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COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: CJP/ PFAJAKA/07		Course name: Academic 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 ECTS credits: 2					
Recommended semester/trimester of the course:					
Course level: I., II., N					
Prerequisites:					
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.					
Notes:					
Course assessment Total number of assessed students: 355					
A	B	C	D	E	FX
31.55	23.1	15.77	10.7	7.04	11.83
Provides: PaedDr. Gabriela Bednáriková					
Date of last modification: 04.10.2019					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚINF/AOS1/15	Course name: Administration of OS
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 ECTS credits: 2	
Recommended semester/trimester of the course: 1., 3.	
Course level: I., II.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes: To be able to install Linux based system, divide disks, to know how to install, configure and manage several network deamons.	
Brief outline of the course: 1. Introduction to network services 2. SSH 3. Routing and NAT 4. Introduction to Firewall 5. Advanced firewall settings 6. DHCP server 7. Web server (apache, php, mysql) 8. Monitoring Server (SNMP, MRTG) 9. Samba Server 10. Mail server (smtp, imap, postfix) 11. Proxy server 12. Windows server 13. Windows Server II. 14. Introduction to Virtualization (Hyper-V OpenVZ)	
Recommended literature: 1. Linux Documentation Project, 4 updated edition. Brno: Computer Press (2008). 2. Stanek, W.: Windows Server 2012 Inside Out. Microsoft Press (2013) 3. Shah, S. Soyinka, W. Administration Linux. Grade (2007) 4. Nemeth, E., et al.: Linux. Brno: Computer Press (2008)	
Course language:	
Notes:	

Course assessment					
Total number of assessed students: 88					
A	B	C	D	E	FX
51.14	23.86	6.82	4.55	7.95	5.68
Provides: RNDr. JUDr. Pavol Sokol, PhD., RNDr. PhDr. Peter Pisarčík					
Date of last modification: 17.09.2015					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚCHV/ AMCU/15		Course name: Aktivizujúce metódy výučby chémie			
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 ECTS credits: 5					
Recommended semester/trimester of the course: 2.					
Course level: II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 29					
A	B	C	D	E	FX
100.0	0.0	0.0	0.0	0.0	0.0
Provides: doc. RNDr. Mária Ganajová, CSc., RNDr. Ivana Sotáková, Ph.D.					
Date of last modification: 03.05.2015					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚCHV/ ZTOX/04		Course name: Basic Toxicology			
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14 Course method: present					
Number of ECTS credits: 5					
Recommended semester/trimester of the course: 1.					
Course level: II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes: Goal of the course is to provide the students with a knowledge of types of toxic substances and their metabolism, safe and handling of toxic substances.					
Brief outline of the course: Historical aspects, types of toxic substances, types of exposure, dose-response relationship. Disposition of toxic compounds (absorption, distribution, excretion of toxic compounds). Metabolism of toxic compounds. Drugs as toxic substances, food additives and contaminants, environmental pollutants. Statement of chemistry laboratory policy. Safe and handling of toxic substances.					
Recommended literature: G. F. Fuhrman: Allgemeine Toxikologie fuer Chemiker, Teubner Verlag, Stuttgart 1984. V. E. Forbes, T. L. Forbe: Ecotoxicology in Theory and Practice, Chapman&Hall, London 1994. J. A. Timbrell: Introduction to Toxicology, Taylor&Francis, London 1994.					
Course language:					
Notes:					
Course assessment Total number of assessed students: 308					
A	B	C	D	E	FX
20.78	27.27	25.0	17.86	7.79	1.3
Provides: RNDr. Miroslava Matiková-Maľarová, PhD.					
Date of last modification: 03.05.2015					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚCHV/ BTC/03		Course name: Biotechnology			
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 ECTS credits: 5					
Recommended semester/trimester of the course: 2.					
Course level: II.					
Prerequisites:					
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:					
Notes:					
Course assessment Total number of assessed students: 100					
A	B	C	D	E	FX
47.0	22.0	18.0	7.0	6.0	0.0
Provides: RNDr. Danica Sabolová, PhD.					
Date of last modification: 03.05.2015					

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice							
Faculty: Faculty of Science							
Course ID: ÚCHV/ ZCVU/04		Course name: Chemical Engineering					
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 ECTS credits: 5							
Recommended semester/trimester of the course: 2., 4.							
Course level: II., III.							
Prerequisites:							
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 (H ₂ SO ₄ , HNO ₃ , HCl, HF, H ₃ PO ₄); Industrial electrochemistry; Industrial fertilizers; Silicate industry – cement manufacture, ceramics; Petrochemistry							
Recommended literature:							
Course language:							
Notes:							
Course assessment Total number of assessed students: 15							
A	B	C	D	E	FX	N	P
13.33	60.0	20.0	6.67	0.0	0.0	0.0	0.0
Provides: doc. RNDr. Zuzana Vargová, Ph.D.							
Date of last modification: 23.02.2018							
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.							

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚCHV/ CHE2/03		Course name: Chemical Excursion			
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: Per study period: 1t Course method: present					
Number of ECTS credits: 4					
Recommended semester/trimester of the course: 2.					
Course level: II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 88					
A	B	C	D	E	FX
94.32	5.68	0.0	0.0	0.0	0.0
Provides: doc. RNDr. Zuzana Vargová, Ph.D.					
Date of last modification: 03.05.2015					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: KPO/SDaM/15		Course name: Child and Adolescent Sociology			
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 ECTS credits: 2					
Recommended semester/trimester of the course: 4.					
Course level: II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 851					
A	B	C	D	E	FX
49.71	29.85	15.39	3.41	1.29	0.35
Provides: Mgr. Alexander Onufrák, PhD.					
Date of last modification: 03.05.2015					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: KPE/MT/09		Course name: Class Management			
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 ECTS credits: 2					
Recommended semester/trimester of the course: 2.					
Course level: II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 499					
A	B	C	D	E	FX
53.91	33.87	9.02	1.6	0.6	1.0
Provides: PaedDr. Renáta Orosová, PhD.					
Date of last modification: 11.02.2020					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚINF/ KKV1/15	Course name: Classical and quantum computations
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 3 / 1 Per study period: 42 / 14 Course method: present	
Number of ECTS credits: 6	
Recommended semester/trimester of the course: 1., 3.	
Course level: II.	
Prerequisites:	
Conditions for course completion: Written work Written and oral examination	
Learning outcomes: To provide information on quantum computer and quantum computations. To compare classical and quantum models and methods.	
Brief outline of the course: The basics of classical theory of computation: Turing machines, Boolean circuits, parallel algorithms, probabilistic computation, NP-complete problems, and the idea of complexity of an algorithm. Introduction of general quantum formalism (pure states, density matrices, and superoperators), universal gate sets and approximation theorems. Grover's algorithm, Shor's factoring algorithm, and the Abelian hidden subgroup problem. Parallel quantum computation, a quantum analogue of NP-completeness, and quantum error-correcting codes.	
Recommended literature: 1. BERMAN, G.P., DOOLEN, G.D., MAINIERI, R., TSIFRINOVIC, V.I. Introduction to Quantum Computers. World Scientific, 2003. 2. GRUSKA, J. Quantum Computing. McGraw-Hill, 1999. 3. JOHNSON, G. A Shortcut Through Time: The Path to the Quantum Computer, Knopf 2003. 4. KITAEV, A.Y., SHEN, A.H., VYALYI, M.N. Classical and Quantum Computation. American Mathematical Society, 2002. 5. NIELSEN, M.A., CHUANG, I.L. Quantum Computation and Quantum Information. Cambridge University Press, 2000. 6. HIRVENSALO, M., Quantum Computing, Springer 2004	
Course language:	
Notes:	

Course assessment					
Total number of assessed students: 128					
A	B	C	D	E	FX
22.66	35.94	14.84	13.28	7.03	6.25
Provides: prof. RNDr. Gabriel Semanišin, PhD., RNDr. Zuzana Bednárová, PhD.					
Date of last modification: 03.05.2015					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

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 ECTS credits: 2	
Recommended semester/trimester of the course:	
Course level: I., II., N	
Prerequisites:	
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

Notes:**Course assessment**

Total number of assessed students: 237

A	B	C	D	E	FX
38.4	22.36	19.41	9.7	6.75	3.38

Provides: Mgr. Barbara Mitříková

Date of last modification: 11.02.2020

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: KGER/ NJKK/07		Course name: Communicative Competence in German Language			
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 ECTS credits: 2					
Recommended semester/trimester of the course:					
Course level: I., II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 44					
A	B	C	D	E	FX
59.09	13.64	6.82	4.55	13.64	2.27
Provides: Mgr. Eva Černáková, PhD.					
Date of last modification: 03.05.2015					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

