University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/ C

Course name: Activating forms of biology teaching

AFV/15

Course type, scope and the method:

Course type: Practice

Recommended course-load (hours): Per week: 2 Per study period: 28

Course method: present

Number of credits: 2

Recommended semester/trimester of the course: 3.

Course level: II.

Prerequisities: ÚBEV/DIB1/03

Conditions for course completion:

Colloquium - presentation of seminar work.

Learning outcomes:

Extension skills of new teaching methods and selected practical activities.

Brief outline of the course:

Teacher and student - partners in learning. The development of science skills through IBSE (Inquiry based science education). New approaches to formative and summative assessment in IBSE. New educational technologies supporting IBSE. Different ways of working with text when learning biology. Project management and cooperative methods for biology lessons. Presentation of seminar work.

Recommended literature:

Kimáková, K.: Úvod do štúdia didaktiky biológie, elektronický študijný text, 2008 Kimáková, K., Švecová, M.: Teorie a praxe zařazení školních projektů ve výuce přírodopisu a biologie, Karolinum Praha 2001 Hudáková, A., Kimáková, K.: Demonštračné pokusy a pozorovania z biológie rastlín, UPJŠ Košice 2005 Periodical publications for teaching biology. Internal materials and methodics on Moodle: https://lms.upjs.sk/login/index.php. Existing curriculum standards and biology textbooks for elementary and secondary schools Existing curriculum standards and biology textbooks for elementary and secondary schools

Course language:

Course assessment

Total number of assessed students: 5

A	В	С	D	Е	FX
0.0	40.0	60.0	0.0	0.0	0.0

Provides: PaedDr. Andrea Lešková, PhD., Mgr. Zuzana Boberová, PhD.

Date of last modification: 24.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚCHV/ Course name: Aktivizujúce metódy výučby chémie AMCU/15 Course type, scope and the method: Course type: Lecture / Practice **Recommended course-load (hours):** Per week: 2 / 2 Per study period: 28 / 28 Course method: present **Number of credits: 5** Recommended semester/trimester of the course: 2. Course level: II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: Course assessment Total number of assessed students: 24 В C D Е FX Α 100.0 0.0 0.0 0.0 0.0 0.0

Provides: doc. RNDr. Mária Ganajová, CSc., RNDr. Ivana Sotáková

Date of last modification: 24.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/

Course name: Biology and Didactics of Biology

BDB/14

Course type, scope and the method:

Course type:

Recommended course-load (hours):

Per week: Per study period: Course method: present

Number of credits: 1

Recommended semester/trimester of the course:

Course level: II.

Prerequisities: ÚBEV/DIB1/03 and (ÚBEV/FG1/03 or ÚBEV/ZOG1/03) and (ÚBEV/ZOM/04 or ÚBEV/ZO1/04 or ÚBEV/ZOO1/11 or ÚBEV/BO1/03 or ÚBEV/BOT1/03)

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment

Total number of assessed students: 114

A	В	С	D	Е	FX
21.93	31.58	27.19	14.04	5.26	0.0

Provides:

Date of last modification: 24.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚBEV/ Course name: Biology and Didactics of Biology **BDB/15** Course type, scope and the method: **Course type: Recommended course-load (hours):** Per week: Per study period: Course method: present Number of credits: 1 Recommended semester/trimester of the course: Course level: II. Prerequisities: ÚBEV/MKVU/15 and ÚBEV/VEK1/03 and ÚBEV/DIB1/03 **Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: Course assessment Total number of assessed students: 27

Α	В	С	D	E	FX
37.04	40.74	18.52	3.7	0.0	0.0

Provides:

Date of last modification: 24.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/

Course name: Biotechnology

BTC/03

Course type, scope and the method:

Course type: Lecture

Recommended course-load (hours): Per week: 3 Per study period: 42

Course method: present

Number of credits: 5

Recommended semester/trimester of the course: 2.

Course level: II.

Prerequisities:

Conditions for course completion:

test

Learning outcomes:

Students obtained the knowledge of basic biotechnological processes and their applications in agriculture, industry, food production and medicine.

Brief outline of the course:

Classification of biotechnology, disciplines and subjects which are involved with biotechnology. The fermentation processes, types of bioreactors, impellers, principles of microbial growth, media and substrates for fermentation processes. The bioremediation, production and application of biogas, in-vessel composting. Micro-organisms used to preparation amino acids, their fermentation preparation, isolation and possible uses. The methods of classical Plant Biotechnology. Ethanol fermentation, spirits, production of wine and beer. The biological filters, nutrient removal and the membrane bioreactors. Antibiotics.

Recommended literature:

E.M.T. El-Mansi et al. ,Fermentation microbiology ang biotechnology,second edition, 2007 Y.H. Hui, Food biochemistry & food processing,Blackwell Publishing 2006

J.E. Smith, Biotechnology, Cambridge university press 2009

Course language:

Course assessment

Total number of assessed students: 95

A	В	С	D	Е	FX
45.26	22.11	18.95	7.37	6.32	0.0

Provides: RNDr. Danica Sabolová, PhD.

Date of last modification: 24.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚCHV/ Course name: Chemical Excursion CHE2/03 Course type, scope and the method: Course type: Practice **Recommended course-load (hours):** Per week: Per study period: 1t Course method: present Number of credits: 4 Recommended semester/trimester of the course: 2. Course level: II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: Course assessment Total number of assessed students: 80 В \mathbf{C} D Е FX Α 93.75 6.25 0.0 0.0 0.0 0.0

Provides: doc. RNDr. Zuzana Vargová, Ph.D.

Date of last modification: 24.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/

Course name: Didaktika chémie I

DCH1/15

Course type, scope and the method:

Course type: Lecture / Practice

Recommended course-load (hours): Per week: 1 / 2 Per study period: 14 / 28

Course method: present

Number of credits: 4

Recommended semester/trimester of the course: 2.

Course level: II.

Prerequisities: ÚCHV/SPC1a/03

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment

Total number of assessed students: 57

Α	В	С	D	Е	FX
75.44	15.79	7.02	1.75	0.0	0.0

Provides: doc. RNDr. Mária Ganajová, CSc., RNDr. Ivana Sotáková

Date of last modification: 24.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/

Course name: Didaktika chémie II

DCH2/15

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: 3.

Course level: II.

Prerequisities: ÚCHV/DCH1/15

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment

Total number of assessed students: 57

Α	В	С	D	Е	FX
75.44	17.54	5.26	1.75	0.0	0.0

Provides: doc. RNDr. Mária Ganajová, CSc., RNDr. Ivana Sotáková

Date of last modification: 24.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚBEV/ Course name: Geology and nature protection education **DGO/17** Course type, scope and the method: Course type: Practice **Recommended course-load (hours):** Per week: 2 Per study period: 28 Course method: present Number of credits: 2 Recommended semester/trimester of the course: 3. Course level: II. Prerequisities: ÚBEV/DIB1/03 and ÚGE/GEB/12 **Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: Course assessment

Total number of assessed students: 0

A	В	С	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Provides: PaedDr. Andrea Lešková, PhD.

Date of last modification: 24.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/ Course name:

DIB1/03

Course name: Didactics of biology

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: 2.

Course level: IL

Prerequisities: KPPaPZ/PPgU/15 or KPE/DPP/14 or KPE/PDU/15

Conditions for course completion:

Continuous assessment of tasks, which students prepared and submitted.

Oral exam

Learning outcomes:

Meet specific subjects teaching biology in high school and an elementary school. Learn and apply didactic knowledges in the topics of the biology curriculum with respect of psychological principles of learning. Selected biology teaching methods and technologies.

Brief outline of the course:

- The aims of biological education in Slovakia, basic documents.
- Analysis of the curriculum and the formulation of educational objectives.
- EUR framework, phases of learning.
- Teaching strategies and methods in biology teaching.
- Concept learning.
- Problem solving and higher-order questions.
- Inquiry based science education.
- The importance of reflection.
- Verification of biological knowledge and skills. Assessment and classification.
- Educational aspects of biology teaching, development of critical thinking skills and key competences.
- Teaching aids for biology, the role of ICT.
- The school garden.
- History of biology teaching. Various concepts of biology teaching abroad.

Recommended literature:

Kimáková, K.: Úvod do štúdia didaktiky biológie, elektronický študijný text, 2008 Periodical publications for teaching biology. Internal study materials in Moodle https://lms.upjs.sk/login/index.php

Existing curriculum standards and biology textbooks for elementary and secondary schools Fišer, R.: Učíme deti myslet a učit se. Praha: Portál, 2011. 176 s. ISBN 978-80262-0043-7 Gavora, P.: Akí sú moji žiaci. (Pedagogická diagnostika žiaka). Nitra: ENIGMA, 2011. 216 s. ISBN 978-80-89132-91-1

Karnsová, M.: Jak budovat dobrý vztah mezi učitelem a žákem. Praha: Portál, 1995. 151 s. ISBN 80-7178-032-4

Kotrba, T., Lacina, L.: Praktické využití aktivizačných metod ve výuce. Brno: Společnost pro odbornou literaturu, 2007. 188 s. ISBN 978-80-87029-12-1

Kyriacou, Ch.: Klíčové dovednosti učitele. Praha: Portál, 1996. 153 s. ISBN 80-7178-022-7

Petty, G.: Moderní vyučování. Praha: Portál, 2013. 380 s. ISBN 80-7178-070-7

Silberman, M.: 101 Metod pre aktivní výcvik a vyučování. Praha: Portál, 1997. 312 s. ISBN: 80-7178-124-X

Course language:

Course assessment

Total number of assessed students: 494

A	В	С	D	Е	FX
46.96	30.97	17.61	4.45	0.0	0.0

Provides: doc. RNDr. Katarína Kimáková, CSc., PaedDr. Andrea Lešková, PhD., Mgr. Zuzana Boberová, PhD.

Date of last modification: 24.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚBEV/ Course name: Diploma Thesis and its Defence DPOU/14 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: II. Prerequisities: ÚBEV/DPP3/14 **Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: Course assessment Total number of assessed students: 59 В C D Е FX Α

Provides:

47.46

Date of last modification: 24.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

1.69

1.69

1.69

11.86

CSc.Guaranteedoc. RNDr. Katarína Kimáková, CSc.

35.59

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚCHV/ Course name: Diploma Thesis and its Defence DPOU/14 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: II. Prerequisities: ÚCHV/DPP3/14 **Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Course assessment** Total number of assessed students: 44 В \mathbf{C} D Е FX Α 75.0 22.73 2.27 0.0 0.0 0.0

Provides:

Date of last modification: 27.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafá	rik University in Koš	ice		
Faculty: Faculty of S	cience			
Course ID: ÚBEV/ DPP1/14				
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period:			
Number of credits: 1				
Recommended seme	ster/trimester of the	course: 1.		
Course level: II.				
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: 68			
	abs	n		
	100.0 0.0			
Provides:				
Date of last modifica	ition: 24.02.2017			
Approved: Guarantee CSc.Guaranteedoc. R		anajová, CSc.Guaranteeprof. PhDr. Oľga Orosová, cová, CSc.		

