

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚMV/ PSM/14		Course name: Advanced statistical methods			
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: 4					
Recommended semester/trimester of the course:					
Course level: II.					
Prerequisites:					
Conditions for course completion: Tests during the semester. Final evaluation is given at the basis of partial examination and final test.					
Learning outcomes: To learn to use the most widely used multivariate methods of data processing practically.					
Brief outline of the course: Multivariate data. Dependence measures. Contingency tables. Regression analysis. Logistic regression. Analysis of variance. Basics of time series. Cluster analysis.					
Recommended literature: Ho, R.: Handbook of univariate and multivariate data analysis and interpretation in SPSS, Chapman & Hall/CRC, 2006 Garson, D.: PA 765 Statnotes: An Online Textbook (electronic textbook, http://www2.chass.ncsu.edu/garson/pa765/statnote.htm), North Carolina State University, 1998 Electronic textbook: http://ucebnice.euromise.cz/index.php?conn=0&section=biostat1					
Course language: Slovak					
Notes:					
Course assessment Total number of assessed students: 47					
A	B	C	D	E	FX
2.13	4.26	29.79	36.17	27.66	0.0
Provides: RNDr. Daniel Klein, PhD.					
Date of last modification: 13.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚCHV/ AOL1/06		Course name: Analysis of Organic Substances			
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: 2., 4.					
Course level: II.					
Prerequisites:					
Conditions for course completion: Examination.					
Learning outcomes: Methods of analysis of organic substances.					
Brief outline of the course: Characteristics, objectives, methods and basic procedures in qualitative and quantitative analysis of organic compounds (AOC). Evidence and identification, molecular, elemental and structural-analytical methods in AOC. Groups solubility, color and precipitation reactions, identification and determination of functional groups. Optical, electrochemical, separation and other methods used in analysis of organic compounds. Some examples of the use of knowledge for the purposes of research and practice.					
Recommended literature: 1. Jerry R. Mohrig et al. Organic Qualitative Analysis, W. H. Freeman and Company, 2003 2. H.T. Openshaw, A Laboratory Manual of Qualitative Organic Analysis, CUP Archive, 1976 3. Oliver Kamm, Qualitative organic analysis, John Wiley & Sons, 1923, Open Library					
Course language:					
Notes:					
Course assessment Total number of assessed students: 31					
A	B	C	D	E	FX
70.97	22.58	3.23	3.23	0.0	0.0
Provides: doc. RNDr. Katarína Reiffová, PhD.					
Date of last modification: 03.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚCHV/APO1/02		Course name: Analysis of Psychotropic and Narcotic Substances			
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.					
Prerequisites:					
Conditions for course completion: Examination					
Learning outcomes: Survey of classification, effects/mechanism and properties of psychotropic and narcotic substances, drug dependences and methods used in the (toxicological) analysis of drugs.					
Brief outline of the course: Drug, drug dependence. Psychotropic and narcotic substances - classification, properties and laws. Dose and tolerance, therapy, prevention. Pharmacokinetics of the drug. Biological effects, biotransformations, receptors. The methods used in the analysis of the drugs (clinical, forensic analysis) - opiates, cocaine, amphetamines and their analogues, hallucinogenics, cannabis products, etc.					
Recommended literature: 1. M. D. Cole: The Analysis of Controlled Substances, Wiley 2003. 2. E. Hodgson: A Textbook of Modern Toxicology, Wiley 2004.					
Course language:					
Notes:					
Course assessment Total number of assessed students: 215					
A	B	C	D	E	FX
97.67	1.4	0.93	0.0	0.0	0.0
Provides: doc. RNDr. Tat'ána Gondová, CSc.					
Date of last modification: 03.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚBEV/ EFZ1/03		Course name: Animal and human ecophysiology			
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: 1.					
Course level: II.					
Prerequisites:					
Conditions for course completion: Seminar. Test.					
Learning outcomes: The aim of lectures is to provide students with knowledge of adaptations to environmental factors and extreme environments effects.					
Brief outline of the course: Environmental factors, reaction, adaptation, deformation. Biological rhythms. Stress reaction - general adaptation syndrom. Physiology and pathology of adaptation mechanisms - fever, pain, inflammation, apoptosis, necrosis. Aging. Regulation of food intake. Food adaptations, fasting, starvation, overfeeding. Thermoregulation. Hibernation, estivation, diapause. Adaptations to hypobaria and hyperbaria. Adaptations to hypergravity and microgravity. Electromagnetic fields. Biotransformation. Xenobiotics in air, water and soil. Drugs of abuse. Carcinogenesis, oncogenes, tumor suppressor genes. Cancer prevention. Prions.					
Recommended literature: 1. Wilmer P and co.: Environmental Physiology of Animals. Blackwell Publishing Inc., 2004 2. Chown SL, Nicolson SW: Insect Physiological Ecology. Oxford University Press 2004					
Course language:					
Notes:					
Course assessment Total number of assessed students: 363					
A	B	C	D	E	FX
14.88	22.04	23.14	23.42	15.43	1.1
Provides: RNDr. Bianka Bojková, PhD.					
Date of last modification: 13.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

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.					
Prerequisites:					
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. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚBEV/ AEN1/03		Course name: Applied entomology			
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: 1.					
Course level: II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 105					
A	B	C	D	E	FX
52.38	35.24	9.52	0.95	1.9	0.0
Provides: doc. RNDr. Ľubomír Panigaj, CSc.					
Date of last modification: 13.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚCHV/ AAS1/03		Course name: Atomic Spectrochemistry			
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: 1., 3.					
Course level: II.					
Prerequisites:					
Conditions for course completion: On the basis of the practical results and seminary works. On the basis of continuous assessment and oral examination.					
Learning outcomes: Theoretical information and practical experience with atomic absorption and emission methods used in analytical chemistry.					
Brief outline of the course: Information and the role of atomic absorption and emission spectroscopy in analytical chemistry. History of the development of spectral methods. Theoretical foundations, principles and classification of optical methods. Experimental foundations of spectral methods. Atomic absorption spectrometry. Atomic emission spectrometry. Atomic fluorescence spectrometry. X-ray spectrometry. Absorption spectroscopy in the visible, ultraviolet and near-infrared region and its analytical applications.					
Recommended literature: I. Němcová, L. Čermáková, P. Rychlovský: Spektrometrické analytické metody. Karolinum, Praha, 1997. D. A. Skoog, J. J. Leary: Instrumental Analytics. Springer, Berlin, 1996. B. Welz, M. Sperling: Atomic Absorption Spectrometry, Wiley-VCH, Weinheim, 1998. H. Günzler, A. Williams: Handbook of Analytical Techniques. Wiley-VCH, Weinheim, 2001. G. Gauglitz, T. Vo-Dinh: Handbook of Spectroscopy. Wiley-VCH, Weinheim, 2003.					
Course language:					
Notes:					
Course assessment Total number of assessed students: 67					
A	B	C	D	E	FX
40.3	22.39	19.4	11.94	5.97	0.0
Provides: doc. Ing. Viera Vojteková, PhD.					

Date of last modification: 03.02.2014
Approved: prof. RNDr. Igor Hudec, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ ZCHI2/11	Course name: Basic chiropterology
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 credits: 3	
Recommended semester/trimester of the course:	
Course level: II.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes: Comprehensive review of scientific knowledge on bats. Review on methods of bat research in conditions of the temperate zone.	
Brief outline of the course: Bat systematics. Species diversity, bats of the Palaearctic. Morphology, anatomy, physiology. Echolocation. Ecology: roosts, diet, hibernations, migration. Social structure, mating systems, population ecology. Research methods.	
Recommended literature: Kunz T. H. & Fenton M. B. (eds), 2003: Bat ecology. The University of Chicago Press, Chicago and London, 779 pp.	
Course language:	
Notes:	
Course assessment Total number of assessed students: 33	
abs	n
96.97	3.03
Provides: RNDr. Marcel Uhrin, PhD.	
Date of last modification: 13.02.2014	
Approved: prof. RNDr. Igor Hudec, CSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚCHV/ ZTOX/04		Course name: Basic Toxicology			
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: 1., 3.					
Course level: II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes: Goal of the course is to provide the students with a knowledge of types of toxic substances and their metabolism, safe and handling of toxic substances.					
Brief outline of the course: Historical aspects, types of toxic substances, types of exposure, dose-response relationship. Disposition of toxic compounds (absorption, distribution, excretion of toxic compounds). Metabolism of toxic compounds. Drugs as toxic substances, food additives and contaminants, environmental pollutants. Statement of chemistry laboratory policy. Safe and handling of toxic substances.					
Recommended literature: G. F. Fuhrman: Allgemeine Toxikologie fuer Chemiker, Teubner Verlag, Stuttgart 1984. V. E. Forbes, T. L. Forbe: Ecotoxicology in Theory and Practice, Chapman&Hall, London 1994. J. A. Timbrell: Introduction to Toxicology, Taylor&Francis, London 1994.					
Course language:					
Notes:					
Course assessment Total number of assessed students: 250					
A	B	C	D	E	FX
21.2	26.8	24.0	18.0	8.8	1.2
Provides: prof. RNDr. Katarína Györyová, DrSc.					
Date of last modification: 03.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚCHV/ BACH1/03	Course name: Bioanalytical Chemistry
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: 1., 3.	
Course level: II.	
Prerequisites:	
Conditions for course completion: Written test Oral examination	
Learning outcomes: Theoretical knowledge and practical experience regarding application of analytical chemistry and analytical methods to laboratory medicine.	
Brief outline of the course: Introduction to Bioanalytical Chemistry, biological samples classification. Factors affecting analytes in biological samples. Collection, transport and storage of biological samples. Selected procedures of sample pretreatment Control and management of quality in clinical laboratory. Enzymes in bioanalysis. Mechanism of enzyme catalysis. Enzymes like analytes and analytical reagents. Moderators of enzyme activity. Introduction to Immunochemical methods, Precipitation and Agglutination methods. Immunodiffusional methods. Radioimmunoanalytic methods (RIA). Nonisotopic methods (EIA, ELISA, LIA, FIA). Investigative procedures in medical microbiology. Principles miniaturization of analytical procedures in clinical chemistry, microchips, nanochips, sensors and biosensors.	
Recommended literature: 1. Mikkelsen, S. R., Cortón, E.: Bioanalytical Chemistry, Wiley, 2004. 2. Wilson, I.: Bioanalytical Separations 4, (Handbook of Analytical Separations), Elsevier, 2003. 3. Suelter, C. H., Kricka, L. J.: Methods of Biochemical Analysis, Vol.37, Bioanalytical Instrumentation, Wiley, 1994. 4. Rodriguez-Diaz, R., Wehr, T., Tuck, S.: Analytical Techniques for Biopharmaceutical Development, Marcell Dekker, 2005.	
Course language:	
Notes:	

Course assessment					
Total number of assessed students: 69					
A	B	C	D	E	FX
27.54	37.68	21.74	11.59	1.45	0.0
Provides: doc. RNDr. Katarína Reiffová, PhD.					
Date of last modification: 03.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice							
Faculty: Faculty of Science							
Course ID: ÚBEV/ BRS1/03		Course name: Biology of Plant Symbioses					
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: 3							
Recommended semester/trimester of the course: 2.							
Course level: II., III.							
Prerequisites:							
Conditions for course completion:							
Learning outcomes: Introduction to biology and ecology of plant symbioses.							
Brief outline of the course: Morphological, cytological, physiological and biochemical aspects of the best known examples of plant symbioses. Lichens, mycorrhiza, symbiosis of flowering plants with nitrogen fixing bacteria, coral reefs symbioses and endosymbioses.							
Recommended literature: Van den Hoek, C. a kol. 1995: Algae, an introduction to phycology, Deacon, J.W. 1997: Modern Mycology							
Course language:							
Notes:							
Course assessment Total number of assessed students: 352							
A	B	C	D	E	FX	N	P
98.86	0.0	0.0	0.0	0.0	0.0	0.0	1.14
Provides: prof. RNDr. Martin Bačkor, DrSc.							
Date of last modification: 13.02.2014							
Approved: prof. RNDr. Igor Hudec, CSc.							