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 ECTS credits: 2					
Recommended semester/trimester of the course:					
Course level: I., II., N					
Prerequisites:					
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: Vince M.: Macmillan Grammar in Context, Macmillan, 2008 McCarthy, O'Dell: English Vocabulary in Use, CUP, 1994 C. Oxengen, C. Latham-Koenig: New English File Advanced, Oxford 2010 Misztal M.: Thematic Vocabulary, Fragment, 1998 www.bbclearningenglish.com ted.com/talks					
Course language:					
Notes:					
Course assessment Total number of assessed students: 406					
A	B	C	D	E	FX
39.66	18.97	16.75	8.62	5.91	10.1
Provides: PaedDr. Gabriela Bednáriková					
Date of last modification: 14.09.2019					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: KGER/NJKG/07		Course name: Communicative Grammar in German Language			
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 ECTS credits: 2					
Recommended semester/trimester of the course:					
Course level: I., II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 50					
A	B	C	D	E	FX
56.0	12.0	10.0	4.0	10.0	8.0
Provides: PaedDr. Ingrid Puchalová, PhD.					
Date of last modification: 03.05.2015					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚINF/MPPc/15	Course name: Continuous practice teaching I
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: Per study period: 4t Course method: present	
Number of ECTS credits: 2	
Recommended semester/trimester of the course: 3.	
Course level: II.	
Prerequisites: ÚINF/MPPb/15	
Conditions for course completion: A certified statement of classroom visits and own taught lessons as proof of a practice within the range prescribed 6 hours classroom visits and 18 taught computer science lessons. Observation records and lesson preparations.	
Learning outcomes: The student under supervision of an experienced teacher trainer teaching practical skills for computer science teaching. Student is familiar with the life of the school, extra-curricular and other activities.	
Brief outline of the course: Observations of teacher trainer lessons, consultations of lesson preparations of students, teaching aids, teaching own lessons, methodological and scientific analysis of lessons, active participation in extracurricular and other activities of training school.	
Recommended literature: Current computer science textbooks for primary and secondary schools in Slovakia.	
Course language: Slovak	
Notes:	
Course assessment Total number of assessed students: 12	
abs	n
100.0	0.0
Provides: doc. RNDr. Ľubomír Šnajder, PhD., PaedDr. Ján Guniš, PhD.	
Date of last modification: 03.05.2015	
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚCHV/MPPc/15	Course name: Continuous practice teaching I
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: Per study period: 4t Course method: present	
Number of ECTS credits: 2	
Recommended semester/trimester of the course: 3.	
Course level: II.	
Prerequisites: ÚCHV/MPPb/15 or ÚCHV/MPPb/03	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 99	
abs	n
100.0	0.0
Provides: RNDr. Ivana Sotáková, Ph.D.	
Date of last modification: 03.05.2015	
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚINF/MPPd/15	Course name: Continuous practice teaching II
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: Per study period: 6t Course method: present	
Number of ECTS credits: 2	
Recommended semester/trimester of the course: 4.	
Course level: II.	
Prerequisites: ÚINF/MPPc/15	
Conditions for course completion: A certified statement of classroom visits and own taught lessons as proof of a practice within the range prescribed 8 hours classroom visits and 30 taught computer science lessons. Observation records and lesson preparations.	
Learning outcomes: The student under supervision of an experienced teacher trainer teaching practical skills for computer science teaching. Student is familiar with the life of the school, extra-curricular and other activities.	
Brief outline of the course: Observations of teacher trainer lessons, consultations of lesson preparations of students, teaching aids, teaching own lessons, methodological and scientific analysis of lessons, active participation in extracurricular and other activities of training school.	
Recommended literature: Current computer science textbooks for primary and secondary schools in Slovakia.	
Course language: Slovak	
Notes:	
Course assessment Total number of assessed students: 9	
abs	n
100.0	0.0
Provides: doc. RNDr. Ľubomír Šnajder, PhD., PaedDr. Ján Guniš, PhD.	
Date of last modification: 03.05.2015	
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚCHV/MPPd/15	Course name: Continuous practice teaching II
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: Per study period: 6t Course method: present	
Number of ECTS credits: 2	
Recommended semester/trimester of the course:	
Course level: II.	
Prerequisites: ÚCHV/MPPc/15	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 78	
abs	n
100.0	0.0
Provides: RNDr. Ivana Sotáková, Ph.D.	
Date of last modification: 03.05.2015	
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚCHV/ KC/03	Course name: Cosmetic chemistry
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14 Course method: present	
Number of ECTS credits: 4	
Recommended semester/trimester of the course: 3.	
Course level: II.	
Prerequisites:	
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 sphingophospholipids), 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 Berlin 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 Edition, ISBN 0534389996.	
Course language:	
Notes:	

Course assessment					
Total number of assessed students: 86					
A	B	C	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: 06.02.2020					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: KPE/ TTUP/15		Course name: Creating Text Teaching Aids			
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 ECTS credits: 2					
Recommended semester/trimester of the course: 2.					
Course level: II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 139					
A	B	C	D	E	FX
53.24	30.94	10.07	4.32	1.44	0.0
Provides: PaedDr. Renáta Orosová, PhD., Mgr. Zuzana Boberová, PhD.					
Date of last modification: 12.02.2020					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: KSSFaK/ KJPUAP/15		Course name: Culture of Spoken Discourse			
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 ECTS credits: 2					
Recommended semester/trimester of the course: 1.					
Course level: II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 0					
A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0
Provides: PhDr. Iveta Bónová, PhD.					
Date of last modification: 03.05.2015					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚINF/ODPU/15		Course name: Defence of diploma thesis			
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present					
Number of ECTS credits: 15					
Recommended semester/trimester of the course:					
Course level: II.					
Prerequisites: ÚINF/DSU1b/15					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 10					
A	B	C	D	E	FX
50.0	0.0	50.0	0.0	0.0	0.0
Provides:					
Date of last modification: 03.05.2015					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚINF/TSM1a/15		Course name: Development and processing of multimedia			
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 ECTS credits: 2					
Recommended semester/trimester of the course: 1., 3.					
Course level: II.					
Prerequisites:					
Conditions for course completion: Assessment of preliminary assignments - static images, animations, sounds, videos. Assessment of the final multimedia project for the selected topic of computer science.					
Learning outcomes: To acquire basic principles about multimedia and procedures for the creation and processing of multimedia (still images, animation, audio, video).					
Brief outline of the course: Principles of creation and processing of computer graphics, audio and video by the help of selected multimedia editors (LogoMotion, Pixlr, Go Animate, Diagramly, InkScape, Audacity, Anvil Studio, Magix Music Maker, CamStudio, Windows Movie Maker, FormatFactory).					
Recommended literature: 1. LACHS, V. Making Multimedia in the Classroom. London : RoutledgeFalmer, 2000. ISBN 0415216842. 2. GÖBEL, S. et al. Technologies for Interactive Digital Storytelling and Entertainment (LNCS 4326). Darmstadt : Springer, 2006. ISBN 3540499342. 3. ADÁMEK, R. et al. Moderná didaktická technika v práci učiteľa. Elfa, s.r.o., Košice. 2010. ISBN 978-80-8086-135-3. 4. CHALUPA, R. Fotografie, hudba a video ve Windows XP. 2005. ISBN 8072269313.					
Course language:					
Notes:					
Course assessment Total number of assessed students: 11					
A	B	C	D	E	FX
27.27	27.27	18.18	9.09	9.09	9.09
Provides: doc. RNDr. Ľubomír Šnajder, PhD., PaedDr. Ján Guniš, PhD.					
Date of last modification: 03.05.2015					

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚINF/TSM1b/15		Course name: Development and processing of multimedia			
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 ECTS credits: 2					
Recommended semester/trimester of the course: 2., 4.					
Course level: II.					
Prerequisites:					
Conditions for course completion: Evaluation of particular assignments. 100% / 0% Project containing programmed multimedia.					
Learning outcomes: Program design and multimedia applications. Understand the basic principles and procedures for multimedia programming.					
Brief outline of the course: Principles of Programming bitmap graphics, bitmap animation, vector graphics, vector animation, audio and video.					
Recommended literature: DUNN, J. R. Digitální video. 2003. ISBN 8025100383. Audacity: Programování v Conquista. [online] Dostupné na internete: < http://audacity.sourceforge.net/help/nyquist2 >. ARMSTRONG, J., DEHAAN, J. Macromedia Flash 8 - výukový průvodce. 2006. ISBN 8025103358.					
Course language:					
Notes:					
Course assessment Total number of assessed students: 5					
A	B	C	D	E	FX
20.0	60.0	20.0	0.0	0.0	0.0
Provides: doc. RNDr. Ľubomír Šnajder, PhD., PaedDr. Ján Guniš, PhD.					
Date of last modification: 03.05.2015					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚINF/ DIN1a/15	Course name: Didactics of informatics
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 ECTS credits: 3	
Recommended semester/trimester of the course: 2.	
Course level: II.	
Prerequisites:	
Conditions for course completion: Computer science teaching plan at secondary grammar school. Conceptual map and cognitive objectives of chosen computer science topic. Collection of tasks with increasing complexity for chosen topic. Teaching preparation for 5E inquiry-based lesson for selected topic.	
Learning outcomes: 1. To acquire an overview of the objectives, content, modern methods of teaching computer science. 2. To create conceptual map, cognitive objectives and tasks collection with increasing complexity for chosen topic. 3. To create a inquiry-oriented methodology of teaching a chosen topic. 4. To solve selected algorithmic problems using various problem solving strategies.	
Brief outline of the course: The objectives and content of computer science education. Teaching task, its forms and parameters. Creation of tasks collection with increasing complexity. Activating methods of teaching computer science. Inquiry-based computer science education. Methodology of teaching selected topics of computer science. Solving algorithmic problems exploiting various strategies.	
Recommended literature: 1. HAZZAN, Orit - LAPIDOT, Tami - RAGONIS, Noa (2011). Guide to teaching computer science : an activity-based approach. London ; New York : Springer, ©2011. ISBN 978-0-85729-443-2. 2. BELL, Tim - MORGAN, Jack (2014). Computer Science Field Guide. University of Canterbury, New Zealand. http://www.cosc.canterbury.ac.nz/csfieldguide/index.html 3. BELL, Tim - WITTEN, Ian H. - FELLOWS, Mike (2005). Computer Science Unplugged: An enrichment and extension programme for primary-aged children. Computer Science Unplugged. 2005. http://ir.canterbury.ac.nz/bitstream/10092/247/1/12584508_Main.pdf 4. KALAŠ, Ivan et al. (2001). Informatika pre stredné školy, Bratislava : SPN, 2001. ISBN 80-10-00157-0. 5. GUNIŠ, Ján - SUDOLSKÁ, Miloslava - ŠNAJDER, Ľubomír (2009). Ďalšie vzdelávanie učiteľov základných škôl a stredných škôl v predmete informatika - Aktivizujúce metódy vo vyučbe školskej informatiky. 2009. ISBN 978-80-89225-96-5.	