University: P. J. Šafá	rik University in Košice			
Faculty: Faculty of S	cience			
Course ID: ÚCHV/ DPP1/14				
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): y period:			
Number of credits: 1				
Recommended seme	ster/trimester of the cours	: 1.		
Course level: II.				
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: 27.02.2017			
••	edoc. RNDr. Mária Ganajov NDr. Katarína Kimáková, C	i, CSc.Guaranteeprof. PhDr. Ol'ga Orosová, Sc.		

University: P. J. Šafá	rik University in Košio	ce		
Faculty: Faculty of S	cience			
Course ID: ÚBEV/ DPP2/14				
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	course: 2.		
Course level: II.				
Prerequisities: ÚBE	V/DPP1/14			
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: 67			
	abs	n		
100.0 0.0				
Provides:		<u> </u>		
Date of last modifica	tion: 24.02.2017			
	edoc. RNDr. Mária Ga NDr. Katarína Kimáko	najová, CSc.Guaranteeprof. PhDr. Oľga Orosová, ová, CSc.		

University: P. J. Šafá	rik University in Koši	ce		
Faculty: Faculty of S	cience			
Course ID: ÚCHV/ DPP2/14	Course ID: ÚCHV/ Course name: Diploma Project II DPP2/14			
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period:			
Number of credits: 2	2			
Recommended seme	ster/trimester of the	course: 2.		
Course level: II.				
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: 36			
	abs	n		
100.0 0.0				
Provides:		·		
Date of last modifica	ation: 27.02.2017			
* *	edoc. RNDr. Mária Ga NDr. Katarína Kimáko	nnajová, CSc.Guaranteeprof. PhDr. Oľga Orosová, ová, CSc.		

University: P. J. Šafá	rik University in Košice	
Faculty: Faculty of S	cience	
Course ID: ÚCHV/ DPP3/14	Course name: Diploma	a Project III
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period:	
Number of credits: 2	2	
Recommended seme	ester/trimester of the co	urse: 3.
Course level: II.		
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	ssed students: 43	
	abs	n
	100.0	0.0
Provides: prof. RND	r. Jozef Gonda, DrSc.	
Date of last modifica	ition: 27.02.2017	
1	edoc. RNDr. Mária Gana NDr. Katarína Kimákova	ijová, CSc.Guaranteeprof. PhDr. Oľga Orosová, á, CSc.

University: P. J. Šafá	rik University in Košic	e
Faculty: Faculty of S	cience	
Course ID: ÚBEV/ DPP3/14	Course name: Diplor	na Project III
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 the c	ourse: 3.
Course level: II.		
Prerequisities: ÚBE	V/DPP2/14 or ÚBEV/D	P2b/03
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: 60	
	abs	n
	100.0	0.0
Provides:		•
Date of last modifica	tion: 24.02.2017	
1	edoc. RNDr. Mária Gar NDr. Katarína Kimáko	najová, CSc.Guaranteeprof. PhDr. Oľga Orosová, vá, CSc.

University: P. J. Šafá	rik University in Koši	ce
Faculty: Faculty of S	cience	
Course ID: ÚCHV/ DSU1a/10	Course name: Diplo	mový seminár z chémie pre XCH
Course type, scope a Course type: Practic Recommended cour Per week: 2 Per stu Course method: pre	ce rse-load (hours): dy period: 28 esent	
Number of credits: 2		
	ster/trimester of the	course: 2.
Course level: II.		
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: 8	
	abs	n
	100.0	0.0
Provides: doc. RNDr	. Mária Ganajová, CS	2.
Date of last modifica	tion: 24.02.2017	
	edoc. RNDr. Mária Ga NDr. Katarína Kimáko	najová, CSc.Guaranteeprof. PhDr. Oľga Orosová, ová, CSc.

University: P. J. Šafá	rik University in Košice			
Faculty: Faculty of S	cience			
Course ID: ÚCHV/ DSU1b/10	Course name: Diplom	ový seminár z chémie pre XCH		
Course type, scope a Course type: Practic Recommended cour Per week: 2 Per stu Course method: pre	ce rse-load (hours): dy period: 28			
Number of credits: 2				
Recommended seme	ster/trimester of the co	ourse: 3.		
Course level: II.				
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: doc. RNDr	. Mária Ganajová, CSc.	•		
Date of last modifica	tion: 24.02.2017			
1	edoc. RNDr. Mária Gan NDr. Katarína Kimákov	ajová, CSc.Guaranteeprof. PhDr. Oľga Orosová, á, CSc.		

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚCHV/ Course name: Digitálne technológie vo výučbe chémie DTCU/15 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: 3. Course level: II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: Course assessment Total number of assessed students: 10 В \mathbf{C} D Е FX Α 100.0 0.0 0.0 0.0 0.0 0.0

Provides: doc. RNDr. Mária Ganajová, CSc., RNDr. Ivana Sotáková

Date of last modification: 24.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/

ETO1/03

Course name: Ethology

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

Course method: present

Number of credits: 6

Recommended semester/trimester of the course: 1., 3.

Course level: II.

Prerequisities:

Conditions for course completion:

Recognition.

Written examination.

Learning outcomes:

To teach the students to know and to be aware of the importance of the behavioural aspect in biological sciences

Brief outline of the course:

History and development of ethology. Ethological methods. The innate forms of behaviour. The simplest forms of learning – conditioning and instrumental learning. Higher form of learning. Social behaviour. Sexual behaviour. Play behaviour. Biological rhythms. Orientation in space and animal migrations. Communication systems of animals. Emotions. Aggression in animal and human behaviour Abnormal forms of behaviour

Recommended literature:

Franck, D.: Verhaltensbiologie. Einfuhrung in die Ethologie. Georg Thieme-Verlag, 1993 Manning, A., Dawkins, M. S.: An introduction to animal behaviour. Cambridge University Press, 1992

Course language:

Course assessment

Total number of assessed students: 889

A	В	С	D	Е	FX
39.37	24.75	26.32	7.54	1.91	0.11

Provides: RNDr. Igor Majláth, PhD., RNDr. Natália Pipová, PhD., RNDr. Terézia Kisková, PhD.

Date of last modification: 24.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚFV/ | Course name: Microcomputer Based Science Laboratory

FEP1/07

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.

Prerequisities:

Conditions for course completion:

test 30 points

active participation 10 points

project (development of mathematical model, videomeasurement and physical experiment) 60 points

The final assessment is based on the sum of partial results

Learning outcomes:

After the course student gains an overview about the possible use of digital technologies to support active learning in science. He gains skills to use and develop activities on measuring data with the help of datalogging, measuring on picture and viderecording and modeling natural processes. Student is able to implement such activities in science teaching to support active learning and conceptual understanding.

Brief outline of the course:

The aim of the course is to present the use of digital technologies to enhance active learning in science with the help of datalogging, videomeasurement and modeling tools. Mathematical modeling is based on dynamical modeling of natural phenomena. Within the course students carry out computer-based experiments, videomeasurements and measurement on picture and create corresponding models. The activities involve selected topics of secondary schools science. The emphasize is put on the methods of implementation of the activities with regard to active students 'learning.

Recommended literature:

[1]Koubek, V., Pecen, I.: Fyzikálne experimenty a modely v školskom mikropočítačom podporovanom laboratóriu, Univerzita Komenského, Bratislava, 1999

[2]Príručka COACH

[3]http://physedu.science.upjs.sk/sis/fyzika/experimenty/index.htm

Course language:

Slovak

Course assessment

Total number of assessed students: 34

A	В	С	D	Е	FX
44.12	44.12	11.76	0.0	0.0	0.0

Provides: doc. RNDr. Zuzana Ješková, PhD.

Date of last modification: 23.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/ Co

Course name: Phytogeography

FG1/03

Course type, scope and the method:

Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14

Course method: present

Number of credits: 5

Recommended semester/trimester of the course: 1., 3.

Course level: I., II.

Prerequisities:

Conditions for course completion:

Written work.

Exam.

Learning outcomes:

To obtain theoretical and practical knowledge from phytogeography.

Brief outline of the course:

History of phytogeography. Plants and environment. Chorology, area, area disjunctions, relics, endemites, vicariancy, floral elements. Main course of florogenesis since paleozoic to quaternary ages. Postglacial evolution of Slovak vegetation. Regional phytogeography of Earth. Vegetation geography: from tropical rainforests to tundras. Changes of earth vegetation and their study. Geographical origin of cultivated plants.

Practices: Fieldworks. Preparing of maps. Phytogeographical division of Slovakia. Students seminar works on phytogeography.

Recommended literature:

Hendrych R.: Fytogeografie. - SPN, Praha 1984.

Brown J. H., Lomolino M. V.: Biogeography. - Sinauer Associates, Sunderland, 1998.

Course language:

Course assessment

Total number of assessed students: 324

A	В	С	D	Е	FX
39.81	21.91	21.3	8.33	7.72	0.93

Provides: prof. RNDr. Pavol Mártonfi, PhD., Mgr. Vladislav Kolarčik, PhD.

Date of last modification: 24.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/

Course name: Introduction to Material Chemistry

FUMCH1/03

Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14

Course method: present

Number of credits: 5

Recommended semester/trimester of the course: 1., 3.

Course level: I., II.

Prerequisities:

Conditions for course completion:

Seminar work. Examination.

Learning outcomes:

To present the different types of functional materials, their atomic structure and mechanical properties.

Brief outline of the course:

Historical perspectives. Materials and human being. Participation of natural science in material engineering. Material revolutions. Classification of materials. Atomic structure and interatomic bonding. Amorphous and crystalline materials. Mechanics of materials. Imperfections in solids. Crystal lattice defects. Point defects. Line defects. Dislocations. Diffusion. Diffusion mechanisms. Deformations and failures, re-crystallization. Deformations. Plastic deformations. Solid solutions. Intermediary phases. Phases in ceramic systems. Phase transformations. Crystallization of metals. Phase identification methods. Stress and strain. Structure of metallic and ceramic materials. Alloys. Steel. Light metals. Metallic glasses. Gold. Inorganic non-metallic materials. Ceramic construction materials. Ceramic tools. Bio-ceramics. Ceramics in cosmos. High-temperature superconductors. Glass. Building binders. Polymers. Essence of polymers. Thermoplastics. Reactoplastics. Polymer structure. Mechanical properties of polymers. Natural materials. Wood. Bones. Teeth. Conchs and shells. Tectrices.

