University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: CJP/

Course name: English Language for PhD Students 1

AJD1/07

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.

Prerequisities:

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 Naďová

Date of last modification: 06.02.2018

Approved: Co-guaranteedoc. RNDr. Viktor Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík, DrSc.Co-guaranteedoc. RNDr. Mária Kožurková, CSc.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: CJP/

Course name: English Language for PhD Students 2

AJD2/07

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.

Prerequisities:

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. Viktor Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík,

DrSc.Co-guaranteedoc. RNDr. Mária Kožurková, CSc.

University: P. J. Šafá	rik University in Ko	ošice	
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ Course name: Bioinformatics BINF/06			
Course type, scope a Course type: Lectur Recommended cour Per week: 4/2 Per Course method: pre	re / Practice rse-load (hours): study period: 56 /	28	
Number of credits: 1	0		
Recommended seme	ster/trimester of tl	he course:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asse	ssed students: 20		
	N	P	
	0.0 100.0		
Provides: doc. RNDr	. Peter Pristaš, CSc.		
Date of last modifica	tion: 26.02.2018		
Approved: Co-guara		tor Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík,	

University: P. J. Šafá	rik University in Košic	ee e	
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ CDC/04			
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period: esent		
Number of credits: 5			
Recommended seme	ster/trimester of the o	course:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asse	ssed students: 1		
	abs n		
100.0 0.0			
Provides:		·	
Date of last modifica	tion: 26.02.2018		
	nteedoc. RNDr. Viktor c. RNDr. Mária Kožur	Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík,	

University: P. J. Šafá	rik University in Ko	šice	
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ CM/04	Course ID: ÚCHV/ Course name: Citation in the Monograph		
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): y period:		
Number of credits: 2	20		
Recommended seme	ster/trimester of the	e course:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asse	ssed students: 3		
	abs	n	
	100.0 0.0		
Provides:		•	
Date of last modifica	tion: 26.02.2018		
Approved: Co-guara DrSc.Co-guaranteedo		or Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík, zurková, CSc.	

University: P. J. Šafá	rik University in Koš	ice	
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ CZC/04	Course ID: ÚCHV/ Course name: Citation in the International Scientific Journal CZC/04		
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of credits: 1	.0		
Recommended seme	ster/trimester of the	course:	
Course level: III.	,		
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asse	ssed students: 36		
	abs	n	
	100.0 0.0		
Provides:			
Date of last modifica	tion: 26.02.2018		
Approved: Co-guara DrSc.Co-guaranteedo		or Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík, urková, CSc.	

University: P. J. Šafá	rik University in Koši	 ce	
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ DK/04	ourse ID: ÚCHV/ Course name: Local Conference		
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of credits: 2			
Recommended seme	ster/trimester of the	course:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	nture:		
Course language:			
Course assessment Total number of asse	ssed students: 95		
	abs	n	
	100.0 0.0		
Provides:		·	
Date of last modifica	tion: 26.02.2018		
Approved: Co-guara: DrSc.Co-guaranteedo		Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík, rková, CSc.	

University: P. J. Šafá	rik University in Ko	šice	
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ DKC/04	Course ID: ÚCHV/ Course name: Local Currented Journal OKC/04		
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): y period:		
Number of credits: 1	5		
Recommended seme	ster/trimester of the	e course:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asse	ssed students: 10		
	abs	n	
	100.0 0.0		
Provides:		·	
Date of last modifica	tion: 26.02.2018		
Approved: Co-guara DrSc.Co-guaranteedo		or Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík, urková, CSc.	

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ DKZU/04	Course ID: ÚCHV/ Course name: Local Conference with Foreign Participation OKZU/04		
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): y period:		
Number of credits: 4	ļ 		
Recommended seme	ster/trimester of the cour	se:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	ture:		
Course language:			
Course assessment Total number of asse	ssed students: 185		
	abs	n	
100.0 0.0			
Provides:			
Date of last modifica	tion: 26.02.2018		
	nteedoc. RNDr. Viktor Víg c. RNDr. Mária Kožurkova	laský, PhD.Guaranteeprof. Ing. Marián Antalík,	

University: P. J. Šafá	rik University in Košio	ee	
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ DNC/04			
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period: esent		
Number of credits: 5			
Recommended seme	ster/trimester of the	course:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asse	ssed students: 17		
	abs n		
100.0 0.0			
Provides:		·	
Date of last modifica	tion: 26.02.2018		
	nteedoc. RNDr. Viktor c. RNDr. Mária Kožur	Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík, ková CSc	

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ DZS/15	Course ID: ÚCHV/ Course name: Doctoral Exam DZS/15		
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present			
Number of credits: 5			
	ster/trimester of the cou	rse:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	ture:		
Course language:			
Course assessment Total number of asses	ssed students: 37		
	N P		
0.0 100.0			
Provides:			
Date of last modifica	tion: 21.09.2017		
Approved: Co-guaranteedoc. RNDr. Viktor Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík, DrSc.Co-guaranteedoc. RNDr. Mária Kožurková, CSc.			

