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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: Combined method of teaching (classroom/distance) Active classroom participation, assignments handed in on time, 2 absences tolerated 1 test (10th week), no retake. (in classroom, in case of distance learning due to worsened epidemiological situation – online) Presentation on chosen topic (in case of distance learning - online thorough MS Teams) Final evaluation- average assessment of test (40%), essay (30%) and presentation (30%). 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: 379					
A	B	C	D	E	FX
33.77	22.16	15.3	10.03	6.6	12.14
Provides: Mgr. Viktória Mária Slovenská					
Date of last modification: 17.09.2020					

Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.

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: Slovak or english	
Notes:	

Course assessment					
Total number of assessed students: 28					
A	B	C	D	E	FX
57.14	21.43	14.29	0.0	7.14	0.0
Provides: RNDr. JUDr. Pavol Sokol, PhD., RNDr. Tomáš Bajtoš					
Date of last modification: 10.02.2021					
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚFV/ ASFU/15		Course name: Astrophysics			
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: 3					
Recommended semester/trimester of the course: 3.					
Course level: II.					
Prerequisites:					
Conditions for course completion: Test within the curriculum presented during the course; seminar essay. Oral exam with preparation; 3 questions within the curriculum presented during the course.					
Learning outcomes: Become acquainted with basic knowledge about the structure and evolution of the universe.					
Brief outline of the course: The stars, their basic properties, structure and evolution. Structure and distribution of matter in the universe. Cosmological theories, formation, evolution and future of the universe.					
Recommended literature: 1. Carroll, B. W., Ostlie, D. A., An Introduction to Modern Astrophysics, Addison-Wesley Publishing Company, Reading, Massachusetts, 1996; 2. Contopoulos, D. Kotsakis, Cosmology, the structure and evolution of the Universe, Springer, 1984; 3. Narlikar, J.V., An Introduction to Cosmology, Cambridge University Press, Cambridge, 2002; 4. Pasachoff, J.M., Filippenko, A., The Cosmos: Astronomy in the New Millennium, Cambridge University Press, 2013;					
Course language: Slovak, English					
Notes:					
Course assessment Total number of assessed students: 10					
A	B	C	D	E	FX
90.0	10.0	0.0	0.0	0.0	0.0
Provides: doc. RNDr. Rudolf Gális, PhD.					
Date of last modification: 26.09.2017					

Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.

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: 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: 867					
A	B	C	D	E	FX
49.83	29.87	15.34	3.34	1.27	0.35
Provides: Mgr. Alexander Onufrák, PhD.					
Date of last modification: 21.09.2020					
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

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: 12.02.2021					
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

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: 136					
A	B	C	D	E	FX
25.0	35.29	13.97	12.5	6.62	6.62
Provides: prof. RNDr. Gabriel Semanišin, PhD., RNDr. Zuzana Bednárová, PhD.					
Date of last modification: 03.05.2015					
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

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. Online teaching (MS Teams), in case of an improved epidemiological situation = on-site teaching. 2 credit tests (presumably in weeks 6/7 and 12/13) and a short oral presentation in English. The tests will be taken online (MS Teams) during online teaching and in class in case of on-site classes. The presentation will be sent to the course instructor as a video recording. Final evaluation consists of the scores obtained for the 2 tests (70%) and the presentation (30%). 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	

<p>Životné prostredie a ekológia Výnimky zo slovosledu Frázové slovesá a ich použitie Charakteristiky neformálneho diškurzu</p>					
<p>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.</p>					
<p>Course language: English language, B2 level according to CEFR</p>					
<p>Notes:</p>					
<p>Course assessment Total number of assessed students: 241</p>					
A	B	C	D	E	FX
38.59	22.41	19.5	9.54	6.64	3.32
<p>Provides: Mgr. Barbara Mitříková</p>					
<p>Date of last modification: 11.02.2021</p>					
<p>Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.</p>					

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: Mgr. Lenka Klimčáková					
Date of last modification: 14.09.2019					
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

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: 54					
A	B	C	D	E	FX
59.26	11.11	9.26	3.7	9.26	7.41
Provides: Mgr. Blanka Jenčíková					
Date of last modification: 03.05.2015					
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚINF/ VKN/15	Course name: Computational and cognitive neuroscience
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:	
Course level: II.	
Prerequisites:	
Conditions for course completion: project, exam	
Learning outcomes: Advanced topics in study of the central nervous system and cognitive processes in human, with focus on computational concepts important in the study of cognitive and neural sciences. Prerequisite: Intro to Neuroscence	
Brief outline of the course: Selected topics in cognitive science (following up on Intro to Neuroscience). Overview of the methods of theoretical study in cognitive and neural science, including connectionistic, statistical and system-theory principles in modeling of cognitive processes and neural circuits. Selected models of the human visual and auditory systems, learning, thinking, attention, development and plasticity.	
Recommended literature: HERTZ, J., KROGH, A. and PALMER R. G.: Introduction to the theory of neural computation. Addison-Wesley 1991 KANDEL, E. R., SCHWARTZ, J. H. and JESSELL, T.M.: Principles of Neural Science. McGraw-Hill, 2000 DAYAN, P. and ABBOTT, L. F.: Theoretical Neuroscience – Computational and Mathematical Modeling of Neural Systems. MIT Press, 2001	
Course language: Slovak or English	
Notes: Content prerequisites: basics of neurobiology, cognitive psychology, linear algebra and differential equations, programing, or instructor's consent	