Recommended literature:

W. D. Callister, Jr.: Fundamentals of Materials Science and Engineering, John Wiley & Sons, 2001.

Brian S. Mitchell: An Introduction to Materials Engineering and Science: For Chemical and Materials Engineers, John Wiley & Sons, 2004.

Course language:

Course assessment

Total number of assessed students: 58

A	В	С	D	Е	FX
87.93	10.34	0.0	0.0	0.0	1.72

Provides: prof. RNDr. Renáta Oriňaková, DrSc.

Date of last modification: 24.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚGE/ Course name: Geology and petrography **GEB/12** Course type, scope and the method: Course type: Lecture / Practice **Recommended course-load (hours):** Per week: 3 / 2 Per study period: 42 / 28 Course method: present **Number of credits:** 6 **Recommended semester/trimester of the course:** 2. Course level: II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:**

Course language:

Course assessment

Total number of assessed students: 824

A	В	C	D	Е	FX
10.68	20.27	32.65	22.94	9.95	3.52

Provides: Ing. Katarína Bónová, PhD.

Date of last modification: 23.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/ | Course name: Immunology

IMU1/03

Course type, scope and the method:

Course type: Lecture

Recommended course-load (hours): Per week: 2 Per study period: 28

Course method: present

Number of credits: 3

Recommended semester/trimester of the course: 1.

Course level: II.

Prerequisities:

Conditions for course completion:

Recognition.

Oral examination.

Learning outcomes:

This course introduces the students to the basic concepts of immunology as well as highlights the role and importance of immunology in various human diseases. The aim of Immunology lessons is the presentation of the organization and function of the immune system, as well as the comprehension of complex molecular and cellular interactions during the induction of immune responses.

Brief outline of the course:

Basic immunology: Lymphatic System Anatomy, The Innate Immune System, The Induced Responses of Innate Immunity, The Adaptive Immune Response, Antigens and Antibodies, Antigen Recognition by B-cell and T-cell Receptors, Antigen Presentation to T-lymphocytes, Complement, Clinical immunology: Allergy and other Hypersensitivities, Autoimmunity and Transplantation, Tumor Immunology, Disorders of The Immune System.

Recommended literature:

Janeway Ch. A., Travers P., Walport M., Schlomchik M.: Immunobiology. Garland Science, 2004 Murphy, K. (2012): Jeneway's Immunobiology. 8th ed. Garland Science

Delves, P.J. et al. (2011): Roitt's essential immunology 12th ed Wiley-Blackwell

Course language:

Course assessment

Total number of assessed students: 834

A	В	С	D	Е	FX
38.25	24.22	25.54	7.07	1.56	3.36

Provides: RNDr. Vlasta Demečková, PhD.

Date of last modification: 24.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Oľga Orosová,

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/

Course name: Cosmetic chemistry

KC/03

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: 3.

Course level: II.

Prerequisities:

Conditions for course completion:

Seminar report on the selected subjects of cosmetic chemistry and its oral presentation connected with discussion. Terminal examination by oral form.

Learning outcomes:

The basic chemical ingredients in cosmetic products, their isolation from natural sources. The construction of some interesting groups of the organic structures and their application in cosmetic industry.

Brief outline of the course:

Skin and its components. The chemistry of lipids. Lipids, their classification (triacylglycerols, glycerophospholipids and sfingophoslipids), liposomes as transport systems. Fatty acids and alcohols, natural and synthetic waxes. Surfactants, their classification. Antioxidants. Dyes, their classification, organic and inorganic dyes, natural and synthetic. Biological active compounds (amino acids, peptides, proteins hydroxy acids, vitamins, polysaccharides) as the cosmetic ingredients. The chemistry of fragrances. Compounds derived from shikimic acid and mevalonic acid, their biosynthesis, Synthetic fragrances and their construction.

Recommended literature:

- 1. S. V. Bhat, B. A. Nagasampagi, M. Sivakumar: Chemistry of Natural Products, Springer Narosa 2005, ISBN 81-7319-481-5.
- 2. G. Ohloff: Scent and Fragrances, Springer-Verlag Berlín Heidelberg 1994, ISBN 3-540-57108-6.
- 3. D. H. Pybus, CH. S. Sell: The chemistry of fragrances, Royal Society of Chemistry 1999, ISBN 0-8540-528-7.
- 4. J. McMurry: Organic chemistry, Brooks/Cole, a Thomson Learning Company 2004, Sixth Eddition, ISBN 0534389996.

Course language:

Course assessment

Total number of assessed students: 86

A	В	С	D	E	FX
79.07	15.12	4.65	1.16	0.0	0.0

Provides: doc. RNDr. Miroslava Martinková, PhD.

Date of last modification: 24.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice Faculty: Faculty of Science **Course ID:** Course name: Culture of Spoken Discourse KSSFaK/ KJPUAP/15 Course type, scope and the method: Course type: Lecture / Practice **Recommended course-load (hours):** Per week: 1 / 1 Per study period: 14 / 14 Course method: present Number of credits: 2 **Recommended semester/trimester of the course:** 1. Course level: II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Course assessment** Total number of assessed students: 0 Α В \mathbf{C} D Е FX 0.0 0.0 0.0 0.0 0.0 0.0

Date of last modification: 18.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafá	rik University in Košice			
Faculty: Faculty of S	cience			
Course ID: ÚTVŠ/ KP/12	Course name: Survival Co	ourse		
Course type, scope a Course type: Practic Recommended cour Per week: Per stud Course method: pre	ce rse-load (hours): ly period: 36s			
Number of credits: 2	2			
Recommended semester/trimester of the course:				
Course level: I., II.				
Prerequisities:				
Conditions for cours	se completion:			
Learning outcomes:				
Brief outline of the c	ourse:			
Recommended litera	nture:			
Course language:				
Course assessment Total number of assessed students: 329				
	abs	n		
	47.11	52.89		
Provides: MUDr. Pet	er Dombrovský, Mgr. Marel	valanský		
Date of last modifica	ntion: 23.02.2017			
	edoc. RNDr. Mária Ganajov NDr. Katarína Kimáková, C	á, CSc.Guaranteeprof. PhDr. Oľga Orosová, Sc.		

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID:

): | Course name

Course name: Professional Ethics for Teachers and School Counsellors

KPPaPZ/KPE/ EPU/15

Course type, scope and the method:

Course type: Practice

Recommended course-load (hours): Per week: 2 Per study period: 28

Course method: present

Number of credits: 2

Recommended semester/trimester of the course: 2., 4.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment

Total number of assessed students: 217

A	В	С	D	Е	FX
93.09	5.99	0.92	0.0	0.0	0.0

Provides: Mgr. Lucia Hricová, PhD.

Date of last modification: 16.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafá	rik University in Koši	ce			
Faculty: Faculty of S	cience				
Course ID: ÚTVŠ/ LKSp/13					
Course type, scope a Course type: Practi Recommended cou Per week: Per stud Course method: pro	ce rse-load (hours): ly period: 36s				
Number of credits: 2	2				
Recommended seme	ester/trimester of the	course:			
Course level: I., II.					
Prerequisities:					
Conditions for cours	se completion:				
Learning outcomes:					
Brief outline of the o	course:				
Recommended litera	ature:				
Course language:					
Course assessment Total number of asse	ssed students: 126				
	abs	n			
	45.24	54.76			
Provides: Mgr. Peter	Bakalár, PhD.	·			
Date of last modifica	ation: 23.02.2017				
1	edoc. RNDr. Mária Ga NDr. Katarína Kimák	anajová, CSc.Guaranteeprof. PhDr. Oľga Orosová, ová, CSc.			

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚFV/ Course n

MDT06/15

Course name: Modern Didactical Technics

Course type, scope and the method:

Course type: Practice

Recommended course-load (hours): Per week: 2 Per study period: 28

Course method: present

Number of credits: 2

Recommended semester/trimester of the course: 2.

Course level: II.

Prerequisities:

Conditions for course completion:

All assignments must be uploaded and accepted be teacher.

Active participation at seminar with minimum 80% participation.

Learning outcomes:

Student graduated from subject will be able:

- recognise basic tools for teaching activities,
- to use all types of actuall tools in science education,
- to design and realise educational activities by using modern technologies.

Brief outline of the course:

- 1. Didigital teacher's workspace'
- 2. Digital imaging
- 3. Digital image processing
- 4. Digital audio processing
- 5. Digital video processing
- 6. Web cam and videoconferencing systems
- 7. Interactive didactical system (wideboard, voting system)
- 8. Computer based measurements
- 9. Digital technologies in everyday life

Recommended literature:

- 1. Kireš, M. et al.: Modern didactical technics in teacher practice, Košice: Elfa, 2010, ISBN 788080861353
- 2. actuall information from web sites related to didactical technologies,
- 3. catalogues of teaching tools,
- 3. actuall articles about modern trends in science education.

Course language:

Slovak, English

Course assessment

Total number of assessed students: 41

A	В	С	D	Е	FX
29.27	48.78	12.2	4.88	4.88	0.0

Provides: doc. RNDr. Jozef Hanč, PhD.

Date of last modification: 23.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

| Course ID: ÚBEV/ | Course name

MKVU/15

Course name: Mikrobiológia a základy virológie

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: 3.

Course level: II.

Prerequisities:

Conditions for course completion:

Attendance of practicals (at least 90%), 2 written examinations during semester, final oral examination

Learning outcomes:

Students will obtain a basic informations on viruses, prokaryotic and eukaryotic microorganisms, their cytology, physiology, genetics, ecology, classification, and importance . Information on basic methods for studying microorganisms will be provided.

Brief outline of the course:

Viruses, prokaryotic and eukaryotic microorganisms, their cytology, physiology, genetics, ecology, classification. The importance of microorganisms for humans and environment.

Recommended literature:

Course language:

Course assessment

Total number of assessed students: 1187

A	В	С	D	Е	FX
22.33	11.63	17.02	20.47	23.76	4.8

Provides: doc. RNDr. Peter Pristaš, CSc., RNDr. Mariana Kolesárová, PhD., RNDr. Lenka Maliničová, PhD.

Date of last modification: 24.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Oľga Orosová,

University: P. J. Šafárik University in Košice						
Faculty: Faculty of S	Faculty: Faculty of Science					
Course ID: KPE/ MPPa/15	Course name: Supervised	Teaching Practice				
Course type, scope a Course type: Practi Recommended cou Per week: Per stud Course method: pro	ce rse-load (hours): ly period: 36s					
Number of credits: 2	2					
Recommended seme	ester/trimester of the cours	e: 1.				
Course level: II.						
Prerequisities:						
Conditions for cours	se completion:					
Learning outcomes:						
Brief outline of the	course:					
Recommended litera	ature:					
Course language:						
Course assessment Total number of asse	essed students: 613					
	abs	n				
	99.84 0.16					
Provides: doc. PhDr. Beata Gajdošová, PhD., PaedDr. Renáta Orosová, PhD., Mgr. Katarína Petríková, PhD.						
Date of last modification: 07.02.2017						
Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Oľga Orosová, CSc.Guaranteedoc. RNDr. Katarína Kimáková, CSc.						