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ FBB/06	ourse ID: ÚCHV/ Course name: Physiology and Biochemistry of Rumen Microorganisms		
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 4 / 2 Per study period: 56 / 28 Course method: present			
Number of credits: 1			
	ster/trimester of the cours	e:	
Course level: III.			
Prerequisities:	Prerequisities:		
Conditions for cours	Conditions for course completion:		
Learning outcomes:	Learning outcomes:		
Brief outline of the c	ourse:		
Recommended litera	nture:		
Course language:			
Course assessment Total number of assessed students: 9			
	N	P	
	0.0 100.0		
Provides: doc. RNDr. Peter Javorský, DrSc., doc. RNDr. Peter Pristaš, CSc.			
Date of last modification: 26.02.2018			
Approved: Co-guaranteedoc. RNDr. Viktor Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík, DrSc.Co-guaranteedoc. RNDr. Mária Kožurková, CSc.			

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of Science			
Course ID: ÚCHV/ GI/06	ourse ID: ÚCHV/ Course name: Genetic Engineering I/06		
Course type, scope a Course type: Lectur Recommended cour Per week: 4/2 Per Course method: pre	re / Practice rse-load (hours): study period: 56 / 28		
Number of credits: 1	0		
Recommended seme	ster/trimester of the cours	e:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended literature:			
Course language:			
Course assessment Total number of asse	ssed students: 15		
	N P		
	0.0 100.0		
Provides: doc. RNDr. Peter Pristaš, CSc.			
Date of last modifica	tion: 26.02.2018		
	nteedoc. RNDr. Viktor Vígla c. RNDr. Mária Kožurková.	nský, PhD.Guaranteeprof. Ing. Marián Antalík, CSc.	

University: P. J. Šafá	rik University in Ko	ošice	
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ IG/04	Course ID: ÚCHV/ Course name: Acquirement of Internal Grant		
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of credits: 1	0		
Recommended seme	ster/trimester of th	ne course:	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the c	course:		
Recommended litera	nture:		
Course language:			
Course assessment Total number of asse	ssed students: 173		
	abs n		
100.0 0.0			
Provides: prof. RND	r. Jozef Gonda, DrS	c.	
Date of last modifica	ntion: 26.02.2018		
Approved: Co-guara		tor Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík,	

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of Science			
Course ID: Dek. PF UPJŠ/JSD/14	Course ID: Dek. PF Course name: Spring School for PhD Students UPJŠ/JSD/14		
Course type, scope a Course type: Lectur Recommended cour Per week: Per stud Course method: pre	re rse-load (hours): ly period: 4d		
Number of credits: 2			
Recommended seme	ster/trimester of the cours	e:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended literature:			
Course language:			
Course assessment Total number of assessed students: 121			
	abs		
	100.0 0.0		
Provides: prof. RNDr. Katarína Cechlárová, DrSc.			
Date of last modification: 19.02.2018			
Approved: Co-guaranteedoc. RNDr. Viktor Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík, DrSc.Co-guaranteedoc. RNDr. Mária Kožurková, CSc.			

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ | **Course name:** Conformational Stability of Proteins

KSB/13

Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours):

Per week: 4 / 2 Per study period: 56 / 28

Course method: present

Number of credits: 8

Recommended semester/trimester of the course:

Course level: III.

Prerequisities:

Conditions for course completion:

Examination

Learning outcomes:

Student should attain extended knowledge in the field of conformation properties of proteins, folding and biosynthesis of proteins, formation and characteristics of missfodled and agregated proteins, new techniques in study of proteins: solvent engineering, display/evolution technologies.

Brief outline of the course:

- 1. Chemical properties of polypeptides (the polymeric nature of proteins, amino acid residues, the polypeptide backbone..).
- 2. Protein structure determination methods. Physical interaction that determine the properties of proteins, conformational properties of polypeptide chains. Biosynthesis of proteins.
- 3. Proteins in solution and in membrane (folded state, missfolded states and denatured states of globular proteins..) stability of the folded conformations of proteins, flexibility and dynamics of protein structure. Misfolded and aggregated states of proteins.
- 4. Protein stability thermodynamic and kinetic stability. Methods for determination of protein stability. Modification of protein stability: solvent engineering, display/evolution technologies.

Recommended literature:

- 1. David L. Nelson, Michael M. Fox, Lenhinger principles of biochemistry, W.H.Freeman, New York, 2004.
- 2. J.M. Berg, J.L. Tymoczko, L. Stryer, Biochemistry, W.H.Freeman, New York, 2007.
- 3. Thomas E. Creighton, Proteins, Structure and Molecular Properties (2nd Ed.), W.H.Freeman; New York, 1993.
- 4. Articles from Scientific Journals.

Course language:

Course assessment

Total number of assessed students: 3

N	P
0.0	100.0

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

Date of last modification: 26.02.2018

Approved: Co-guaranteedoc. RNDr. Viktor Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík, DrSc.Co-guaranteedoc. RNDr. Mária Kožurková, CSc.