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.	
Prerequisites:	
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: <ol style="list-style-type: none"> 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, Stereoelectronic 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. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚBEV/ BFA1/03		Course name: Biopharmacology			
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: 2.					
Course level: I., II.					
Prerequisites:					
Conditions for course completion: Written test. Oral examination.					
Learning outcomes: To provide the students with basic knowledge on the classification and mechanism of action of the most important pharmaceuticals					
Brief outline of the course: Pharmaceutical principles. Classification of drugs. Absorption, biotransformation and excretion of drugs from the organism. Pharmacogenetics. Molecular mechanisms of drug effects. Drug-receptor interactions. Chronic administration of drugs. Teratogenicity and cancerogenicity of drugs. Development and introduction of drugs for clinical use. Principle of chronopharmacology					
Recommended literature: Clark, W. G., Braber, D.C., Johnen, A.R.: Goth's medical pharmacology. Mosby Year Book, 1992					
Course language:					
Notes:					
Course assessment Total number of assessed students: 228					
A	B	C	D	E	FX
14.91	24.56	23.68	17.11	17.54	2.19
Provides: RNDr. Peter Orendáš, PhD.					
Date of last modification: 13.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚBEV/ BSP/04		Course name: Biospeleology			
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 1 / 1 Per study period: 14 / 14 Course method: present					
Number of credits: 4					
Recommended semester/trimester of the course: 2., 4.					
Course level: II.					
Prerequisites:					
Conditions for course completion: active participation on the seminars and field trips preparation of oral presentation to the selected topic semestral written test oral examination					
Learning outcomes: The main goal of the subject is to get basic knowledge on the diversity of the cave biota, relationships and adaptations to the specific environment, its role in the cave system and protection of the cave biota.					
Brief outline of the course: The subject covers morphology and systematics of the cave fauna and microflora, their adaptations to this specific habitat type, geographic distribution, functioning of the cave system and interactions between its components, human influence and protection of the cave biota.					
Recommended literature: Culver D. C., 1982: Cave life – evolution and ecology. Harvard University Press, Cambridge, Massachusetts and London Culver D.C., White W.B., 2005: Encyclopedia of caves. Elsevier, 1-654 Vandel A., 1965: Biospeleology - the biology of cavernicolous animals. Pergamon Press, Oxford Wilkens H., Culver D.C., Humphreys W.F., 2000: Subterranean Ecosystems. Ecosystems of the World, vol. 30. Elsevier, 1-791					
Course language:					
Notes:					
Course assessment Total number of assessed students: 29					
A	B	C	D	E	FX
100.0	0.0	0.0	0.0	0.0	0.0
Provides: doc. RNDr. Ľubomír Kováč, CSc.					

Date of last modification: 13.02.2014
Approved: prof. RNDr. Igor Hudec, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚCHV/ FKC1/03		Course name: Colloid Chemistry			
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: 2.					
Course level: II.					
Prerequisites:					
Conditions for course completion: Approved calculation exercises tests and an approved written examination Examination					
Learning outcomes: To clarify basic physicochemical principles of colloid disperse systems (size of dispersed particles is from 1 nanometre to 1 micrometre) to understand several important problems of technology and nature.					
Brief outline of the course: Classification and characterization of dispersed systems. Heterogeneity of colloidal systems. Optical properties of colloids. Theory of light scattering. Molecular-kinetic properties. Brownian motion, diffusion, osmosis, and sedimentation. Adsorption-basic concepts. Electrokinetic phenomena and their application. Structure, stability and coagulation of colloids. Rheology of dispersed systems. Gels. Aerosols. Solid dispersions, emulsions and foams. The theory is applied during laboratory and calculation exercises.					
Recommended literature: W.J. Moore: Physical Chemistry, Longman, London 1972 P.C. Hiemenz: Principles of Colloid and Surface Chemistry, M. Dekker, New York 1986 P.W. Atkins: Physical Chemistry, Oxford University Press, Oxford, New York 2002					
Course language:					
Notes:					
Course assessment Total number of assessed students: 15					
A	B	C	D	E	FX
80.0	6.67	13.33	0.0	0.0	0.0
Provides: prof. RNDr. Andrej Oriňák, PhD., doc. RNDr. Renáta Oriňáková, PhD.					
Date of last modification: 03.02.2014					

Approved: prof. RNDr. Igor Hudec, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚCHV/ FKC/00		Course name: Colloid Chemistry Practicals			
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 3 Per study period: 42 Course method: present					
Number of credits: 3					
Recommended semester/trimester of the course: 2.					
Course level: II.					
Prerequisites:					
Conditions for course completion: Approved laboratory reports Assessment					
Learning outcomes: To give an introduction to technically important applications of colloid and surface chemistry.					
Brief outline of the course: Surface effects. Adsorption at interface of solid and liquid phases, determination of surface nature. Electrical properties. Stability and coagulation of colloids. Structure-mechanical properties of colloids. Properties and aggregation of surfactants and micelles. Rheological properties.					
Recommended literature: B.P. Levitt: Findlay's Practical Physical Chemistry, Longman, London 1973 Internal textbooks					
Course language:					
Notes:					
Course assessment Total number of assessed students: 4					
A	B	C	D	E	FX
100.0	0.0	0.0	0.0	0.0	0.0
Provides: RNDr. František Kaľavský					
Date of last modification: 03.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

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.		
Prerequisites:		
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. RNDr. Igor Hudec, CSc.		

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚBEV/ DNR/06		Course name: Dendrology			
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: 2.					
Course level: II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course: Basic knowledge on autochthonous and allochthonous woody plants. Morphological signs of woody plants, ecological requirements, geographic distribution. Intraspecific variability, growth forms and their use. Selected chapters from seed production and tree nursery of woody plants. Application of woody plants in garden and landscape architecture in urban environment. Protected and memorial trees, databasis of occurrence, measures of protection and treating. Manifestations of expansion and invasion of woody plants.					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 42					
A	B	C	D	E	FX
61.9	14.29	9.52	14.29	0.0	0.0
Provides: doc. RNDr. Sergej Mochnacký, CSc., Ing. Peter Kelbel, Dr.					
Date of last modification: 13.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚGE/ DSEI/05	Course name: Diploma seminar 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:	
Course level: II.	
Prerequisites:	
Conditions for course completion: Verification of acquired basic methodological and formal procedures of the final thesis creation by presentation (70% of rating) and written examination (30%). To obtain A grade, weighted average of the both parts of examination must reach at least 90%, To obtain B it is 80%, for C it is 70%, for D 60% and for E 50%. Credits shall not be granted to a student who obtain less than 50 % from any of both parts of examination.	
Learning outcomes: Acquired knowledge of demands for diploma thesis as well as of theoretical, methodological and formal scientific procedures of diploma thesis creation.	
Brief outline of the course: The content and form of selected parts of thesis writing (abstract, introduction, conclusion, etc.) Ethics and culture of writing diploma thesis, citations and references, types of sources (printed, electronic, etc.). Formal aspects of the thesis. Linguistic adjustment (terminology, stylistics, syntax, grammar, typography). Rules of presentation of the thesis. Presentation of current results and state of diploma thesis.	
Recommended literature: HOVORKA, D., KOMÁREK, K., CHRAPAN, J. 2011: Ako písať a komunikovať. Martin (Vydavateľstvo Osveta), 247 s. KATUŠČÁK, D. 2008: Ako písať záverečné a kvalifikačné práce. Nitra (Enigma), 162 s. ÚTVAR REKTORA UPJŠ (2011): Smernica č. 1/2011, Dostupné na internete: < http://www.upjs.sk/public/media/2438/smernica-1-2011.pdf >, 25 s.	
Course language: Slovak	
Notes:	

Course assessment					
Total number of assessed students: 191					
A	B	C	D	E	FX
86.39	8.38	3.66	1.05	0.52	0.0
Provides: Mgr. Ladislav Novotný, PhD., prof. Mgr. Jaroslav Hofierka, PhD.					
Date of last modification: 11.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚGE/DSEII/05		Course name: Diploma seminar 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:					
Course level: II.					
Prerequisites:					
Conditions for course completion: Verification of acquired methodological and formal procedures of the creation of diploma thesis by the presentation of current thesis creation by presentation of own diploma thesis (100% of rating). To obtain A grade, the rating of student's presentation must reach at least 90%, To obtain B it is 80%, for C it is 70%, for D 60% and for E 50%. Credits shall not be granted to a student who obtain rating less than 50 %.					
Learning outcomes: Acquired skills to apply theoretical, methodological and formal scientific procedures of diploma thesis creation.					
Brief outline of the course: The seminary is focused to the topics of individual diploma thesis. Students present current state of their thesis, its content and its particular parts. Each diploma thesis is discussed at scientific level.					
Recommended literature: HOVORKA, D., KOMÁREK, K., CHRAPAN, J. 2011: Ako písať a komunikovať. Martin (Vydavateľstvo Osveta), 247 s. KATUŠČÁK, D. 2008: Ako písať záverečné a kvalifikačné práce. Nitra (Enigma), 162 s. ÚTVAR REKTORA UPJŠ (2011): Smernica č. 1/2011, Dostupné na internete: < http://www.upjs.sk/public/media/2438/smernica-1-2011.pdf >, 25 s.					
Course language: Slovak					
Notes:					
Course assessment Total number of assessed students: 100					
A	B	C	D	E	FX
83.0	7.0	7.0	0.0	1.0	2.0
Provides: Mgr. Ladislav Novotný, PhD., prof. Mgr. Jaroslav Hofierka, PhD.					
Date of last modification: 11.02.2014					

