

Provides: RNDr. Rastislav Jendželovský, PhD.
Date of last modification: 23.02.2018
Approved: Co-guaranteedoc. RNDr. Peter Solár, PhD.Co-guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteeprof. RNDr. Eva Čellárová, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: CJP/AJD1/07		Course name: English Language for PhD Students 1			
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: III.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Course assessment Total number of assessed students: 558					
N	Ne	P	Pr	abs	neabs
0.0	0.0	56.99	0.0	43.01	0.0
Provides: PhDr. Helena Petruňová, CSc., Mgr. Zuzana Kolaříková, PhD., Mgr. Zuzana Nad'ová					
Date of last modification: 06.02.2018					
Approved: Co-guaranteedoc. RNDr. Peter Solár, PhD.Co-guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteeprof. RNDr. Eva Čellárová, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: CJP/AJD2/07		Course name: English Language for PhD Students 2			
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: III.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Course assessment Total number of assessed students: 558					
N	Ne	P	Pr	abs	neabs
0.0	0.0	92.29	1.43	6.27	0.0
Provides: PhDr. Helena Petruňová, CSc., Mgr. Zuzana Kolaříková, PhD.					
Date of last modification: 06.02.2018					
Approved: Co-guaranteedoc. RNDr. Peter Solár, PhD.Co-guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteeprof. RNDr. Eva Čellárová, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice							
Faculty: Faculty of Science							
Course ID: ÚBEV/ AMK/15		Course name: Aplikovaná mikrobiológia					
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: Attendance of practicals (at least 90%), final examination							
Learning outcomes: Študenti získajú prehľad o využití mikroorganizmov v priemyselných procesoch pre výrobu biochemikálií a o využití rekombinantných DNA techník v priemysle. Ďalej získajú informácie o kyselinu mliečnu produkujúcich baktériách a ich využití v potravinárskom priemysle a o využití mikroorganizmov pri ochrane životného prostredia – čistenie odpadových vôd, bioremediácia, biopalivá.							
Brief outline of the course: Application of bacteria in industrial processes, biochemicals production. Application of recombinant DNA techniques in industry. Lactic acid bacteria and its application in food industry. Microbiology in food quality control. Application of microorganisms in environment protection – wastewater treatment, bioremediation, biofuels, microbiology of biogas plants.							
Recommended literature:							
Course language:							
Course assessment Total number of assessed students: 14							
A	B	C	D	E	FX	N	P
50.0	14.29	21.43	7.14	0.0	0.0	0.0	7.14
Provides: doc. RNDr. Peter Pristaš, CSc., prof. RNDr. Jana Sedláková, PhD., RNDr. Lenka Maliničová, PhD.							
Date of last modification: 23.02.2018							
Approved: Co-guaranteedoc. RNDr. Peter Solár, PhD.Co-guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteeprof. RNDr. Eva Čellárová, DrSc.							

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice							
Faculty: Faculty of Science							
Course ID: ÚBEV/ BTR1/06		Course name: Plant Biotechnology					
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 3 Per study period: 28 / 42 Course method: present							
Number of credits: 6							
Recommended semester/trimester of the course:							
Course level: I., II., III.							
Prerequisites:							
Conditions for course completion: Active participation at the practicals, written test, protocols, oral examination							
Learning outcomes: To gain theoretical and practical knowledge on plant tissue culture in vitro.							
Brief outline of the course: History of plant tissue culture. Genetics and physiology of plant cell and tissue culture, protoplasts, embryoids and organs cultured in vitro under sterile conditions. Use of the tissue culture in research and praxis. Cryopreservation of plant cells and tissues. Immobilised plant systems. Genetic transformation of plants and expression of foreign genes.							
Recommended literature: Slater A. et al.: Plant Biotechnology. Oxford University Press 2008, 376 pp. Wink M. (Ed.): An Introduction to Molecular Biotechnology. Willey-Blackwell, 2011, 601 pp. Periodicals and Internet sources							
Course language:							
Course assessment Total number of assessed students: 144							
A	B	C	D	E	FX	N	P
38.19	18.75	14.58	8.33	11.81	3.47	0.0	4.86
Provides: prof. RNDr. Eva Čellárová, DrSc., RNDr. Katarína Nigutová, PhD.							
Date of last modification: 23.02.2018							
Approved: Co-guaranteedoc. RNDr. Peter Solár, PhD.Co-guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteeprof. RNDr. Eva Čellárová, DrSc.							