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ MK/04	Course ID: ÚCHV/ Course name: International Conference		
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of credits: 6)		
Recommended seme	ster/trimester of the cour	se:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	Recommended literature:		
Course language:			
Course assessment Total number of asse	ssed students: 195		
	abs		
100.0 0.0			
Provides:			
Date of last modifica	tion: 26.02.2018		
	nteedoc. RNDr. Viktor Víg c. RNDr. Mária Kožurkova	laský, PhD.Guaranteeprof. Ing. Marián Antalík,	

University: P. J. Šafárik University in Košice			
Faculty: Faculty of Science			
Course ID: ÚCHV/ MPEP/06	Course name: Methodology of Experimental Work		
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 seme	ster/trimester of the cours	e:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:	Learning outcomes:		
Brief outline of the c	ourse:		
Recommended litera	nture:		
Course language:	Course language:		
Course assessment Total number of assessed students: 14			
abs n			
100.0 0.0			
I .	2 .	. RNDr. Mária Kožurková, CSc., prof. Ing. ký, PhD., doc. RNDr. Erik Sedlák, PhD.	
Date of last modification: 26.02.2018			
Approved: Co-guaranteedoc. RNDr. Viktor Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík, DrSc.Co-guaranteedoc. RNDr. Mária Kožurková, CSc.			

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ | Course name: Modern Trends in Biotechnology

MTB/13

Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 3 / 1 Per study period: 42 / 14

Course method: present

Number of credits: 6

Recommended semester/trimester of the course:

Course level: III.

Prerequisities:

Conditions for course completion:

Examination

Learning outcomes:

To acquaint students with the latest knowledge and trends in biotechnology.

Brief outline of the course:

Methods, disciplines and the use of biotechnology. The material base for biotechnology. Genetic engineering, cloning, artificial insemination and conventional techniques of plant biotechnology. Biomass - Biotechnology substrate. Biogas. Fermentation processes, cultivation equipment, types of fermenters and mixers. Food Biotechnology: alcoholic fermentation, production of spirits, beer and wine. Production of dairy products, amino acids and vitamins. Manufacture of organic solvents: acetone, butanol, ethanol. Biotechnology in medicine. Production of antibiotics, vaccines and proteins for therapeutic purposes. Wastewater treatment: biological filters, membrane bioreactors, sludge disposal, removal of solid impurities and water disinfection.

Recommended literature:

- 1. Y.H. Hui, Ph.D, Wai-Kit Nip, Leo M.L. Nollet, PhD, Gopinadhan Paliyath, Ph.D., Benjamin K. Simpson, Food Biochemistry and Food Processing, Wiley-Blackwell, 2006.
- 2. E. M. T. El-Mansi, C. F. A. Bryce, Arnold L. Demain, A.R. Allman, Fermentation Microbiology and Biotechnology, Second Edition, CRS Press, 2006.
- 3. Principles of Fermentation Technology, Second Edition, P F Stanbury, S. Hall, A. Whitaker, Elsevier Science Ltd., 1999.
- 4. J. G. Black, Microbiology (seventh edition), John Wiley & Sons, Inc. 2008.
- 5. J. E. Smith, Biotechnology (fifth edition), UK, University Press, Cambridge, 2009.
- 6. W. Bains, Biotechnology from A-Z (third edition), Oxford university Press, 2004.

Course language:

Course assessment

Total number of assessed students: 2

Total Halliot of abbedded Statellis. 2	
N	P
0.0	100.0

Provides: RNDr. Danica Sabolová, PhD.

Date of last modification: 26.02.2018

Approved: Co-guaranteedoc. RNDr. Viktor Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík,

DrSc.Co-guaranteedoc. RNDr. Mária Kožurková, CSc.

University: P. J. Šafá	rik University in Kos	šice	
Faculty: Faculty of Science			
Course ID: ÚCHV/ NEM/04	Course name: Introduction of a New Experimental Method		
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period: esent		
Number of credits: 1			
Recommended seme	ster/trimester of the	e course:	
Course level: III.		-	
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asse	ssed students: 7		
	abs n		
100.0 0.0			
Provides:			
Date of last modification: 26.02.2018			
Approved: Co-guarate DrSc.Co-guaranteedo		or Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík, urková, CSc.	

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ | Course name: Nucleic Acids: Structure and Function

NKSF/13

Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 3 / 1 Per study period: 42 / 14

Course method: present

Number of credits: 6

Recommended semester/trimester of the course:

Course level: III.

Prerequisities:

Conditions for course completion:

Examination

Learning outcomes:

The main objective of the course is to provide studenst of PhD degree the newest trends in the field of molecular biology and biochemistry focused on nucleic acids.