Approved: prof. RNDr. Igor Hudec, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚCHV/ DPCUa/04	Course name: Diploma Thesis
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present	
Number of credits: 2	
Recommended semester/trimester of the course:	
Course level: II.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 527	
abs	n
99.81	0.19
Provides: prof. RNDr. Jozef Gonda, DrSc., prof. RNDr. Katarína Györyová, DrSc., prof. RNDr. Juraj Černák, CSc., doc. RNDr. Mária Reháková, CSc., doc. RNDr. Vladimír Zelenák, PhD., doc. RNDr. Ivan Potočník, PhD., doc. RNDr. Zuzana Vargová, Ph.D., doc. RNDr. Mária Ganajová, CSc., doc. Mgr. Vasil' Andruch, CSc.	
Date of last modification: 03.02.2014	
Approved: prof. RNDr. Igor Hudec, CSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚCHV/ DPCUb/04	Course name: Diploma Thesis
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present	
Number of credits: 2	
Recommended semester/trimester of the course:	
Course level: II.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 396	
abs	n
99.49	0.51
Provides: prof. RNDr. Jozef Gonda, DrSc., prof. RNDr. Juraj Černák, CSc., prof. RNDr. Katarína Györyová, DrSc., doc. RNDr. Ivan Potočný, PhD., doc. RNDr. Vladimír Zelenák, PhD., doc. RNDr. Zuzana Vargová, Ph.D., doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Mária Reháková, CSc., doc. Mgr. Vasil' Andruch, CSc.	
Date of last modification: 03.02.2014	
Approved: prof. RNDr. Igor Hudec, CSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚCHV/ DPCUc/04	Course name: Diploma Thesis
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present	
Number of credits: 2	
Recommended semester/trimester of the course:	
Course level: II.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 374	
abs	n
100.0	0.0
Provides: prof. RNDr. Jozef Gonda, DrSc., prof. RNDr. Juraj Černák, CSc., prof. RNDr. Katarína Györyová, DrSc., doc. RNDr. Ivan Potočný, PhD., doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Mária Reháková, CSc., doc. RNDr. Vladimír Zelenák, PhD., doc. RNDr. Zuzana Vargová, Ph.D., doc. Mgr. Vasil' Andruch, CSc.	
Date of last modification: 03.02.2014	
Approved: prof. RNDr. Igor Hudec, CSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚBEV/ 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.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 35					
A	B	C	D	E	FX
51.43	25.71	11.43	8.57	2.86	0.0
Provides:					
Date of last modification: 18.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/SDPa/15	Course name: Diploma Thesis Seminar
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.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 37	
abs	n
100.0	0.0
Provides: RNDr. Igor Majláth, PhD., prof. RNDr. Martin Bačkor, DrSc., prof. RNDr. Igor Hudec, CSc., Doc. RNDr. Peter Paľove-Balang, PhD., doc. RNDr. Monika Kassayová, CSc., RNDr. Andrej Mock, PhD., doc. RNDr. Katarína Kimáková, CSc., RNDr. Bianka Bojková, PhD., RNDr. Rastislav Jendželovský, PhD., RNDr. Eva Vranová, PhD., RNDr. Katarína Bruňáková, PhD., Mgr. Vladislav Kolarčík, PhD., doc. RNDr. Peter Pristaš, CSc., prof. RNDr. Eva Čellárová, DrSc., doc. RNDr. Zuzana Daxnerová, CSc., RNDr. Vlasta Demečková, PhD., RNDr. Miroslav Soták, PhD., doc. RNDr. Peter Solár, PhD., Mgr. Silvia Gajdošová, Ph.D., prof. RNDr. Miroslav Repčák, DrSc., RNDr. Peter Ľuptáčík, PhD., RNDr. Ján Gálik, CSc., prof. RNDr. Pavol Mártonfi, PhD., RNDr. Marcel Uhrin, PhD., RNDr. Lucia Slovinská, PhD., RNDr. Gabriela Hřčková, CSc., RNDr. Andrea Schreiberová, PhD., RNDr. Marcela Martončíková, PhD., RNDr. Petra Bonová, PhD., Mgr. Peter Kaňuch, PhD., MVDr. Miroslava Némethová, PhD., RNDr. Alexander Čanády, PhD., RNDr. Mikuláš Oros, PhD., RNDr. Štefan Číkoš, CSc., RNDr. Svetlana Kišidayová, CSc., RNDr. Martina Šemeláková, PhD., RNDr. Jaroslav Pavel, PhD., RNDr. Natália Raschmanová, PhD., RNDr. Veronika Petruľová, PhD., RNDr. Marián Petrovič, PhD., RNDr. Enikő Račeková, CSc., RNDr. Nadežda Lukáčová, DrSc., RNDr. Terézia Kisková, PhD.	
Date of last modification: 25.02.2014	

Approved: prof. RNDr. Igor Hudec, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/SDPb/15	Course name: Diploma Thesis Seminar
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.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 28	
abs	n
100.0	0.0
Provides: RNDr. Igor Majláth, PhD., prof. RNDr. Martin Bačkor, DrSc., prof. RNDr. Igor Hudec, CSc., doc. RNDr. Monika Kassayová, CSc., RNDr. Andrej Mock, PhD., doc. RNDr. Katarína Kimáková, CSc., RNDr. Bianka Bojková, PhD., RNDr. Rastislav Jendželovský, PhD., RNDr. Eva Vranová, PhD., RNDr. Katarína Bruňáková, PhD., Mgr. Vladislav Kolarčík, PhD., doc. RNDr. Peter Pristaš, CSc., prof. RNDr. Eva Čellárová, DrSc., doc. RNDr. Zuzana Daxnerová, CSc., RNDr. Vlasta Demečková, PhD., RNDr. Miroslav Soták, PhD., doc. RNDr. Peter Solár, PhD., Mgr. Silvia Gajdošová, Ph.D., prof. RNDr. Miroslav Repčák, DrSc., RNDr. Peter Ľuptáčik, PhD., RNDr. Ján Gálik, CSc., prof. RNDr. Pavol Mártonfi, PhD., RNDr. Marcel Uhrin, PhD., Doc. RNDr. Peter Paľove-Balang, PhD., RNDr. Lucia Slovinská, PhD., RNDr. Gabriela Hrčková, CSc., RNDr. Andrea Schreiberová, PhD., RNDr. Marcela Martončíková, PhD., RNDr. Petra Bonová, PhD., Mgr. Peter Kaňuch, PhD., MVDr. Miroslava Némethová, PhD., RNDr. Alexander Čanády, PhD., RNDr. Mikuláš Oros, PhD., RNDr. Štefan Číkoš, CSc., RNDr. Svetlana Kišidayová, CSc., RNDr. Martina Šemeláková, PhD., RNDr. Jaroslav Pavel, PhD., RNDr. Natália Raschmanová, PhD., RNDr. Veronika Petruľová, PhD., RNDr. Marián Petrovič, PhD., RNDr. Enikő Račeková, CSc., RNDr. Nadežda Lukáčová, DrSc., RNDr. Terézia Kisková, PhD.	
Date of last modification: 25.02.2014	

Approved: prof. RNDr. Igor Hudec, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ SDPc/15	Course name: Diploma Thesis Seminar
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.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 29	
abs	n
100.0	0.0
Provides: RNDr. Igor Majláth, PhD., prof. RNDr. Martin Bačkor, DrSc., prof. RNDr. Igor Hudec, CSc., Doc. RNDr. Peter Paľove-Balang, PhD., doc. RNDr. Monika Kassayová, CSc., RNDr. Andrej Mock, PhD., doc. RNDr. Katarína Kimáková, CSc., RNDr. Bianka Bojková, PhD., RNDr. Rastislav Jendželovský, PhD., RNDr. Eva Vranová, PhD., RNDr. Katarína Bruňáková, PhD., Mgr. Vladislav Kolarčík, PhD., doc. RNDr. Peter Pristaš, CSc., prof. RNDr. Eva Čellárová, DrSc., doc. RNDr. Zuzana Daxnerová, CSc., RNDr. Vlasta Demečková, PhD., RNDr. Miroslav Soták, PhD., doc. RNDr. Peter Solár, PhD., Mgr. Silvia Gajdošová, Ph.D., prof. RNDr. Miroslav Repčák, DrSc., RNDr. Peter Ľuptáčík, PhD., RNDr. Ján Gálik, CSc., prof. RNDr. Pavol Mártonfi, PhD., RNDr. Marcel Uhrin, PhD., RNDr. Lucia Slovinská, PhD., RNDr. Gabriela Hřčková, CSc., RNDr. Andrea Schreiberová, PhD., RNDr. Marcela Martončíková, PhD., RNDr. Petra Bonová, PhD., Mgr. Peter Kaňuch, PhD., MVDr. Miroslava Némethová, PhD., RNDr. Alexander Čanády, PhD., RNDr. Mikuláš Oros, PhD., RNDr. Štefan Číkoš, CSc., RNDr. Svetlana Kišidayová, CSc., RNDr. Martina Šemeláková, PhD., RNDr. Jaroslav Pavel, PhD., RNDr. Natália Raschmanová, PhD., RNDr. Veronika Petruľová, PhD., RNDr. Marián Petrovič, PhD., RNDr. Enikő Račeková, CSc., RNDr. Nadežda Lukáčová, DrSc., RNDr. Terézia Kisková, PhD.	
Date of last modification: 25.02.2014	

