

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:					
Course assessment Total number of assessed students: 114					
A	B	C	D	E	FX
50.88	36.84	9.65	0.88	1.75	0.0
Provides: doc. RNDr. Ľubomír Panigaj, CSc.					
Date of last modification: 24.02.2017					
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: KFaDF/AFS/05		Course name: Ancient 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: II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Course assessment Total number of assessed students: 31					
A	B	C	D	E	FX
80.65	6.45	6.45	0.0	6.45	0.0
Provides: Doc. PhDr. Peter Nezník, CSc.					
Date of last modification: 24.02.2017					
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, 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: II.					
Prerequisites:					
Conditions for course completion: Written test. Oral exmanitation.					
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. Teratogenity and cancerogenity 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:					
Course assessment Total number of assessed students: 229					
A	B	C	D	E	FX
14.85	24.45	24.02	17.03	17.47	2.18
Provides: doc. RNDr. Monika Kassayová, CSc.					
Date of last modification: 24.02.2017					
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, 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.					
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:					
Course assessment Total number of assessed students: 60					
A	B	C	D	E	FX
98.33	0.0	1.67	0.0	0.0	0.0
Provides: doc. RNDr. Ľubomír Kováč, CSc.					
Date of last modification: 24.02.2017					
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice							
Faculty: Faculty of Science							
Course ID: ÚBEV/CK1/03		Course name: Cytogenetics and Karyology					
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., III.							
Prerequisites:							
Conditions for course completion: written tests, protocols, oral examination							
Learning outcomes: To gain knowledge and experience in genetic processes at the cell level using the newest scientific findings of cytogenetics and molecular cytology. To get acquainted in detail with the results coming from human genome mapping.							
Brief outline of the course: Organisation of eukaryotic genome. Nuclear skeleton. Nucleolus, nucleolar skeleton. Chromatin structure and changes of chromatin. Levels of DNA organisation in cell nucleus. Chromosomes. Polythene chromosomes. Cell cycle. Genetic regulation of a cell cycle. Genetic regulation of cell differentiation. Apoptosis. Telomeres and function of telomerase. Molecular cytology. Basic characteristics of the Human genome project - what we can learn from it?							
Recommended literature: Russel, J.P.: Genetics, Third Edition, Harper Collins Publisher, New York 1992 Periodicals Internet sources							
Course language:							
Course assessment Total number of assessed students: 1107							
A	B	C	D	E	FX	N	P
24.93	14.81	15.54	14.72	17.52	11.38	0.0	1.08
Provides: prof. RNDr. Eva Čellárová, DrSc., RNDr. Katarína Bruňáková, PhD.							
Date of last modification: 24.02.2017							
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, 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:							
Course assessment Total number of assessed students: 82							
A	B	C	D	E	FX	N	P
21.95	21.95	29.27	10.98	4.88	0.0	0.0	10.98
Provides: prof. RNDr. Beňadik Šmajda, CSc., RNDr. Natália Pipová, PhD.							
Date of last modification: 24.02.2017							
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, 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:					
Course level: I., II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Course assessment Total number of assessed students: 734					
A	B	C	D	E	FX
60.63	13.9	12.67	8.72	3.41	0.68
Provides: doc. PhDr. Pavol Tholt, PhD., mim. prof., Doc. PhDr. Peter Nezník, CSc., PhDr. Katarína Mayerová, PhD., doc. Mgr. Róbert Stojka, PhD.					
Date of last modification: 24.02.2017					
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, 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:					
Course assessment Total number of assessed students: 122					
A	B	C	D	E	FX
54.1	28.69	11.48	4.1	1.64	0.0
Provides:					
Date of last modification: 24.02.2017					
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚBEV/EB1/99		Course name: Evolutionary Biology			
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: II.					
Prerequisites:					
Conditions for course completion: written test					
Learning outcomes: To understand the fundamentals of the theory of evolution, the evidence supporting contemporary views on the origin and evolution of living organisms on Earth and the mechanisms of evolution.					