Brief outline of the course:

The lead-in of the molecular genetics and biology problems, the implication of the nucleic acids for processes occurring in cells. Dividing the nucleic acids according to their chemical compound and their function, localization in the cell organelles, DNA and RNA structure, DNA topology, the chromatine structure, the histons function, dividing of the small RNA molecules and their catalytic function. Transcription in eukaryotických and prokaryotic cells: promoters, enhancers, silencers, transcription factors, initiation, post-transcription modification, processing of precursor RNA: covalent modification, hnRNA, polyadenylation, cap creation, splicing and RNA editing, transcription regulation, negative-positive, anti-termination, attenuation, cis- and transregulating elements, iRNA. Translation of the eukaryotic and prokaryotic genomes: iniciation, elongation, termination, post-translating modification, regulating mechanisms, protein folding, in vitro translating systems. Replication: iniciation, ori/ARS, the replicant factor processing mechanisms, PCR and its variations. The nucleic acids metabolism, syntheses and degradation of the purine and pyrimidin bases, gout. Mutations: the hereditary illnesses, the infulence of the outer and the initial factors to the mutagenesis induction, definition of the oncogenes and the tumor suppressing genes. Viruses: genome, morphology, function. Carcinogenesis and gene therapy. The Outlook for a successful cancer treatment. The cons and pros of the known therapeutic methods.

Recommended literature:

- 1. B. Alberts, A. Johnson, J. Lewis, M. Raff, K. Roberts, P.: Walter Molecular Biology of the Cell, Garland Science, Fifth edition, New York, NY, 2008.
- 2. Neidle S.: Cancer Drug Design and Discovery, Academic Press, First edition, 2007.
- 3. Krauss G.: Biochemistry of Signal Transduction and Regulation, Wiley-VCH Verlag GmbH, Second Edition, 2003.

Course language:

Course assessment

Total number of assessed students: 6		
N	P	
0.0	100.0	
Provides: doc. RNDr. Viktor Víglaský, PhD.		
Date of last modification: 26.02.2018		
Approved: Co-guaranteedoc. RNDr. Viktor Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík, DrSc.Co-guaranteedoc. RNDr. Mária Kožurková, CSc.		

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ NZ/04	Durse ID: ÚCHV/ Course name: Not-Reviewed International or Local Proceedings Z/04		
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of credits: 2	2		
Recommended seme	ster/trimester of the co	irse:	
Course level: III.	,		
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	nture:		
Course language:			
Course assessment Total number of asse	ssed students: 162		
	abs		
100.0 0.0			
Provides:		·	
Date of last modifica	ntion: 26.02.2018		
	nteedoc. RNDr. Viktor V c. RNDr. Mária Kožurko	íglaský, PhD.Guaranteeprof. Ing. Marián Antalík, vá, CSc.	

University: P. J. Šafárik University in Košice			
Faculty: Faculty of Science			
Course ID: ÚCHV/ ODZP/2014/15	J 31		
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present			
Number of credits: 3	0		
Recommended seme	ster/trimester of the c	ourse:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended literature:			
Course language:			
Course assessment Total number of asses	ssed students: 32		
	N P		
0.0 100.0			
Provides:			
Date of last modification: 21.09.2017			
Approved: Co-guaranteedoc. RNDr. Viktor Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík, DrSc.Co-guaranteedoc. RNDr. Mária Kožurková, CSc.			

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of Science			
Course ID: ÚCHV/ PDS/18	ourse ID: ÚCHV/ Course name: Writing Dissertation Work DS/18		
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): y period:		
Number of credits: 1	5		
Recommended seme	ster/trimester of the co	irse:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	ture:		
Course language:			
Course assessment Total number of asses	ssed students: 5		
	N P		
	0.0 100.0		
Provides:			
Date of last modification: 17.04.2018			
Approved: Co-guaranteedoc. RNDr. Viktor Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík, DrSc.Co-guaranteedoc. RNDr. Mária Kožurková, CSc.			

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ Course name: Advances in Clinical Biochemistry

PKLB/13

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: 8

Recommended semester/trimester of the course:

Course level: III.

Prerequisities:

Conditions for course completion:

Oral examination

Learning outcomes:

Familiarize postgraduate students with newest knowledge from medicinal biochemistry and pathobiochemistry.

Brief outline of the course:

Molecular basis of medicinal biochemistry (urine, kidney, pancreas, gland, heart, blood circulation, lungs and bronchi, liver and bile duct) and its application into practice.

Recommended literature:

Rosenthal, M.D., Glew, R.H.: Medical biochemistry – human metabolism in health and disease, Wiley and Sons, 2009.

Course language:

Course assessment

Total number of assessed students: 4

N	P
0.0	100.0

Provides: doc. RNDr. Mária Kožurková, CSc.

Date of last modification: 26.02.2018

Approved: Co-guaranteedoc. RNDr. Viktor Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík, DrSc.Co-guaranteedoc. RNDr. Mária Kožurková, CSc.

University: P. J. Šafá	rik University in Košio	ce
Faculty: Faculty of S	cience	
Course ID: ÚCHV/ Course name: Membership in a Conference organizing Committee POVK/04		
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period:	
Number of credits: 2		
Recommended seme	ster/trimester of the o	course:
Course level: III.		
Prerequisities:		
Conditions for cours	e completion:	
Learning outcomes:		
Brief outline of the c	ourse:	
Recommended litera	iture:	
Course language:		
Course assessment Total number of asse	ssed students: 33	
	abs	n
	100.0	0.0
Provides:		•
Date of last modifica	tion: 26.02.2018	
	nteedoc. RNDr. Viktor c. RNDr. Mária Kožur	Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík, ková, CSc.