Approved: prof. RNDr. Igor Hudec, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ SDPd/15	Course name: Diploma Thesis Seminar
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.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 30	
abs	n
100.0	0.0
Provides: prof. RNDr. Igor Hudec, CSc., RNDr. Vlasta Demečková, PhD., RNDr. Miroslav Soták, PhD., doc. RNDr. Peter Solár, PhD., Mgr. Silvia Gajdošová, Ph.D., prof. RNDr. Miroslav Repčák, DrSc., RNDr. Peter Ľuptáčík, PhD., RNDr. Ján Gálik, CSc., prof. RNDr. Pavol Mártonfi, PhD., RNDr. Marcel Uhrin, PhD., RNDr. Petra Bonová, PhD., RNDr. Alexander Čanády, PhD., RNDr. Štefan Číkoš, CSc., RNDr. Gabriela Hrková, CSc., Mgr. Peter Kaňuch, PhD., RNDr. Terézia Kisková, PhD., RNDr. Svetlana Kišidayová, CSc., RNDr. Nadežda Lukáčová, DrSc., RNDr. Marcela Martončíková, PhD., MVDr. Miroslava Némethová, PhD., RNDr. Mikuláš Oros, PhD., RNDr. Jaroslav Pavel, PhD., RNDr. Marián Petrovič, PhD., RNDr. Veronika Petruľová, PhD., RNDr. Enikó Račeková, CSc., RNDr. Natália Raschmanová, PhD., RNDr. Andrea Schreiberová, PhD., RNDr. Lucia Slovinská, PhD., RNDr. Martina Šemeláková, PhD., RNDr. Andrej Mock, PhD.	
Date of last modification: 25.02.2014	
Approved: prof. RNDr. Igor Hudec, CSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚBEV/ EET1/03		Course name: Ecological ethology			
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: 2.					
Course level: I., II.					
Prerequisites: ÚBEV/ETO1/03					
Conditions for course completion: Recognition. Oral exmination.					
Learning outcomes: To analyze and comprehend to priciples of behavioral strategies in a given ecosystem from the point of view of sociobiology					
Brief outline of the course: The topic of sociobiology and its relations to other disciplines. The evolution of social behavior in animals and in man. Strategies of social interactions and formation of groups in relation to the ecosystem. The choice of appropriate social arrangement, sexual partner, reproductional and parental strategy. Competition among indiviuals and sexes.					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 143					
A	B	C	D	E	FX
89.51	4.2	5.59	0.7	0.0	0.0
Provides: RNDr. Igor Majláth, PhD.					
Date of last modification: 13.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚBEV/ EKV1/03		Course name: Ecology of Birds			
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: 2.					
Course level: II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 191					
A	B	C	D	E	FX
74.87	15.71	7.33	0.52	1.57	0.0
Provides: RNDr. Ladislav Mošanský, CSc.					
Date of last modification: 13.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice							
Faculty: Faculty of Science							
Course ID: ÚBEV/ EKC1/00		Course name: Ecology of mammals					
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 1 / 1 Per study period: 14 / 14 Course method: present							
Number of credits: 3							
Recommended semester/trimester of the course: 1.							
Course level: II., III.							
Prerequisites:							
Conditions for course completion:							
Learning outcomes: To understand a) ecological position of mammal groups in ecosystems and their importance in ecological networks; b) anthropogenic impacts on mammals and their coenoses; c) population ecology of some mammal groups							
Brief outline of the course: Factors of environment. Temperature. Water. Snow. Light. Adaptations. Hypothermy. Hibernation, aestivation, letargy. Resources. Food. Food strategies and specialistaions. Habitat and nika. Interactions. Komensalism. Mutualism. Kooperation. Competition. Predator and prey. Mammals and plants. Food webs. Teritoriality. Home range. Lek. Metapopulations. Reproduction. Mating systems. Oestrus. r- and K- strategy. Monogamy, polygamy. Dispersion. Migration. Habitat selection. Individual. Population. Natality, mortality. Kohorts. Population dynamics and cycles. Gradations. Mammal diversity. Island biogeografy. Macroecology. Gradients. Long-term studies. Habitat fragmentations. Synanthropy. Conservation of mammals. Wind energy. Mammal introductions. Repatriations, reintroductions. Expansions. Global climate changes and mammals. Protected areas. Vulneralble species. Minimal viable population.							
Recommended literature: Feldhamer G., Drickamer L., Vessey SH., Merritt JF., 2000. Mammalogy: Adaptation, Diversity and Ecology. McGraw Hill Hardback, 563 pp. Vlasák P., 1986. Ekologie cicavcu. Academia, Praha, 292 pp.							
Course language:							
Notes:							
Course assessment Total number of assessed students: 213							
A	B	C	D	E	FX	N	P
57.75	20.66	14.08	2.82	2.82	0.0	0.0	1.88
Provides: RNDr. Marcel Uhrin, PhD.							

Date of last modification: 13.02.2014
Approved: prof. RNDr. Igor Hudec, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ EPZ1/03	Course name: Ecology of Soil Animals
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: 2.	
Course level: I., II.	
Prerequisites:	
Conditions for course completion: active participation in seminars preparation of the presentation to the given topic semestral written test oral examination	
Learning outcomes: The main goal of the subject is to gain basic knowledge on the functioning of the soil system with the special reference to dominant systematic groups of the soil fauna, their ecology and taxonomic identification.	
Brief outline of the course: The subject deals with the soil as an ecological system and type of environment It is concentrated to the ecological factors ruling the life in soil, soil-dwelling animals and their adaptations to this specific habitat. Functioning of the soil system and understanding of the principal interactions of soil fauna with plant rhizosphere and soil microflora are among the main goals of the discipline.	
Recommended literature: Coleman, D.C., Crossley, D. A., 1996: Fundamentals of Soil Ecology. Academic Press, London, 1-205 Eisenbeis, G., Wichard, W., 1987: Atlas on the Biology of Soil Arthropods. Springer- Verlag Berlin, Germany, 1-437 Schaller, F. 1968: Soil Animals. The University of Michigan Press, United States of America, 1-144 Wallwork, J. A., 1970: Ecology of Soil Animals. McGraw- Hill, England, 1-283 Wallwork, J. A., 1976: The distribution and Diversity of Soil Fauna. Academic Press, London, 1-355	
Course language:	
Notes:	

Course assessment					
Total number of assessed students: 108					
A	B	C	D	E	FX
47.22	25.93	15.74	8.33	2.78	0.0
Provides: RNDr. Natália Raschmanová, PhD.					
Date of last modification: 13.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚBEV/ EVZ1/03		Course name: Ecology of Water Animals			
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: 2.					
Course level: I., II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes: Ecological characteristic of freshwater groups and prevalent species - only Invertebrata.					
Brief outline of the course: Biology of the most common representatives and groups of freshwater animals of Central Europe temperate region. Morphological adaptations, taxonomical characters, water communities.					
Recommended literature: Fryer, G., Murphy, S.: A natural history of the lakes, tarns and streams of the English Lake District. Freshw. Biol. Association Cumbria, 1991 Bronsmark, Ch., Hansson, L. A.: The biology of Lakes and ponds. Biol. Of Habitats Ser, 1998					
Course language:					
Notes:					
Course assessment Total number of assessed students: 120					
A	B	C	D	E	FX
15.0	14.17	15.83	52.5	2.5	0.0
Provides: prof. RNDr. Igor Hudec, CSc.					
Date of last modification: 13.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚCHV/ FEM1/03	Course name: Electroanalytical 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: 5	
Recommended semester/trimester of the course: 1., 3.	
Course level: II.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes: Survey on principles, theoretical background and practical applications of modern electroanalytical methods.	
Brief outline of the course: Importance of electroanalytical methods for environmental control and protection, requirements of practice, electrochemical cells, electrode potential, mass transfer by convection, migration and diffusion, Cottrell equation, direct current voltammetry and polarography(principle, theoretical backround, examples of practical application). TAST polarography and voltammetry, staircase voltammetry, pulse techniques: normal pulse and differential pulse voltammetry and polarography, square - wave voltammetry and polarography, AC polarography and voltammetry, anodic stripping voltammetry, adsorptive(or accumulation) voltammetry (applications in clinical and environmental analysis), working electrodes in voltammetry: stationary mercury electrode, mercury film electrode, glassy carbon electrode, carbon paste electrode,metallic electrodes, rotating disk electrode, rotating ring-disk electrode, ultramicroelectrodes, chemically modified electrodes, potentiometry, principles of ion selective electrodes, glass electrodes, ISE with solid and liquid membranes, biocatalytic membrane electrodes, chronopotentiometry, potentiometric stripping analysis, electroanalytical detectors in flow systems, amperometric titrations, biamperometric and bipotentiometric titrations, potentiostatic and galvanostatic coulometry.	
Recommended literature: F. Scholtz: Electroanalytical Methods, Springer Vrlg., Heidelberg 2002, ISBN 3-540-42449-3 J. Wang: Analytical Electrochemistry, VCH Publ., New York 1994,2000 R. Kalvoda (Ed.): Electroanalytical Methods in Chemical and Environmental Analysis, Plenum Publ. Corp., New York 1987 A.J. Bard, L.R. Faulkner: Electrochemical Methods, Jofn Wiley and Sons, New York 1980 T. Riley, A. Watson: Polarography and Other Voltametric Methods, John Wiley and Sons, Chichester 1987 J. Wang: Stripping Analysis, VCH Publ. Inc., Deerfield Beach 1985	
Course language:	

Notes:					
Course assessment					
Total number of assessed students: 22					
A	B	C	D	E	FX
77.27	9.09	9.09	4.55	0.0	0.0
Provides: RNDr. Andrea Straková Fedorková, PhD.					
Date of last modification: 03.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚBEV/ ETS1/03		Course name: Entomocenoses of Slovakia			
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 credits: 5					
Recommended semester/trimester of the course: 2.					
Course level: II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 70					
A	B	C	D	E	FX
57.14	25.71	12.86	1.43	0.0	2.86
Provides: doc. RNDr. Ľubomír Panigaj, CSc.					
Date of last modification: 13.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice							
Faculty: Faculty of Science							
Course ID: ÚCHV/EECH/03		Course name: Environmental Chemistry					
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: 2.							
Course level: I., II.							
Prerequisites:							
Conditions for course completion: Examination.							
Learning outcomes:							
Brief outline of the course: The subject of environmental chemistry. Matter cycles on Earth. Geochemical cycles. Carbon, nitrogen, sulphur, phosphorous cycles. Metals and environment. Special cycles. Earth atmosphere composition, functions of atmosphere. Physical and chemical processes in atmosphere. Atmospheric photochemistry. Pollutants in atmosphere and greenhouse effect. Models of greenhouse effects. Principles of air quality control. Energetic Earth balance. Water environment and pollutants monitored. Classification of pollutants and ways of elimination. Waste water cleaning processes. Analytical methods in environmental chemistry, applications. Soil analysis, biogeochemical processes. Acid rain, metal ions in soil. Environmental analysis, strategy and concepts.							
Recommended literature: 1. G. Schwedt: The Essential Guide to Environmental Chemistry, Wiley and Sons, London 2001 2. R.N. Reeve, J.D. Barnes: General Environmental Chemistry, Wiley, London 1994							
Course language:							
Notes:							
Course assessment Total number of assessed students: 85							
A	B	C	D	E	FX	N	P
57.65	15.29	18.82	3.53	4.71	0.0	0.0	0.0
Provides: RNDr. Andrea Straková Fedorková, PhD.							
Date of last modification: 03.02.2014							
Approved: prof. RNDr. Igor Hudec, CSc.							