Course language:					
Notes:					
Course assessment					
Total number of assessed students: 68					
A	B	C	D	E	FX
27.94	16.18	22.06	20.59	11.76	1.47
Provides: doc. RNDr. Ľubomír Šnajder, PhD., PaedDr. Ján Guniš, PhD.					
Date of last modification: 01.04.2020					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚINF/ DIN1b/15	Course name: Didactics of informatics
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 ECTS credits: 5	
Recommended semester/trimester of the course: 3.	
Course level: II.	
Prerequisites:	
Conditions for course completion: The preliminary assessment shall be based on the results of independent work of student on computers for a number of sub-assignments (course and evaluation of own inquiry activity, didactical quiz, interactive modelling applet, inquiry-based worksheet with tasks and questions). In final exam students will demonstrate an overview of the theoretical knowledge in the field of computer science education in written form and they will present and defend their own educational project for the chosen topic of the computer science (containing objectives, system of tasks with increasing complexity, tasks solutions and methodological commentaries and didactical quiz).	
Learning outcomes: 1. For the chosen topic of school informatics create didactic quiz, inquiry-based worksheet with tasks and questions, implement and evaluate own inquiry activity. 2. To create an interactive model for the chosen natural phenomenon or computer science concept. 3. To create a lesson preparation using modern teaching methods and aids, to implement it in practice and evaluate.	
Brief outline of the course: Teaching paradigms. Inquiry based computer science education. Process of creating concepts in computer science. Assessment of learning objectives of pupils, didactical quizzes. Programming teaching (paradigms, environments, data types, commands, variables). Specifics of computer arithmetics. Mathematical modelling and simulation. Methodology of teaching selected topics of computer science (multimedia, internet). Computer science competitions.	
Recommended literature: 1. HAZZAN, Orit - LAPIDOT, Tami - RAGONIS, Noa (2011). Guide to teaching computer science : an activity-based approach. London ; New York : Springer, ©2011. ISBN 978-0-85729-443-2. 2. BELL, Tim - MORGAN, Jack (2014) Computer Science Field Guide. University of Canterbury, New Zealand. http://www.cosc.canterbury.ac.nz/csfieldguide/index.html 3. SALANCI, Ľubomír - TOMCSÁNYIOVÁ, Monika - BLAHO, Andrej (2010). Ďalšie vzdelávanie učiteľov základných škôl a stredných škôl v predmete informatika : Didaktika programovania 2. Bratislava : Štátny pedagogický ústav, 2010. 36 s. ISBN 978-80-8118-053-8.	

4. GUNIŠ, Ján - ŠNAJDER, Ľubomír (2009). Ďalšie vzdelávanie učiteľov základných škôl a stredných škôl v predmete informatika : Didaktika predmetu Informatika 2. Bratislava : Štátny pedagogický ústav, 2009. 45 s. ISBN 978-80-8118-021-7.

Course language:

Notes:

Course assessment

Total number of assessed students: 148

A	B	C	D	E	FX
16.89	33.78	24.32	16.22	8.11	0.68

Provides: doc. RNDr. Ľubomír Šnajder, PhD., PaedDr. Ján Guniš, PhD.

Date of last modification: 03.05.2015

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚCHV/ DCH1/15		Course name: Didaktika chémie I			
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 ECTS credits: 4					
Recommended semester/trimester of the course: 2.					
Course level: II.					
Prerequisites: ÚCHV/SPC1a/03					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 87					
A	B	C	D	E	FX
66.67	17.24	10.34	1.15	2.3	2.3
Provides: doc. RNDr. Mária Ganajová, CSc., RNDr. Ivana Sotáková, Ph.D.					
Date of last modification: 03.05.2015					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚCHV/ DCH2/15		Course name: Didaktika chémie II			
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 ECTS credits: 4					
Recommended semester/trimester of the course: 3.					
Course level: II.					
Prerequisites: ÚCHV/DCH1/15					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 99					
A	B	C	D	E	FX
77.78	15.15	6.06	1.01	0.0	0.0
Provides: doc. RNDr. Mária Ganajová, CSc., RNDr. Ivana Sotáková, Ph.D.					
Date of last modification: 03.05.2015					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚCHV/ DTCU/15		Course name: Digitálne technológie vo výučbe chémie			
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 ECTS credits: 5					
Recommended semester/trimester of the course: 3.					
Course level: II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 10					
A	B	C	D	E	FX
100.0	0.0	0.0	0.0	0.0	0.0
Provides: doc. RNDr. Mária Ganajová, CSc., RNDr. Milena Kristofová, RNDr. Ivana Sotáková, Ph.D.					
Date of last modification: 03.05.2015					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚCHV/ DPP1/14	Course name: Diploma Project I
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present	
Number of ECTS credits: 1	
Recommended semester/trimester of the course: 1.	
Course level: II.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 52	
abs	n
100.0	0.0
Provides: prof. Mgr. Vasiľ Andruch, DSc., RNDr. Monika Antušová, RNDr. Mariana Budovská, PhD., prof. RNDr. Juraj Černák, DrSc., RNDr. Erika Demkovičová, PhD., RNDr. Alina Diuzheva, PhD., RNDr. Ján Elečko, PhD., RNDr. Martin Fábian, doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Gonda, DrSc., doc. RNDr. Taťána Gondová, CSc., prof. RNDr. Katarína Györyová, DrSc., RNDr. Andrea Halaganová, RNDr. Dáša Halamová, PhD., RNDr. Slávka Hamuláková, PhD., doc. RNDr. Ján Imrich, CSc., RNDr. Ladislav Janovec, PhD., doc. RNDr. Mária Kožurková, CSc., RNDr. Petra Krafčíková, PhD., RNDr. Milena Kristofová, RNDr. Zuzana Kudličková, PhD., doc. RNDr. Juraj Kuchár, PhD., RNDr. Elena Kupcová, PhD., doc. RNDr. Miroslava Martinková, PhD., RNDr. Miroslava Matiková-Maľarová, PhD., MUDr. Angela Molčányiová, PhD., RNDr. Andrea Morovská Turoňová, PhD., RNDr. Patrik Olekšák, prof. RNDr. Andrej Oriňák, PhD., prof. RNDr. Renáta Oriňáková, DrSc., RNDr. Zuzana Orságová Kráľová, PhD., RNDr. Ondrej Petruš, PhD., doc. RNDr. Ivan Potočňák, PhD., doc. RNDr. Katarína Reiffová, PhD., Mgr. Mária Sabalová, PhD., RNDr. Danica Sabolová, PhD., doc. RNDr. Erik Sedlák, PhD., RNDr. Rastislav Serbin, PhD., doc. RNDr. Andrea Straková Fedorková, PhD., RNDr. Jana Šandrejová, PhD., RNDr. Nataša Tomášková, PhD., RNDr. Monika Tvrdoňová, PhD., doc. RNDr. Zuzana Vargová, Ph.D., RNDr. Rastislav Varhač, PhD., RNDr. Martin Vavra, PhD., doc. RNDr. Viktor Vígľaský, PhD.,	

RNDr. Mária Vilková, PhD., doc. Ing. Viera Vojteková, PhD., prof. RNDr. Vladimír Zelenák, DrSc.
Date of last modification: 03.05.2015
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚCHV/ DPP2/14	Course name: Diploma Project II
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present	
Number of ECTS credits: 2	
Recommended semester/trimester of the course: 2.	
Course level: II.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 49	
abs	n
100.0	0.0
Provides: RNDr. Miroslav Almáši, PhD., prof. Mgr. Vasil' Andruch, DSc., prof. Ing. Marián Antalík, DrSc., RNDr. Monika Antušová, prof. Dr. Yaroslav Bazel', DrSc., RNDr. Michal Bečka, PhD., Mgr. Eva Beňová, Mgr. František Bochnák, RNDr. Martina Gašková, RNDr. Mariana Budovská, PhD., Ing. Tatiana Bušová, prof. RNDr. Juraj Černák, DrSc., RNDr. Miroslava Čonková, RNDr. Erika Demkovičová, PhD., RNDr. Alina Diuzheva, PhD., RNDr. Magdaléna Dzurillová, CSc., RNDr. Ján Elečko, PhD., RNDr. Martin Fábian, RNDr. Milica Fabišíková, PhD., Mgr. Veronika Kuchárová, PhD., prof. Ing. Karol Flórián, DrSc., prof. Ing. Miriam Gálová, DrSc., doc. RNDr. Mária Ganajová, CSc., RNDr. Katarína Garajová, RNDr. Katarína Gavalierová, prof. RNDr. Jozef Gonda, DrSc., doc. RNDr. Taťána Gondová, CSc., prof. RNDr. Katarína Györyová, DrSc., RNDr. Andrea Halaganová, RNDr. Dáša Halamová, PhD., RNDr. Slávka Hamul'áková, PhD., RNDr. Marianna Harvanová, PhD., RNDr. Simona Fazekašová, Ing. Lenka Hurajtová, RNDr. Renáta Chromá, doc. RNDr. Ján Imrich, CSc., RNDr. Dominika Jacková, PhD., RNDr. Ladislav Janovec, PhD., RNDr. František Kaľavský, Mgr. Eva Kicková, RNDr. Eva Konkoľová, PhD., doc. RNDr. Adam Košturiak, CSc., RNDr. Oleksandr Kozlov, doc. RNDr. Mária Kožurková, CSc., RNDr. Petra Krafčíková, PhD., prof. Ing. Pavol Kristian, DrSc., RNDr. Milena Kristofová, RNDr. Zuzana Kudličková, PhD., doc. RNDr. Juraj Kuchár, PhD., RNDr. Elena Kupcová, PhD., RNDr. Monika Kvaková, Mgr. Štefan Levoča, Mgr. Miroslava Litecká, Mgr. Andrea Lüköová,	

