, PhD.

Date of last modification: 03.02.2014

Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚTVŠ/ NJ//13	**Course name:** Naval Yachting
Course type, scope and the method: **Course type:** Practice **Recommended course-load (hours):** **Per week:** 36 **Per study period:** 504 **Course method:** present	
Number of credits: 2	
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: 2

abs	n
100.0	0.0

Provides: doc. Mgr. Rastislav Feč, PhD.
Date of last modification: 15.01.2014
Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/PAT1/03	**Course name:** Patobiochemistry

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 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: 122

A	B	C	D	E	FX
70.49	19.67	7.38	2.46	0.0	0.0

Provides: MUDr. Angela Molčányiová, PhD.

Date of last modification: 03.02.2014

Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ VPC/01	**Course name:** PC in Biomacromolecule Analysis

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 credits: 4

Recommended semester/trimester of the course:

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:
Analysis of nucleotide and aminoacid sequences by personal computers (PC) and free software (BioEdit, Prophet, GeneDoc, RasMol, VNTI-Viewer) and web-based analysis tool (blast, fasta, clustal). Introduction to public biological databases (PubMed, GenBank, SwissProt) and data mining. Specialized analysis – molecular taxonomy, phylogenetic analysis, prediction of biopolymers structure.

Brief outline of the course:
Usage of PC and WWW network for biological sequence analysis. History of Internet, FTP, E-mail services. Freely available biological and biomedicinal databases (PubMed, GenBank, SwissProt). Nucleotide sequence analysis. Protein sequence analysis. Pairwise sequence comparisons – blast software. Multiple sequence comparisons – clustal software. Molecular taxonomy of bacteria. Evolutionary and phylogenetic analysis. Seconadary and tertiary structure prediction.

Recommended literature:
The phylogenetic handbook, Salemi, M. a Vandamme, A-M., Cambridge University Press, 2003, 485 s

Course language:

Notes:

Course assessment
Total number of assessed students: 43

A	B	C	D	E	FX
100.0	0.0	0.0	0.0	0.0	0.0

Provides: doc. RNDr. Peter Pristaš, CSc.

Date of last modification: 03.02.2014

Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: Dek. PF UPJŠ/PPZ/13	**Course name:** Personality Development and Key Competences for Success on a Labour Market

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

Number of credits: 2

Recommended semester/trimester of the course: 1., 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: 39

A	B	C	D	E	FX
100.0	0.0	0.0	0.0	0.0	0.0

Provides: RNDr. Peter Stefányi, PhD.

Date of last modification: 17.02.2014

Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ PSF/03	**Course name:** Proteins, Structure and Function

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 credits: 5

Recommended semester/trimester of the course:

Course level: II.

Prerequisities:

Conditions for course completion:

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:
T.E. Creighton: Proteins - structures and molecular properties, 1993, W.H. Freeman and Company - New York.
Alan Fersht: Structure and mechanism in protein science, W.H. Freeman and Company, New York, 1999.
Robert A. Copeland: Enzymes (2nd edition), Wiley-VCH, 2000.

Course language:

Notes:

Course assessment
Total number of assessed students: 110

A	B	C	D	E	FX
46.36	20.91	18.18	7.27	6.36	0.91

Provides: RNDr. Rastislav Varhač, PhD.

Date of last modification: 03.02.2014

Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚTVŠ/ ÚTVŠ/CM/13	**Course name:** Seaside Aerobic Exercise
Course type, scope and the method: **Course type:** Practice **Recommended course-load (hours):** **Per week:** 36 **Per study period:** 504 **Course method:** present	
Number of credits: 2	
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: 7

abs	n
57.14	42.86

Provides: Mgr. Alena Buková, PhD., Mgr. Agata Horbacz, PhD.
Date of last modification: 15.01.2014
Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚCHV/ SP1/14	**Course name:** Semestral Project I
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of credits: 4	
Recommended semester/trimester of the course: 1.	
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: 44