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/ Cou

Course name: Scheduled practice teaching

MPPb/15

Course type, scope and the method:

Course type: Practice

Recommended course-load (hours): Per week: Per study period: 36s

Course method: present

Number of credits: 1

Recommended semester/trimester of the course: 2.

Course level: II.

Prerequisities: KPE/MPPa/15 and KPE/PDU/15 and (KPPaPZ/PaSPP/09 or KPPaPZ/PPgU/15)

Conditions for course completion:

During the practice student observe 11 biology lessons and leads one own biology hour under the guidance of a teacher trainer.

Confirmation of classroom visits.

Written assessment from the teacher trainer.

Learning outcomes:

Students acquire knowledge by observing the practical application of teaching skills for teaching the subject of biology and getting to know the organization of school work. Introduction into practical implementation of biology lesson.

Brief outline of the course:

Students observe the process of teaching biology at primary and secondary school and analyzed it with teacher trainer. Practice takes place continuously during the course of the semester. Practice is scheduled once a week at the time of first to third lesson in schools.

The first two hours observation/teaching, the third hour analysing process under the guidance of a teacher trainer.

Recommended literature:

Current biology textbooks for primary and secondary schools in Slovakia.

Course language:

Course assessment

Total number of assessed students: 379

abs	n
99.47	0.53

Provides:

Date of last modification: 24.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚCHV/ Course name: Scheduled practice teaching MPPb/15 Course type, scope and the method: Course type: Practice **Recommended course-load (hours):** Per week: Per study period: 36s Course method: present Number of credits: 1 Recommended semester/trimester of the course: 2. Course level: II. Prerequisities: KPE/MPPa/15 and KPE/PDU/15 and (KPPaPZ/PaSPP/09 or KPPaPZ/PPgU/15) **Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: Course assessment Total number of assessed students: 215 abs n 100.0 0.0

Provides: RNDr. Ivana Sotáková, doc. RNDr. Mária Ganajová, CSc.

Date of last modification: 24.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafá	rik University in Košice				
Faculty: Faculty of S	cience				
Course ID: ÚCHV/ MPPc/15	Course name: Continuous	practice teaching I			
Course type, scope a Course type: Practi Recommended cou Per week: Per stud Course method: pre	ce rse-load (hours): ly period: 4t				
Number of credits: 2	2				
Recommended seme	ster/trimester of the cours	e: 3.			
Course level: II.					
Prerequisities: ÚCH	V/MPPb/15 or ÚCHV/MPP	b/03			
Conditions for cours	se completion:				
Learning outcomes:					
Brief outline of the o	course:				
Recommended litera	nture:				
Course language:					
Course assessment Total number of asse	Course assessment Total number of assessed students: 58				
	abs	n			
	100.0 0.0				
Provides: RNDr. Ivan	Provides: RNDr. Ivana Sotáková, doc. RNDr. Mária Ganajová, CSc.				
Date of last modifica	ation: 24.02.2017		_		

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafá	rik University in Koš	ice
Faculty: Faculty of S	cience	
Course ID: ÚBEV/ MPPc/15	Course name: Cont	inuous practice teaching I
Course type, scope a Course type: Practic Recommended cou Per week: Per stud Course method: pro	ce rse-load (hours): ly period: 4t	
Number of credits: 2	2	
Recommended seme	ster/trimester of the	course: 3.
Course level: II.		
Prerequisities: ÚBE	V/MPPb/03 or ÚBEV	/MPPb/15
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: 102	
	abs	n
	100.0	0.0
Provides:		•
Date of last modifica	ntion: 24.02.2017	
Approved: Guarante CSc.Guaranteedoc. R		anajová, CSc.Guaranteeprof. PhDr. Oľga Orosová, ová, CSc.

University: P. J. Šafá	rik University in Košice					
Faculty: Faculty of Science						
Course ID: ÚCHV/ Course name: Continuous practice teaching II MPPd/15						
Course type: Practic Recommended cour Per week: Per stud	Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: Per study period: 6t Course method: present					
Number of credits: 2						
Recommended seme	ster/trimester of the cours	e: 4.				
Course level: II.						
Prerequisities: ÚCH	V/MPPc/15					
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 n						
100.0 0.0						
Provides: RNDr. Ivana Sotáková, doc. RNDr. Mária Ganajová, CSc.						
Date of last modification: 24.02.2017						
Approved: Guarantee	Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Oľga Orosová,					

University: P. J. Šafá	rik University in Košice	
Faculty: Faculty of S	cience	
Course ID: ÚBEV/ MPPd/15	Course name: Continu	ous practice teaching II
Course type, scope a Course type: Practic Recommended cou Per week: Per stud Course method: pre	ce rse-load (hours): ly period: 6t	
Number of credits: 2	2	
Recommended seme	ster/trimester of the co	urse: 4.
Course level: II.		
Prerequisities: ÚBE	V/MPPc/15	
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: 76	
	abs	n
	100.0	0.0
Provides: PaedDr. A	ndrea Lešková, PhD.	•
Date of last modifica	ntion: 24.02.2017	
••	edoc. RNDr. Mária Gana NDr. Katarína Kimáková	jová, CSc.Guaranteeprof. PhDr. Oľga Orosová, , CSc.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/

Course name: Chemistry and Didactics of Chemistry I

MSSU1/14

Course type, scope and the method:

Course type:

Recommended course-load (hours):

Per week: Per study period: Course method: present

Number of credits: 1

Recommended semester/trimester of the course:

Course level: II.

Prerequisities: ÚCHV/VKAU/04 and ÚCHV/DCH2/15

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment

Total number of assessed students: 51

A	В	С	D	E	FX
47.06	37.25	13.73	1.96	0.0	0.0

Provides:

Date of last modification: 27.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚCHV/ Course name: Chemistry and Didactics of Chemistry II MSSU2/14 Course type, scope and the method: **Course type: Recommended course-load (hours):** Per week: Per study period: Course method: present Number of credits: 1 **Recommended semester/trimester of the course:** Course level: II. Prerequisities: ÚCHV/VKOCH/03 and ÚCHV/DCH2/15 **Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Course assessment** Total number of assessed students: 29 В C D Ε FX Α

Provides:

79.31

Date of last modification: 27.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

0.0

0.0

0.0

6.9

CSc.Guaranteedoc. RNDr. Katarína Kimáková, CSc.

13.79

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: KPE/ Course name: Class Management MT/09 Course type, scope and the method: Course type: Practice **Recommended course-load (hours):** Per week: 2 Per study period: 28 Course method: present Number of credits: 2 **Recommended semester/trimester of the course:** 2. Course level: II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: Course assessment Total number of assessed students: 455

A	В	С	D	E	FX
54.07	32.97	9.67	1.54	0.66	1.1

Provides: PaedDr. Renáta Orosová, PhD.

Date of last modification: 07.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KGER/

Course name: Communicative Grammar in German Language

NJKG/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: I., II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment

Total number of assessed students: 47

A	В	C	D	E	FX
53.19	12.77	10.64	4.26	10.64	8.51

Provides: PaedDr. Ingrid Puchalová, PhD.

Date of last modification: 20.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/ | Course

Course name: Conservation Biology

OPR/12

Course type, scope and the method:

Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 0 Per study period: 28 / 0

Course method: present

Number of credits: 3

Recommended semester/trimester of the course: 1.

Course level: I., II.

Prerequisities:

Conditions for course completion:

Examination.

Learning outcomes:

The main goal of the subject is to introduce term biodiversity, principal threats and conservation of species, populations, communities and ecosystems.

Brief outline of the course:

Fundamental and origin of conservation biology. Different levels of biodiversity, biodiversity hotspots on Earth. Economic value of biodiversity as the principal argument of nature conservation. Factors leading to biodiversity threats. Extinctions and problems of small populations. Conservation of populations and species, conservation programs and strategies. Classification and management of protected areas, conservation outside the protected areas. Sustainable development, education to conservation of nature.

Recommended literature:

Primack R.B., 2010: Essentials of conservation biology. Sinauer Associates, 1-603

Course language:

Course assessment

Total number of assessed students: 559

A	В	C	D	Е	FX
75.49	13.6	7.69	2.15	0.36	0.72

Provides: doc. RNDr. Ľubomír Kováč, CSc.

Date of last modification: 24.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID:

Course name: Problémové a agresívne správanie žiakov. Etiológia,

KPPaPZ/PASZ/17

prevencia a intervencia.

Course type, scope and the method:

Course type: Practice

Recommended course-load (hours): Per week: 2 Per study period: 28

Course method: present

Number of credits: 2

Recommended semester/trimester of the course: 2.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment

Total number of assessed students: 17

Α	В	С	D	Е	FX
100.0	0.0	0.0	0.0	0.0	0.0

Provides: PhDr. Anna Janovská, PhD.

Date of last modification: 25.05.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: KPE/ Course name: Pedagogical Diagnostics **PDD/17** Course type, scope and the method: Course type: Practice **Recommended course-load (hours):** Per week: 2 Per study period: 28 Course method: present Number of credits: 2 Recommended semester/trimester of the course: 2. Course level: II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: Course assessment Total number of assessed students: 7 В \mathbf{C} D Е FX Α 100.0 0.0 0.0 0.0 0.0 0.0

Provides: PaedDr. Renáta Orosová, PhD., Mgr. Lucia Diheneščíková, PhD.

Date of last modification: 13.06.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: KPE/ Course name: Pedagogical Communication **PDK/17** Course type, scope and the method: Course type: Practice **Recommended course-load (hours):** Per week: 2 Per study period: 28 Course method: present Number of credits: 2 **Recommended semester/trimester of the course:** 1. Course level: II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: Course assessment Total number of assessed students: 8 В \mathbf{C} D Ε FX Α 75.0 25.0 0.0 0.0 0.0 0.0 Provides: Mgr. Katarína Petríková, PhD.

Date of last modification: 13.06.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPE/

Course name: Teaching Methodology and Pedagogy

PDU/15

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: 1.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment

Total number of assessed students: 1275

Α	В	C	D	E	FX
11.76	25.8	26.2	20.08	8.71	7.45

Provides: PaedDr. Renáta Orosová, PhD., Mgr. Katarína Petríková, PhD., Mgr. Lucia

Diheneščíková, PhD.