Brief outline of the course: Historical overview of evolutionary theories. The origin of life. Elements of evolution: mutations, population waves, and isolation. Natural selection. Molecular evolution. Adaptations and their classification. Concept of species. Macroevolution. Evolution of functions and organs, evolution of onthogeny. Phylogeny of animals. Evolutionary progress. Anthropogenesis. Plant diversity. Primary and secondary speciation of plants. Reproduction-isolation mechanisms. Hybridisation and introgression of plants. Polyploidy. Reproductive systems in plants.					
Recommended literature: Futuyama, D.J.: Evolutionary biology, Sinauer Associates, Sunderland, 3rd ed., 1997. Dobzhansky T. et al.: Evolution. San Francisco 1977.					
Course language:					
Course assessment Total number of assessed students: 514					
A	B	C	D	E	FX
11.67	23.54	23.74	25.1	14.01	1.95
Provides: prof. RNDr. Pavol Mártonfi, PhD., prof. RNDr. Beňadik Šmajda, CSc., prof. RNDr. Eva Čellárová, DrSc.					
Date of last modification: 24.02.2017					
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, 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: 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:					
Course assessment Total number of assessed students: 173					
A	B	C	D	E	FX
88.44	4.62	6.36	0.58	0.0	0.0
Provides: RNDr. Igor Majláth, PhD.					
Date of last modification: 24.02.2017					
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚBEV/EF1/03		Course name: Experimental methods in physiology			
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: Recognition of practical skills. Oral and practical examination.					
Learning outcomes: To explain the basic rules of breeding of laboratory animals and of the criteria of correct handling of animals during housing and in experiment					
Brief outline of the course: The experimental animal, the laboratory animal, biomodels. Basics of animal breeding. Biological traits of commonly used laboratory animals. Genetics of lab. animals. Microbiological criteria of animal breeding. The influence of internal and external factors on health state and reactivity of animals: genetic determinants, sex, social and behavioral factors. The influence of physical factors of housing (temperature, humidity, light, noise, transport). Design of experiments.					
Recommended literature:					
Course language:					
Course assessment Total number of assessed students: 175					
A	B	C	D	E	FX
48.0	31.43	16.0	3.43	0.57	0.57
Provides: RNDr. Ján Gálik, CSc.					
Date of last modification: 24.02.2017					
Approved: Guarantee prof. RNDr. Beňadik Šmajda, 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:					
Course assessment Total number of assessed students: 394					
A	B	C	D	E	FX
14.21	22.34	22.34	23.1	16.75	1.27
Provides: doc. RNDr. Bianka Bojková, PhD.					
Date of last modification: 24.02.2017					
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, 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: 4.							
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 specialisations. Habitat and niche. Interactions. Commensalism. Mutualism. Cooperation. Competition. Predator and prey. Mammals and plants. Food webs. Territoriality. Home range. Lek. Metapopulations. Reproduction. Mating systems. Oestrus. r- and K- strategy. Monogamy, polygamy. Dispersion. Migration. Habitat selection. Individual. Population. Natality, mortality. Cohorts. Population dynamics and cycles. Gradations. Mammal diversity. Island biogeography. 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. Vulnerable 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 cicavců. Academia, Praha, 292 pp.							
Course language:							
Course assessment Total number of assessed students: 233							
A	B	C	D	E	FX	N	P
61.37	18.88	12.88	2.58	2.58	0.0	0.0	1.72
Provides: doc. RNDr. Marcel Uhrin, PhD.							
Date of last modification: 24.02.2017							
Approved: Guarantee prof. RNDr. Beňadik Šmajda, 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, drillosphere, 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:					
Course assessment Total number of assessed students: 159					
A	B	C	D	E	FX
55.97	31.45	9.43	1.89	1.26	0.0
Provides: RNDr. Peter Ľuptáčik, PhD.					
Date of last modification: 24.02.2017					
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, 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:					
Course assessment Total number of assessed students: 201					
A	B	C	D	E	FX
73.63	15.92	8.46	0.5	1.49	0.0
Provides: Mgr. Peter Kaňuch, PhD.					
Date of last modification: 24.02.2017					
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, 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: 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. Academis Press, London, 1-355					
Course language:					
Course assessment Total number of assessed students: 136					
A	B	C	D	E	FX
47.79	25.0	18.38	6.62	2.21	0.0

Provides: RNDr. Natália Raschmanová, PhD.