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ CDC/04	Course name: Citation in scientific journal published in the country of residence
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present	
Number of credits: 5	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Course assessment Total number of assessed students: 5	
abs	n
100.0	0.0
Provides:	
Date of last modification: 23.02.2018	
Approved: Co-guaranteedoc. RNDr. Peter Solár, PhD.Co-guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteeprof. RNDr. Eva Čellárová, DrSc.	

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: 1207							
A	B	C	D	E	FX	N	P
24.86	14.66	15.49	14.83	17.4	11.76	0.0	0.99
Provides: prof. RNDr. Eva Čellárová, DrSc., RNDr. Katarína Bruňáková, PhD.							
Date of last modification: 23.02.2018							
Approved: Co-guaranteedoc. RNDr. Peter Solár, PhD.Co-guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteeprof. RNDr. Eva Čellárová, DrSc.							

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ CM/04	Course name: Citation in monograph
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: III.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Course assessment Total number of assessed students: 0	
Provides:	
Date of last modification: 23.02.2018	
Approved: Co-guaranteedoc. RNDr. Peter Solár, PhD.Co-guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteeprof. RNDr. Eva Čellárová, DrSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice							
Faculty: Faculty of Science							
Course ID: ÚBEV/CTP1/01		Course name: Cytopathology					
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: To provide the students with a knowledge of basic biological principles of carcinogenesis.							
Brief outline of the course: Tumor development. Tumor growth and metastatic potential. Cell cycle regulation and pathogenesis of cancer. Apoptosis in tumor growth and metastasis. Oncogenes and cancer. Tumor suppressor genes. Metastasis suppressor genes. Angiogenesis in cancer. Cell surface glycoproteins and their receptors. Proteinases and their inhibitors in cancer invasion. Radio-, chemo- and immunotherapy.							
Recommended literature: Sherbet, G.V., Lakshmi, M. S.: The Genetics of Cancer. Genes Associated with Cancer Invasion, Metastasis and Cell Proliferation. Academic Press, London, 1997 Shebert, G. V.: The biology of tumor malignancy. Academic Press, London, 1982							
Course language:							
Course assessment Total number of assessed students: 303							
A	B	C	D	E	FX	N	P
38.61	22.44	20.79	9.57	5.28	2.31	0.0	0.99
Provides: prof. RNDr. Peter Fedoročko, CSc.							
Date of last modification: 23.02.2018							
Approved: Co-guaranteedoc. RNDr. Peter Solár, PhD.Co-guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteeprof. RNDr. Eva Čellárová, DrSc.							