Date of last modification: 07.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: CJP/

Course name: Academic English

PFAJAKA/07

Course type, scope and the method:

Course type: Practice

Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: combined, present

Number of credits: 2

Recommended semester/trimester of the course:

Course level: I., II., N

Prerequisities:

Conditions for course completion:

Active classroom participation, 2 absences tolerated (4x45 min.) tolerated. 2 tests (5th/6th week and 12th/13th week), no retake. Minipresentation on chosen topic. Final evaluation- average assessment of tests and presentation. Grading scale: A 93-100%, B 86-92%, C 79-85%, D 72-78%, E 65-71%, FX 64% and less

Learning outcomes:

Brief outline of the course:

Recommended literature:

Seal B.: Academic Encounters, CUP, 2002

T. Armer: Cambridge English for Scientists, CUP 2011

M. McCarthy M., O'Dell F. - Academic Vocabulary in Use, CUP 2008

Zemach, D.E, Rumisek, L.A: Academic Writing, Macmillan 2005

Olsen, A.: Active Vocabulary, Pearson, 2013

www.bbclearningenglish.com

Cambridge Academic Content Dictionary, CUP, 2009

Course language:

English language, level B2 according to CEFR.

Course assessment

Total number of assessed students: 334

A	В	С	D	Е	FX
29.94	23.65	16.17	11.08	7.49	11.68

Provides: PaedDr. Gabriela Bednáriková

Date of last modification: 21.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: CJP/ PFAJGA/07 Course name: Communicative Grammar in English

Course type, scope and the method:

Course type: Practice

Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: combined, present

Number of credits: 2

Recommended semester/trimester of the course:

Course level: I., II., N

Prerequisities:

Conditions for course completion:

Active classroom participation (max. 2x90 min. absences tolerated). 2 test (5th/6th and 12/13th week), no retake. Final evaluation- average assessment of tests. Grading scale: A 93-100%, B 86-92%, C 79-85%, D 72-78%, E 65-71%, FX 64% and less.

Learning outcomes:

Brief outline of the course:

Recommended literature:

Misztal M.: Thematic Vocabulary, Fragment, 1998 McCarthy, O'Dell: English Vocabulary in Use, 1994

Alexander L.G.: Longman English Grammar, Longman, 1988

Jones I. - Communicative Grammar Practice, CUP, 1992

Vince M.: Macmillan Grammar in Context, Macmillan, 2008

www.bbclearningenglish.com

Gráf T., Peters S.: Time to practise, Polyglot, 2007

Course language:

Course assessment

Total number of assessed students: 389

A	В	С	D	Е	FX
39.33	18.25	16.97	9.0	6.17	10.28

Provides: PaedDr. Gabriela Bednáriková, Mgr. Barbara Mitríková

Date of last modification: 21.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: CJP/ PFAJKKA/07

Course name: Communicative Competence in English

Course type, scope and the method:

Course type: Practice

Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: combined, present

Number of credits: 2

Recommended semester/trimester of the course:

Course level: I., II., N

Prerequisities:

Conditions for course completion:

Active participation in class and completed homework assignments. Students are allowed to miss two classes at the most.

2 credit tests (presumably in weeks 6/7 and 12/13) and short academic presentations in English on selected topics.

Final grade will be calculated as follows: A 93-100 %, B 86-92%, C 79-85%, D 72-78%, E 65-71%, FX 64 % and less.

Learning outcomes:

Uplatnenie a aktívne používanie svojich teoretických vedomostí v praktických komunikačných situáciách. Zdokonalenie jazykových vedomostí a zručností študenta, rečovej, pragmatickej a vecnej kompetencie, predovšetkým zlepšujú komunikáciu, schopnosť prijímať a formulovať výpovede, efektívne vyjadrovať svoje myšlienky ako aj orientovať sa v obsahovom pláne výpovede. Precvičovanie rečových intencií kontaktných (napr. pozdravy, oslovenia, pozvanie, oslovenie), informatívnych (napr. získavanie a podávanie informácií, vyjadrenie priestorových a časových vzťahov), regulačných (napr. prosba, poďakovanie, zákaz, pochvala, súhlas, nesúhlas) a hodnotiacich (napr. vyjadrenie vlastného názoru, stanoviska, želania, emócií). Výsledkom budovania praktickej jazykovej kompetencie majú byť vedomosti a zručnosti zodpovedajúce požiadavkám a kritériám dokumentu Spoločný európsky referenčný rámec pre vyučovanie jazykov.

Brief outline of the course:

Rodina, jej formy a problémy

Vyjadrovanie pocitov a dojmov

Dom, bývanie a budúcnosť

Formy a dialekty v anglickom jazyku

Život v meste a na vidieku

Kolokácie a idiomy, zaužívané slovné spojenia

Prázdniny a sviatky vo svete

Životné prostredie a ekológia

Výnimky zo slovosledu

Frázové slovesá a ich použitie

Charakteristiky neformálneho diškurzu

Recommended literature:

www.bbclearningenglish.com

McCarthy M., O'Dell F.: English Vocabulary in Use, Upper-Intermediate. CUP, 1994.

Misztal M.: Thematic Vocabulary. SPN, 1998.

Fictumova J., Ceccarelli J., Long T.: Angličtina, konverzace pro pokročilé. Barrister and

Principal, 2008.

Peters S., Gráf T.: Time to practise. Polyglot, 2007.

Jones L.: Communicative Grammar Practice. CUP, 1985.

Alexander L.G.: Longman English Grammar. Longman, 1988.

Course language:

English language, B2 level according to CEFR

Course assessment

Total number of assessed students: 211

A	В	С	D	Е	FX
36.02	21.33	20.38	10.9	7.58	3.79

Provides: Mgr. Barbara Mitríková

Date of last modification: 21.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: KPE/ Course name: Pedagogy and Psychology **PPD/15** Course type, scope and the method: **Course type: Recommended course-load (hours):** Per week: Per study period: Course method: present Number of credits: 1 Recommended semester/trimester of the course: Course level: II. Prerequisities: KPE/PDU/15 and KPPaPZ/PPgU/15 **Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: Course assessment Total number of assessed students: 279 В \mathbf{C} D Ε FX Α

Provides:

27.24

Date of last modification: 07.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

15.41

0.36

4.3

27.96

CSc.Guaranteedoc. RNDr. Katarína Kimáková, CSc.

24.73

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: Dek. PF

Course name: Personality Development and Key Competences for Success

UPJŠ/PPZ/13

on a Labour Market

Course type, scope and the method:

Course type: Practice

Recommended course-load (hours): Per week: Per study period: 14s

Course method: present

Number of credits: 2

Recommended semester/trimester of the course:

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment

Total number of assessed students: 39

Α	В	С	D	E	FX
100.0	0.0	0.0	0.0	0.0	0.0

Provides: RNDr. Peter Stefányi, PhD.

Date of last modification: 13.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID:

Course name: Psychology and Educational Psychology

KPPaPZ/PPgU/15

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: 1.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment

Total number of assessed students: 1199

A	В	С	D	Е	FX
10.51	18.93	22.85	22.52	21.93	3.25

Provides: prof. PhDr. Ol'ga Orosová, CSc., Mgr. Lucia Hricová, PhD., PhDr. Anna Janovská, PhD.

Date of last modification: 16.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

COURSE INFORMATION LETTER University: P. J. Šafárik University in Košice Faculty: Faculty of Science **Course ID:** Course name: Psychológia tvorivosti a práca s nadanými v práci učiteľa KPPaPZ/PTPN/17 Course type, scope and the method: Course type: Practice **Recommended course-load (hours):** Per week: 2 Per study period: 28 Course method: present Number of credits: 2 Recommended semester/trimester of the course: 2. Course level: II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: Course assessment Total number of assessed students: 3 В \mathbf{C} D Е FX Α 0.0 0.0 0.0 0.0

100.0 0.0 Provides: Mgr. Lucia Hricová, PhD.

Date of last modification: 25.05.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID:

Course name: Drug Addiction Prevention in Educational Practice

KPPaPZ/PUDU/15

Course type, scope and the method:

Course type: Lecture / Practice

Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14

Course method: present

Number of credits: 4

Recommended semester/trimester of the course: 1., 3.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment

Total number of assessed students: 204

A	В	С	D	E	FX
46.57	42.65	9.8	0.98	0.0	0.0

Provides: prof. PhDr. Ol'ga Orosová, CSc., Mgr. Marta Kulanová, PhD., Mgr. Marcela

Štefaňáková, Mgr. Bohuš Hajduch

Date of last modification: 16.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

COURSE INFORMATION LETTER University: P. J. Šafárik University in Košice Faculty: Faculty of Science **Course ID:** Course name: Psychology of Health KPPaPZ/PsZ/15 Course type, scope and the method: Course type: Practice **Recommended course-load (hours):** Per week: 2 Per study period: 28 Course method: present Number of credits: 2 Recommended semester/trimester of the course: 3. Course level: II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: Course assessment Total number of assessed students: 50

A	В	C	D	E	FX
100.0	0.0	0.0	0.0	0.0	0.0

Provides: Mgr. Jozef Benka, PhD. et PhD.

Date of last modification: 16.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/

Course name: Stereochemistry of Inorganic Compounds

SAZ1/15

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: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Symmetry, elements of symmetry, point groups, symmetrical properties of orbitals and bonds. Principles of stereochemistry, VSEPR, configuration of molecules, polyhedra, regular and semiregular polyhedra. Valence shells with 4–12 electron pairs, geometry of molecules and periodic system.

Recommended literature:

Kepert, D. L.: Inorganic Stereochemistry. Springer-Verlag, Berlin, 1982.

Kettle, S. F. A.: Symmetry and Structure. John Wiley & Sons, New York, 1985.

Course language:

Course assessment

Total number of assessed students: 10

A	В	С	D	Е	FX
60.0	10.0	10.0	20.0	0.0	0.0

Provides: doc. RNDr. Vladimír Zeleňák, PhD.

Date of last modification: 24.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

COURSE INFORMATION LETTER University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: KPO/ Course name: Child and Adolescent Sociology SDaM/15 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: 2 Recommended semester/trimester of the course: 3. Course level: II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: Course assessment Total number of assessed students: 831 В \mathbf{C} D Е FX Α

49.94 29.6

Provides: Mgr. Alexander Onufrák, PhD.

Date of last modification: 17.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

3.37

0.36

1.32

15.4

COURSE INFORMATION LETTER University: P. J. Šafárik University in Košice Faculty: Faculty of Science **Course ID:** Course name: Mobbing, Violence and Their Prevention KPPaPZ/SNP/09 Course type, scope and the method: Course type: Practice **Recommended course-load (hours):** Per week: 2 Per study period: 28 Course method: present Number of credits: 2 Recommended semester/trimester of the course: Course level: II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: Course assessment Total number of assessed students: 83

Α	В	С	D	Е	FX
80.72	18.07	1.2	0.0	0.0	0.0

Provides: Mgr. Mária Bačíková, PhD.