Date of last modification: 24.02.2017
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, 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:					
Course assessment Total number of assessed students: 889					
A	B	C	D	E	FX
39.37	24.75	26.32	7.54	1.91	0.11
Provides: RNDr. Igor Majláth, PhD., RNDr. Natália Pipová, PhD., RNDr. Terézia Kisková, PhD.					
Date of last modification: 24.02.2017					
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, 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:					
Course assessment Total number of assessed students: 88					
A	B	C	D	E	FX
56.82	26.14	13.64	1.14	0.0	2.27
Provides: doc. RNDr. Ľubomír Panigaj, CSc.					
Date of last modification: 24.02.2017					
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, 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: 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., Hannsson, L. A.: The biology of Lakes and ponds. Biol. Of Habitats Ser, 1998					
Course language:					
Course assessment Total number of assessed students: 154					
A	B	C	D	E	FX
18.83	18.18	20.13	40.91	1.95	0.0
Provides: prof. RNDr. Igor Hudec, CSc.					
Date of last modification: 24.02.2017					
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, 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:					
Course assessment Total number of assessed students: 189					
A	B	C	D	E	FX
34.92	21.69	20.11	21.69	1.59	0.0
Provides: prof. RNDr. Igor Hudec, CSc.					
Date of last modification: 24.02.2017					
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, 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:					
Course assessment Total number of assessed students: 8					
A	B	C	D	E	FX
87.5	12.5	0.0	0.0	0.0	0.0
Provides: Doc. PhDr. Peter Nezník, CSc.					
Date of last modification: 24.02.2017					
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚBEV/IMU1/03		Course name: Immunology			
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: 1.					
Course level: II.					
Prerequisites:					
Conditions for course completion: Recognition. Oral examination.					
Learning outcomes: This course introduces the students to the basic concepts of immunology as well as highlights the role and importance of immunology in various human diseases. The aim of Immunology lessons is the presentation of the organization and function of the immune system, as well as the comprehension of complex molecular and cellular interactions during the induction of immune responses.					
Brief outline of the course: Basic immunology: Lymphatic System Anatomy, The Innate Immune System, The Induced Responses of Innate Immunity, The Adaptive Immune Response, Antigens and Antibodies, Antigen Recognition by B-cell and T-cell Receptors, Antigen Presentation to T-lymphocytes, Complement, Clinical immunology: Allergy and other Hypersensitivities, Autoimmunity and Transplantation, Tumor Immunology, Disorders of The Immune System.					
Recommended literature: Janeway Ch. A., Travers P., Walport M., Schlomchik M.: Immunobiology. Garland Science, 2004 Murphy, K. (2012): Janeway's Immunobiology. 8th ed. Garland Science Delves, P.J. et al. (2011): Roitt's essential immunology 12th ed Wiley-Blackwell					
Course language:					
Course assessment Total number of assessed students: 834					
A	B	C	D	E	FX
38.25	24.22	25.54	7.07	1.56	3.36
Provides: RNDr. Vlasta Demečková, PhD.					
Date of last modification: 24.02.2017					
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚBEV/IMUC1/03		Course name: Practical in immunology			
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: 1.					
Course level: II.					
Prerequisites: ÚBEV/IMU1/03					
Conditions for course completion: Recognition. Recognition.					
Learning outcomes: The practical course will focus on basic techniques and skills in immunology laboratories in order to have technical foundation to suggest experimental analysis of some immunological questions.					
Brief outline of the course: Special immunology practicals cover common immunological techniques as well as techniques relevant to the research projects at the department. The main aim is to understand the host immune response to infection. Practical also include a study of the histophysiology of animal immune organs. The students will learn to perform immunological experiments, including critical evaluation of the results.					
Recommended literature: Study materials provided by teacher.					
Course language:					
Course assessment Total number of assessed students: 241					
A	B	C	D	E	FX
68.05	18.26	12.86	0.41	0.0	0.41
Provides: RNDr. Vlasta Demečková, PhD.					