abs	n
100.0	0.0

Provides: prof. RNDr. Jozef Gonda, DrSc., doc. RNDr. Miroslava Martinková, PhD., RNDr. Monika Tvrdoňová, PhD., RNDr. Martin Walko, PhD., RNDr. Ladislav Janovec, PhD., RNDr. Mariana Budovská, PhD., doc. Mgr. Vasiľ Andruch, CSc., doc. RNDr. Erik Sedlák, PhD., doc. RNDr. Mária Kožurková, CSc., prof. Ing. Marián Antalík, DrSc., doc. RNDr. Viktor Víglaský, PhD., RNDr. Nataša Tomášková, PhD., RNDr. Rastislav Varhač, PhD., RNDr. Danica Sabolová, PhD., doc. RNDr. Ivan Potočňák, PhD., prof. Dr. Yaroslav Bazeľ, DrSc.

Date of last modification: 05.02.2014

Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚCHV/ SP2/14	**Course name:** Semestral Project II
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of credits: 6	
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: 21

abs	n
100.0	0.0

Provides: doc. RNDr. Ján Imrich, CSc., prof. RNDr. Jozef Gonda, DrSc., doc. RNDr. Miroslava Martinková, PhD., RNDr. Monika Tvrdoňová, PhD., RNDr. Martin Walko, PhD., RNDr. Ladislav Janovec, PhD., RNDr. Mariana Budovská, PhD., doc. RNDr. Erik Sedlák, PhD., doc. RNDr. Mária Kožurková, CSc., doc. RNDr. Viktor Víglaský, PhD., RNDr. Nataša Tomášková, PhD., RNDr. Rastislav Varhač, PhD.

Date of last modification: 05.02.2014

Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ SDP/03	**Course name:** Seminar to Diploma Thesis

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 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: 184

A	B	C	D	E	FX
95.11	2.72	1.09	0.54	0.0	0.54

Provides: RNDr. Andrea Straková Fedorková, PhD., doc. RNDr. Mária Kožurková, CSc., prof. RNDr. Andrej Oriňák, PhD., prof. Dr. Yaroslav Bazeľ, DrSc., doc. RNDr. Taťána Gondová, CSc., doc. RNDr. Mária Reháková, CSc., doc. RNDr. Zuzana Vargová, Ph.D., doc. RNDr. Renáta Oriňáková, PhD., doc. RNDr. Katarína Reiffová, PhD., doc. Mgr. Vasiľ Andruch, CSc., RNDr. Andrea Morovská Turoňová, PhD., RNDr. Lívia Kocúrová, PhD., Mgr. Vladimír Komanický, PhD., RNDr. Rastislav Serbin, PhD.

Date of last modification: 03.02.2014

Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPPaPZ/SPVKE/07	**Course name:** Social-Psychological Training of Coping with Critical Life 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 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: 101

abs	n	z
97.03	2.97	0.0

Provides:

Date of last modification: 04.02.2014

Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚTVŠ/ TVa/11	**Course name:** Sports Activities I.

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 credits: 2

Recommended semester/trimester of the course: 1.

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: 7160

abs	n	neabs
88.42	7.82	3.76

Provides: PaedDr. Imrich Staško, doc. PhDr. Ivan Šulc, CSc., doc. Mgr. Rastislav Feč, PhD., Mgr. Ivan Matúš, PhD., Mgr. Zuzana Küchelová, Mgr. Peter Bakalár, PhD., doc. PaedDr. Ivan Uher, PhD., PaedDr. Milena Švedová, PhD., Mgr. Agata Horbacz, PhD., Mgr. Marek Valanský, Mgr. Dávid Kaško

Date of last modification: 15.01.2014

Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚTVŠ/ TVb/11	**Course name:** Sports Activities II.

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 credits: 2

Recommended semester/trimester of the course: 2.

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: 6364

abs	n	neabs
84.95	11.06	3.99

Provides: PaedDr. Imrich Staško, doc. Mgr. Rastislav Feč, PhD., doc. PhDr. Ivan Šulc, CSc., Mgr. Ivan Matúš, PhD., Mgr. Zuzana Küchelová, doc. PaedDr. Ivan Uher, PhD., Mgr. Peter Bakalár, PhD., PaedDr. Milena Švedová, PhD., Mgr. Agata Horbacz, PhD., Mgr. Marek Valanský, Mgr. Dávid Kaško

Date of last modification: 15.01.2014

Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚTVŠ/ TVc/11	**Course name:** Sports Activities III.