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ CZC/04	Course name: Citation in scientific journal published abroad
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present	
Number of credits: 10	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Course assessment Total number of assessed students: 36	
abs	n
100.0	0.0
Provides:	
Date of last modification: 23.02.2018	
Approved: Co-guaranteedoc. RNDr. Peter Solár, PhD.Co-guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteeprof. RNDr. Eva Čellárová, DrSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/DK/04	Course name: Conference in the country of residence
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: III.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Course assessment Total number of assessed students: 131	
abs	n
100.0	0.0
Provides:	
Date of last modification: 23.02.2018	
Approved: Co-guaranteedoc. RNDr. Peter Solár, PhD.Co-guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteeprof. RNDr. Eva Čellárová, DrSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/DKC/04	Course name: Journals registered in the Current Contents Connect database and published in the country of residence
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present	
Number of credits: 15	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Course assessment Total number of assessed students: 16	
abs	n
100.0	0.0
Provides:	
Date of last modification: 23.02.2018	
Approved: Co-guaranteedoc. RNDr. Peter Solár, PhD.Co-guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteeprof. RNDr. Eva Čellárová, DrSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/DKZU/04	Course name: International conference taking place in the country of residence
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: III.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Course assessment Total number of assessed students: 112	
abs	n
100.0	0.0
Provides:	
Date of last modification: 23.02.2018	
Approved: Co-guaranteedoc. RNDr. Peter Solár, PhD.Co-guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteeprof. RNDr. Eva Čellárová, DrSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ DNC/04	Course name: Journals not registered in the Current Contents Connect database and published in the country of residence
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present	
Number of credits: 5	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Course assessment Total number of assessed students: 40	
abs	n
100.0	0.0
Provides:	
Date of last modification: 23.02.2018	
Approved: Co-guaranteedoc. RNDr. Peter Solár, PhD.Co-guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteeprof. RNDr. Eva Čellárová, DrSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/DZS/14	Course name: Doctoral exam
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present	
Number of credits: 5	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisites: ÚBEV/VEK3/11	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Course assessment Total number of assessed students: 48	
N	P
0.0	100.0
Provides:	
Date of last modification: 23.02.2018	
Approved: Co-guaranteedoc. RNDr. Peter Solár, PhD.Co-guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteeprof. RNDr. Eva Čellárová, DrSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice							
Faculty: Faculty of Science							
Course ID: ÚBEV/ EMK/15		Course name: Environmentálna mikrobiológia					
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: Attendance of practicals (at least 90%), final oral examination							
Learning outcomes: To provide students data on participation of microorganisms in biosphere processes, characteristics of most frequently occurring microbial communities and interactions of microorganisms with other organisms.							
Brief outline of the course: Evolution and biodiversity of microorganisms, microorganisms in environment, the influence of abiotic factors on microorganisms, biogeochemical cycles, interactions between microorganisms and other organisms							
Recommended literature:							
Course language:							
Course assessment Total number of assessed students: 44							
A	B	C	D	E	FX	N	P
45.45	29.55	0.0	0.0	4.55	0.0	0.0	20.45
Provides: doc. RNDr. Peter Pristaš, CSc., prof. RNDr. Jana Sedláková, PhD., RNDr. Lenka Maliničová, PhD.							
Date of last modification: 23.02.2018							
Approved: Co-guaranteedoc. RNDr. Peter Solár, PhD.Co-guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteeprof. RNDr. Eva Čellárová, DrSc.							

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ FG/14	Course name: Functional genomics
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: Active participation in practical and theoretical courses	
Learning outcomes: Functional genomics attempts to answer questions about the function of DNA at the levels of genes, RNA transcripts, and proteins. A key characteristic of functional genomics studies is their genome-wide approach to these questions, generally involving high-throughput methods rather than a more traditional “gene-by-gene” approach. The outcome of this course will be understanding of the approaches and methods used in functional genomics and their application in research as well as in practice.	
Brief outline of the course: <ul style="list-style-type: none"> • Introduction to functional genomics • Genome and functional genomics: sequenced model organisms, conceptual and methodological input of genome sequencing, structural vs. functional genome annotation • Genome-wide reverse genetics: techniques to create collections of genome-wide mutants and their use in functional genomics • Transcriptomics: methods to obtain transcriptome data, data analysis, data mining • Proteomics: methods to obtain proteome data, quantitative vs. qualitative proteomics, data analysis, data mining • Metabolomics: methods to obtain metabolomic data, quantitative vs. qualitative metabolomics, data analysis, data mining * Interactomics - protein networks, methods in interactome and signalome studies, data analysis, practical use of the acquired knowledge on interactome and signalome • Biological databases and other resources for functional genome analysis • A real-case applications of the functional genomics 	
Recommended literature: Internet sources, PowerPoint Presentation	
Course language: English	
Course assessment Total number of assessed students: 91	