Course assessment					
Total number of assessed students: 8					
A	B	C	D	E	FX
50.0	12.5	25.0	12.5	0.0	0.0
Provides: doc. Ing. Norbert Kopčo, PhD.					
Date of last modification: 10.02.2021					
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚINF/ VYZ1/15	Course name: Computational complexity
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: 4	
Recommended semester/trimester of the course: 3.	
Course level: II.	
Prerequisites:	
Conditions for course completion: Oral examination.	
Learning outcomes: To give the students the theoretical background in computational complexity and theory of NP-completeness.	
Brief outline of the course: Deterministic and nondeterministic algorithms with polynomial time, NP-completeness. Deterministic simulation of a nondeterministic Turing machine. Satisfiability of Boolean formulae. Another NP-complete problems: satisfiability of a formula in a conjunctive normal form, 3-satisfiability, 3-colorability of a graph, 3-colorability of a planar graph, knapsack problem, balancing, ... Space bounded computations, classes L, NL, PSPACE. Deterministic simulation - Savitch theorem. Closure under complement. Complete problems for classes NL, P, and PSPACE.	
Recommended literature: 1. J.E. Hopcroft, R.Motwani, J.D. Ullman: Introduction to automata theory, languages, and computation, Addison-Wesley, 2007. 2. M. Sipser: Introduction to the Theory of Computation, Thomson, 2nd edition, 2006. 3. L.A.Hemaspaandra, M.Ogihara: Complexity theory companion, EATCS series, texts in computer science, Springer-Verlag, 2002. 4. S. Arora, B. Barak: Computational Complexity: A Modern Approach, Cambridge Univ. Press, 2009. 5. G.Brassard, P.Bradley: Fundamentals of algorithmics, Prentice Hall, 1996. 6. D.P.Bovet, P.Crescenzi: Introduction to the theory of complexity, Prentice Hall, 1994. 7. C. Calude and J. Hromkovič: Complexity: A Language-Theoretic Point of View, in G. Rozenberg and A. Salomaa, Handbook of Formal Languages II, Springer, 1997.	
Course language: Slovak or english	
Notes: Content prerequisites: Basic notions from the theory of automata and formal languages.	

Basic skills in programming and design of algorithms (in any programming language). Basics knowledge in mathematical logic, set theory, and graph theory.					
Course assessment Total number of assessed students: 334					
A	B	C	D	E	FX
57.78	15.57	11.68	7.19	7.49	0.3
Provides: prof. RNDr. Viliam Geffert, DrSc.					
Date of last modification: 22.02.2021					
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚINF/MSSUI/15		Course name: Computer science and didactics of informatics			
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, ÚINF/TIK1/15, (ÚINF/UGR1/15 and lebo ÚINF/KKV1/15 and lebo ÚINF/KKV1/21 and lebo ÚINF/UNS1/15 and lebo 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: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚFV/ 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: ÚFV/MPPb/15	
Conditions for course completion: Confirmed list of sittings in on classes and teaching as a confirmation of attendance in the required extent of 6 lessons of sitting in on classes and 18 physics lessons taught by student. Lesson records and written preparation for the lessons.	
Learning outcomes: Student gains under the guidance of teacher trainer practical teaching skills within the subject of Physics.	
Brief outline of the course: Sitting in on classes, teaching physics lessons by student, consulted with teacher trainer, analysis of observed and taught lessons.	
Recommended literature: Textbooks for lower and upper secondary school physics	
Course language: Slovak	
Notes:	
Course assessment Total number of assessed students: 15	
abs	n
100.0	0.0
Provides: doc. RNDr. Jozef Hanč, PhD.	
Date of last modification: 03.05.2015	
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚFV/ 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: ÚFV/MPPc/15	
Conditions for course completion: Confirmed list of sittings in on classes and teaching as a confirmation of attendance in the required extent of 8 lessons of sitting in on classes and 30 physics lessons taught by student. Lesson records and written preparation for the lessons.	
Learning outcomes: Student gains under the guidance of teacher trainer practical teaching skills within the subject of Physics.	
Brief outline of the course: Sitting in on classes, teaching physics lessons by student, consulted with teacher trainer, analysis of observed and taught lessons.	
Recommended literature: Textbooks for lower and upper secondary school physics	
Course language: Slovak	
Notes:	
Course assessment Total number of assessed students: 9	
abs	n
100.0	0.0
Provides: doc. RNDr. Jozef Hanč, PhD.	
Date of last modification: 03.05.2015	
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.	