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 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: 4191

abs	n	neabs
89.91	4.72	5.37

Provides: PaedDr. Imrich Staško, doc. Mgr. Rastislav Feč, PhD., doc. PhDr. Ivan Šulc, CSc., Mgr. Ivan Matúš, PhD., Mgr. Zuzana Küchelová, doc. PaedDr. Ivan Uher, PhD., PaedDr. Milena Švedová, PhD., Mgr. Peter Bakalár, PhD., Mgr. Agata Horbacz, PhD., Mgr. Marek Valanský, Mgr. Dávid Kaško

Date of last modification: 15.01.2014

Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

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: present

Number of 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: 3363

abs	n	neabs
86.14	6.78	7.08

Provides: PaedDr. Imrich Staško, doc. Mgr. Rastislav Feč, PhD., doc. PhDr. Ivan Šulc, CSc., Mgr. Ivan Matúš, PhD., Mgr. Zuzana Küchelová, PaedDr. Milena Švedová, PhD., Mgr. Peter Bakalár, PhD., doc. PaedDr. Ivan Uher, PhD., Mgr. Agata Horbacz, PhD., Mgr. Marek Valanský, Mgr. Dávid Kaško

Date of last modification: 15.01.2014

Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ SVKBCH/03	**Course name:** Students Scientific Conference - Seminar and Presentation

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 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: 36

A	B	C	D	E	FX
100.0	0.0	0.0	0.0	0.0	0.0

Provides: doc. RNDr. Mária Kožurková, CSc.

Date of last modification: 03.02.2014

Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚTVŠ/ LKSp//13	**Course name:** Summer Course-Rafting of TISA River
Course type, scope and the method: **Course type:** Practice **Recommended course-load (hours):** **Per week:** 36 **Per study period:** 504 **Course method:** present	
Number of credits: 2	
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: 63	

abs	n
41.27	58.73

Provides: Mgr. Peter Bakalár, PhD.
Date of last modification: 15.01.2014
Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚTVŠ/ KP/12	**Course name:** Survival Course
Course type, scope and the method: **Course type:** Practice **Recommended course-load (hours):** **Per week:** 36 **Per study period:** 504 **Course method:** present	
Number of credits: 2	
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: 185

abs	n
41.62	58.38

Provides: Mgr. Marek Valanský
Date of last modification: 15.01.2014
Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPPaPZ/UPR/03	**Course name:** The Art of Aiding by Verbal Exchange

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 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: 47

A	B	C	D	E	FX
87.23	4.26	2.13	2.13	0.0	4.26

Provides: Mgr. Ondrej Kalina, PhD.

Date of last modification: 04.02.2014

Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚTVŠ/ ZKLS//13	**Course name:** Winter Ski Training Course
Course type, scope and the method: **Course type:** Practice **Recommended course-load (hours):** **Per week:** 36 **Per study period:** 504 **Course method:** present	
Number of credits: 2	
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: 59

abs	n
25.42	74.58

Provides: PaedDr. Imrich Staško, doc. PhDr. Ivan Šulc, CSc.
Date of last modification: 15.01.2014
Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/XBCH/03	**Course name:** Xenobiochemistry

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 credits: 5

Recommended semester/trimester of the course:

Course level: II.

Prerequisities:

Conditions for course completion:

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: 88

A	B	C	D	E	FX
67.05	17.05	11.36	3.41	1.14	0.0

Provides: RNDr. Danica Sabolová, PhD.

Date of last modification: 03.02.2014

Approved: prof. Ing. Marián Antalík, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: D PrávF/ZP2/11	**Course name:** Základy práva pre prirodovedcov II
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 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: 95	

abs	n
97.89	2.11

Provides:
Date of last modification: 14.01.2014
Approved: prof. Ing. Marián Antalík, DrSc.