A	B	C	D	E	FX	N	P
25.27	25.27	25.27	6.59	12.09	2.2	0.0	3.3
Provides: RNDr. Katarína Bruňáková, PhD., RNDr. Andrea Kimáková, PhD., RNDr. Katarína Nigutová, PhD., RNDr. Linda Petijová, PhD., RNDr. Andrea Schreiberová, PhD.							
Date of last modification: 23.02.2018							
Approved: Co-guaranteedoc. RNDr. Peter Solár, PhD.Co-guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteeprof. RNDr. Eva Čellárová, DrSc.							

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice							
Faculty: Faculty of Science							
Course ID: ÚBEV/GC1/01		Course name: Human 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:							
Learning outcomes: To provide students with a basics of human genetics, with the role of genetic factors in pathologic processes, with the inheritance, diagnostics and treatment of genetic disorders.							
Brief outline of the course: The genetic basics of physiological variability and pathological traits of individuals; human population genetics; the patterns of inheritance and pedigree problem solving; the basic methods used in human genetics - genealogy, linkage analysis and the gene mapping, cytogenetic analysis and karyotyping, the DNA diagnosis of pathological traits; the treatment of genetic disorders.							
Recommended literature: Thompson JS, Thompson MW (2001): Genetics in Medicine 6/e. W.B.Sounders Company, Philadelphia, Pennsylvania, USA Friedman JM, Dill FJ, Hayden MR, McGillivray BC (1996): Genetics 2/e. Williams & Wilkins, Baltimore, Maryland, USA							
Course language:							
Course assessment Total number of assessed students: 1111							
A	B	C	D	E	FX	N	P
25.38	14.31	16.29	14.22	17.19	12.06	0.0	0.54
Provides: RNDr. Katarína Bruňáková, PhD.							
Date of last modification: 23.02.2018							
Approved: Co-guaranteedoc. RNDr. Peter Solár, PhD.Co-guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteeprof. RNDr. Eva Čellárová, DrSc.							

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice							
Faculty: Faculty of Science							
Course ID: ÚBEV/ GEP/12		Course name: Population Genetics					
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., III.							
Prerequisites:							
Conditions for course completion: Exam.							
Learning outcomes: Acquire knowledge about genetic interactions in population. Describe the theoretical and historical ground of population genetics. Identify, characterize and compare fundamental mechanisms (mutation, selection, migration, genetic drift). Interactions leading to intra- and interpopulation variability in population structure. Genetic diversity analysis.							
Brief outline of the course: Factors affecting populations. Genetic variability in populations. Polymorphism, heterozygosity. Fundamental models in population genetics. Hardy-Weinberg theorem for 2, 3 and n alleles. Special cases of random mating (Bruce's genotype ratios, Sex-linked genes). Population genetics and mutations. Assortative mating, calculation and interpretation of inbreeding coefficient. Genetic drift, fixation/elimination of alleles in small populations. One-way, two-way migration. Natural selection in haploid and diploid populations. Populations of plants, animals and human. Darwin's evolution theory, molecular evolution.							
Recommended literature: HALLIBURTON. R. (2004): Introduction to Population Genetics. Pearson Prentice Hall. HARTL, D. L. and CLARK, A. G. (2007): Principles of Population Genetics. 4th ed. Sinauer. RELICHOVÁ, J. (2001): Genetika populací. Masarykova univerzita Brno. Hedrick, P.W.: Genetics of Populations. Jones and Bartlett Publishers 2000.							
Course language:							
Course assessment Total number of assessed students: 955							
A	B	C	D	E	FX	N	P
19.16	14.87	14.66	16.54	20.21	13.72	0.0	0.84
Provides: RNDr. Linda Petijová, PhD., RNDr. Katarína Bruňáková, PhD.							
Date of last modification: 23.02.2018							