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚBEV/ ETO1/03		Course name: Ethology			
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: 1.					
Course level: II.					
Prerequisites:					
Conditions for course completion: Recognition. Written examination.					
Learning outcomes: To teach the students to know and to be aware of the importance of the behavioural aspect in biological sciences					
Brief outline of the course: History and development of ethology. Ethological methods. The innate forms of behaviour. The simplest forms of learning – conditioning and instrumental learning. Higher form of learning. Social behaviour. Sexual behaviour. Play behaviour. Biological rhythms. Orientation in space and animal migrations. Communication systems of animals. Emotions. Aggression in animal and human behaviour. Abnormal forms of behaviour					
Recommended literature: Franck, D.: Verhaltensbiologie. Einführung in die Ethologie. Georg Thieme-Verlag, 1993 Manning, A., Dawkins, M. S.: An introduction to animal behaviour. Cambridge University Press, 1992					
Course language:					
Notes:					
Course assessment Total number of assessed students: 748					
A	B	C	D	E	FX
38.24	26.34	26.74	6.95	1.6	0.13
Provides: RNDr. Igor Majláth, PhD., RNDr. Natália Pipová, PhD., Mgr. Adriana Hižňanová					
Date of last modification: 13.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/TCE/02	Course name: Field Course of Ecology
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: Per study period: 5d Course method: present	
Number of credits: 3	
Recommended semester/trimester of the course: 2.	
Course level: II.	
Prerequisites: ÚBEV/EVZ1/03 and ÚBEV/EFZ1/03 and ÚBEV/ETS1/03	
Conditions for course completion: 5-10 min. presentation of own results and their interpretation	
Learning outcomes: Fundamental methods of ecological research in field. The influence of abiotic factors on zoocenoses, practical demecology and quantitative characteristics of zoocenoses.	
Brief outline of the course: Verification of theoretical knowledge oriented on animal ecology in the field.	
Recommended literature: Begon M., Harper J.L., Townsend C.R., 1990: Ecology - individuals, populations and communities. Blackwell, New York, 1-945	
Course language:	
Notes:	
Course assessment Total number of assessed students: 6	
abs	n
100.0	0.0
Provides: doc. RNDr. Ľubomír Kováč, CSc., prof. RNDr. Igor Hudec, CSc., RNDr. Andrej Mock, PhD.	
Date of last modification: 13.02.2014	
Approved: prof. RNDr. Igor Hudec, CSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚCHV/ PCH1/00		Course name: Food chemistry			
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: I., II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes: Based on excursions to food plants and analytical laboratories specialized on food analysis together with own prepared projects during seminars the students should gain general overview about food chemistry, basic legal documents, additives.					
Brief outline of the course: The main categories of substances in the most important group of food. Contamination of food. Physical and chemical properties of food and chemical reactions relative to obtaining, storing and preparing of food. Analytical methods for determination of quality of the food.					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 238					
A	B	C	D	E	FX
57.56	36.55	5.46	0.0	0.0	0.42
Provides: RNDr. Dušan Koščík, CSc., RNDr. Ján Elečko					
Date of last modification: 03.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚCHV/ SKACH1/06		Course name: Forensic and Clinical Analytical Chemistry			
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: 2., 4.					
Course level: II.					
Prerequisites:					
Conditions for course completion: Examination.					
Learning outcomes: Application of analytical methods in forensic medicine.					
Brief outline of the course: Basic principles and definition of subject. Basic criminalistic categories. Criminalistic track. Criminalistic technology. Criminalistic methods, resources, procedures and operations. Introduction to forensic chemistry. Chemical, physical and physicochemical methods of research tracks and material evidence. Fingerprints. Forensic biology. Forensic toxicology.					
Recommended literature: 1.A. Mozayani, C.Noziglia: The Forensic Laboratory Handbook. Procedures and Practice, Springer, 2006 2.H.Duffus, H.G.J.Worth: Fundamental Toxicology, Springer, 2006 3.R.Bertholf, R.Winecker: Chromatographic Methods in Clinical Chemistry and Toxicology, Wiley. 2007					
Course language:					
Notes:					
Course assessment Total number of assessed students: 21					
A	B	C	D	E	FX
42.86	38.1	19.05	0.0	0.0	0.0
Provides: doc. RNDr. Katarína Reiffová, PhD.					
Date of last modification: 03.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚBEV/VEEKO/14		Course name: General Ecology			
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.					
Prerequisites: ÚBEV/ECE/15 ÚBEV/EP/14					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 1					
A	B	C	D	E	FX
100.0	0.0	0.0	0.0	0.0	0.0
Provides:					
Date of last modification: 25.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚBEV/VEENV/14		Course name: General Ecology			
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.					
Prerequisites: ÚBEV/ECE/15 ÚGE/PAM/12 ÚGE/DPZ/15 ÚBEV/EP/14					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 0					
A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0
Provides:					
Date of last modification: 18.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚBEV/VECHZP/14		Course name: General Ecology			
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.					
Prerequisites: ÚBEV/ECE/15 ÚBEV/EP/14					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 2					
A	B	C	D	E	FX
50.0	50.0	0.0	0.0	0.0	0.0
Provides:					
Date of last modification: 25.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚBEV/ GB1/03		Course name: Geobotany			
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: 1.					
Course level: I., II.					
Prerequisites:					
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
41.03	23.08	17.95	10.26	7.69	0.0
Provides: doc. RNDr. Sergej Mochnacký, CSc.					
Date of last modification: 13.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: KFaDF/DF2p/03		Course name: History of Philosophy 2 (General Introduction)			
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: 2.					
Course level: I., II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 729					
A	B	C	D	E	FX
60.49	13.85	12.76	8.78	3.43	0.69
Provides: doc. PhDr. Pavol Tholt, PhD., mim.prof., Doc. PhDr. Peter Nezník, CSc., PhDr. Katarína Mayerová, PhD., Mgr. Róbert Stojka, PhD.					
Date of last modification: 26.01.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚBEV/ HDR1/99		Course name: Hydrobiology			
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 1 / 1 Per study period: 14 / 14 Course method: present					
Number of credits: 3					
Recommended semester/trimester of the course: 1.					
Course level: I., II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course: Abiotic and biotic factors of water environment; typology and characteristics of freshwater habitats; eutrophication, pollution saprobity and evaluation of habitats with relation to abiotic factors.					
Recommended literature: Horn, A., Goldman, C.: Limnology. Mc Graw Hill. 2nd Edition, 1994 Wetzel, R.G.: Limnological analyses. Springer Verl., 3rd Edition, 2000					
Course language:					
Notes:					
Course assessment Total number of assessed students: 163					
A	B	C	D	E	FX
39.88	23.93	14.72	19.63	1.84	0.0
Provides: prof. RNDr. Igor Hudec, CSc.					
Date of last modification: 13.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚCHV/ CHHS/07		Course name: Hydrochemistry			
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: 1.					
Course level: II.					
Prerequisites:					
Conditions for course completion: Test Examination					
Learning outcomes: Getting a knowledge about the hydrochemistry.					
Brief outline of the course: Types of natural waters and their properties. Chemical content and properties of nature water. Surface waters. Chemical content and properties of surface waters. Fundamentals of aquatic chemistry. The hydrologic cycle. Mineral waters, their classification. Chemical content and properties of mineral waters. Underground water. Processes influencing the content of underground water. Sea water. Waste water. Content and properties of waste water. Basic strages of water analysis. Sampling. Physical properties of water. Methods of analysis of water chemical content. Biochemical oxygen demand. Dissolved oxygen. Distributing diagrams. Interaction of content of water and sediments. Test-methods in water analysis. Automatic monitoring stations. Sensor systems. Requirements for water quality.					
Recommended literature: 1. Handbook of Water and Wastewater Treatment Technologies. Ed. By Nicholas P Cheremisinoff, Butterworth Heinemann, 2001. 576 p. 2. Principles of Water Quality Control, Ed. by Thy Tebbutt, Butterworth Heinemann, 1997. 288 p. 3. Water Technology. Ed. by N. F. Gray, Butterworth Heinemann, 2005. 600 p.					
Course language:					
Notes:					
Course assessment Total number of assessed students: 86					
A	B	C	D	E	FX
25.58	22.09	18.6	18.6	15.12	0.0

Provides: doc. Mgr. Vasil' Andruch, CSc., RNDr. Rastislav Serbin, PhD., RNDr. Livia Kocúrová, PhD.

Date of last modification: 03.02.2014

Approved: prof. RNDr. Igor Hudec, CSc.

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.					
Prerequisites:					
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. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚCHV/ CMG/03		Course name: Chemical management			
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.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes: The main goal is thorough the lectures of top managers from slovak chemical companies illustrate the basic principles of production management, marketing, strategy building in chemical and pharmaceutical industry.					
Brief outline of the course: Basic processes connected to industry manufacturing and management of chemical production in Slovak chemical companies					
Recommended literature: Internal sources					
Course language:					
Notes:					
Course assessment Total number of assessed students: 170					
A	B	C	D	E	FX
54.12	44.71	1.18	0.0	0.0	0.0
Provides: RNDr. Dušan Koščík, CSc., RNDr. Patrik Čonka, PhD.					
Date of last modification: 03.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚCHV/ ACM1/06		Course name: Chemometrics			
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: 2.					
Course level: II.					
Prerequisites:					
Conditions for course completion: On the basis of the tests and seminary works On the basis of the continuous assesment and examination.					
Learning outcomes: Knowledge about the correct and theoretically based evaluation of analytical results and methods. Knowledge about the methods of validation and accreditation of laboratories. Knowledge about the result uncertainties and methods of decision statistics.					
Brief outline of the course: The principles of the mathematic- statistical methods used in analytical chemistry. Probability distribution of the measuring results. Classic and robust estimation of the mean value and variance. Statistical tests and their application. Accuracy, precision, and reliability of the results. Uncertainty of the results. Calibration in the analytical chemistry, linear and nonlinear models. Evaluation of the analytical methods, the chosen optimization approaches. Solving of the typical examples in the frame of the practical lectures.					
Recommended literature: R. G. Brereton: Chemometrics., Wiley, Chichester, 2003 M. Meloun, J. Militký: Kompendium statistického zpracování dat., Academia, Praha 2006					
Course language:					
Notes:					
Course assessment Total number of assessed students: 69					
A	B	C	D	E	FX
34.78	30.43	23.19	4.35	7.25	0.0
Provides: doc. Ing. Viera Vojteková, PhD.					
Date of last modification: 03.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚCHV/ CHRA1/03		Course name: Chromatographic Analysis			
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: 1.					
Course level: II.					
Prerequisites:					
Conditions for course completion: Examination.					
Learning outcomes:					
Brief outline of the course: General characteristics of chromatographic system and chromatographic separation. Analyte retention in chromatography, retention indices. Models used for chromatographic system description. Parameters affecting quality of chromatographic separation. Sensitivity, separated analytes, separation time, optimisation of chromatographic process. General equation of chromatography. Evaluation of retention and selectivity of chromatographic process. Stationary phase. Qualitative chromatographic analysis. Quantitative analysis methods, sample preparation. System of analyte separation. Identification in chromatographic analysis.					
Recommended literature: D. A. Skoog, J. J. Leary: Principles of Instrumental Analysis, Saunders, 1992.					
Course language:					
Notes:					
Course assessment Total number of assessed students: 59					
A	B	C	D	E	FX
83.05	6.78	6.78	0.0	3.39	0.0
Provides: prof. RNDr. Andrej Oriňák, PhD.					
Date of last modification: 03.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice							
Faculty: Faculty of Science							
Course ID: ÚBEV/ CRO1/03		Course name: Chronophysiology					
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: 1.							
Course level: II., III.							
Prerequisites:							
Conditions for course completion: Oral examination.							
Learning outcomes: To outline the problematics of the time organisation of biological processes and their significance in evolution of living organisms							
Brief outline of the course: Time structure of physiological variables in animals and man. Basic notions and categories of biological rhythms. The significance of biological rhythms in the evolution of living things. The genetic basis and molecular mechanisms of biological clocks in animals. The endogenous character of biological rhythms. The multioscillatory system of the organism. The significance of circadian and seasonal rhythms for the animal and human life. The application of chrono-physiological principles.							
Recommended literature:							
Course language:							
Notes:							
Course assessment Total number of assessed students: 67							
A	B	C	D	E	FX	N	P
23.88	25.37	23.88	10.45	5.97	0.0	0.0	10.45
Provides: prof. RNDr. Beňadik Šmajda, CSc., RNDr. Natália Pipová, PhD.							
Date of last modification: 13.02.2014							
Approved: prof. RNDr. Igor Hudec, CSc.							