RNDr. Veronika Hatiarová, RNDr. Jozef Magura, PhD., MUDr. RNDr. Lucia Haverová, PhD., doc. RNDr. Miroslava Martinková, PhD., RNDr. Mária Matejová, PhD., RNDr. Miroslava Matiková-Maľarová, PhD., MUDr. Angela Molčányiová, PhD., RNDr. Andrea Morovská Turoňová, PhD., RNDr. Patrik Nunhart, RNDr. Patrik Olekšák, prof. RNDr. Andrej Oriňák, PhD., prof. RNDr. Renáta Oriňáková, DrSc., RNDr. Zuzana Orságová Králová, PhD., RNDr. Ondrej Petruš, PhD., prof. Ing. Dušan Podhradský, DrSc., doc. RNDr. Ivan Potočňák, PhD., RNDr. Miroslav Psoťka, PhD., RNDr. Michal Rečlo, doc. RNDr. Katarína Reiffová, PhD., RNDr. Silvia Rengevičová, RNDr. Mária Repovská, PhD., RNDr. Róbert Rončák, RNDr. Ingrida Bártová, PhD., Mgr. Mária Sabalová, PhD., RNDr. Danica Sabolová, PhD., Mgr. Daniela Jakubeczyová, Mgr. Erika Samoľová, PhD., doc. RNDr. Erik Sedlák, PhD., RNDr. Rastislav Serbin, PhD., RNDr. Paulína Slepčíková, RNDr. Romana Smolková, PhD., RNDr. Ivana Sotáková, Ph.D., RNDr. Kvetoslava Stanková, PhD., doc. RNDr. Andrea Straková Fedorková, PhD., RNDr. Zuzana Stramová, Mgr. Mária Suváková, RNDr. Jana Šandrejová, PhD., RNDr. Michael Široký, RNDr. Ivana Šišoláková, PhD., RNDr. Jana Špaková Raschmanová, PhD., doc. RNDr. Viktor Víglaský, PhD., RNDr. Mária Vilková, PhD., doc. Ing. Viera Vojteková, PhD., Mgr. Anna Vráblová, prof. RNDr. Vladimír Zeleňák, DrSc., Mgr. Lukáš Žid

Date of last modification: 03.05.2015

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajči, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚCHV/ DPP3/14	Course name: Diploma Project III
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present	
Number of ECTS credits: 2	
Recommended semester/trimester of the course: 3.	
Course level: II.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 60	
abs	n
100.0	0.0
Provides: doc. RNDr. Tat'ána Gondová, CSc.	
Date of last modification: 03.05.2015	
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚCHV/DPOU/14		Course name: Diploma Thesis and its Defence			
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present					
Number of ECTS credits: 15					
Recommended semester/trimester of the course:					
Course level: II.					
Prerequisites: ÚCHV/DPP3/14					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 52					
A	B	C	D	E	FX
78.85	19.23	1.92	0.0	0.0	0.0
Provides:					
Date of last modification: 03.05.2015					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚCHV/DSU1a/10	Course name: Diplomový seminár z chémie pre XCH
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 ECTS credits: 2	
Recommended semester/trimester of the course: 2.	
Course level: II.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 8	
abs	n
100.0	0.0
Provides: doc. RNDr. Mária Ganajová, CSc.	
Date of last modification: 03.05.2015	
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚCHV/ DSU1b/10	Course name: Diplomový seminár z chémie pre XCH
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 ECTS credits: 2	
Recommended semester/trimester of the course: 3.	
Course level: II.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 6	
abs	n
100.0	0.0
Provides: doc. RNDr. Mária Ganajová, CSc.	
Date of last modification: 03.05.2015	
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: KPPaPZ/PUDU/15		Course name: Drug Addiction Prevention in Educational Practice			
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 ECTS credits: 4					
Recommended semester/trimester of the course: 1., 3.					
Course level: II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 284					
A	B	C	D	E	FX
48.59	42.96	7.75	0.7	0.0	0.0
Provides: prof. PhDr. Oľga Orosová, CSc., Mgr. Marianna Berinšterová, PhD.					
Date of last modification: 06.09.2018					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

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 ECTS credits: 2					
Recommended semester/trimester of the course: 2.					
Course level: II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 148					
A	B	C	D	E	FX
62.84	22.97	8.78	4.05	1.35	0.0
Provides: PhDr. Anna Janovská, PhD.					
Date of last modification: 25.03.2020					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: KPE/ ZSP/15		Course name: Essentials of Special Education			
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 ECTS credits: 2					
Recommended semester/trimester of the course: 3.					
Course level: II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 357					
A	B	C	D	E	FX
48.46	29.97	14.85	5.32	1.4	0.0
Provides: Mgr. Peter Fudaly, PhD.					
Date of last modification: 13.09.2019					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: KPE/ ZZP/12		Course name: Experiential Education			
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 ECTS credits: 4					
Recommended semester/trimester of the course: 1., 3.					
Course level: II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 266					
A	B	C	D	E	FX
41.35	40.98	15.41	2.26	0.0	0.0
Provides: PaedDr. Renáta Orosová, PhD., Mgr. Katarína Petříková, PhD.					
Date of last modification: 30.01.2020					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚINF/FO1/15		Course name: Formal languages and automata			
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 ECTS credits: 5					
Recommended semester/trimester of the course: 1., 3.					
Course level: II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes: To provide theoretical background for studying computer science in general, by giving the necessary knowledge in theory of automata.					
Brief outline of the course: Greibach normal structure of contextfree gramars. Deterministic pushdown automata. Context-sensitive grammars and linearly-bounded Turing machines. Deterministic linearly-bounded Turing machines. Space bounded machines. Phrase-structure grammars and Turing machines. Post correspondence problem. Undecidable problems in the theory of formal languages.					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 11					
A	B	C	D	E	FX
36.36	36.36	18.18	9.09	0.0	0.0
Provides: prof. RNDr. Viliam Geffert, DrSc., Mgr. Alexander Szabari, PhD.					
Date of last modification: 03.05.2015					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚINF/MSSUI/15		Course name: Informatika a didaktika informatiky			
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present					
Number of ECTS credits: 1					
Recommended semester/trimester of the course:					
Course level: II.					
Prerequisites: ÚINF/DIN1b/15 and ÚINF/TIK1/15 and (ÚINF/UGR1/15 or ÚINF/KKV1/15 or ÚINF/UNS1/15 or ÚINF/FO1/15)					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 13					
A	B	C	D	E	FX
38.46	23.08	23.08	7.69	7.69	0.0
Provides:					
Date of last modification: 24.04.2017					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚINF/TIK1/15		Course name: Information theory, encoding			
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 ECTS credits: 4					
Recommended semester/trimester of the course: 1.					
Course level: II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 80					
A	B	C	D	E	FX
63.75	11.25	12.5	3.75	0.0	8.75
Provides: doc. RNDr. Stanislav Krajčí, PhD.					
Date of last modification: 03.05.2015					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚINF/ VIV1/15	Course name: Internet in education
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 ECTS credits: 4	
Recommended semester/trimester of the course: 2.	
Course level: II.	
Prerequisites:	
Conditions for course completion: Assessment of preliminary assignments - design of a teleproject, design of an e-learning course lesson, design and implementation of a video-conference activity. In final exam students will demonstrate an overview of using the Internet in education in written form and they will present and defend their final work focused on using the Internet in education (design and implementation of an e-learning course, teleproject, webquest, on-line competition, lesson exploiting several Internet sources and tools).	
Learning outcomes: 1. To acquire an overview of the possibilities of using the Internet in education. 2. To enhance skills for searching, acquiring, exchanging and presenting information via the Internet. 3. To design, develop and verify an Internet activity (e-learning course, teleproject, WebQuest, online competition, video lecture).	
Brief outline of the course: Overview of using the Internet in education. Educational Web sites and search engines. Design, implementation and evaluation of e-learning courses. Educational teleprojects, online competitions, teleexperiments. Communicating via the Internet - forums, blogs, videoconferences, social networking. Social, medical, ethical and legal aspects of using the Internet.	
Recommended literature: 1. CONRAD, Rita-Marie - DONALDSON, J. Ana (2011). Engaging the Online Learner: Activities and Resources for Creative Instruction. Jossey-Bass; Updated Edition edition 2011. ISBN 978-1118018194. 2. FREEDMAN, Terry (2010) The Amazing Web 2.0 Projects Book. http://www.terry-freedman.org.uk/web2_2010/Amazing%20Web%202%20Projects%20%20online%20version.pdf 3. MANN, B. L. Selected Styles in Web-based Educational Research. Information Science Pub, 2005. ISBN 15-9140-732-X. 4. BARANOVIČ, R. et al. Internet pre stredné školy - Učebnica Internetu. Praha : Computer Press, 2003. 275 s. ISBN 80-251-0088-X.	

Course language:					
Notes:					
Course assessment					
Total number of assessed students: 150					
A	B	C	D	E	FX
15.33	33.33	21.33	14.67	12.0	3.33
Provides: doc. RNDr. Ľubomír Šnajder, PhD., PaedDr. Ján Guniš, PhD.					
Date of last modification: 01.04.2020					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚCHV/ UECH/03	Course name: Introduction to Environmental Chemistry
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14 Course method: present	
Number of ECTS credits: 5	
Recommended semester/trimester of the course: 1., 3.	
Course level: I., II.	
Prerequisites:	
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:	
Notes:	

Course assessment					
Total number of assessed students: 210					
A	B	C	D	E	FX
48.57	20.95	15.71	8.57	6.19	0.0
Provides: doc. RNDr. Andrea Straková Fedorková, PhD.					
Date of last modification: 20.09.2017					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚCHV/ FUMCH1/03	Course name: Introduction to Material Chemistry
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14 Course method: present	
Number of ECTS credits: 5	
Recommended semester/trimester of the course: 1., 3.	
Course level: I., II.	
Prerequisites:	
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:	
Notes:	