Approved: Co-guaranteedoc. RNDr. Peter Solár, PhD.Co-guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteeprof. RNDr. Eva Čellárová, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ GMd/12	Course name: Génové manipulácie
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: III.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Course assessment Total number of assessed students: 3	
abs	n
100.0	0.0
Provides: doc. RNDr. Peter Pristaš, CSc., RNDr. Mariana Kolesárová, PhD.	
Date of last modification: 23.02.2018	
Approved: Co-guaranteedoc. RNDr. Peter Solár, PhD.Co-guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteeprof. RNDr. Eva Čellárová, DrSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/IG/04	Course name: Receiving a grant under Internal Scientific Grant System (VVGS)
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present	
Number of credits: 10	
Recommended semester/trimester of the course: 6., 8.	
Course level: III.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Course assessment Total number of assessed students: 146	
abs	n
100.0	0.0
Provides:	
Date of last modification: 23.02.2018	
Approved: Co-guaranteedoc. RNDr. Peter Solár, PhD.Co-guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteeprof. RNDr. Eva Čellárová, DrSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: Dek. PF UPJŠ/JSD/14	Course name: Spring School for PhD Students
Course type, scope and the method: Course type: Lecture Recommended course-load (hours): Per week: Per study period: 4d Course method: present	
Number of credits: 2	
Recommended semester/trimester of the course:	
Course level: III.	
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: prof. RNDr. Katarína Cechlárová, DrSc.	
Date of last modification: 19.02.2018	
Approved: Co-guaranteedoc. RNDr. Peter Solár, PhD.Co-guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteeprof. RNDr. Eva Čellárová, DrSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/MK/04	Course name: International Conference
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present	
Number of credits: 6	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Course assessment Total number of assessed students: 200	
abs	n
100.0	0.0
Provides:	
Date of last modification: 23.02.2018	
Approved: Co-guaranteedoc. RNDr. Peter Solár, PhD.Co-guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteeprof. RNDr. Eva Čellárová, DrSc.	

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. Viral models in genetics (Tobacco mosaic virus, Lambda phage, PhiX174 phage). Prokaryotic model systems (Escherichia coli, Diplococcus pneumoniae, Agrobacterium tumefaciens and A. rhizogenes). Another prokaryotic models (Bacillus subtilis, Caulobacter crescentus, Mycoplasma genitalium, Synechocystis sp.), Model systems of simple eukaryotic organisms (Saccharomyces cerevisiae, Neurospora crassa, Aspergillus nidulans, Dictiostelium discoideum). Animal model systems (Drosophila melanogaster, Caenorhabditis elegans, Danio rerio, Mus musculus). Another animal models (Xenopus laevis, Ambystoma mexicanum, Chrysemys picta, Anolis carolinensis, Fugu rubripes, Gallus gallus, Heterocephalus glaber). Plant model organisms (Pisum sativum, Arabidopsis thaliana, Nicotiana tabacum, Zea mays, Selaginella moellendorffii, Brachypodium distachyon, Lotus japonicus, Populus trichocarpa). Mendel's laws. Morgan's rules. Genetic databases. Model organisms and their role in the treatment of human genetic disorders.	
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: 1190	

A	B	C	D	E	FX	N	P
23.78	15.13	15.63	14.54	17.9	12.02	0.0	1.01
Provides: prof. RNDr. Eva Čellárová, DrSc., RNDr. Andrea Kimáková, PhD., RNDr. Katarína Nigutová, PhD.							
Date of last modification: 23.02.2018							
Approved: Co-guaranteedoc. RNDr. Peter Solár, PhD.Co-guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteeprof. RNDr. Eva Čellárová, DrSc.							