Date of last modification: 16.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/

Course name: Special practising the school experiments I

SPC1a/03

Course type, scope and the method:

Course type: Practice

Recommended course-load (hours): Per week: 4 Per study period: 56

Course method: present

Number of credits: 5

Recommended semester/trimester of the course: 1.

Course level: II.

Prerequisities:

Conditions for course completion:

Continuous checking of theoretical preparation, development of report and presentation. Semestral test

Learning outcomes:

The aim of this subject is learn of basic experimental skillfulness in techniques in school experiment with accent on safety and health protections of students at scholar experimental work.

Brief outline of the course:

Selection and arrangement of chemical experiments as the demonstrative experiments, or pupils 'experiments to themes basic laws of chemistry, determination of constant physicochemical, factors influence speed of chemical reaction, experiments from electrochemistry, creating gases; preparation works characters of quantitative, interesting experiments of everyday life.

Recommended literature:

- 1. Ganajová, M., Dzurillová, M. 2005: Školské pokusy z chémie I. UPJŠ v Košiciach, Prírodovedecká fakulta, 140 s. ISBN 80-7097-617-9
- 2. Ganajová, M. 2005: Chemické experimenty s vybranými produktami z obchodu. UPJŠ v Košiciach, Prírodovedecká fakulta, 110 s. ISBN 80-7097-611-X
- 3. Tomeček,O.: Školská experimentálna semimikrosúprava. Učebné pomôcky Banská Bystrica 1980
- 4. The primary and secondary textbook of chemistry
- 5. http://kekule.science.upjs.sk (ŠIS)

Course language:

Course assessment

Total number of assessed students: 223

A	В	С	D	Е	FX
65.02	27.35	6.73	0.9	0.0	0.0

Provides: doc. RNDr. Mária Ganajová, CSc., RNDr. Ivana Sotáková

Date of last modification: 24.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Ol'ga Orosová, CSc.Guaranteedoc. RNDr. Katarína Kimáková, CSc.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/

Course name: Special practising the school experiments II

SPC1b/03

Course type, scope and the method:

Course type: Practice

Recommended course-load (hours): Per week: 3 Per study period: 42

Course method: present

Number of credits: 3

Recommended semester/trimester of the course: 2.

Course level: II.

Prerequisities:

Conditions for course completion:

The knowledge of the reaction mechanism of the main tests of several organic compounds derivatives and the ability of their laboratory realization are required. Written tests: more than 50% from each one is required.

Learning outcomes:

The students will become familiar with the basic laboratory skills and techniques that they can apply in demonstrating experiments in their future career as a teacher. The rules of healthy and safety laboratory work are emphasised.

Brief outline of the course:

Qualitative analysis of organic compounds

Alkanes - preparation of methane

Alkenes preparation and addition reactions of ethene, addition reaction of β -carotene

Alkynes, Aromatic hydrocarbons and their derivatives – preparation of benzene, aromatic electrophilic substitution reactions – nitration of toluene and naphthalene, preparation of benzyl bromide

Halogenoderivatives – preparation of chloroethane, chloroform, methyl iodide, iodoform Hydroxoderivatives – properties and reactivity - methanol, ethanol, ethylene glycol, glycerol, preparation of sodium ethanolate and sodium phenoxide, bromation of phenol, colour reactions of phenols, naphtols

Oxoderivatives – diethyl ether – preparation and properties, Aldehydes and Ketones – preparation of formaldehyde, oxidation of formaldehyde, acetone – addition of sodium hydrogensulfite

Carboxylic acids and their derivatives – preparation and properties of soap

Natural compounds – carbohydrates, proteins, amino acids, lipids

Factors that affect the rate of chemical reactions – temperature and concentration Isolation of the fragrant components using steam distillation

Recommended literature:

- 1. Smik, L., Merva, L., Brutovská, A: Technika a didaktika školských pokusov, Vyd.Rektorát UPJŠ,Košice,1988
- 2. Smik, L. a kol.: Špeciálna didaktika chémie II., Vyd. Rektorát UPJŠ, Košice, 1984
- 3. Internal scripts -Školské pokusy z organickej chémie

Course language:

slovak

Course assessment

Total number of assessed students: 216

A	В	С	D	Е	FX
41.2	27.31	18.98	8.8	3.7	0.0

Provides: RNDr. Jana Špaková Raschmanová, PhD., RNDr. Ján Elečko, PhD.

Date of last modification: 24.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Oľga Orosová,

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/

Course name: School experiments and observations

SPP/08

Course type, scope and the method:

Course type: Practice

Recommended course-load (hours): Per week: 2 Per study period: 28

Course method: present

Number of credits: 2

Recommended semester/trimester of the course: 3.

Course level: II.

Prerequisities:

Conditions for course completion:

Realisation of didactic analysis after conducted experiments and observations.

Learning outcomes:

Preparing students for the implementation of biological school experiments and observations.

Brief outline of the course:

The course is aimed at training and application skills that are necessary for the implementation of experiments and observations in the classroom. It helps students develop theoretical knowledge in practical work during training and familiarizes them with didactic methods in demonstrating the biological observation and educational experiments. It focuses on the possibilities of applying these methods in the various stages of a teaching unit.

Recommended literature:

HUDÁKOVÁ, A., KIMÁKOVÁ, K. 2005. Demonštračné pokusy a pozorovania z biológie rastlín. Košice: UPJŠ; Prírodovedecká fakulta, 84 s. ISBN 80-7097-610-1. Internal study materials in Moodle https://lms.upjs.sk/login/index.php

Course language:

Course assessment

Total number of assessed students: 64

A	В	С	D	E	FX
64.06	20.31	12.5	3.13	0.0	0.0

Provides: PaedDr. Andrea Lešková, PhD., Mgr. Zuzana Boberová, PhD.

Date of last modification: 24.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ Cou

Course name: Structure Analysis

STA1/03

Course type, scope and the method: Course type: Lecture / Practice

Recommended course-load (hours): Per week: 2 / 2 Per study period: 28 / 28

Course method: present

Number of credits: 6

Recommended semester/trimester of the course:

Course level: II.

Prerequisities:

Conditions for course completion:

2 written tests.

30 %

The final examination is in a written form. The final mark is based on the results from current and final tests.

Learning outcomes:

Students get an overview about the symmetry at the micro- and macrostructure level and about diffraction methods used for the crystal structure determination and they will learn how to use the results of the crystal structure analysis in their own work.

Brief outline of the course:

Macrostructure and microstructure symmetry, individual work with space groups. Theoretical basis of the diffraction experiment. Practical aspects of crystal structure solution. Processing the results of structural analysis. Theoretical basis, practical aspects and possibilities of X-ray powder diffraction analysis, its use at work of a chemist.

Recommended literature:

Massa, W.: Crystal structure determination, 2nd edition. Springer 2004.

Clegg, W. et al.: Crystal structure analysis. Principles and practice. Oxford University Press 2009.

Hahn, T.: International tables for crystallography, Vol. A. Kluwer Academic Publishers 2002.

Stout, G.H. & Jensen, L.H.: X-ray Structure Determination. Macmillan Publishing Co., Inc. 1968. Klug, H.P. & Alexander, L.E.: X-Ray diffraction procedures for polycrystalline and amorphous

materials. John Wiley & Sons, Inc. 1970.

Course language:

Slovak and English

Course assessment

Total number of assessed students: 100

A	В	С	D	Е	FX
29.0	16.0	27.0	19.0	8.0	1.0

Provides: doc. RNDr. Ivan Potočňák, PhD.

Date of last modification: 24.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Oľga Orosová,

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚBEV/ Course name: Student Scientific Conference SVK/01 Course type, scope and the method: **Course type: Recommended course-load (hours):** Per week: Per study period: Course method: present Number of credits: 4 Recommended semester/trimester of the course: 2. Course level: I., II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Course assessment** Total number of assessed students: 230 В \mathbf{C} D Ε FX Α 100.0 0.0 0.0 0.0 0.0 0.0 **Provides:**

Date of last modification: 24.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPE/

Course name: Creating Text Teaching Aids

TTUP/15

Course type, scope and the method:

Course type: Practice

Recommended course-load (hours): Per week: 2 Per study period: 28

Course method: present

Number of credits: 2

Recommended semester/trimester of the course: 2.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment

Total number of assessed students: 103

Α	В	С	D	Е	FX
48.54	33.98	10.68	4.85	1.94	0.0

Provides: PaedDr. Renáta Orosová, PhD., Mgr. Katarína Petríková, PhD.

Date of last modification: 07.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚTVŠ/ Co

Course name: Sports Activities I.

TVa/11

Course type, scope and the method:

Course type: Practice

Recommended course-load (hours): Per week: 2 Per study period: 28

Course method: present

Number of credits: 2

Recommended semester/trimester of the course: 1.

Course level: I., I.II., II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment

Total number of assessed students: 10457

abs	abs-A	abs-B	abs-C	abs-D	abs-E	n	neabs
88.25	0.0	0.0	0.0	0.0	0.02	7.81	3.92

Provides: Mgr. Peter Bakalár, PhD., Mgr. Dana Dračková, PhD., Mgr. Agata Horbacz, PhD., Mgr. Dávid Kaško, Mgr. Zuzana Küchelová, PhD., PaedDr. Jana Potočníková, PhD., doc. PaedDr. Ivan Uher, PhD., Mgr. Marek Valanský, prof. RNDr. Stanislav Vokál, DrSc., Mgr. Aurel Zelko, PhD., Mgr. Marcel Čurgali, doc. PhDr. Ivan Šulc, CSc.

Date of last modification: 23 02 2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚTVŠ/ C

Course name: Sports Activities II.

TVb/11

Course type, scope and the method:

Course type: Practice

Recommended course-load (hours): Per week: 2 Per study period: 28

Course method: present

Number of credits: 2

Recommended semester/trimester of the course: 2.

Course level: I., I.II., II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment

Total number of assessed students: 9779

abs	abs-A	abs-B	abs-C	abs-D	abs-E	n	neabs
85.09	0.61	0.02	0.0	0.0	0.02	10.36	3.9

Provides: Mgr. Peter Bakalár, PhD., Mgr. Dana Dračková, PhD., Mgr. Agata Horbacz, PhD., Mgr. Dávid Kaško, Mgr. Zuzana Küchelová, PhD., PaedDr. Jana Potočníková, PhD., doc. PaedDr. Ivan Uher, PhD., Mgr. Marek Valanský, prof. RNDr. Stanislav Vokál, DrSc., Mgr. Aurel Zelko, PhD., Mgr. Marcel Čurgali, doc. PhDr. Ivan Šulc, CSc.