University: P. J. Šafá	rik University in Košic	ee	
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ PPC/04	Course name: Direct	Pedagogical Activities	
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period: esent		
Number of credits: 1			
	ster/trimester of the c	course:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asse	ssed students: 347		
	abs		n
	100.0		0.0
Provides:			
Date of last modifica	tion: 26.02.2018		
	nteedoc. RNDr. Viktor c. RNDr. Mária Kožur		prof. Ing. Marián Antalík,

University: P. J. Šafá	rik University in Košic	ee	
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ PPC/04	Course name: Direct	Pedagogical Activities	
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period: esent		
Number of credits: 1			
	ster/trimester of the c	course:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asse	ssed students: 347		
	abs		n
	100.0		0.0
Provides:			
Date of last modifica	tion: 26.02.2018		
	nteedoc. RNDr. Viktor c. RNDr. Mária Kožur		prof. Ing. Marián Antalík,

University: P. J. Šafá	rik University in Košio	ce
Faculty: Faculty of S	cience	
Course ID: ÚCHV/ Course name: Work with Literar Data from Internet PUI/06		
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period: esent	
Number of credits: 3		
	ster/trimester of the	course:
Course level: III.		
Prerequisities:		
Conditions for cours	e completion:	
Learning outcomes:		
Brief outline of the c	ourse:	
Recommended litera	iture:	
Course language:		
Course assessment Total number of asse	ssed students: 37	
	abs	n
	100.0	0.0
Provides:		·
Date of last modifica	tion: 26.02.2018	
	nteedoc. RNDr. Viktor c. RNDr. Mária Kožur	Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík, ková, CSc.

University: P. J. Šafá	rik University in Ko	šice
Faculty: Faculty of S	cience	
Course ID: ÚCHV/ Course name: Patents, Inventions, Software PVS/04		
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): y period:	
Number of credits: 2		
Recommended seme	ster/trimester of the	e course:
Course level: III.		
Prerequisities:		
Conditions for cours	e completion:	
Learning outcomes:		
Brief outline of the c	ourse:	
Recommended litera	iture:	
Course language:		
Course assessment Total number of asse	ssed students: 0	
	abs	n
	0.0	0.0
Provides:		
Date of last modifica	tion: 26.02.2018	
Approved: Co-guara DrSc.Co-guaranteedo		or Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík, urková, CSc.

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: KPE/ Course name: Pedagogy for university teachers PgVU/17 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. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: Course assessment Total number of assessed students: 12 abs neabs n 100.0 0.0 0.0

Provides: PaedDr. Renáta Orosová, PhD.

Date of last modification: 05.02.2018

Approved: Co-guaranteedoc. RNDr. Viktor Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík, DrSc.Co-guaranteedoc. RNDr. Mária Kožurková, CSc.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID:

Course name: Psychology for University Lecturers

KPPaPZ/PsVU/17

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.

Prerequisities:

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. Viktor Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík,

DrSc.Co-guaranteedoc. RNDr. Mária Kožurková, CSc.

University: P. J. Šafárik University in Košice		
Faculty: Faculty of S	cience	
Course ID: ÚCHV/ Course name: Reviewed International or Local Proceedings RZ/04		
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 seme	ster/trimester of the cou	rse:
Course level: III.		
Prerequisities:		
Conditions for course completion:		
Learning outcomes:		
Brief outline of the course:		
Recommended literature:		
Course language:		
Course assessment Total number of assessed students: 265		
	abs	n
100.0 0.0		0.0
Provides:		
Date of last modifica	tion: 26.02.2018	
Approved: Co-guaranteedoc. RNDr. Viktor Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík, DrSc.Co-guaranteedoc. RNDr. Mária Kožurková, CSc.		

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of Science			
Course ID: ÚCHV/ SCI/04	Course name: SCI Citation	on	
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present			
Number of credits: 2	20		
Recommended seme	ster/trimester of the cour	se:	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of assessed students: 128			
	abs		
100.0 0.0			
Provides:			
Date of last modification: 26.02.2018			
Approved: Co-guaranteedoc. RNDr. Viktor Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík, DrSc.Co-guaranteedoc. RNDr. Mária Kožurková, CSc.			

University: P. J. Šafá	rik University in Košio	ce	
Faculty: Faculty of Science			
Course ID: ÚCHV/ SDPR/04	Course name: Co-wo	orker of a Local Project	
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period: esent		
	ester/trimester of the	Poursa.	
Course level: III.	ster/trimester of the	- Course.	
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the c	course:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asse	ssed students: 348		
	abs		
99.71 0.29			
Provides:			
Date of last modification: 26.02.2018			
11	nteedoc. RNDr. Viktor c. RNDr. Mária Kožur	Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík, ková, CSc.	