Date of last modification: 24.02.2017					
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, 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: II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
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: 24.02.2017					
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, 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:		
Course assessment Total number of assessed students: 281		
abs	n	z
98.22	1.78	0.0
Provides: Mgr. Ondrej Kalina, PhD., Mgr. Lucia Hricová, PhD.		
Date of last modification: 16.02.2017		
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, 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: Per study period: 36s 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:	
Course assessment Total number of assessed students: 329	
abs	n
47.11	52.89
Provides: MUDr. Peter Dombrovský, Mgr. Marek Valanský	
Date of last modification: 23.02.2017	
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, 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: Per study period: 36s 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:	
Course assessment Total number of assessed students: 126	
abs	n
45.24	54.76
Provides: Mgr. Peter Bakalár, PhD.	
Date of last modification: 23.02.2017	
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, CSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚBEV/ MEB1/03		Course name: Cell metabolism			
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. Oral examination.					
Learning outcomes: To provide the students with knowledge about the principal metabolic processes in living cells.					
Brief outline of the course: Carbohydrates – significance and role in animal organisms. Inborn errors of carbohydrate and lipid metabolism in humans. Lipid metabolism. Role of the liver and adipose tissue in lipid metabolism. Plasma lipoproteins – metabolism and disorders. Cholesterol and atherosclerosis. Protein metabolism and its inborn errors. Water and solute metabolism. Physiology and regulatory mechanisms of water-base balance in animal organisms. Metabolic regulation. Topochemistry of metabolic processes					
Recommended literature: 1. Murray, R. K., Grammer, D. K., Mayes, P. A., Rodwell, V.W.: Harper's Biochemistry. Prentice-Hall, Appleton & Lange, 1993 2. Vasudevan D.M. and co.: Textbook of Biochemistry for Medical Students. Jaypee Brothers Medical Publishers 2011					
Course language:					
Course assessment Total number of assessed students: 157					
A	B	C	D	E	FX
37.58	24.2	17.83	8.28	7.64	4.46
Provides: doc. RNDr. Monika Kassayová, CSc.					
Date of last modification: 24.02.2017					
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚBEV/ MECV/16		Course name: Metódy ekologického výskumu cicavcov			
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: 2.					
Course level: II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
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: doc. RNDr. Marcel Uhrin, PhD.					
Date of last modification: 24.02.2017					
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice							
Faculty: Faculty of Science							
Course ID: ÚBEV/MOG/03		Course name: Model Organisms in Genetics					
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., III.							
Prerequisites:							
Conditions for course completion: protocols, participation at a mini conference: Model organism for my diploma thesis, oral examination							
Learning outcomes: To provide the students with an information on model systems of prokaryotic and eukaryotic organisms used in genetic research.							
Brief outline of the course: Basic properties of model organisms used in genetics. Prokaryotic model systems (Escherichia coli, Diplococcus pneumoniae, Agrobacterium tumefaciens and A. rhizogenes). Model systems of simple eukaryotic organisms (Saccharomyces cerevisiae, Neurospora crassa). Plant and animal model systems in vitro and in vivo. Caenorhabditis elegans. Arabidopsis thaliana. Mendel's laws. Drosophila melanogaster. Morgan's rules. Danio rerio. Mus musculus. Human genome. Transgenic plants and animals. HeLa cells. Stem cells. Genetic importance of the study of twins. Genetic databases.							
Recommended literature: Snustad, P.D., Simmons, M.J.: Genetika. Nakladatelství Masarykovy univerzity, Brno, 2009, 871 str., Genetic periodicals, Internet sources							
Course language:							
Course assessment Total number of assessed students: 1091							
A	B	C	D	E	FX	N	P
23.56	15.67	15.77	14.21	18.06	11.64	0.0	1.1
Provides: prof. RNDr. Eva Čellárová, DrSc., RNDr. Andrea Kimáková, PhD., RNDr. Miroslav Soták, PhD., RNDr. Katarína Nigutová, PhD.							
Date of last modification: 24.02.2017							

Approved: Guaranteeprof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚBEV/ MR1/03		Course name: Plant Metabolism			
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 2 Per study period: 28 / 28 Course method: present					
Number of credits: 6					
Recommended semester/trimester of the course:					
Course level: II.					