Date of last modification: 23.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Oľga Orosová,

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚTVŠ/ C

Course name: Sports Activities III.

TVc/11

Course type, scope and the method:

Course type: Practice

Recommended course-load (hours): Per week: 2 Per study period: 28

Course method: present

Number of credits: 2

Recommended semester/trimester of the course: 3.

Course level: I., I.II., II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment

Total number of assessed students: 6188

abs	abs-A	abs-B	abs-C	abs-D	abs-E	n	neabs
89.66	0.03	0.0	0.0	0.0	0.0	4.36	5.95

Provides: PaedDr. Jana Potočníková, PhD., Mgr. Marcel Čurgali, Mgr. Peter Bakalár, PhD., Mgr. Dana Dračková, PhD., Mgr. Agata Horbacz, PhD., Mgr. Dávid Kaško, Mgr. Zuzana Küchelová, PhD., doc. PaedDr. Ivan Uher, PhD., Mgr. Marek Valanský, prof. RNDr. Stanislav Vokál, DrSc., Mgr. Aurel Zelko, PhD., doc. PhDr. Ivan Šulc, CSc.

Date of last modification: 23 02 2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Oľga Orosová,

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚTVŠ/

Course name: Sports Activities IV.

TVd/11

Course type, scope and the method:

Course type: Practice

Recommended course-load (hours): Per week: 2 Per study period: 28

Course method: present

Number of credits: 2

Recommended semester/trimester of the course: 4.

Course level: I., I.II., II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment

Total number of assessed students: 4644

abs	abs-A	abs-B	abs-C	abs-D	abs-E	n	neabs
85.66	0.32	0.04	0.0	0.0	0.0	6.61	7.36

Provides: Mgr. Marcel Čurgali, Mgr. Peter Bakalár, PhD., Mgr. Dana Dračková, PhD., Mgr. Agata Horbacz, PhD., Mgr. Dávid Kaško, Mgr. Zuzana Küchelová, PhD., PaedDr. Jana Potočníková, PhD., doc. PaedDr. Ivan Uher, PhD., Mgr. Marek Valanský, prof. RNDr. Stanislav Vokál, DrSc., Mgr. Aurel Zelko, PhD., doc. PhDr. Ivan Šulc, CSc.

Date of last modification: 23.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Oľga Orosová,

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/

Course name: Introduction to Environmental Chemistry

UECH/03

Course type, scope and the method:

Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14

Course method: present

Number of credits: 5

Recommended semester/trimester of the course: 1., 3.

Course level: I., II.

Prerequisities:

Conditions for course completion:

Oral examination

Learning outcomes:

Introduction to topics in environmental chemistry and basic procedures applied for environmental protection.

Brief outline of the course:

Introduction to Environmental Chemistry

Chemical aspects of pollution and environmental problems. Composition and behavior of the atmosphere. Energy balance of the Earth and climate changes. Principles of photochemistry, photoprocesses in the atmosphere. Petroleum, hydrocarbons and coal (characteristics, sources and environmental pollution). Soaps, polymers and synthetic surfactants. Haloorganics and pesticides. Environmental chemistry of some important elements (C, N, S, P, halogens, biologically important metals ...). Environmental chemistry in aqueous media. Aqueous systems, parameters, cycles and their protection. The Earth's crust (rocks, minerals, soils). Natural and artificial radioactivity, utilization. Energy and energy sources (fossil fuels, nuclear, geothermal, solar energy, wind and water energy). Solid waste disposal and recycling.

Recommended literature:

- 1. Gary W. van Loon, Stephen J. Duffy : Environmental Chemistry A Global Perspective, Oxford University Press, Oxford 2003
- 2. R.A. Bailey, H.M. Clark, J.P. Ferris, S. Krause, R.L. Strong: Chemistry of the Environment, Academic Press, San Diego 2002
- 3. G. Schwedt: The Essential Guide to Environmental Chemistry, Wiley and Sons, London 2001
- 4. R.N. Reeve, J.D. Barnes: General Environmental Chemistry, Wiley, London 1994
- 5. G. Burton, J. Holman, G. Pilling, D. Waddington: Chemical Storylines, Heinemann, Oxford, London 1994
- 6 www

Course language:

Course assessment

Total number of assessed students: 208

A	В	С	D	Е	FX
48.56	20.67	15.87	8.65	6.25	0.0

Provides: doc. RNDr. Andrea Straková Fedorková, PhD.

Date of last modification: 24.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course name: Úvod do psychológie náboženstva **Course ID:** KPPaPZ/UPN/17 Course type, scope and the method: Course type: Practice **Recommended course-load (hours):** Per week: 2 Per study period: 28 Course method: present Number of credits: 2 Recommended semester/trimester of the course: 2. Course level: II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: Course assessment Total number of assessed students: 0 В \mathbf{C} D Ε FX Α

Provides: Mgr. Jozef Benka, PhD. et PhD.

0.0

Date of last modification: 25.05.2017

0.0

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

0.0

0.0

0.0

0.0

COURSE INFORMATION LETTER University: P. J. Šafárik University in Košice Faculty: Faculty of Science **Course ID:** Course name: The Art of Aiding by Verbal Exchange KPPaPZ/UPR/15 Course type, scope and the method: Course type: Practice **Recommended course-load (hours):** Per week: 2 Per study period: 28 Course method: present Number of credits: 2 Recommended semester/trimester of the course: 2. Course level: II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: Course assessment

Total number of assessed students: 82

A	В	С	D	E	FX
92.68	2.44	3.66	1.22	0.0	0.0

Provides: Mgr. Ondrej Kalina, PhD.

Date of last modification: 16.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/ Cou

Course name: Introduction to Ecology

VEK1/03

Course type, scope and the method:

Course type: Lecture

Recommended course-load (hours): Per week: 2 Per study period: 28

Course method: present

Number of credits: 3

Recommended semester/trimester of the course: 1.

Course level: I., II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Fundamental parameters and relations in ecological science.

Brief outline of the course:

Ecological factors and relations in environment (air, water, soil); influence of ecological factors on individuals (morphological adaptations, behavioral reactions); populations and communities; ecosystems (impact assessment); conservation and biodiversity.

Recommended literature:

Begon, M., Harper, J. L., Townsend, C. L.: Ecology: individuals, populations, and communities. Blackwell Sci. Publ., 1990

Course language:

Course assessment

Total number of assessed students: 1461

A	В	С	D	Е	FX
19.78	15.54	24.44	18.34	12.66	9.24

Provides: prof. RNDr. Igor Hudec, CSc.

Date of last modification: 24.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/

Course name: Selected Topics in Analytical Chemistry

VKACH/03

Course type, scope and the method:

Course type: Lecture / Practice

Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14

Course method: present

Number of credits: 5

Recommended semester/trimester of the course: 3.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Classical methods of analytical chemistry - volumetric analysis, gravimetry. Review of analytical instrumental methods. New analytical techniques for characterization and identifications of analytes.

Recommended literature:

Skoog D.A.: Principles of Instrumental Analysis. Saunders Col. Publishing, New York 1985.

D.Harvey: Modern Analytical Chemistry. McGraw Hill, Boston, 2000.

Course language:

Course assessment

Total number of assessed students: 3

A	В	С	D	Е	FX
100.0	0.0	0.0	0.0	0.0	0.0

Provides: doc. RNDr. Taťána Gondová, CSc.

Date of last modification: 24.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/

Course name: Selected Topics in Inorganic Chemistry

VKAU/04

Course type, scope and the method:

Course type: Lecture / Practice

Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14

Course method: present

Number of credits: 5

Recommended semester/trimester of the course: 3.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Greenwood, N.N., Earnshaw, A.: Chemistry of the elements I and II, Pergamon Press N.Y., 1993. C. N. R. Rao, A. Muller, A. K. Cheetham: The Chemistry of Nanomaterials (Vol. 1,2), Wiley-VCH,2006.

Atkins O., Overton T., Rourke J., Weller M., Armstrong F.: Inorganic Chemistry, University Press, Oxford, 2006.

Course language:

Course assessment

Total number of assessed students: 31

A	В	С	D	Е	FX
45.16	19.35	22.58	6.45	6.45	0.0

Provides: doc. RNDr. Vladimír Zeleňák, PhD.

Date of last modification: 24.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/

Course name: Vybrané kapitoly z chémie

VKCH/10

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

Per week: 2 / 1 Per study period: 28 / 14

Course method: present

Number of credits: 4

Recommended semester/trimester of the course: 1., 3.

Course level: II.

Prerequisities:

Conditions for course completion:

Terminal examination by written form.

Learning outcomes:

Organic chemistry:

The general review on the basic chemistry of saccharides, lipids, amino acids and peptides.

Inorganic chemstry:

To get acquaintance of the students with the stereochemistry of inorganic compounds, methods of the study and its influence on the properties of the compounds. Moreover to get acquintance of the students with actual direction of inorganic chemistry in the area of nanomaterials.

Brief outline of the course:

Organic chemistry:

Nomenclature of monosaccharides, their stereochemistry (the Fischer projection, the Haworth projection, conformation of sugars). Monosaccharide derivatives. Ascending reactions. Oligosaccharides and polysaccharides.

Lipids, their structure and classification. Groups of lipids. Triacylglycerols, glycerophospholipids sfingophospholipids, glycosphingolipids.

Amino acids, their nomenclature, classification and stereochemistry. Synthesis of amino acids. Nonribosomal construction of peptides.

Inorganic chemistry:

Symmetry, elements of symmetry, point groups, symmetrical properties of orbitals and bonds. Principles of stereochemistry, VSEPR, configuration of molecules, polyhedra, regular and semiregular polyhedra, the use of concept of symmetry in IR and UV-VIS spectroscopy. Nanochemistry - definition, bonds in nanoparticles and nanopowders, interactions between nanoparticles. Unique properties of nanomaterials, new methods of the synthesis of nanomaterials.

Recommended literature:

- J. McMurry: Organic chemistry, Brooks/Cole, a Thomson Learning Company 2004, Sixth Eddition, ISBN 0534389996.
- J. Chomič: Stereochemistry of inorganic compounds, UPJŠ Košice, 1988.
- K. J. Klabunde, R. M. Richards: Nanoscale Materials in Chemistry, Wiley-CH, 2009.

Course language:

Course assessment							
Total number of assessed students: 157							
A	В	C	D	Е	FX		
22.93	25.48	35.03	13.38	2.55	0.64		

Provides: doc. RNDr. Mária Kožurková, CSc., doc. RNDr. Vladimír Zeleňák, PhD., doc. RNDr. Miroslava Martinková, PhD.