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of Science			
Course ID: ÚCHV/ SMPR/04	IV/ Course name: Co-worker of an International Project		
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present			
Number of credits: 1	5		
Recommended seme	ster/trimester of the cour	se:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of assessed students: 36			
	abs		
	100.0 0.0		
Provides:			
Date of last modification: 26.02.2018			
Approved: Co-guaranteedoc. RNDr. Viktor Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík, DrSc.Co-guaranteedoc. RNDr. Mária Kožurková. CSc.			

University: P. J. Šafárik University in Košice			
Faculty: Faculty of Science			
Course ID: ÚCHV/ SSOL/04	e ID: ÚCHV/ Course name: Individual Study of Scientific Literature /04		
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of credits: 2			
Recommended seme	ster/trimester of th	e course:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asse	ssed students: 180		
	abs n		
	100.0 0.0		
Provides:			
Date of last modification: 26.02.2018			
Approved: Co-guara		or Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík,	

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚCHV/ Course name: Trends in Biophysical Chemistry TBFC/04 Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 4 / 2 Per study period: 56 / 28 Course method: present Number of credits: 10 Recommended semester/trimester of the course: Course level: III. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course:** Structure hierarchy of biological systems Time hierarchy in biological systems Regulatory mechanism Cooperativity Autocatalytic processes Atractors, fractals Surface interfaces Evolution of biological systems Molecular principles of morphogenesis, signal transductions Communications, chemotaxis Biomimetic materials Modern biophys.chem methods and devices Modern biophys. Methods and devices **Recommended literature:** Cantor, C.R., Schimmel, P.R. Biophysical Chemistry, W.H. Freeman and Co., S. Francisco, 1980 Voet, D. Voet, J.G. Biochemistry, John Willey @Sons, 1990 Kersal E. van Holde, W. Curtis Johnson, P. Shing Ho: Principles of Physical Biochemistry, Prentise Hall. 1998 Articles from Journals Course language: Course assessment Total number of assessed students: 28 N P

100.0

0.0

Provides: prof. Ing. Marián Antalík, DrSc.

Date of last modification: 26.02.2018

Approved: Co-guaranteedoc. RNDr. Viktor Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík, DrSc.Co-guaranteedoc. RNDr. Mária Kožurková, CSc.

University: P. J. Šafárik University in Košice			
Faculty: Faculty of Science			
Course ID: ÚCHV/ VBP/04	ÚCHV/ Course name: Supervision of Bachelor Thesis		
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 seme	ster/trimester of the cours	e:	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of assessed students: 282			
	abs n		
	100.0 0.0		
Provides: prof. RNDr. Jozef Gonda, DrSc.			
Date of last modification: 26.02.2018			
Approved: Co-guaranteedoc. RNDr. Viktor Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík, DrSc.Co-guaranteedoc. RNDr. Mária Kožurková, CSc.			

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ | **Course name:** Research of Individual Molecules

VIM/13

Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 4 / 2 Per study period: 56 / 28

Course method: present

Number of credits: 8

Recommended semester/trimester of the course:

Course level: III.

Prerequisities:

Conditions for course completion:

Examination

Learning outcomes:

In biological systems, many biopolymers present in small amounts, even as individual molecules. Recently, new methods have been developed to study such systems. The lectures will be given to work regularities of such systems, as well as biochemical and biophysical research methods of individual molecules.

Brief outline of the course:

Biomacromolecules, cells in terms of their individual characteristics. Basic knowledge about the function of lasers and other devices (eg XFEL), suitable for the study of biomacromolecules. GFP protein, dyes - fluorescent probes, nano and microparticles. Atomic force microscopy - AFM, MSM. Microchip electrophoresis and microhydrodynamic devices (MEMS, Lab on a Chip). Super resolution microscopy, two-photon processes, and more. TERS, SERS, Fano resonance. SNOM, fluorescence correlation spectroscopy. GSDM, STED. Storm, FRET, TIRF. Manipulation of individual molecules, cells. Optical tweezers, magnetic tweezers, optical crystals with cavity. Electron microscopy (SEM, TEM), X-ray microscopy. Study of membrane processes, Patch clamp. The electrical conductivity of the molecules, graphene, carbon nanotubes.

Recommended literature:

- 1. Christoph Zander, Jörg Enderlein, Richard A. Keller Single molecule detection in solution: methods and applications Wiley, 2002.
- 2. Chris Gell, David Brockwell, D. Alastair Smith, Handbook of single molecule fluorescence spectroscopy, Oxford University Press, 2006.
- 3. Experimental oriented journal articles:

/ Keir C Neuman & Attila Nagy Single-molecule force spectroscopy: optical tweezers, magnetic tweezers and atomic force microscopy Nature Methods - 5, 491 - 505 (2008)

/ Chirlmin Joo, Hamza Balci, Yuji Ishitsuka,1 Chittanon Buranachai, and Taekjip Ha, Advances in Single-Molecule Fluorescence Methods for Molecular Biology, Annual Review of Biochemistry 77, 51-76 (2008).