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.		
Prerequisites:		
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. RNDr. Igor Hudec, CSc.		

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.		
Prerequisites:		
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. RNDr. Igor Hudec, CSc.		

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.		
Prerequisites:		
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. RNDr. Igor Hudec, CSc.		

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.		
Prerequisites:		
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. RNDr. Igor Hudec, CSc.		

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.		
Prerequisites:		
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. RNDr. Igor Hudec, CSc.		

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.		
Prerequisites:		
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. RNDr. Igor Hudec, CSc.		

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.		
Prerequisites:		
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. RNDr. Igor Hudec, CSc.		

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.		
Prerequisites:		
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. RNDr. Igor Hudec, CSc.		

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.		
Prerequisites:		
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. RNDr. Igor Hudec, CSc.		

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.		
Prerequisites:		
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. RNDr. Igor Hudec, CSc.		

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.		
Prerequisites:		
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. RNDr. Igor Hudec, CSc.		

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.		
Prerequisites:		
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. RNDr. Igor Hudec, CSc.		

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.					
Prerequisites:					
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. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚCHV/ ACPE1/03		Course name: Industrial Ecology			
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: 1., 3.					
Course level: I., II.					
Prerequisites:					
Conditions for course completion: On the basis of the written tests and seminary work. On the basis of the continuous assessment and examination.					
Learning outcomes: The concept of industrial ecology in the frame of environmental chemistry.					
Brief outline of the course: The concept of industrial ecology. Selected topics of environmental chemistry in the context of industrial ecology. Selected topics of industrial, clinical toxicology and ecotoxicology.					
Recommended literature: S. E. Manahan: Industrial Ecology., CRC Press, New York, 1999. S. E. Manahan: Environmental Chemistry. , CRC Press, New York, 2005.					
Course language:					
Notes:					
Course assessment Total number of assessed students: 139					
A	B	C	D	E	FX
27.34	20.14	23.74	14.39	13.67	0.72
Provides: doc. Ing. Viera Vojteková, PhD.					
Date of last modification: 03.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚGE/ISU/12		Course name: Information systems on territory			
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 credits: 4					
Recommended semester/trimester of the course:					
Course level: II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course: The class focuses on introduction to the information systems of regions providing mainly geospatial information on particular phenomenon. We discuss mainly web based information systems on soils, cadastre, geology, etc. and their practical use.					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 133					
A	B	C	D	E	FX
85.71	6.77	3.01	4.51	0.0	0.0
Provides: prof. Mgr. Jaroslav Hofierka, PhD., Mgr. Michal Gallay, PhD., RNDr. Ján Kaňuk, PhD.					
Date of last modification: 11.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚCHV/MMU/03		Course name: Macromolecular 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: 4					
Recommended semester/trimester of the course: 1.					
Course level: II.					
Prerequisites:					
Conditions for course completion: Written test. Examination					
Learning outcomes: To make students familiar with available structures of polymers and their synthesis methods as well as with structure reflection in their properties.					
Brief outline of the course: Fundamental aspects of chemical composition of polymers-monomers, shape and the relationship between structure and properties. Primary, secondary, tertiary and quaternary structures. Thermal transition. Chain polyreactions. Step polyreactions. Synthetic methods of functional polymers and their characterisation. Naturally occurring polymers, their properties. Degradation of polymers. Molecular mass distributions. Determination of molecular mass of macromolecules. Polymers and environment.					
Recommended literature: H.-G Elias: Macromolecules, Volume 1 (Structure and Properties); Volume 2 (Synthesis, Materials, and Technology), Plenum Press, New York 1984 W.J. Moore: Physical Chemistry, Longman, London 1972 P. Munk: Introduction to Macromolecular Science, John Wiley & Sons, New York 1989 P.W. Atkins: Physical Chemistry, Oxford University Press, Oxford, New York 2002					
Course language:					
Notes:					
Course assessment Total number of assessed students: 18					
A	B	C	D	E	FX
44.44	22.22	22.22	11.11	0.0	0.0
Provides: RNDr. Andrea Morovská Turoňová, PhD.					
Date of last modification: 03.02.2014					

Approved: prof. RNDr. Igor Hudec, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚCHV/ MCV1/03	Course name: Methods of Chemical Research
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: 2.	
Course level: II.	
Prerequisites:	
Conditions for course completion: The students are expected to actively participate in seminars by demonstrating solutions to selected problems (a presentation of a real problem) in front of their course-fellows. Examination	
Learning outcomes: To make students known with the physicochemical parameters' means of measurement, evaluation, and interpretation for the study of the process, i.e. the rate of reaction, mechanism, intermediates and final products in both homogeneous and heterogeneous systems.	
Brief outline of the course: Overview of basic principles of the determination of physicochemical quantities (dissociation constant, activity coefficient, solubility product, stability constant of complex, diffusion coefficient). Calorimetry and its utilisation. Experimental methods in kinetics. The Butler-Volmer equation. Survey of selected key topics in colloid chemistry. Adsorption-BET equation. Determination of molecular mass of macromolecules. A discussion of topics selected from active research fields.	
Recommended literature: W.J. Moore: Physical Chemistry, Longman Group Limited, London 1972 H. H. Willard et al.: Instrumental Methods of Analysis, Wadsworth, Belmont 1988 J. Koryta, J. Dvořák, L. Kavan: Principles of Electrochemistry, John Wiley & Sons, New York 1993 P.W. Atkins: Physical Chemistry, Oxford University Press, Oxford, New York 2002 D. Kladeková: Supportive Textbooks in Course: Methods of Chemical Research, The ESF project no. SOP HR 2005/NP1-051 11230100466, Košice 2008	
Course language:	
Notes:	

Course assessment							
Total number of assessed students: 25							
A	B	C	D	E	FX	N	P
48.0	36.0	4.0	8.0	0.0	0.0	0.0	4.0
Provides: RNDr. Andrea Straková Fedorková, PhD.							
Date of last modification: 03.02.2014							
Approved: prof. RNDr. Igor Hudec, CSc.							

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.	
Prerequisites:	
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. RNDr. Igor Hudec, CSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚGE/OPS/12		Course name: Open source GIS and digital elevation models			
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:					
Course level: II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course: The students will get practical experience with using geographic information systems based on Open Source idea. Mainly GRASS GIS will be used. The class framework involves input of data, visualisation, spatial analysis with vectors and rasters, 3D modelling.					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 83					
A	B	C	D	E	FX
77.11	16.87	2.41	0.0	3.61	0.0
Provides: Mgr. Michal Gallay, PhD., RNDr. Ján Kaňuk, PhD.					
Date of last modification: 11.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚBEV/ PAR1/03		Course name: Parasitology 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: 6					
Recommended semester/trimester of the course: 2.					
Course level: I., II.					
Prerequisites: ÚBEV/ZOM/04 or ÚBEV/ZO1/03 or ÚBEV/ZO1/04					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 320					
A	B	C	D	E	FX
45.63	20.0	14.69	14.37	4.38	0.94
Provides: RNDr. Viktória Majláthová, PhD., RNDr. Igor Majláth, PhD.					
Date of last modification: 13.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚBEV/ PAR2/03		Course name: Parasitology II			
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 1 / 1 Per study period: 14 / 14 Course method: present					
Number of credits: 3					
Recommended semester/trimester of the course: 2.					
Course level: II.					
Prerequisites: ÚBEV/PAR1/03					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 37					
A	B	C	D	E	FX
72.97	13.51	10.81	2.7	0.0	0.0
Provides: prof. MVDr. Pavol Dubinský, DrSc., RNDr. Marta Špakulová, DrSc.					
Date of last modification: 13.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