Prerequisites:					
Conditions for course completion: Examen					
Learning outcomes: To provide the students with pathways of biosynthesis in plant and functions of primary and secondary metabolites					
Brief outline of the course: Photosynthesis: structure of photosynthetic apparatus, light absorption, electron and proton transport, photophosphorylation. Calvin cycle, rubisco and photorespiration. C4 and CAM plants. Synthesis of starch and sucrose. Respiration: glycolysis, citric acid cycle, electron transport and ATP synthesis. Lipid biosynthesis and conversion into carbohydrates. Polyacetylenes. Nitrogen metabolism: fixation, nitrate assimilation, ammonium conversion to amino acids. Sulfur assimilation and metabolism. Terpenes: biosynthesis and functions. Phenolic compounds: pathways of biosynthesis, phenylpropanes, flavonoids and lignins. Alkaloids. Mechanisms of plant defense.					
Recommended literature: Lawlor D. W. Photosynthesis. Third edition. BIOS, Oxford 2001; Taiz L., Zeiger E., Plant physiology. Fifth edition. Sinauer ass., Sunderland 2010					
Course language:					
Course assessment Total number of assessed students: 103					
A	B	C	D	E	FX
26.21	16.5	17.48	16.5	20.39	2.91
Provides: doc. RNDr. Peter Paľove-Balang, PhD.					
Date of last modification: 24.02.2017					
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice							
Faculty: Faculty of Science							
Course ID: ÚBEV/MZO1/03		Course name: Molecular basis of ontogenetic development					
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:							
Course level: II., III.							
Prerequisites:							
Conditions for course completion: Oral examination.							
Learning outcomes: Acquiring of basic knowledge of principles and molecular-biological mechanisms of ontogenetic development of animal and plant organisms.							
Brief outline of the course: Regulation of the ontogenetic development in eukaryotic organisms. Program of the ontogenetic development. Cell determination and differentiation. Molecular mechanisms of formation of specialised cell types. Epigenetic mechanisms of cellular memory. Imprinting. Combinatory control of eukaryotic genes. Regulatory genes. Establishment of cell position. Formation of the embryonic body plan. Establishment of the main axis of body. Shape formation. Cloning of multicellular organisms.							
Recommended literature: Gerhard,J.,Kirschener,M.: Cells, Embryos and Evolution. Blacwell Science Inc., Massachusett,Oxford,London,1997							
Course language:							
Course assessment Total number of assessed students: 327							
A	B	C	D	E	FX	N	P
36.7	22.32	12.23	14.07	8.56	4.59	0.0	1.53
Provides: prof. RNDr. Eva Mišúrová, CSc., RNDr. Zuzana Jendželovská, PhD.							
Date of last modification: 24.02.2017							
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, CSc.							

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice							
Faculty: Faculty of Science							
Course ID: ÚBEV/ NAT/10		Course name: Neuroanatómia					
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 0 Per study period: 28 / 0 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: To provide the students with basic knowledge, principles and function of human nervous system.							
Brief outline of the course: Introduction to neuroanatomy, development, classification of the Nervous System, dividing of the Nervous System (CNS and PNS), Spinal Cord and Spinal Nerves (structure, reflexes, gray matters and intrinsic pathways, Ascending, Descending Tracts), Brain Stem and Cranial Nerves, Cerebellum, Diencephalon, Telencephalon, Limbic System, Cerebrospinal Fluid System, Vegetative Nervous System, Functional Systems (Motor systems - pyramidal tract, extrapyramidal Motor System, motor pathway), (Sensory system - pathway of Epicritic Sensibility, Pathway of Protopathic Sensibility, Optic Pathway, Auditory Tract, Vestibular Tract)							
Recommended literature: Kahle W., Leonhardt H., Platzer W.: Color Atlas and Textbook of Human Anatomy, Volume 3. Nervous System and Sensory Organs, 1993 Georg Thieme Verlag Stuttgart, New York Hendelman W.J.: Atlas of functional neuroanatomy CRC Press LLC, 2000 Kopf-Mäier P.: Wolf-Heideggers Atlas of Human Anatomy Karger, 2000 Miklošová M.: Anatómia PF, UPJŠ, 2011, Equilibria Haines, D.E.: Neuroanatomy, Lippincott Williams, Wilkins, 2011							
Course language:							
Course assessment Total number of assessed students: 25							
A	B	C	D	E	FX	N	P
20.0	12.0	8.0	0.0	0.0	4.0	0.0	56.0
Provides: RNDr. Juraj Ševc, PhD.							