Course assessment					
Total number of assessed students: 70					
A	B	C	D	E	FX
88.57	10.0	0.0	0.0	0.0	1.43
Provides: prof. RNDr. Renáta Oriňaková, DrSc.					
Date of last modification: 20.09.2017					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚINF/ UGR1/15		Course name: Introduction to computer graphics			
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 ECTS credits: 5					
Recommended semester/trimester of the course: 1., 3.					
Course level: I., II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes: To provide the students with knowledge of graphics algorithms and basic principles of computer graphics.					
Brief outline of the course: Graphics hardware, input and output devices. Color models, palettes. Raster graphics algorithms for drawing 2D primitives. Filling and clipping. Curve modeling, interpolations and approximations, spline forms, Bézier curves, B-splines, surfaces. Homogenous coordinates, affine transformations, perspective and parallel projections. Visible-surface determination, illumination and shading. Rendering techniques, photorealism, textures, ray tracing, radiosity. Object representations, computer animation, virtual reality.					
Recommended literature: FOLEY, J. D., van DAM, A., FEINER, S., HUGHES, J.: Computer Graphics: Principles and Practice, Addison-Wesley, 1991 MORTENSON, M.E.: Geometric modeling, 2.ed., Willey, 1997					
Course language:					
Notes:					
Course assessment Total number of assessed students: 292					
A	B	C	D	E	FX
14.04	9.93	13.36	23.63	30.48	8.56
Provides: prof. RNDr. Gabriel Semanišin, PhD., RNDr. Rastislav Krivoš-Belluš, PhD.					
Date of last modification: 03.05.2015					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚINF/ UNS1/15		Course name: Introduction to neural networks			
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 ECTS credits: 5					
Recommended semester/trimester of the course: 1., 3.					
Course level: I., II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes: To understand and to know applications of basic paradigms of neural networks. To learn working with software for neural network models.					
Brief outline of the course: Basic models of computational units - neurons (linear threshold gates, polynomial threshold gates, perceptrons), their computational capability, algorithms of adaptations. Feed-forward neural networks, back propagation algorithm. Hopfield neural networks. ART neural networks. Using neural networks to solving of problems. Genetic and evolution algorithms.					
Recommended literature: J. Hertz, A.Krogh, R.G. Palmer: Introduction to the theory of neural computation, Addison Wesley, 1991 HASSOUN, M. H.: Fundamentals of artificial neural networks, The MIT Press, 1995					
Course language:					
Notes:					
Course assessment Total number of assessed students: 420					
A	B	C	D	E	FX
12.38	16.67	23.33	19.76	23.33	4.52
Provides: doc. RNDr. Gabriela Andrejková, CSc.					
Date of last modification: 03.05.2015					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚINF/LOP1/15		Course name: Logic programming			
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 ECTS credits: 5					
Recommended semester/trimester of the course: 2., 4.					
Course level: I., II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes: To learn bases of declarative programming (as complementary method to procedural programming) and basic methods of implementations of logic programming languages.					
Brief outline of the course: Facts and rules in Prolog. Unification of terms (Robinson's unification algorithm). Recursion and backtrack in Prolog. Computational step and computational tree. Classification of terms. Lists. Functors and operators in composed terms. Predicates for input and output. Dynamic database. Cycles (repeat-fail, for). Predicates related to backtrack. Cut. Predicates evaluating of arithmetic expressions.					
Recommended literature: Bratko, I.: Prolog – programming for artificial intelligence, third edition. Addison-Wesley, 2001 Nilsson U., Maluszynski J.: Logic, Programming and Prolog, John Wiley & Sons Ltd. 1995 Nienhuys-Cheng Sh.H., Wolf R.: Foundations of Inductive Logic Programming, Springer-Verlag, 1997					
Course language:					
Notes:					
Course assessment Total number of assessed students: 265					
A	B	C	D	E	FX
23.02	11.32	13.21	24.15	26.42	1.89
Provides: RNDr. Ondrej Krídlo, PhD.					
Date of last modification: 03.05.2015					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚFV/ FEP1/07	Course name: Microcomputer Based Science Laboratory
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 ECTS credits: 4	
Recommended semester/trimester of the course:	
Course level: I., II.	
Prerequisites:	
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	
Notes:	

Course assessment					
Total number of assessed students: 34					
A	B	C	D	E	FX
44.12	44.12	11.76	0.0	0.0	0.0
Provides: doc. RNDr. Zuzana Ješková, PhD.					
Date of last modification: 03.05.2015					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚFV/ MDT06/06		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 ECTS credits: 3					
Recommended semester/trimester of the course:					
Course level: I., II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 76					
A	B	C	D	E	FX
97.37	1.32	0.0	0.0	0.0	1.32
Provides: doc. RNDr. Marián Kireš, PhD.					
Date of last modification: 03.05.2015					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚFV/ MDT06/15	Course name: Modern Didactical Technology
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 ECTS credits: 2	
Recommended semester/trimester of the course: 2.	
Course level: II.	
Prerequisites:	
Conditions for course completion: All assignments must be uploaded by a student and accepted by a teacher according to assessment criteria. Active participation at the 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 actual tools in education of science or humanities, - to design and realise educational activities by using modern technologies.	
Brief outline of the course: 0. Introduction 1. Cloud services 2. Digital notebooks 3. Digital imaging 4. Digital image processing 5. Digital text processing 6. Digital audio processing 7. Digital video, processing, videoconferencing 8. Google online services 9. Interactive didactical system (whiteboard, e-voting system, tablet) 10. Computer based laboratories 11. Digital technologies and virtual experiments 12. Digital teacher's workspace	
Recommended literature: 1. Kireš, M. et al.: Modern didactical technics in teacher practice, Košice: Elfa, 2010, ISBN 788080861353 2. actual information from web sites related to didactical technologies, 3. catalogues of teaching tools, 3. actual articles about modern trends in science and humanities education.	

Course language: Slovak, English					
Notes:					
Course assessment Total number of assessed students: 44					
A	B	C	D	E	FX
34.09	45.45	11.36	4.55	4.55	0.0
Provides: doc. RNDr. Marián Kireš, PhD., doc. RNDr. Jozef Hanč, PhD.					
Date of last modification: 22.02.2019					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: KPE/PPD/15		Course name: Pedagogy and Psychology			
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present					
Number of ECTS credits: 1					
Recommended semester/trimester of the course:					
Course level: II.					
Prerequisites: KPE/PDU/15 and KPPaPZ/PPgU/15					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 438					
A	B	C	D	E	FX
29.91	24.89	25.57	14.61	3.65	1.37
Provides:					
Date of last modification: 17.04.2020					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: Dek. PF UPJŠ/PPZ/13		Course name: Personality Development and Key Competences for Success on a Labour Market			
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: Per study period: 14s Course method: present					
Number of ECTS credits: 2					
Recommended semester/trimester of the course:					
Course level: II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 39					
A	B	C	D	E	FX
100.0	0.0	0.0	0.0	0.0	0.0
Provides: RNDr. Peter Stefányi, PhD.					
Date of last modification: 03.05.2015					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚINF/ PDSI1/15	Course name: Pro-seminar to diploma thesis in informatics
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 ECTS credits: 2	
Recommended semester/trimester of the course: 1.	
Course level: II.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes: To inform students about areas of informatics they are suitable to work in diploma theses. In the end of semester students have to prepared themes of diploma theses, goals and recommended study literature.	
Brief outline of the course: The seminar is oriented to problems prospective to preparations of Diploma theses.	
Recommended literature: MEŠKO, D., KATUŠČÁK, D. Akademická príručka. 1. vyd. Vydavateľstvo Osveta : Martin, 2004. 316 s. ISBN 80-8063-150-6 ISO 690: 1987 Documentation - Bibliographic references. Content, form and structure. ISO 2145: 1978 Documentation - Numbering of divisions and subdivisions in written documents. Eco, U.: Jak napsat diplomovou práci, z taliančiny Come si fa una tesi di laures, Milano, 1977, Olomouc, Votobíax. Odborná a vedecká literatúra týkajúca sa diplomovej práce podľa odporúčania vedúceho diplomovej práce.	
Course language:	
Notes:	
Course assessment Total number of assessed students: 451	
abs	n
99.33	0.67
Provides: doc. RNDr. Ľubomír Šnajder, PhD., doc. RNDr. Gabriela Andrejková, CSc., doc. RNDr. Jozef Jirásek, PhD.	
Date of last modification: 03.05.2015	

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: KPPaPZ/KPE/ EPU/15		Course name: Professional Ethics for Teachers and School Counsellors			
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 ECTS credits: 2					
Recommended semester/trimester of the course: 2., 4.					
Course level: II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 333					
A	B	C	D	E	FX
95.5	3.9	0.6	0.0	0.0	0.0
Provides: Mgr. Lucia Hricová, PhD.					
Date of last modification: 25.03.2020					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚINF/JAC1/15	Course name: Programming language C
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 ECTS credits: 2	
Recommended semester/trimester of the course: 1., 3.	
Course level: I., II.	
Prerequisites:	
Conditions for course completion: Practices attendance and activity. Home assignment Final project.	
Learning outcomes: Become skilled in language C and get knowledge of the theoretical concepts that are used in the development in low-level software.	
Brief outline of the course: 1. Installing and setting up the development environment. Simple program in C, compiling and running. 2. Loops, conditions. Introduction to arrays. Numeric functions from numeric library. Compiling with `gcc` and setting up the warnings and hints. 3. Functions. Statically allocated arrays. Array gotchas in C. Makefiles for complex projects. 4. Basic I/O functions. Functions with array parameters and specifics. 5. Dynamic memory allocation as a mechanism for dynamic arrays. Strings as a special case of arrays. Strings and file I/O. 6. String manipulation principles and functions from standard library. 7. Working with binary files. 8. Custom data types. Structs. 9. Dynamic data structures. Linked lists. Stacks and operations with these structs. 10. Additional operations with dynamic data structures. Parameter passing with values and name. 11. Useful tricks and hints: passing parameters from operating system, exit codes. Multidimensional arrays. 12. Function pointers. Generic pointers. Unions.	
Recommended literature: 1. A. D. Marshall: Programming in C: UNIX System Calls and Subroutines using C. [online] <http://www.cs.cf.ac.uk/Dave/C/CE.html> 2. J. Maasen: C for Java Programmers. [online] <http://www.cs.vu.nl/~jason/college/dictaat.pdf> 3. Bruce Eckel: Thinking in C. [online] <http://mindview.net/CDs/ThinkingInC>	
Course language:	