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.					
Prerequisites:					
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. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚGE/ FYG1/03		Course name: Physical geography 1			
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: 5					
Recommended semester/trimester of the course: 1.					
Course level: I., II.					
Prerequisites: ÚGE/GEM2/05					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course: Hydrology of the running water, genesis and development of river basins, measuring of water and its flow. Genesis and the main types of lakes, temperatures, water movements. Sea and water currents, its chemical properties, relief of the sea-floor. Subsurface waters, glaciers. In the section of soil science and soil geography, physical and chemical nature of soils will be treated as well as actual and presently used systems of the soil classification. Distribution of different soil types in the world and Slovakia, principles of the soil zonality.					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 558					
A	B	C	D	E	FX
2.33	4.3	19.18	27.96	38.53	7.71
Provides: RNDr. Dušan Barabas, CSc., RNDr. Alena Gessert, PhD.					
Date of last modification: 11.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚBEV/ FG1/03		Course name: Phytogeography			
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: 1., 3.					
Course level: I., II.					
Prerequisites:					
Conditions for course completion: Written work. Exam.					
Learning outcomes: To obtain theoretical and practical knowledge from phytogeography.					
Brief outline of the course: History of phytogeography. Plants and environment. Chorology, area, area disjunctions, relics, endemites, vicariancy, floral elements. Main course of florogenesis since paleozoic to quaternary ages. Postglacial evolution of Slovak vegetation. Regional phytogeography of Earth. Vegetation geography: from tropical rainforests to tundras. Changes of earth vegetation and their study. Geographical origin of cultivated plants. Practices: Fieldworks. Preparing of maps. Phytogeographical division of Slovakia. Students seminar works on phytogeography.					
Recommended literature: Hendrych R.: Fytografie. - SPN, Praha 1984. Brown J. H., Lomolino M. V.: Biogeography. - Sinauer Associates, Sunderland, 1998.					
Course language:					
Notes:					
Course assessment Total number of assessed students: 249					
A	B	C	D	E	FX
41.77	22.09	21.69	6.02	6.83	1.61
Provides: prof. RNDr. Pavol Mártonfi, PhD., Mgr. Vladislav Kolarčík, PhD.					
Date of last modification: 13.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚBEV/ EKR1/03		Course name: Plant Ecology			
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: 2.					
Course level: II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes: Introduction to Plant Ecology.					
Brief outline of the course: Basic problems of plant integration in the environment, ecology of plant populations, interactions between individuals and population, dynamics of the populations. Interactions between productivity of populations and synecology. Ecology of communities and ecosystems.					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 213					
A	B	C	D	E	FX
69.95	18.31	7.04	2.82	1.88	0.0
Provides: prof. RNDr. Martin Bačkor, DrSc.					
Date of last modification: 13.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚCHV/ PFCU/03		Course name: Practical in Physical Chemistry			
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 3 Per study period: 42 Course method: present					
Number of credits: 4					
Recommended semester/trimester of the course: 1.					
Course level: I., II.					
Prerequisites:					
Conditions for course completion: Approved laboratory reports Assessment					
Learning outcomes: Theoretical principles, description of each technique and appropriate physical chemistry experiments.					
Brief outline of the course: Experimental verification of theoretical knowledge on thermodynamics, thermochemistry, chemical equilibria (determination of enthalpy, phase diagrams), colligative properties (cryoscopy, ebullioscopy), adsorption. Experimental verification of theoretical knowledge on electrochemistry (conductivity, dissociation constants, activity coefficients, electromotive force of galvanic cell, Daniell cell, potentials, polarography) and chemical kinetics (determination of rate constants).					
Recommended literature: B.P. Levitt: Findlay's Practical Physical Chemistry, Longman, London 1973 W.J. Moore: Physical Chemistry, Longman, London 1972 P.W. Atkins: Physical Chemistry, Oxford University Press, Oxford, New York 2002					
Course language:					
Notes:					
Course assessment Total number of assessed students: 211					
A	B	C	D	E	FX
68.25	23.7	7.11	0.95	0.0	0.0
Provides: RNDr. František Kaľavský, RNDr. Andrea Morovská Turoňová, PhD.					
Date of last modification: 03.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: KPPaPZ/PPZMg/12		Course name: Psychology and Health Psychology (Mgr. study)			
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 credits: 4					
Recommended semester/trimester of the course: 2.					
Course level: I., II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 221					
A	B	C	D	E	FX
19.91	25.79	25.34	12.67	15.84	0.45
Provides: PhDr. Anna Janovská, PhD., PhDr. Karolína Barinková, PhD., Mgr. Lucia Hricová					
Date of last modification: 04.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚBEV/ REK1/01		Course name: Radiation ecology			
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: 3					
Recommended semester/trimester of the course: 3.					
Course level: I., II.					
Prerequisites:					
Conditions for course completion: Oral examination.					
Learning outcomes: To provide the students with a basic knowledge about the effects of ionizing radiation on living systems.					
Brief outline of the course: Biologically important radionuclides. Natural sources of ionizing radiation. Artificial radioisotopes and the paths of their entrance into the biosphere. Radioactive compounds in the food chains. Entrance, cumulation and excretion of radioactive substances in animals. Biological effects of ionizing radiation.					
Recommended literature: Coggle, J.E.: Biological Effects of Radiation. Taylor and Francis LTD, London, 1983 Hall, E.J.: Radiobiology for the Radiologist. J.B. Lippincott Company, Philadelphia, 1988					
Course language:					
Notes:					
Course assessment Total number of assessed students: 15					
A	B	C	D	E	FX
33.33	26.67	33.33	6.67	0.0	0.0
Provides: prof. RNDr. Beňadik Šmajda, CSc.					
Date of last modification: 13.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚGE/ DPZ/12		Course name: Remote sensing			
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: 3					
Recommended semester/trimester of the course:					
Course level: I., II.					
Prerequisites: ÚGE/ZKA/13					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course: Remote Sensing includes – electromagnetic radiation, electromagnetic spectrum, radiometric quantities. Radiation sources, interaction with the surrounding, reflection, impact of the atmosphere, diffusion in the atmosphere, absorption in the atmosphere, landscape objects and their identification and appreciation, data acquire - basic division, cameras, film material, types of aerial images, radiometer, mechanical scanner, electronic scanner, carriers, satellites and their instrumentation, principals of remote sensing data postprocessing, interpretation of satellite and aerial images, remote sensing applications.					
Recommended literature: Lillesand, T. M., Kiefer, R. W., 2002: Remote Sensing and Image Interpretation., New York, John Wiley&Sons, x, 724 s.					
Course language:					
Notes:					
Course assessment Total number of assessed students: 261					
A	B	C	D	E	FX
19.16	24.14	31.03	16.48	9.2	0.0
Provides: Mgr. Michal Gallay, PhD., prof. Mgr. Jaroslav Hofierka, PhD.					
Date of last modification: 11.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚCHV/ AVZ1/02		Course name: Sampling of Analytical Samples			
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: 2.					
Course level: II.					
Prerequisites:					
Conditions for course completion: Examination.					
Learning outcomes:					
Brief outline of the course: Analytical sample, characterisation. Sampling and norms effecting sampling process. Quantity, number of samples. Sampling techniques. Sampling laboratory equipment. Sampling techniques. Sample pre-concentration. Sample storing and conservation. Matrix simplifying, specific analysis. Chromatographic sample pre-treatment.					
Recommended literature: O. Stoeppler: Sampling and Sample Preparation Practical Guide for Analytical Chemists. Academic Press, London, 2002. E. P. Popek: Sampling and Analysis of Environmental Chemical Pollutants. Elsevier Science, San Diego, 2003.					
Course language:					
Notes:					
Course assessment Total number of assessed students: 170					
A	B	C	D	E	FX
63.53	21.76	10.59	3.53	0.59	0.0
Provides: prof. RNDr. Andrej Oriňák, PhD., RNDr. Lenka Lorencová, PhD.					
Date of last modification: 03.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

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.	
Prerequisites:	
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. RNDr. Igor Hudec, CSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚBEV/ VKH1/03		Course name: Selected topics in herpetology			
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: 2.					
Course level: II.					
Prerequisites:					
Conditions for course completion: Written test. Oral examination.					
Learning outcomes: To broaden the knowledge of students on evolution, taxonomy, morphology, ecology and ecology of amphibia and reptiles acquired before in the subject Zoology.					
Brief outline of the course: Systematical overview of amphibia and reptilia with a classification on species level. Phylogenetical development of amphibia and reptilia. Characteristics of morphological and ecophysiological adaptations. Adaptations on the significant abiotic and biotic factors (food, temperature, substrate, humidity, etc.). Selected aspects of population dynamics of some groups. Behavioral manifestations of amphibia and reptilia from a comparative aspect.					
Recommended literature: 1. BARUŠ V. a kol.: Reptiles-Reptilia (Fauna of the ČSFR), Prague, 1992 (in Czech) 2. BARUŠ V. a kol.: Amphibia (Fauna of the ČSFR). Prague, 1992. (in Czech) 3. OLIVA O., HRABĚ S., LÁC J. : Vertebrates of Slovakia I. Bratislava, 1968 (in Slovak) 4. ROČEK Z.: Studies in Herpetology. Praha, 1986. 5. ZWACH I. : Our species of amphibia and reptilia on the photograph. Prague, 1990. 6. DIESENER G., REICHHOLF J.: Amphibia and reptilia. Bratislava, 1997					
Course language:					
Notes:					
Course assessment Total number of assessed students: 99					
A	B	C	D	E	FX
93.94	4.04	2.02	0.0	0.0	0.0
Provides: RNDr. Igor Majláth, PhD., RNDr. Natália Pipová, PhD.					
Date of last modification: 13.02.2014					

Approved: prof. RNDr. Igor Hudec, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/SEBE/12	Course name: Seminár evolučnej a behaviorálnej ekológie živočíchov
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 1 / 1 Per study period: 14 / 14 Course method: present	
Number of credits: 2	
Recommended semester/trimester of the course: 1., 3.	
Course level: II.	
Prerequisites: ÚBEV/ZO1/04 and ÚBEV/ZOO1/03	
Conditions for course completion:	
Learning outcomes: In evolution ecology part several selection mechanisms caused adaptations in wild animals will be presented. In behavioral ecology part behavior as adaptation aiming fitness increasing will be presented. Case studies will be used to demonstrate principles of the art; students will be solve examples from population genetics using several biostatistical methods.	
Brief outline of the course: Evolution theories. Variability and its importance. Phenotypic plasticity. Population genetics. Selection. Adaptation. Speciation. Evolution of behaviour. Sexual selection. Host-parasitic relationships. Sexually selected traits. Social interactions. Mating systems and parental care. Foraging strategies.	
Recommended literature: Danchin É., Giraldeau L.-A. & Cézilly F., 2008: Behavioural ecology. Oxford University Press. Flegr J. 2005 alebo 2009: Evoluční biologie. Academia, Praha.	
Course language:	
Notes:	
Course assessment Total number of assessed students: 10	
abs	n
100.0	0.0
Provides: RNDr. Marcel Uhrin, PhD., Mgr. Peter Kaňuch, PhD.	
Date of last modification: 13.02.2014	
Approved: prof. RNDr. Igor Hudec, CSc.	

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.					
Prerequisites:					
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 acceptance 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 Bazel', DrSc., doc. RNDr. Tat'ána 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. Vasil' 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. RNDr. Igor Hudec, CSc.					

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.		
Prerequisites:		
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. RNDr. Igor Hudec, CSc.		