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: 349							
A	B	C	D	E	FX	N	P
35.82	22.06	12.61	14.04	8.6	5.44	0.0	1.43
Provides: prof. RNDr. Eva Mišúrová, CSc., RNDr. Zuzana Jendželovská, PhD.							
Date of last modification: 23.02.2018							
Approved: Co-guaranteedoc. RNDr. Peter Solár, PhD.Co-guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteeprof. RNDr. Eva Čellárová, DrSc.							

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ NEM/04	Course name: Implementation of new experimental methodology
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present	
Number of credits: 15	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Course assessment Total number of assessed students: 70	
abs	n
100.0	0.0
Provides:	
Date of last modification: 23.02.2018	
Approved: Co-guaranteedoc. RNDr. Peter Solár, PhD.Co-guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteeprof. RNDr. Eva Čellárová, DrSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ NZ/04	Course name: Non-reviewed collections of papers and monographs published abroad or in the country of residence
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: III.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Course assessment Total number of assessed students: 117	
abs	n
100.0	0.0
Provides:	
Date of last modification: 23.02.2018	
Approved: Co-guaranteedoc. RNDr. Peter Solár, PhD.Co-guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteeprof. RNDr. Eva Čellárová, DrSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ODZP/14	Course name: Defence of Doctoral Thesis
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present	
Number of credits: 30	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Course assessment Total number of assessed students: 33	
N	P
0.0	100.0
Provides:	
Date of last modification: 23.02.2018	
Approved: Co-guaranteedoc. RNDr. Peter Solár, PhD.Co-guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteeprof. RNDr. Eva Čellárová, DrSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ PDS/18	Course name: Writing Dissertation Work
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present	
Number of credits: 15	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Course assessment Total number of assessed students: 10	
N	P
0.0	100.0
Provides:	
Date of last modification: 17.04.2018	
Approved: Co-guaranteedoc. RNDr. Peter Solár, PhD.Co-guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteeprof. RNDr. Eva Čellárová, DrSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ PDS/14	Course name: Writing Dissertation Work
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present	
Number of credits: 15	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Course assessment Total number of assessed students: 37	
abs	n
100.0	0.0
Provides:	
Date of last modification: 23.02.2018	
Approved: Co-guaranteedoc. RNDr. Peter Solár, PhD.Co-guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteeprof. RNDr. Eva Čellárová, DrSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ PVS/04	Course name: Author's patents, discoveries, software
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: III.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Course assessment Total number of assessed students: 1	
abs	n
100.0	0.0
Provides:	
Date of last modification: 23.02.2018	
Approved: Co-guaranteedoc. RNDr. Peter Solár, PhD.Co-guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteeprof. RNDr. Eva Čellárová, DrSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice		
Faculty: Faculty of Science		
Course ID: KPE/ PgVU/17	Course name: Pedagogy for university teachers	
Course type, scope and the method: Course type: Lecture Recommended course-load (hours): Per week: Per study period: 28s Course method: present		
Number of credits: 5		
Recommended semester/trimester of the course:		
Course level: III.		
Prerequisites:		
Conditions for course completion:		
Learning outcomes:		
Brief outline of the course:		
Recommended literature:		
Course language:		
Course assessment Total number of assessed students: 12		
abs	n	neabs
100.0	0.0	0.0
Provides: PaedDr. Renáta Orosová, PhD.		
Date of last modification: 05.02.2018		
Approved: Co-guaranteedoc. RNDr. Peter Solár, PhD.Co-guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteeprof. RNDr. Eva Čellárová, DrSc.		

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice		
Faculty: Faculty of Science		
Course ID: KPPaPZ/PsVU/17	Course name: Psychology for University Lecturers	
Course type, scope and the method: Course type: Lecture Recommended course-load (hours): Per week: Per study period: 28s Course method: present		
Number of credits: 5		
Recommended semester/trimester of the course:		
Course level: III.		
Prerequisites:		
Conditions for course completion:		
Learning outcomes:		
Brief outline of the course:		
Recommended literature:		
Course language:		
Course assessment Total number of assessed students: 12		
abs	n	neabs
100.0	0.0	0.0
Provides: Mgr. Marta Dobrowolska Kulanová, PhD., doc. PhDr. Beata Gajdošová, PhD.		
Date of last modification: 20.02.2018		
Approved: Co-guaranteedoc. RNDr. Peter Solár, PhD.Co-guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteeprof. RNDr. Eva Čellárová, DrSc.		