Notes:					
Course assessment					
Total number of assessed students: 196					
A	B	C	D	E	FX
36.22	18.37	15.82	14.29	10.71	4.59
Provides: RNDr. PhDr. Peter Pisarčík					
Date of last modification: 07.09.2015					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: KPPaPZ/PPgU/15		Course name: Psychology and Educational Psychology			
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 ECTS credits: 5					
Recommended semester/trimester of the course: 1.					
Course level: II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 1353					
A	B	C	D	E	FX
10.86	18.55	22.47	22.84	22.32	2.96
Provides: prof. PhDr. Oľga Orosová, CSc., Mgr. Lucia Hricová, PhD., PhDr. Anna Janovská, PhD.					
Date of last modification: 06.09.2019					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: KPPaPZ/PsZ/15		Course name: Psychology of Health			
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 ECTS credits: 2					
Recommended semester/trimester of the course: 3.					
Course level: II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 69					
A	B	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: 22.03.2019					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: KSSFaK/ ČGUAP/15	Course name: Reading Literacy in Educational Process
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 ECTS credits: 2	
Recommended semester/trimester of the course: 2.	
Course level: II.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 25	
abs	n
100.0	0.0
Provides: doc. PaedDr. Ivica Hajdučková, PhD.	
Date of last modification: 16.02.2019	
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚINF/ PPU1a/15	Course name: Running practice
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 ECTS credits: 2	
Recommended semester/trimester of the course: 2.	
Course level: II.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 176	
abs	n
97.16	2.84
Provides: RNDr. JUDr. Pavol Sokol, PhD.	
Date of last modification: 03.05.2015	
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚINF/MPPb/15	Course name: Scheduled practice teaching
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: Per study period: 36s Course method: present	
Number of ECTS credits: 1	
Recommended semester/trimester of the course: 2.	
Course level: II.	
Prerequisites: KPE/MPPa/15 and KPE/PDU/15 and (KPPaPZ/PaSPP/09 or KPPaPZ/PPgU/15)	
Conditions for course completion: During the practice students observe 11 computer science lessons and leads one own computer science 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 computer science and getting to know the organization of school work. Introduction into practical implementation of computer science lesson.	
Brief outline of the course: Students observe the process of teaching computer science at primary and secondary school and analysed 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 computer science textbooks for primary and secondary schools in Slovakia.	
Course language: Slovak	
Notes:	
Course assessment Total number of assessed students: 65	
abs	n
100.0	0.0
Provides: doc. RNDr. Ľubomír Šnajder, PhD., PaedDr. Ján Guniš, PhD.	
Date of last modification: 03.05.2015	

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚCHV/ MPPb/15	Course name: Scheduled practice teaching
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: Per study period: 36s Course method: present	
Number of ECTS credits: 1	
Recommended semester/trimester of the course: 2.	
Course level: II.	
Prerequisites: 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:	
Notes:	
Course assessment Total number of assessed students: 245	
abs	n
100.0	0.0
Provides: RNDr. Ivana Sotáková, Ph.D.	
Date of last modification: 03.05.2015	
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚTVŠ/ ÚTVŠ/CM/13	Course name: Seaside Aerobic Exercise
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: Per study period: 36s Course method: present	
Number of ECTS credits: 2	
Recommended semester/trimester of the course:	
Course level: I., II.	
Prerequisites:	
Conditions for course completion: Conditions for course completion: Attendance	
Learning outcomes: Learning outcomes: Students will be provided an overview of possibilities how to spend leisure time in seaside conditions actively and their skills in work and communication with clients will be improved. Students will acquire practical experience in organising the cultural and art-oriented events, with the aim to improve the stay and to create positive experiences for visitors.	
Brief outline of the course: Brief outline of the course: 1. Basics of seaside aerobics 2. Morning exercises 3. Pilates and its application in seaside conditions 4. Exercises for the spine 5. Yoga basics 6. Sport as a part of leisure time 7. Application of projects of productive spending of leisure time for different age and social groups (children, young people, elderly) 8. Application of seaside cultural and art-oriented activities in leisure time	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 42	
abs	n
11.9	88.1

Provides: Mgr. Alena Buková, PhD., Mgr. Agata Horbacz, PhD.
Date of last modification: 15.03.2019
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚCHV/ VKACH/03		Course name: Selected Topics in Analytical Chemistry			
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14 Course method: present					
Number of ECTS credits: 5					
Recommended semester/trimester of the course: 3.					
Course level: II.					
Prerequisites:					
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:					
Notes:					
Course assessment Total number of assessed students: 3					
A	B	C	D	E	FX
100.0	0.0	0.0	0.0	0.0	0.0
Provides: doc. RNDr. Tat'ána Gondová, CSc.					
Date of last modification: 03.05.2015					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚCHV/ VKAU/04		Course name: Selected Topics in Inorganic Chemistry			
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14 Course method: present					
Number of ECTS credits: 5					
Recommended semester/trimester of the course: 3.					
Course level: II.					
Prerequisites:					
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:					
Notes:					
Course assessment Total number of assessed students: 67					
A	B	C	D	E	FX
46.27	26.87	20.9	2.99	2.99	0.0
Provides: prof. RNDr. Vladimír Zeleňák, DrSc.					
Date of last modification: 03.05.2015					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orossová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚCHV/ VKOCH/03		Course name: Selected topics in organic chemistry			
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14 Course method: present					
Number of ECTS credits: 5					
Recommended semester/trimester of the course: 3.					
Course level: II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 106					
A	B	C	D	E	FX
34.91	25.47	19.81	14.15	5.66	0.0
Provides: doc. RNDr. Ján Imrich, CSc.					
Date of last modification: 03.05.2015					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚINF/ DSU1a/15	Course name: Seminar to diploma theses in informatics XI
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 ECTS credits: 2	
Recommended semester/trimester of the course: 2.	
Course level: II.	
Prerequisites:	
Conditions for course completion: Elaboration and presentation of papers on selected areas of computer science education. Present the interim results of the diploma thesis.	
Learning outcomes: Get an overview of the results of educational research in the field of computer science education. To learn currently work on the diploma thesis, to present partial results of the pedagogical research work on it.	
Brief outline of the course: Educational research in the field of computer science education. Study of educational literature (conference proceedings, journals, studies) focusing on selected issues of computer science education. Presentations of interim results of students' diploma theses.	
Recommended literature: 1. KATUŠČÁK, D. Ako písať vysokoškolské a kvalifikačné práce: ako písať seminárne práce a ročníkové práce, práce študentskej vedeckej a odbornej činnosti, diplomové, záverečné a atestačné práce a dizertácie. 3. vyd. Nitra : Enigma, 2004. 162 s. ISBN 80-89132-10-3. 2. ISO 690: 1987 Documentation - Bibliographic references. Content, form and structure. 3. ISO 2145: 1978 Documentation - Numbering of divisions and subdivisions in written documents. 4. ECO, U. Jak napsat diplomovou práci. Olomouc : Votobia, 1997. 278 s. ISBN 80-7098-173-7. 5. Digital libraries (ACM Digital Library, IEEEExplore, DOAJ) 6. Scientific literature relevant to diploma thesis according of recommendation of supervisor.	
Course language: Slovak	
Notes:	

Course assessment	
Total number of assessed students: 6	
abs	n
100.0	0.0
Provides: doc. RNDr. Ľubomír Šnajder, PhD.	
Date of last modification: 03.05.2015	
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚINF/DSU1b/15	Course name: Seminar to diploma theses in informatics XI
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 ECTS credits: 2	
Recommended semester/trimester of the course: 3.	
Course level: II.	
Prerequisites: ÚINF/DSU1a/15	
Conditions for course completion:	
Learning outcomes: Get an experience with design, realization and evaluation of own educational research in the field of computer science education. To learn currently work on the diploma thesis, to present partial results of the pedagogical research work on it.	
Brief outline of the course: Educational research in the field of computer science education. Study of educational literature (conference proceedings, journals, studies) focusing on selected issues of computer science education. Design, realization and evaluation of own educational research in the field of computer science education. Presentations of interim results of students' diploma theses.	
Recommended literature: 1. HENDL, Jan (2005). Kvalitativní výzkum - základní metody a aplikace. Praha : Portál, 2005. ISBN 80-7367-040-2. 2. ŠVAŘÍČEK, Roman - ŠEĎOVÁ, Klára et al. (2007). Kvalitativní výzkum v pedagogických vědách. Praha : Portál, 2007. ISBN 978-80-7367-313-0. 3. GAVORA, Peter et al. (2010). Elektronická učebnica pedagogického výskumu. [online]. Bratislava : Univerzita Komenského, 2010. Dostupné na: http://www.e-metodologia.fedu.uniba.sk/ ISBN 978-80-223-2951-4. 4. BELL, Tim - MORGAN, Jack (2014). Computer Science Field Guide. University of Canterbury, New Zealand. Dostupné na: http://www.cosc.canterbury.ac.nz/csfieldguide/index.html 5. Digital libraries (ACM Digital Library, IEEEExplore, DOAJ) 6. Scientific literature relevant to diploma thesis according of recommendation of supervisor.	
Course language: Slovak	
Notes:	