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚBEV/ EKP1/04		Course name: Soil Ecology			
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: 1.					
Course level: II.					
Prerequisites:					
Conditions for course completion: active participation in the seminars preparation of oral presentation to the selected topic semestral written test					
Learning outcomes: The main goal of the subject is to understand soil as a heterogenous substrate and environment for the organisms with special emphasis to the mineral and organic components of the soil essential for existence and development of populations of the living biota.					
Brief outline of the course: The subject covers characterization of components of the soil environment, microclimate, nutrient cycling and energy flow. It deals with soil-forming factors and processes, soil organisms (microbial communities, plant roots, invertebrate communities) and functioning of the soil system (decomposition, litter system, rhizosphere, drilosphere, termitosphere).					
Recommended literature: Coleman D. C., Crossley D. A. jr.: Fundamentals of soil ecology. Academic Press, 1995 Dunger W., Fiedler H. J.: Methoden in Bodenbiologie. VEB Gustav Fischer Verlag, Jena, 1989 Lavelle P. Spain A. V.: Soil ecology. Kluwer Academic Publishers. Dordrecht-Boston-London, 2001					
Course language:					
Notes:					
Course assessment Total number of assessed students: 144					
A	B	C	D	E	FX
59.72	29.86	6.94	2.08	1.39	0.0
Provides: RNDr. Peter Ľuptáčík, PhD.					
Date of last modification: 13.02.2014					

Approved: prof. RNDr. Igor Hudec, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚGE/ PAM/12		Course name: Spatial analyses and modelling			
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 credits: 4					
Recommended semester/trimester of the course: 1.					
Course level: II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 132					
A	B	C	D	E	FX
45.45	31.06	15.15	4.55	3.03	0.76
Provides: prof. Mgr. Jaroslav Hofierka, PhD., Mgr. Michal Gallay, PhD., RNDr. Ján Kaňuk, PhD.					
Date of last modification: 11.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚCHV/ VSE1a/04		Course name: Special Seminar			
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: II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course: Actual problems of physical and analytical chemistry which are connected with the solution of the students theses.					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 34					
A	B	C	D	E	FX
91.18	5.88	0.0	0.0	2.94	0.0
Provides: prof. Dr. Yaroslav Bazel', DrSc., doc. RNDr. Katarína Reiffová, PhD., doc. RNDr. Tat'ána Gondová, CSc., doc. Ing. Viera Vojteková, PhD., doc. Mgr. Vasil' Andruch, CSc., RNDr. Andrea Straková Fedorková, PhD., prof. RNDr. Andrej Oriňák, PhD., doc. RNDr. Renáta Oriňáková, PhD., RNDr. Andrea Morovská Turoňová, PhD.					
Date of last modification: 03.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚCHV/ VSE1b/04		Course name: Special Seminar			
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.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course: Actual problems of physical and analytical chemistry which are connected with the solution of the students theses.					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 35					
A	B	C	D	E	FX
88.57	2.86	5.71	2.86	0.0	0.0
Provides: prof. Dr. Yaroslav Bazel', DrSc., RNDr. Andrea Straková Fedorková, PhD., prof. RNDr. Andrej Oriňák, PhD., doc. Ing. Viera Vojteková, PhD., doc. RNDr. Katarína Reiffová, PhD., doc. RNDr. Renáta Oriňáková, PhD., doc. RNDr. Tat'ána Gondová, CSc., doc. Mgr. Vasil' Andruch, CSc., RNDr. Andrea Morovská Turoňová, PhD., RNDr. Rastislav Serbin, PhD.					
Date of last modification: 03.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚCHV/ STOX/04		Course name: Special Toxicology			
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.					
Prerequisites: ÚCHV/ZTOX/04					
Conditions for course completion:					
Learning outcomes: Goal of the course is to provide the students with a knowledge of toxicology of organic and inorganic compounds, drugs, food additives, e.g., safety of substances, designation of substances in accordance of norm of European Union and order of Government of Slovak Republic.					
Brief outline of the course: Goal of the course is to provide the students with a knowledge of toxicology of organic and inorganic compounds, drugs, food additives, e.g., safety of substances, designation of substances in accordance of norm of European Union and order of Government of Slovak Republic.					
Recommended literature: J. A. Timbrell: Introduction to Toxicology, Taylor and Francis, London 1989. H. Kenneth Dillon, Mat H. Ho: Biological Monitoring of Exposure to Chemicals: Metals, John Wiley & Sons, New York 1991. V. E. Forbes, T. L. Forbes: Toxicology in Theory and Practice, Chapman Hall, London 1994. H. M. Stahr: Analytical Methods in Toxicology, John Wiley & Sons, New York 1991.					
Course language:					
Notes:					
Course assessment Total number of assessed students: 192					
A	B	C	D	E	FX
50.52	23.96	17.19	6.25	2.08	0.0
Provides: prof. RNDr. Katarína Györyová, DrSc.					
Date of last modification: 03.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

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.		
Prerequisites:		
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. RNDr. Igor Hudec, CSc.		

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.		
Prerequisites:		
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. RNDr. Igor Hudec, CSc.		

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.		
Prerequisites:		
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. RNDr. Igor Hudec, CSc.		

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.		
Prerequisites:		
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. RNDr. Igor Hudec, CSc.		

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚBEV/ SVK/01		Course name: Student Scientific Conference			
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: 2.					
Course level: I., II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 175					
A	B	C	D	E	FX
100.0	0.0	0.0	0.0	0.0	0.0
Provides:					
Date of last modification: 13.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚCHV/ SVK/00		Course name: Students Scientific Conference (Presentation)			
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: 2.					
Course level: I., II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 21					
A	B	C	D	E	FX
100.0	0.0	0.0	0.0	0.0	0.0
Provides:					
Date of last modification: 03.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

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.	
Prerequisites:	
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. RNDr. Igor Hudec, CSc.	

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.	
Prerequisites:	
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. RNDr. Igor Hudec, CSc.	

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.					
Prerequisites:					
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. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚCHV/ TOXOL/03		Course name: Toxicology of organic compounds			
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: 4					
Recommended semester/trimester of the course:					
Course level: II.					
Prerequisites:					
Conditions for course completion: Seminar written report on the selected subjects of toxicology of organic compounds and its oral presentation connected with the discussion. Terminal examination by oral form.					
Learning outcomes: The study of the interaction between chemicals and biological systems in order to quantitatively determine the potential for organic compounds to produce the harmful effects in living organisms.					
Brief outline of the course: General principles of toxicology, definition of xenobiotics, toxic effects, local and systemic toxicity. Toxicokinetic, absorption, distribution, biotransformation and excretion of xenobiotics and their metabolites. Biotransformation of xenobiotics. Phase I Reactions (oxidation, reduction, hydrolysis), characterization of enzymes. Phase II reactions, glucuronidation, sulfation, methylation, acetylation, amino acid conjugation, glutathione conjugation. Toxication versus detoxication, general principles, toxic intermediates and their detoxication. Biotransformation of organic solvents and their toxic effects, toxic effects of natural products of microorganisms, fungi, plants and some animals. Drug dependence, the general principles and mechanisms.					
Recommended literature: C. D. Laassen: Toxicology: The basic science of poisons, McGraw-Hill Companies, Inc. 2001. ISBN: 0-07-134721-6.					
Course language:					
Notes:					
Course assessment Total number of assessed students: 112					
A	B	C	D	E	FX
66.07	18.75	8.93	4.46	1.79	0.0
Provides: doc. RNDr. Miroslava Martinková, PhD.					
Date of last modification: 03.02.2014					

Approved: prof. RNDr. Igor Hudec, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚCHV/ MSO1/03		Course name: Wastes Treatment 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: 1.					
Course level: II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course: Wastes clasiffication, wastes separation. Re-cycling of wastes, methods of wastes elimination and re-finishing. Pyrolysis, degradation of wastes by pyrolysis, process optimization. Analytical methods for wastes analysis. Monitoring of wastes degradation pollutants, toxicity of wastes and degradation products.					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 66					
A	B	C	D	E	FX
71.21	25.76	3.03	0.0	0.0	0.0
Provides: prof. RNDr. Andrej Oriňák, PhD., RNDr. Lenka Lorencová, PhD.					
Date of last modification: 03.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚCHV/ATV1/04		Course name: Water Pretreatment			
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: 2.					
Course level: II.					
Prerequisites:					
Conditions for course completion: Test Examination					
Learning outcomes: Getting a knowledge about the methods of water pretreatment.					
Brief outline of the course: Disinfection of drinking water. Fluoridation of drinking water. Water softening and demineralisation. Waste water. Neutralization of wastewater. Oxidation of wastewater. Physico-chemical methods of waste water treatment. Biological treatment of wastewater.					
Recommended literature: 1. Handbook of Water and Wastewater Treatment Technologies. Ed. By Nicholas P Cheremisinoff, Butterworth Heinemann, 2001. 576 p. 2. Principles of Water Quality Control, Ed. by Thy Tebbutt, Butterworth Heinemann, 1997. 288 p. 3. Water Technology. Ed. by N. F. Gray, Butterworth Heinemann, 2005. 600 p.					
Course language:					
Notes:					
Course assessment Total number of assessed students: 152					
A	B	C	D	E	FX
34.87	13.82	18.42	19.08	13.82	0.0
Provides: doc. Mgr. Vasil' Andruch, CSc.					
Date of last modification: 03.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

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.	
Prerequisites:	
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. RNDr. Igor Hudec, CSc.	

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.	
Prerequisites:	
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. RNDr. Igor Hudec, CSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ ZOG1/03	Course name: Zoogeography
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: 1.	
Course level: I., II.	
Prerequisites:	
Conditions for course completion: active participation in seminars preparation of the oral presentation to the selected topic semestral written test oral examination	
Learning outcomes: The main goal of the subject is to get knowledge on the basic reasons of recent distribution of the animals on the Earth, zoogeographic regionalization of the Earth's surface and human influence on the faunal distribution in the history.	
Brief outline of the course: This course will review our current understanding of the patterns of animal distribution and the processes that influence distributions of species and their attributes. Zoogeography will integrate information on the historical and current ecology, genetics, and physiology of animals and their interaction with environmental processes (continental drift, climate) in regulating geographic distributions. The course will emphasize descriptive and analytical approaches useful in hypothesis testing in zoogeography and will illustrate applied aspects of zoogeography (e.g. refuge design in conservation).	
Recommended literature: Buchar, J., 1983: Zoogeografie. SPN Praha Darlington, P.J., 1998: Zoogeography: The geographical distribution of animals. Krieger, USA Lomolino M.V., Brown J.H., Riddle B. R., 2005: Biogeography. Sinauer Associates, 1-845 Plesník, P., Zatkalík, F., 1996: Biogeografia. Vysokoškolské skriptá, PríFUK Bratislava	
Course language:	
Notes:	

Course assessment					
Total number of assessed students: 692					
A	B	C	D	E	FX
20.66	23.41	25.0	20.09	8.09	2.75
Provides: doc. RNDr. Ľubomír Kováč, CSc.					
Date of last modification: 13.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚBEV/ ZOO1/11		Course name: Zoológia II (pre magisterské štúdium)			
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.					
Prerequisites: ÚBEV/ZO1/04					
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
12.82	35.9	23.08	7.69	20.51	0.0
Provides: RNDr. Peter Ľuptáčik, PhD., RNDr. Marcel Uhrin, PhD.					
Date of last modification: 13.02.2014					
Approved: prof. RNDr. Igor Hudec, CSc.					