Course language:

Course assessment

Total number of assessed students: 2			
N	P		
0.0	100.0		
Provides: prof. Ing. Marián Antalík, DrSc.			
Date of last modification: 26.02.2018			
Approved: Co-guaranteedoc. RNDr. Viktor Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík, DrSc.Co-guaranteedoc. RNDr. Mária Kožurková, CSc.			

University: P. J. Šafárik University in Košice			
Faculty: Faculty of Science			
Course ID: ÚCHV/ VKB/06	urse ID: ÚCHV/ Course name: Selected Topics in Biochemistry		
Course type, scope a Course type: Lectur Recommended cour Per week: 4/2 Per Course method: pre	re / Practice rse-load (hours): study period: 56 / 1	28	
Number of credits: 1	0		
Recommended seme	ster/trimester of th	ne course:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asse	ssed students: 38		
	N P		
0.0 100.0			
Provides: prof. Ing. Marián Antalík, DrSc.			
Date of last modification: 26.02.2018			
Approved: Co-guaranteedoc. RNDr. Viktor Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík, DrSc Co-guaranteedoc. RNDr. Mária Kožurková. CSc			

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ | Course name: Selected Topics in Biochemistry of Microorganisms

VKBM/13

Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 4 / 2 Per study period: 56 / 28

Course method: present

Number of credits: 8

Recommended semester/trimester of the course:

Course level: III.

Prerequisities:

Conditions for course completion:

Examination

Learning outcomes:

Familiarize postgraduate students with newest knowledge from Biochemistry of microorganism.

Brief outline of the course:

Diversity of microbial world – microbial evolution, taxonomy and diversity.

Ecology and symbiosis – Biogeochemical cycling and introductory microbial ecology, microbial interactions.

Antimicrobial chemotherapy – development of chemotherapy, general characteristics of antimicrobial drugs, determining the level of antimicrobial activity, antibacterial drugs, factor influencing antimicrobial drug effectiveness, drug resistance, antifungal, antiviral and antiprotozoal drugs.

Food and industrial microbiology – microbiology of food, microorganism growth in foods, microbial and food spoilage, controlling food spoilage, food-borne pathogens.

Applied and industrial microbiology – microorganisms used in industrial microbiology, major products of industrial microbiology.

Recommended literature:

- 1. Black, J. G.: Microbiology, Wiley & Sons, Inc., 2008.
- 2. Johnson, T. R., Case, J.: Laboratory Experiments in Microbiology, 9th Ed., Pearson, 2010.
- 3. Kayser, F. H., Bienz, K. A., Eckert, J., Zinkernagel, R. M.: Medical Microbiology, Thieme, Stitgart-New York, 2001.
- 4. Levinson, W.: Review of Medical Microbiology and Immunology, McGraw-Hill International Edition, 2010.
- 5. Willey, J. M., Sherwood, L. M., Woolverton, C. J.: Prescott, Harley, and Klein's Microbiology, McGraw-Hill International Edition, 2008.

Course language:

Course assessment

Total number of assessed students: 4

N	P	
0.0	100.0	
Provides: doc. RNDr. Mária Kožurková, CSc.		
Date of last modification: 26.02.2018		

Approved: Co-guaranteedoc. RNDr. Viktor Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík, DrSc.Co-guaranteedoc. RNDr. Mária Kožurková, CSc.

University: P. J. Šafárik University in Košice				
Faculty: Faculty of Science				
Course ID: ÚCHV/ VKBMB/04	Course name: Selected Topics in Biochemistry and Molecular Biology			
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: 8	}			
Recommended seme	ster/trimester of the cours	e:		
Course level: III.				
Prerequisities:				
Conditions for cours	e completion:			
Learning outcomes:				
Brief outline of the c	ourse:			
Recommended litera	iture:			
Course language:				
Course assessment Total number of asse	Course assessment Total number of assessed students: 37			
	N P			
	0.0 100.0			
Provides: doc. RNDr. Peter Javorský, DrSc., doc. RNDr. Peter Pristaš, CSc.				
Date of last modification: 26.02.2018				
Approved: Co-guaranteedoc. RNDr. Viktor Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík, DrSc Co-guaranteedoc. RNDr. Mária Kožurková. CSc				

University: P. J. Šafárik University in Košice			
Faculty: Faculty of S	Faculty: Faculty of Science		
Course ID: ÚCHV/ VKFZ/06	urse ID: ÚCHV/ Course name: Selected Topics in Physiology		
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 4 / 2 Per study period: 56 / 28 Course method: present			
Number of credits: 1			
Recommended seme	ster/trimester of the cours	e:	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asses	Course assessment Total number of assessed students: 0		
	N	P	
0.0			
Provides: prof. MVDr. Juraj Koppel, DrSc., RNDr. Štefan Číkoš, CSc.			
Date of last modification: 26.02.2018			
Approved: Co-guaranteedoc. RNDr. Viktor Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík, DrSc.Co-guaranteedoc. RNDr. Mária Kožurková, CSc.			