Course assessment	
Total number of assessed students: 30	
abs	n
100.0	0.0
Provides: doc. RNDr. Ľubomír Šnajder, PhD.	
Date of last modification: 03.05.2015	
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: KSSFaK/VSJU/15	Course name: Slovak Language for Teachers
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 ECTS credits: 2	
Recommended semester/trimester of the course: 1., 3.	
Course level: II.	
Prerequisites:	
Conditions for course completion: passing a final test	
Learning outcomes: Mastering of standard Slovak in spoken and written discourse. Becoming familiarized with codification manuals, acquiring skills related to bibliography and quotation standards. Mastering of written communication in accordance with current orthographical rules. Mastering of basic characteristics of expressions of text and style and fundamentals of text composition.	
Brief outline of the course: Characteristics of basic terms of general linguistics (language – speech, language functions, the sign character of language, language levels, content and form in language, individual and general aspect of language units) on interdisciplinary background and with the application to Slovak as a national language. Language standard, codification, usus. Basic codification manuals. Application of orthographic rules in practical documents. Sound culture, pronunciation styles. Orthoepic phenomena in vowels and consonants. Application of rhythmic law and its exceptions. Assimilation and its specific features in Slovak. Style, stylization – methods and demonstration of structure of text components.	
Recommended literature: Krátky slovník slovenského jazyka. Bratislava: Veda 1997. Slovník súčasného slovenského jazyka. Bratislava: Veda 2006. Slovník súčasného slovenského jazyka. Bratislava: Veda 2011. Pravidlá slovenského pravopisu. Bratislava: Veda 2000. KRÁĽ, Á.: Pravidlá slovenskej výslovnosti. Bratislava, SPN 1984; 1988. 632 s. ONDRUŠ, Š. – SABOL, J.: Úvod do štúdia jazykov. 3. vyd. Bratislava, SPN 1987. 343s. SABOL, J.- SLANČOVÁ, D. - SOKOLOVÁ, M.: Kultúra hovoreného slova. Prešov, FF UPJŠ 1989. SABOL, J. – BÓNOVÁ, I. – SOKOLOVÁ, M.: Kultúra hovoreného prejavu. Prešov: FF PU 2006. FINDRA, J.: Štylistika slovenčiny. Martin : Osveta, 2004. FINDRA, Ján: Štylistika slovenčiny v cvičeniach. Martin : Osveta, 2005. SLANČOVÁ, D.: Praktická štylistika. 2., upravené a doplnené vydanie. Prešov: Slovacontact	

1996. 178 s. ISBN 80-901417-9-X.					
Course language:					
Notes:					
Course assessment Total number of assessed students: 74					
A	B	C	D	E	FX
17.57	32.43	25.68	16.22	8.11	0.0
Provides: PhDr. Iveta Bónová, PhD., PhDr. Lucia Jasinská, PhD., Mgr. Lena Ivančová, PhD.					
Date of last modification: 15.05.2019					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚCHV/ STOX/04		Course name: Special Toxicology			
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14 Course method: present					
Number of ECTS credits: 5					
Recommended semester/trimester of the course: 3.					
Course level: II.					
Prerequisites: ÚCHV/ZTOX/04					
Conditions for course completion:					
Learning outcomes: Goal of the course is to provide the students with a knowledge of toxicology of organic and inorganic compounds, drugs, food additives, e.g., safety of substances, designation of substances in accordance of norm of European Union and order of Government of Slovak Republic.					
Brief outline of the course: Goal of the course is to provide the students with a knowledge of toxicology of organic and inorganic compounds, drugs, food additives, e.g., safety of substances, designation of substances in accordance of norm of European Union and order of Government of Slovak Republic.					
Recommended literature: J. A. Timbrell: Introduction to Toxicology, Taylor and Francis, London 1989. H. Kenneth Dillon, Mat H. Ho: Biological Monitoring of Exposure to Chemicals: Metals, John Wiley & Sons, New York 1991. V. E. Forbes, T. L. Forbes: Toxicology in Theory and Practice, Chapman Hall, London 1994. H. M. Stahr: Analytical Methods in Toxicology, John Wiley & Sons, New York 1991.					
Course language:					
Notes:					
Course assessment Total number of assessed students: 208					
A	B	C	D	E	FX
50.96	24.52	15.87	6.73	1.92	0.0
Provides: prof. RNDr. Katarína Györyová, DrSc., RNDr. Miroslava Matiková-Maľarová, PhD.					
Date of last modification: 03.05.2015					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚCHV/SPC1a/03		Course name: Special practising the school experiments I			
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 ECTS credits: 5					
Recommended semester/trimester of the course: 1.					
Course level: II.					
Prerequisites:					
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:					
Notes:					
Course assessment Total number of assessed students: 253					
A	B	C	D	E	FX
66.01	26.09	7.11	0.79	0.0	0.0
Provides: doc. RNDr. Mária Ganajová, CSc., RNDr. Ivana Sotáková, Ph.D.					

Date of last modification: 03.05.2015
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Olga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚCHV/ SPC1b/03	Course name: Special practising the school experiments II
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 ECTS credits: 3	
Recommended semester/trimester of the course: 2.	
Course level: II.	
Prerequisites:	
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: at least 51% 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 reactions of β -carotene Alkynes - preparation of acetylene and studying of its reaction Aromatic hydrocarbons and their derivatives – preparation and their characteristic reactions Halogenoderivatives – preparation of chloroethane and iodoform Hydroxoderivatives and ethers – properties and reactivity - methanol, ethanol, glycerol, preparation of sodium ethanolate, phenols, characteristic properties of diethylether Carbonyl compounds - preparation and their reactions Carboxylic acids and their derivatives – preparation and properties Natural compounds – carbohydrates, proteins, amino acids, lipids Column chromatography -acetylation reaction of ferrocene - its preparation and separation of the obtained products by column chromatography Isolation of the fragrant components using steam distillation Everyday life chemistry	
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 studying material - Špeciálne praktikum školských pokusov z organickej chémie	

Course language: slovak language					
Notes:					
Course assessment Total number of assessed students: 238					
A	B	C	D	E	FX
39.5	28.57	19.75	8.4	3.78	0.0
Provides: RNDr. Jana Špaková Raschmanová, PhD., RNDr. Ján Elečko, PhD., RNDr. Zuzana Kudličková, PhD.					
Date of last modification: 05.02.2020					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚTVŠ/ TVa/11	Course name: Sports Activities I.
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present	
Number of ECTS credits: 2	
Recommended semester/trimester of the course: 1.	
Course level: I., I.II., II.	
Prerequisites:	
Conditions for course completion: Conditions for course completion: Min. 80% of active participation in classes.	
Learning outcomes: Learning outcomes: Increasing physical condition and performance within individual sports. Strengthening the relationship of students to the selected sports activity and its continual improvement.	
Brief outline of the course: Brief outline of the course: Within the optional subject, the Institute of Physical Education and Sports of Pavol Jozef Šafárik University provides for students the following sports activities: aerobics, basketball, badminton, floorball, yoga, pilates, swimming, body-building, indoor football, self-defence and karate, table tennis, sports for unfit persons, streetball, tennis, and volleyball. In the first two semesters of the first level of education students will master basic characteristics and particularities of individual sports, motor skills, game activities, they will improve level of their physical condition, coordination abilities, physical performance, and motor performance fitness. Last but not least, the important role of sports activities is to eliminate swimming illiteracy and by means of a special program of medical physical education to influence and mitigate unfitness. In addition to these sports, the Institute offers for those who are interested winter and summer physical education trainings with an attractive program and organises various competitions, either at the premises of the faculty or University or competitions with national or international participation.	
Recommended literature:	
Course language:	
Notes:	

Course assessment							
Total number of assessed students: 12947							
abs	abs-A	abs-B	abs-C	abs-D	abs-E	n	neabs
88.64	0.06	0.0	0.0	0.0	0.03	7.22	4.05
Provides: doc. PhDr. Ivan Šulc, CSc., Mgr. Zuzana Küchelová, PhD., Mgr. Peter Bakalár, PhD., doc. PaedDr. Ivan Uher, PhD., Mgr. Agata Horbacz, PhD., Mgr. Marek Valanský, prof. RNDr. Stanislav Vokál, DrSc., Mgr. Dávid Kaško, Mgr. Aurel Zelko, PhD., Mgr. Dana Dračková, PhD., Mgr. Marcel Čurgali, PaedDr. Jana Potočníková, PhD.							
Date of last modification: 18.03.2019							
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Olga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.							

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚTVŠ/ TVb/11	Course name: Sports Activities II.
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present	
Number of ECTS credits: 2	
Recommended semester/trimester of the course: 2.	
Course level: I., I.II., II.	
Prerequisites:	
Conditions for course completion: Conditions for course completion: Final assessment and active participation in classes - min. 75%.	
Learning outcomes: Learning outcomes: Increasing physical condition and performance within individual sports. Strengthening the relationship of students to the selected sports activity and its continual improvement.	
Brief outline of the course: Brief outline of the course: Within the optional subject, the Institute of Physical Education and Sports of Pavol Jozef Šafárik University provides for students the following sports activities: aerobics, basketball, badminton, floorball, yoga, pilates, swimming, body-building, indoor football, self-defence and karate, table tennis, sports for unfit persons, streetball, tennis, and volleyball. In the first two semesters of the first level of education students will master basic characteristics and particularities of individual sports, motor skills, game activities, they will improve level of their physical condition, coordination abilities, physical performance, and motor performance fitness. Last but not least, the important role of sports activities is to eliminate swimming illiteracy and by means of a special program of medical physical education to influence and mitigate unfitness. In addition to these sports, the Institute offers for those who are interested winter and summer physical education trainings with an attractive program and organises various competitions, either at the premises of the faculty or University or competitions with national or international participation.	
Recommended literature:	
Course language:	
Notes:	

Course assessment							
Total number of assessed students: 11186							
abs	abs-A	abs-B	abs-C	abs-D	abs-E	n	neabs
85.58	0.55	0.02	0.0	0.0	0.05	9.99	3.8
Provides: doc. PhDr. Ivan Šulc, CSc., Mgr. Zuzana Küchelová, PhD., doc. PaedDr. Ivan Uher, PhD., Mgr. Peter Bakalár, PhD., Mgr. Agata Horbacz, PhD., Mgr. Marek Valanský, prof. RNDr. Stanislav Vokál, DrSc., Mgr. Dávid Kaško, Mgr. Aurel Zelko, PhD., Mgr. Dana Dračková, PhD., Mgr. Marcel Čurgali, PaedDr. Jana Potočnicková, PhD.							
Date of last modification: 18.03.2019							
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.							

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice							
Faculty: Faculty of Science							
Course ID: ÚTVŠ/ TVc/11		Course name: Sports Activities III.					
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present							
Number of ECTS credits: 2							
Recommended semester/trimester of the course: 3.							
Course level: I., I.II., II.							
Prerequisites:							
Conditions for course completion:							
Learning outcomes:							
Brief outline of the course:							
Recommended literature:							
Course language:							
Notes:							
Course assessment Total number of assessed students: 7741							
abs	abs-A	abs-B	abs-C	abs-D	abs-E	n	neabs
90.03	0.04	0.01	0.0	0.0	0.03	4.04	5.85
Provides: doc. PhDr. Ivan Šulc, CSc., Mgr. Zuzana Küchelová, PhD., doc. PaedDr. Ivan Uher, PhD., Mgr. Peter Bakalár, PhD., Mgr. Agata Horbacz, PhD., Mgr. Marek Valanský, prof. RNDr. Stanislav Vokál, DrSc., Mgr. Dávid Kaško, Mgr. Aurel Zelko, PhD., Mgr. Dana Dračková, PhD., Mgr. Marcel Čurgali, PaedDr. Jana Potočnicková, PhD.							
Date of last modification: 03.05.2015							
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.							