Date of last modification: 24.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Ol'ga Orosová, CSc.Guaranteedoc. RNDr. Katarína Kimáková, CSc.

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚCHV/ Course name: Selected topics in organic chemistry VKOCH/03 Course type, scope and the method: Course type: Lecture / Practice **Recommended course-load (hours):** Per week: 2 / 1 Per study period: 28 / 14 Course method: present **Number of credits: 5** Recommended semester/trimester of the course: 3. Course level: II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: Course assessment Total number of assessed students: 100 В \mathbf{C} D Ε FX Α 25.0 34.0 21.0 14.0 6.0 0.0

Provides: doc. RNDr. Ján Imrich, CSc.

Date of last modification: 24.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPPaPZ/VP/09 Course name: Educational Counselling

Course type, scope and the method:

Course type: Practice

Recommended course-load (hours): Per week: 2 Per study period: 28

Course method: present

Number of credits: 2

Recommended semester/trimester of the course: 2.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment

Total number of assessed students: 119

A	В	С	D	E	FX
56.3	26.89	10.08	5.04	1.68	0.0

Provides: PhDr. Anna Janovská, PhD.

Date of last modification: 16.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice Faculty: Faculty of Science **Course ID:** Course name: Vývinová psychológia pre učiteľov KPPaPZ/VPU/17 Course type, scope and the method: Course type: Practice **Recommended course-load (hours):** Per week: 2 Per study period: 28 Course method: present Number of credits: 2 **Recommended semester/trimester of the course:** 1. Course level: II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course:**

Course language:

Recommended literature:

Course assessment

Total number of assessed students: 13

A	В	C	D	Е	FX
38.46	46.15	15.38	0.0	0.0	0.0

Provides: Mgr. Mária Bačíková, PhD.

Date of last modification: 25.05.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID:

Course name: Slovak Language for Teachers

KSSFaK/VSJU/15

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: 2

Recommended semester/trimester of the course: 1., 3.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment

Total number of assessed students: 40

A	В	С	D	Е	FX
12.5	32.5	27.5	20.0	7.5	0.0

Provides: PhDr. Iveta Bónová, PhD., Mgr. Lucia Jasinská, PhD., Mgr. Lena Ivančová, PhD.

Date of last modification: 18.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/

Course name: Xenobiochemistry

XBCH/04

Course type, scope and the method:

Course type: Lecture

Recommended course-load (hours): Per week: 3 Per study period: 42

Course method: present

Number of credits: 5

Recommended semester/trimester of the course: 2.

Course level: II.

Prerequisities:

Conditions for course completion:

test

Learning outcomes:

Students obtained modern knowledge of xenobiotics metabolism in living organisms

Brief outline of the course:

Characterization of metabolism of xenobiotics in the liver. The basic types of biotransformation reactions - oxidation, reduction, hydrolysis, conjugation. Biotransformation enzymes. Free radicals and their effects, lipid peroxidation.

Recommended literature:

Z. Ďuračková: Voľné radikály a antioxidanty v medicíne, Slovak akademik press 1998.

Z. Vodrážka: Biochémia, Praha, 1996.

A. Jindra: Biochémia, molekulárnobiologické a farmakologické aspekty, Praha, 1985.

Course language:

Course assessment

Total number of assessed students: 56

A	В	С	D	Е	FX
66.07	17.86	8.93	1.79	5.36	0.0

Provides: RNDr. Danica Sabolová, PhD.

Date of last modification: 24.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/

Course name: Chemical Engineering

ZCVU/04

Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14

Course method: present

Number of credits: 5

Recommended semester/trimester of the course: 2., 4.

Course level: II., III.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

General and Inorganic Engineering; Mineral raw materials; Raw materials processing, transport and holding; Chemical reactors; Chemical metallurgy – Fe, Al, Cu working; Inorganic acids manufacture (H2SO4, HNO3, HCl, HF, H3PO4); Industrial electrochemistry; Industrial fertilizers; Silicate industry – cement manufacture, ceramics; Petrochemistry

Recommended literature:

Course language:

Course assessment

Total number of assessed students: 5

A	В	С	D	Е	FX	N	Р
20.0	60.0	20.0	0.0	0.0	0.0	0.0	0.0

Provides: doc. RNDr. Zuzana Vargová, Ph.D.

Date of last modification: 24.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: Course name: The Fundamentals of Pedagogico-Psychological Research

KPPaPZ/ZMPPV/15 | Methodology

Course type, scope and the method:

Course type; scope and the method:

Course type: Lecture / Practice

Recommended course-load (hours):

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

Course method: present

Number of credits: 4

Recommended semester/trimester of the course: 2.

Course level: II.

Prerequisities: KPPaPZ/PPgU/15 and KPE/PDU/15

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment

Total number of assessed students: 297

A	В	С	D	E	FX
14.48	24.58	24.92	21.89	13.8	0.34

Provides: Mgr. Mária Bačíková, PhD., PhDr. Anna Janovská, PhD.

Date of last modification: 16.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/ Co

Course name: Zoogeography

ZOG1/03

Course type, scope and the method: Course type: Lecture / Practice

Recommended course-load (hours): Per week: 2 / 2 Per study period: 28 / 28

Course method: present

Number of credits: 6

Recommended semester/trimester of the course: 1., 3.

Course level: I., II.

Prerequisities:

Conditions for course completion:

Active participation in seminars.

Preparation of oral presentation to selected topic.

Semestral written test.

Oral examination.

Learning outcomes:

The main goal of the subject is to get knowledge on the basic reasons of recent distribution of the animals on the Earth, zoogeographic regionalization of the Earth's surface and human influence on the faunal distribution in the history.

Brief outline of the course:

This course will review our current understanding of the patterns of animal distribution and the processes that influence distributions of species and their attributes. Zoogeography will integrate information on the historical and current ecology, genetics, and physiology of animals and their interaction with environmental processes (continental drift, climate) in regulating geographic distributions. The course will emphasize descriptive and analytical approaches useful in hypothesis testing in zoogeography and will illustrate applied aspects of zoogeography (e.g. refuge design in conservation).

Recommended literature:

Buchar, J., 1983: Zoogeografie. SPN Praha

Darlington, P.J., 1998: Zoogeography: The geographical distribution of animals. Krieger, USA Lomolino M.V., Brown J.H., Riddle B. R., 2005: Biogeography. Sinauer Associates, 1-845 Plesník, P., Zatkalík, F., 1996: Biogeografia. Vysokoškolské skriptá, PríFUK Bratislava

Course language:

Course assessment

Total number of assessed students: 845

A	В	С	D	Е	FX
23.2	23.55	24.85	18.22	8.17	2.01

Provides: doc. RNDr. Ľubomír Kováč. CSc.

Date of last modification: 24.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Oľga Orosová,

COURSE INFORMATION LETTER University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: KPE/ Course name: Essentials of Special Education ZSP/15 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: 2 Recommended semester/trimester of the course: 3. Course level: II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: Course assessment Total number of assessed students: 194 В \mathbf{C} D E FX Α

Provides: Mgr. Lucia Diheneščíková, PhD.

36.08

Date of last modification: 07.02.2017

35.05

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

8.25

2.06

0.0

18.56

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/

Course name: Basic Toxicology

ZTOX/04

Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14

Course method: present

Number of credits: 5

Recommended semester/trimester of the course: 1.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Goal of the course is to provide the students with a knowledge of types of toxic substances and their metabolism, safe and handling of toxic substances.

Brief outline of the course:

Historical aspects, types of toxic substances, types of exposure, dose-response relationship. Disposition of toxic compounds (absorption, distribution, excretion of toxic compounds). Metabolism of toxic compounds. Drugs as toxic substances, food additives and contaminants, environmental pollutans. Statement of chemistry laboratory policy. Safe and handling of toxic substances.

Recommended literature:

- G. F. Fuhrman: Allgemeine Toxikologie fuer Chemiker, Teubner Verlag, Stutgart 1984.
- V. E. Forbes, T. L. Forbe: Ecotoxicology in Theory and Practice, Chapman&Hall, London 1994.
- J. A. Timbrell: Introduction to Toxicology, Taylor&Francis, London 1994.

Course language:

Course assessment

Total number of assessed students: 288

Α	В	С	D	Е	FX
21.18	28.13	23.61	17.36	8.33	1.39

Provides: RNDr. Miroslava Matiková-Maľarová, PhD.

Date of last modification: 24.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPE/ Course name: Experiential Education

ZZP/12

Course type, scope and the method: Course type: Lecture / Practice

Recommended course-load (hours): Per week: 1 / 2 Per study period: 14 / 28

Course method: present

Number of credits: 4

Recommended semester/trimester of the course: 1., 3.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment

Total number of assessed students: 143

A	В	C	D	E	FX
36.36	44.76	16.08	2.8	0.0	0.0

Provides: PaedDr. Renáta Orosová, PhD., prof. Volodymyr Starosta, DrSc.

Date of last modification: 07.02.2017

Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc. Guaranteeprof. PhDr. Ol'ga Orosová,

University: P. J. Šafá	rik University in Košice					
Faculty: Faculty of S	cience					
Course ID: ÚTVŠ/ ÚTVŠ/CM/13						
Course type, scope a Course type: Practic Recommended cou Per week: Per stud Course method: pre	ce rse-load (hours): ly period: 36s					
Number of credits: 2	2					
Recommended seme	ster/trimester of the cours	e:				
Course level: I., II.						
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: 15					
	abs	n				
	26.67 73.33					
Provides: Mgr. Alena	a Buková, PhD., Mgr. Agata	Horbacz, PhD.				
Date of last modifica	ation: 23.02.2017					
* *	edoc. RNDr. Mária Ganajov NDr. Katarína Kimáková, C	á, CSc.Guaranteeprof. PhDr. Ol'ga Orosová, Sc.				

University: P. J. Šafárik University in Košice				
Faculty: Faculty of Science				
Course ID: KSSFaK/ ČGUAP/15	Course name: Reading Lit	Course name: Reading Literacy in Educational Process		
Course type, scope a Course type: Lectur Recommended course week: 2 Per stu Course method: pre	re rse-load (hours): idy period: 28 esent			
Number of credits: 2				
Recommended seme	ster/trimester of the cours	e: 2.		
Course level: II.				
Prerequisities:				
Conditions for cours	se completion:			
Learning outcomes:				
Brief outline of the c	course:			
Recommended litera	ature:			
Course language:				
Course assessment Total number of asse	ssed students: 18			
	abs	n		
100.0 0.0				
Provides: doc. PaedI	Provides: doc. PaedDr. Ivica Hajdučeková, PhD.			
Date of last modification: 18.02.2017				
Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Ol'ga Orosová, CSc.Guaranteedoc. RNDr. Katarína Kimáková, CSc.				