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ RZ/04	Course name: Peer-reviewed collections of papers and monographs published abroad or in in the country of residence
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present	
Number of credits: 5	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Course assessment Total number of assessed students: 259	
abs	n
100.0	0.0
Provides:	
Date of last modification: 23.02.2018	
Approved: Co-guaranteedoc. RNDr. Peter Solár, PhD.Co-guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteeprof. RNDr. Eva Čellárová, DrSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/SCI/04	Course name: Citation registered in Science Citation Index
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: III.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Course assessment Total number of assessed students: 52	
abs	n
100.0	0.0
Provides:	
Date of last modification: 23.02.2018	
Approved: Co-guaranteedoc. RNDr. Peter Solár, PhD.Co-guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteeprof. RNDr. Eva Čellárová, DrSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ SDPR/04	Course name: Co-worker of project supported by national grant schemes
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: III.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Course assessment Total number of assessed students: 378	
abs	n
100.0	0.0
Provides:	
Date of last modification: 23.02.2018	
Approved: Co-guaranteedoc. RNDr. Peter Solár, PhD.Co-guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteeprof. RNDr. Eva Čellárová, DrSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ SMPR/04	Course name: Co-worker of project supported by international grant schemes
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present	
Number of credits: 15	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Course assessment Total number of assessed students: 39	
abs	n
100.0	0.0
Provides:	
Date of last modification: 23.02.2018	
Approved: Co-guaranteedoc. RNDr. Peter Solár, PhD.Co-guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteeprof. RNDr. Eva Čellárová, DrSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/SSOL/04	Course name: Samostatné štúdium odbornej literatúry
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: III.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Course assessment Total number of assessed students: 232	
abs	n
100.0	0.0
Provides:	
Date of last modification: 23.02.2018	
Approved: Co-guaranteedoc. RNDr. Peter Solár, PhD.Co-guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteeprof. RNDr. Eva Čellárová, DrSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ VYS/04	Course name: Talk given at scholar seminars of department or institute
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: III.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Course assessment Total number of assessed students: 213	
abs	n
100.0	0.0
Provides:	
Date of last modification: 23.02.2018	
Approved: Co-guaranteedoc. RNDr. Peter Solár, PhD.Co-guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteeprof. RNDr. Eva Čellárová, DrSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ ZKC/04	Course name: Journals registered in the Current Contents Connect database and published abroad
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: III.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Course assessment Total number of assessed students: 232	
abs	n
100.0	0.0
Provides:	
Date of last modification: 23.02.2018	
Approved: Co-guaranteedoc. RNDr. Peter Solár, PhD.Co-guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteeprof. RNDr. Eva Čellárová, DrSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ ZNC/04	Course name: Journals not registered in the Current Contents Connect database and published abroad
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present	
Number of credits: 5	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Course assessment Total number of assessed students: 52	
abs	n
100.0	0.0
Provides:	
Date of last modification: 23.02.2018	
Approved: Co-guaranteedoc. RNDr. Peter Solár, PhD.Co-guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteeprof. RNDr. Eva Čellárová, DrSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ ZSP/04	Course name: Realisation of study/research stay abroad
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: 6., 8.	
Course level: III.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Course assessment Total number of assessed students: 88	
abs	n
100.0	0.0
Provides:	
Date of last modification: 23.02.2018	
Approved: Co-guaranteedoc. RNDr. Peter Solár, PhD.Co-guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteeprof. RNDr. Eva Čellárová, DrSc.	