University: P. J. Šafárik University in Košice			
Faculty: Faculty of S	Faculty: Faculty of Science		
Course ID: ÚCHV/ VKI/06	rse ID: ÚCHV/ Course name: Selected Topics in Immunology		
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 4 / 2 Per study period: 56 / 28 Course method: present			
Number of credits: 1	0		
Recommended seme	ster/trimester of the cours	e:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of assessed students: 3			
	N P		
	0.0 100.0		
Provides: prof. MVDr. Juraj Koppel, DrSc., RNDr. Štefan Číkoš, CSc.			
Date of last modification: 26.02.2018			
Approved: Co-guaranteedoc. RNDr. Viktor Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík, DrSc.Co-guaranteedoc. RNDr. Mária Kožurková, CSc.			

University: P. J. Šafá	rik University in Košic	e	
Faculty: Faculty of S	Faculty: Faculty of Science		
Course ID: ÚCHV/ VPBP/04	HV/ Course name: Review of a Bachelor Thesis		
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present			
Number of credits: 2			
	ster/trimester of the c	ourse:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	ture:		
Course language:			
Course assessment Total number of assessed students: 60			
	abs n		
100.0 0.0			
Provides:			
Date of last modification: 26.02.2018			
Approved: Co-guaranteedoc. RNDr. Viktor Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík, DrSc.Co-guaranteedoc. RNDr. Mária Kožurková, CSc.			

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚCHV/ VPSV/04	Course name: Supervision of a Students Scientific Work				
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period:				
Number of credits: 6					
Recommended semester/trimester of the course:					
Course level: III.					
Prerequisities:	Prerequisities:				
Conditions for course completion:					
Learning outcomes:					
Brief outline of the c	ourse:				
Recommended litera	iture:				
Course language:					
Course assessment Total number of asse	ssed students: 64				
	abs	n			
	100.0	0.0			
Provides: prof. RNDr. Jozef Gonda, DrSc.					
Date of last modification: 26.02.2018					
	nteedoc. RNDr. Viktor Vígl. c. RNDr. Mária Kožurková	aský, PhD.Guaranteeprof. Ing. Marián Antalík, CSc.			

University: P. J. Šafárik University in Košice				
Faculty: Faculty of Science				
Course ID: ÚCHV/ VYS/04	Course name: Pres	entation in Seminar		
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period:			
Number of credits: 2				
Recommended seme	ster/trimester of th	e course:		
Course level: III.				
Prerequisities:				
Conditions for course completion:				
Learning outcomes:				
Brief outline of the c	ourse:			
Recommended litera	iture:			
Course language:				
Course assessment Total number of assessed students: 173				
	abs	n		
	100.0	0.0		
Provides: prof. RNDr. Jozef Gonda, DrSc.				
Date of last modification: 26.02.2018				
Approved: Co-guaranteedoc. RNDr. Viktor Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík, DrSc Co-guaranteedoc. RNDr. Mária Kožurková. CSc				

University: P. J. Šafárik University in Košice				
Faculty: Faculty of Science				
Course ID: ÚCHV/ ZKC/04	Course name: International Currented Journal			
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present				
Number of credits: 2	20			
Recommended seme	ster/trimester of the co	urse:		
Course level: III.				
Prerequisities:				
Conditions for cours	e completion:			
Learning outcomes:				
Brief outline of the c	ourse:			
Recommended litera	iture:			
Course language:				
Course assessment Total number of assessed students: 244				
	abs	n		
	99.59	0.41		
Provides:				
Date of last modification: 26.02.2018				
	nteedoc. RNDr. Viktor V c. RNDr. Mária Kožurko	íglaský, PhD.Guaranteeprof. Ing. Marián Antalík, vá, CSc.		

University: P. J. Šafárik University in Košice				
Faculty: Faculty of Science				
Course ID: ÚCHV/ ZNC/04	Course name: International Non-Currented Jounal			
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period:			
Number of credits: 5				
Recommended seme	ster/trimester of the	e course:		
Course level: III.				
Prerequisities:				
Conditions for course completion:				
Learning outcomes:				
Brief outline of the c	ourse:			
Recommended litera	iture:			
Course language:				
Course assessment Total number of asse	ssed students: 16			
	abs	n		
	100.0	0.0		
Provides:		·		
Date of last modification: 26.02.2018				
Approved: Co-guara DrSc.Co-guaranteedo		or Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík, urková, CSc.		

University: P. J. Šafárik University in Košice						
Faculty: Faculty of Science						
Course ID: ÚCHV/ ZSP/04	Course name: Study 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 seme	ster/trimester of the	course:				
Course level: III.						
Prerequisities:						
Conditions for cours	e completion:					
Learning outcomes:	Learning outcomes:					
Brief outline of the course:						
Recommended litera	iture:					
Course language:	Course language:					
Course assessment Total number of assessed students: 75						
	abs	n				
	100.0	0.0				
Provides:						
Date of last modification: 26.02.2018						
Approved: Co-guaranteedoc. RNDr. Viktor Víglaský, PhD.Guaranteeprof. Ing. Marián Antalík, DrSc.Co-guaranteedoc. RNDr. Mária Kožurková, CSc.						