Date of last modification: 24.02.2017							
Approved: Guarantee prof. RNDr. Beňadik Šmajda, 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:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Course assessment Total number of assessed students: 44					
A	B	C	D	E	FX
75.0	13.64	9.09	2.27	0.0	0.0
Provides: RNDr. Viktória Majláthová, PhD.					
Date of last modification: 24.02.2017					
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice							
Faculty: Faculty of Science							
Course ID: ÚBEV/ PFYZ/15		Course name: Comparative animal physiology					
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:							
Course level: II., III.							
Prerequisites:							
Conditions for course completion: Performance of oral examination.							
Learning outcomes: The students receive an overview on the significance of physiological adaptational mechanisms to the various life conditions on the individual levels of the phylogenesis.							
Brief outline of the course: Phylogeny of food acquisition, processing and utilization in animals. Energy metabolism (factors influencing the metabolic rate; physiology of physical work; principles of aerobic performance in various species). Thermal housekeeping (poikilothermic and homoiothermic strategies, life in cool environment). The phylogenic development of the nervous system. Sensoric abilities of the animals. Evolution of the brain. Endocrinal and neuroendocrinal regulation of body functions in evertebrates and vertebrates. Reproductive systems of the animals. Navigation in animals. Motoric basics of animal behaviour. The mechanisms of the exchange of respiratory gases in a phylogenetic view. Comparison of the circulatory systems in animals. Water- and mineral housekeeping in terrestrial and aquatic animals. Excretory systems of the animals.							
Recommended literature:							
Course language:							
Course assessment Total number of assessed students: 12							
A	B	C	D	E	FX	N	P
50.0	25.0	0.0	8.33	0.0	0.0	0.0	16.67
Provides: prof. RNDr. Beňadik Šmajda, CSc.							
Date of last modification: 24.02.2017							
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, 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:					
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: 13.02.2017					
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, 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 (Master's 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:					
Course level: II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Course assessment Total number of assessed students: 226					
A	B	C	D	E	FX
19.47	25.22	25.66	13.27	15.93	0.44
Provides: PhDr. Anna Janovská, PhD., Mgr. Lucia Hricová, PhD.					
Date of last modification: 16.02.2017					
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, 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: 1.	
Course level: II.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Course assessment Total number of assessed students: 121	
abs	n
100.0	0.0
Provides:	
Date of last modification: 24.02.2017	
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, 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: 2.	
Course level: II.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Course assessment Total number of assessed students: 86	
abs	n
100.0	0.0
Provides:	
Date of last modification: 24.02.2017	
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, 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: 3.	
Course level: II.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Course assessment Total number of assessed students: 83	
abs	n
100.0	0.0
Provides:	
Date of last modification: 24.02.2017	
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, 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: 4.					
Course level: II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Course assessment Total number of assessed students: 80					
A	B	C	D	E	FX
85.0	6.25	5.0	1.25	2.5	0.0
Provides:					
Date of last modification: 24.02.2017					
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, 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:		
Course assessment Total number of assessed students: 126		
abs	n	z
97.62	2.38	0.0
Provides: Mgr. Ondrej Kalina, PhD.		
Date of last modification: 16.02.2017		
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, 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., 4.					
Course level: I., II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Course assessment Total number of assessed students: 230					
A	B	C	D	E	FX
100.0	0.0	0.0	0.0	0.0	0.0
Provides:					
Date of last modification: 24.02.2017					
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, 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:							
Course assessment Total number of assessed students: 10457							
abs	abs-A	abs-B	abs-C	abs-D	abs-E	n	neabs
88.25	0.0	0.0	0.0	0.0	0.02	7.81	3.92
Provides: Mgr. Peter Bakalár, PhD., Mgr. Dana Dračková, PhD., Mgr. Agata Horbacz, PhD., Mgr. Dávid Kaško, Mgr. Zuzana Küchelová, PhD., PaedDr. Jana Potočnicková, PhD., doc. PaedDr. Ivan Uher, PhD., Mgr. Marek Valanský, prof. RNDr. Stanislav Vokál, DrSc., Mgr. Aurel Zelko, PhD., Mgr. Marcel Čurgali, doc. PhDr. Ivan Šulc, CSc.							