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice							
Faculty: Faculty of Science							
Course ID: ÚTVŠ/ TVd/11		Course name: Sports Activities IV.					
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present							
Number of ECTS credits: 2							
Recommended semester/trimester of the course: 4.							
Course level: I., I.II., II.							
Prerequisites:							
Conditions for course completion:							
Learning outcomes:							
Brief outline of the course:							
Recommended literature:							
Course language:							
Notes:							
Course assessment Total number of assessed students: 5086							
abs	abs-A	abs-B	abs-C	abs-D	abs-E	n	neabs
85.19	0.29	0.04	0.0	0.0	0.0	6.78	7.69
Provides: doc. PhDr. Ivan Šulc, CSc., Mgr. Zuzana Küchelová, PhD., Mgr. Peter Bakalár, PhD., doc. PaedDr. Ivan Uher, PhD., Mgr. Agata Horbacz, PhD., Mgr. Marek Valanský, prof. RNDr. Stanislav Vokál, DrSc., Mgr. Lucia Kršňáková, PhD., Mgr. Dávid Kaško, Mgr. Aurel Zelko, PhD., Mgr. Dana Dračková, PhD., Mgr. Marcel Čurgali, PaedDr. Jana Potočnicková, PhD.							
Date of last modification: 03.05.2015							
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.							

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚCHV/ SAZ1/15		Course name: Stereochemistry of Inorganic Compounds			
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 ECTS credits: 3					
Recommended semester/trimester of the course:					
Course level: II.					
Prerequisites:					
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:					
Notes:					
Course assessment Total number of assessed students: 18					
A	B	C	D	E	FX
50.0	16.67	22.22	11.11	0.0	0.0
Provides: prof. RNDr. Vladimír Zelenák, DrSc.					
Date of last modification: 03.05.2015					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚCHV/ STA1/03	Course name: Structure Analysis
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 2 Per study period: 28 / 28 Course method: present	
Number of ECTS credits: 6	
Recommended semester/trimester of the course:	
Course level: II.	
Prerequisites:	
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	
Notes:	

Course assessment					
Total number of assessed students: 115					
A	B	C	D	E	FX
26.96	16.52	26.96	20.0	8.7	0.87
Provides: doc. RNDr. Ivan Potočný, PhD.					
Date of last modification: 03.05.2015					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Olga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚINF/ SVK1/15		Course name: Student scientific conference			
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present					
Number of ECTS credits: 4					
Recommended semester/trimester of the course: 2., 4.					
Course level: I., II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 171					
A	B	C	D	E	FX
100.0	0.0	0.0	0.0	0.0	0.0
Provides:					
Date of last modification: 03.05.2015					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚTVŠ/ LKSp/13	Course name: Summer Course-Rafting of TISA River
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: Per study period: 36s Course method: present	
Number of ECTS credits: 2	
Recommended semester/trimester of the course:	
Course level: I., II.	
Prerequisites:	
Conditions for course completion: Conditions for course completion: Attendance Final assessment: Raft control on the waterway (attended/not attended)	
Learning outcomes: Learning outcomes: Students have knowledge of rafts (canoe) and their control on waterway.	
Brief outline of the course: Brief outline of the course: 1. Assessment of difficulty of waterways 2. Safety rules for rafting 3. Setting up a crew 4. Practical skills training using an empty canoe 5. Canoe lifting and carrying 6. Putting the canoe in the water without a shore contact 7. Getting in the canoe 8. Exiting the canoe 9. Taking the canoe out of the water 10. Steering a) The pry stroke (on fast waterways) b) The draw stroke 11. Capsizing 12. Commands	
Recommended literature:	
Course language:	
Notes:	

Course assessment	
Total number of assessed students: 151	
abs	n
45.03	54.97
Provides: Mgr. Peter Bakalár, PhD.	
Date of last modification: 18.03.2019	
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: KPE/MPPa/15	Course name: Supervised Teaching Practice
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: Per study period: 36s Course method: present	
Number of ECTS credits: 2	
Recommended semester/trimester of the course: 1.	
Course level: II.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 757	
abs	n
99.87	0.13
Provides: doc. PhDr. Beata Gajdošová, PhD., PaedDr. Renáta Orosová, PhD., Mgr. Zuzana Boberová, PhD.	
Date of last modification: 03.05.2015	
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚTVŠ/ KP/12	Course name: Survival Course
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: Per study period: 36s Course method: present	
Number of ECTS credits: 2	
Recommended semester/trimester of the course:	
Course level: I., II.	
Prerequisites:	
Conditions for course completion: Conditions for course completion: Attendance Final assessment: continuous fulfilment of all tasks within the course	
Learning outcomes: Learning outcomes: Students will be familiarized with principles of safe stay and movement in extreme natural conditions as they will obtain theoretical knowledge and practical skills to solve the extraordinary and demanding situations connected with survival and minimization of damage to health. The course develops team work and students will learn how to manage and face the situations that require overcoming of obstacles.	
Brief outline of the course: Brief outline of the course: Lectures: 1. Principles of behaviour and safety for movement and stay in unknown mountains 2. Preparation and leadership of tour 3. Objective and subjective danger in mountains 4. Principles of hygiene and prevention of damage to health in extreme conditions Exercises: 1. Movement in terrain, orientation and navigation in terrain (compasses, GPS) 2. Preparation of improvised overnight stay 3. Water treatment and food preparation.	
Recommended literature:	
Course language:	
Notes:	

Course assessment	
Total number of assessed students: 392	
abs	n
44.39	55.61
Provides: Mgr. Marek Valanský, MUDr. Peter Dombrovský	
Date of last modification: 15.03.2019	
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: KPE/ PDU/15		Course name: Teaching Methodology and Pedagogy			
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 ECTS credits: 5					
Recommended semester/trimester of the course: 1.					
Course level: II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 1427					
A	B	C	D	E	FX
15.49	24.18	26.49	19.06	8.13	6.66
Provides: PaedDr. Renáta Orosová, PhD., Mgr. Zuzana Boberová, PhD., Mgr. Katarína Petříková, PhD.					
Date of last modification: 13.09.2019					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: KPPaPZ/UPR/15		Course name: The Art of Aiding by Verbal Exchange			
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present					
Number of ECTS credits: 2					
Recommended semester/trimester of the course: 2.					
Course level: II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 105					
A	B	C	D	E	FX
92.38	1.9	3.81	0.95	0.95	0.0
Provides: Mgr. Ondrej Kalina, PhD.					
Date of last modification: 18.03.2019					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: KPPaPZ/ZMPPV/15		Course name: The Fundamentals of Pedagogico-Psychological Research Methodology			
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 ECTS credits: 4					
Recommended semester/trimester of the course: 2.					
Course level: II.					
Prerequisites: KPPaPZ/PPgU/15 and KPE/PDU/15					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 442					
A	B	C	D	E	FX
19.0	25.79	23.76	19.23	11.99	0.23
Provides: Mgr. Mária Bačíková, PhD., PhDr. Anna Janovská, PhD.					
Date of last modification: 25.03.2020					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚFV/ VMV1/04		Course name: Using Multimedia in Education			
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 ECTS credits: 4					
Recommended semester/trimester of the course: 2.					
Course level: I., II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 85					
A	B	C	D	E	FX
85.88	10.59	0.0	0.0	1.18	2.35
Provides: doc. RNDr. Marián Kireš, PhD., RNDr. Rastislav Adamek, PhD.					
Date of last modification: 03.05.2015					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚCHV/ VKCH/10	Course name: Vybrané kapitoly z chémie
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 ECTS credits: 4	
Recommended semester/trimester of the course: 1., 3.	
Course level: II.	
Prerequisites:	
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 chemistry: 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 acquaintance 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 Edition, ISBN 0534389996. J. Chomič: Stereochemistry of inorganic compounds, UPIŠ Košice, 1988. K. J. Klabunde, R. M. Richards: Nanoscale Materials in Chemistry, Wiley-CH, 2009.	

Course language:					
Notes:					
Course assessment					
Total number of assessed students: 188					
A	B	C	D	E	FX
23.94	26.6	33.51	13.3	2.13	0.53
Provides: doc. RNDr. Mária Kožurková, CSc., prof. RNDr. Vladimír Zelenák, DrSc., doc. RNDr. Miroslava Martinková, PhD.					
Date of last modification: 03.05.2015					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚTVŠ/ ZKLS//13	Course name: Winter Ski Training Course
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 36 Per study period: 504 Course method: present	
Number of ECTS credits: 2	
Recommended semester/trimester of the course:	
Course level: I., II.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 97	
abs	n
32.99	67.01
Provides: doc. PhDr. Ivan Šulc, CSc., Mgr. Marek Valanský	
Date of last modification: 03.05.2015	
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚCHV/ XBCH/04		Course name: Xenobiochemistry			
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 ECTS credits: 5					
Recommended semester/trimester of the course: 2.					
Course level: II.					
Prerequisites:					
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 antioxidyanty v medicíne, Slovak akademik press 1998. Z.Vodrážka : Biochémia, Praha, 1996. A. Jindra: Biochémia, molekulárnobiologické a farmakologické aspekty, Praha, 1985.					
Course language:					
Notes:					
Course assessment Total number of assessed students: 75					
A	B	C	D	E	FX
62.67	20.0	9.33	2.67	5.33	0.0
Provides: prof. Ing. Marián Antalík, DrSc., RNDr. Danica Sabolová, PhD.					
Date of last modification: 03.05.2015					
Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					