Date of last modification: 23.02.2017							
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, 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:							
Course assessment Total number of assessed students: 9779							
abs	abs-A	abs-B	abs-C	abs-D	abs-E	n	neabs
85.09	0.61	0.02	0.0	0.0	0.02	10.36	3.9
Provides: Mgr. Peter Bakalár, PhD., Mgr. Dana Dračková, PhD., Mgr. Agata Horbacz, PhD., Mgr. Dávid Kaško, Mgr. Zuzana Küchelová, PhD., PaedDr. Jana Potočnicková, PhD., doc. PaedDr. Ivan Uher, PhD., Mgr. Marek Valanský, prof. RNDr. Stanislav Vokál, DrSc., Mgr. Aurel Zelko, PhD., Mgr. Marcel Čurgali, doc. PhDr. Ivan Šulc, CSc.							
Date of last modification: 23.02.2017							
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, 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:							
Course assessment Total number of assessed students: 6188							
abs	abs-A	abs-B	abs-C	abs-D	abs-E	n	neabs
89.66	0.03	0.0	0.0	0.0	0.0	4.36	5.95
Provides: PaedDr. Jana Potočnicková, PhD., Mgr. Marcel Čurgali, Mgr. Peter Bakalár, PhD., Mgr. Dana Dračková, PhD., Mgr. Agata Horbacz, PhD., Mgr. Dávid Kaško, Mgr. Zuzana Küchelová, PhD., doc. PaedDr. Ivan Uher, PhD., Mgr. Marek Valanský, prof. RNDr. Stanislav Vokál, DrSc., Mgr. Aurel Zelko, PhD., doc. PhDr. Ivan Šulc, CSc.							
Date of last modification: 23.02.2017							
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, 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:							
Course assessment Total number of assessed students: 4644							
abs	abs-A	abs-B	abs-C	abs-D	abs-E	n	neabs
85.66	0.32	0.04	0.0	0.0	0.0	6.61	7.36
Provides: Mgr. Marcel Čurgali, Mgr. Peter Bakalár, PhD., Mgr. Dana Dračková, PhD., Mgr. Agata Horbacz, PhD., Mgr. Dávid Kaško, Mgr. Zuzana Küchelová, PhD., PaedDr. Jana Potočnicková, PhD., doc. PaedDr. Ivan Uher, PhD., Mgr. Marek Valanský, prof. RNDr. Stanislav Vokál, DrSc., Mgr. Aurel Zelko, PhD., doc. PhDr. Ivan Šulc, CSc.							
Date of last modification: 23.02.2017							
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, CSc.							

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚBEV/ UBEV/VKKI//15		Course name: Selected topics in clinical immunology			
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:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Course assessment Total number of assessed students: 26					
A	B	C	D	E	FX
84.62	15.38	0.0	0.0	0.0	0.0
Provides: RNDr. Vlasta Demečková, PhD.					
Date of last modification: 24.02.2017					
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice							
Faculty: Faculty of Science							
Course ID: ÚBEV/ UFCM/10		Course name: Introduction to Flow Cytometry					
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., 3.							
Course level: II., III.							
Prerequisites:							
Conditions for course completion:							
Learning outcomes: The goal is to teach the students on II. and III. stage some theoretical and practical aspects of analytical cytometry with special focus on flow cytometry. The course will cover theoretical bases of fluorescence, its detection, multiparametric analyses and practical applications in clinical diagnosis and scientific research.							
Brief outline of the course: Fluorescence: physical bases, detection, various designs of instruments exploiting fluorescence detection, fluorescent dyes, fluorescently labeled antibodies Flow cytometry: principle of hydrodynamic focusing, signal detection, analog and digital data processing, data plotting, gating. Various types of analyses, basic applications, summary of commercial hardware and software. Cell sorting: physical principles of cell sorting – advantages and disadvantages, sorting strategies, summary of applications and commercial hardware and software. Practical software data analyses.							
Recommended literature: 1. H.M. Shapiro: Practical Flow Cytometry, WILEY-LISS, 2003. (ISBN:0-471-41125-6) 2. A.L. Givan: Flow Cytometry: First principles, WILEY-LISS, 2001, (ISBN 0-471-22394-8) 3. J. Dolezel a kol.: Flow Cytometry with Plant Cells, Wiley-VCH, 2007, (ISBN: 978-3-527-31487-4)							
Course language:							
Course assessment Total number of assessed students: 113							
A	B	C	D	E	FX	N	P
67.26	0.0	7.96	2.65	2.65	0.0	0.0	19.47
Provides: RNDr. Rastislav Jendželovský, PhD.							
Date of last modification: 24.02.2017							
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, CSc.							

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚBEV/ UK/17		Course name: Urbánna ekológia			
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: 3					
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:					
Course assessment Total number of assessed students: 3					
A	B	C	D	E	FX
100.0	0.0	0.0	0.0	0.0	0.0
Provides: doc. RNDr. Marcel Uhrin, PhD.					
Date of last modification: 28.02.2017					
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, 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:					
Course assessment Total number of assessed students: 49					
A	B	C	D	E	FX
85.71	4.08	2.04	2.04	2.04	4.08
Provides: Mgr. Ondrej Kalina, PhD.					
Date of last modification: 16.02.2017					
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, 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:					
Course assessment Total number of assessed students: 128					
A	B	C	D	E	FX
91.41	5.47	3.13	0.0	0.0	0.0
Provides: RNDr. Igor Majláth, PhD., RNDr. Natália Pipová, PhD.					
Date of last modification: 24.02.2017					
Approved: Guarantee prof. RNDr. Beňadik Šmajda, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚBEV/ VMES/17		Course name: Vývinové a molekulárne mechanizmy v evolúcii stavovcov			
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 0 Per study period: 28 / 0 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:					
Course assessment Total number of assessed students: 5					
A	B	C	D	E	FX
0.0	0.0	100.0	0.0	0.0	0.0
Provides: doc. RNDr. Martin Kunderát, Ph.D.					
Date of last modification: 24.02.2017					
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, 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: 1.	
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:	
Course assessment Total number of assessed students: 55	
abs	n
98.18	1.82
Provides: doc. RNDr. Marcel Uhrin, PhD.	
Date of last modification: 24.02.2017	
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, CSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚBEV/ ZFZ/14		Course name: Zoology and Animal Physiology			
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/EFZ1/03 and ÚBEV/MEB1/03 and ÚBEV/IMU1/03 and ÚBEV/ZOG1/03 and ÚBEV/EB1/99 and ÚBEV/ETO1/03					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Course assessment Total number of assessed students: 44					
A	B	C	D	E	FX
31.82	34.09	22.73	9.09	0.0	2.27
Provides:					
Date of last modification: 24.02.2017					
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚBEV/ ZNFYZ/15		Course name: Basics of Neurophysiology			
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:					
Course assessment Total number of assessed students: 34					
A	B	C	D	E	FX
82.35	11.76	5.88	0.0	0.0	0.0
Provides: RNDr. Ján Gálik, CSc., prof. RNDr. Beňadik Šmajda, CSc.					
Date of last modification: 24.02.2017					
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, 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 oral presentation to 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:					
Course assessment Total number of assessed students: 845					
A	B	C	D	E	FX
23.2	23.55	24.85	18.22	8.17	2.01
Provides: doc. RNDr. Ľubomír Kováč, CSc.					

Date of last modification: 24.02.2017
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, 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: Per study period: 36s 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:	
Course assessment Total number of assessed students: 15	
abs	n
26.67	73.33
Provides: Mgr. Alena Buková, PhD., Mgr. Agata Horbacz, PhD.	
Date of last modification: 23.02.2017	
Approved: Guaranteeprof. RNDr. Beňadik Šmajda, CSc.	