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.	
Date of last modification: 03.05.2015	
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.	

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.	
Date of last modification: 03.05.2015	
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.	

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: Mgr. Katarína Petříková, PhD., PaedDr. Renáta Orosová, PhD.					
Date of last modification: 12.02.2021					
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

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: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

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: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

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: 14					
A	B	C	D	E	FX
42.86	21.43	21.43	7.14	7.14	0.0
Provides: doc. RNDr. Ľubomír Šnajder, PhD.					
Date of last modification: 03.05.2015					

Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.

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: 6					
A	B	C	D	E	FX
16.67	66.67	16.67	0.0	0.0	0.0
Provides: PaedDr. Ján Guniš, PhD.					
Date of last modification: 09.02.2021					
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: KPPaPZ/VPU/17	Course name: Developmental Psychology for Teachers
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: Evaluation of participation in teaching, continuous evaluation of activity in seminars, evaluation of seminar work,	
Learning outcomes: The graduate will understand the principles of developmental psychology, and will be able to characterize the norm in separate developmental stages with a specific focus on the period of school age and adolescence. As part of the seminar work, a students will process current knowledge published in foreign journals. They will have a knowledge about the current social discourse on the topics covered. The graduate will be able to consider various aspects of the possible influence of parents and friends on the development of piupils and apply the knowledge of developmental psychology in the practice of the teacher.	
Brief outline of the course: Determinants and factors of development, cognitive development, personality development. Socialization in separate developmental stages (family, peers, school). Specifics of development in the period of school age, in pubescence and adolescence. Parents and their role in child development. Application of knowledge of developmental psychology in the teacher's practice - communication with students in different developmental stages, creating a teacher-student relationship with respect to the development needs of the student.	
Recommended literature: Vágnerová, M. Vývojová psychologie. Portál, Praha 2000 Říčan, P. Cesta životem. Portál, Praha, 2004. Thorová, K. Vývojová psychologie. Portál, Praha, 2015. Macek, P. Adolescence. Praha: Portál, 2003 Matějček, Z. - rôzne diela	
Course language:	
Notes:	

Course assessment					
Total number of assessed students: 44					
A	B	C	D	E	FX
65.91	22.73	4.55	6.82	0.0	0.0
Provides: Mgr. Mária Bačíková, PhD.					
Date of last modification: 17.02.2021					
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚFV/ DF1a/15	Course name: Didactics of Physics I
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:	
Conditions for course completion: teaching plan for two lessons 10p micro teaching activities 20p educational project 20p answering questions during the course 10p end-of course oral examination 40p	
Learning outcomes: Knowledge and skills in the field of Physics education, overview about the problems of Physics education, basic skills necessary to prepare and guide educational activities, school experiments, problem solving and to use modern media for physics education.	
Brief outline of the course: Within the Didactics of Physics subject the core problems of physics education are introduced and case studies of their solving are interpreted. Strategies on design and implementation of educational activities, their evaluation and the use of modern media are introduced and corresponding skills are trained.	
Recommended literature: 1.J. Janovič a kol.: Didaktika fyziky, MFF UK Bratislava, 1990 2.J. Janovič a kol.: Vybrané kapitoly didaktiky fyziky, MFF UK Bratislava, 1999 3.E. Kašpar a kol.: Didaktika fyziky, SPN Praha, 1978 4.E. Mechlová: Didaktika fyziky 1, 2, PdF Ostrava, 1989 5.J. Fenclová: Úvod do teórie a metodológie didaktiky fyziky, SPN Praha, 1982 Primary school textbooks for Physics actual didactic publications	
Course language: Slovak, English	
Notes:	

Course assessment					
Total number of assessed students: 13					
A	B	C	D	E	FX
46.15	53.85	0.0	0.0	0.0	0.0
Provides:					
Date of last modification: 28.03.2020					
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚFV/ DF1b/15	Course name: Didactics of Physics II
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: 3.	
Course level: II.	
Prerequisites: ÚFV/DF1a/15	
Conditions for course completion: teaching plan for two lessons 10p micro teaching activities 20p educational project 20p answering questions during the course 10p end-of course oral examination 40p	
Learning outcomes: knowledge and skills in the field of Physics education, overview about the problems of Physics education, basic skills necessary to prepare and guide educational activities, school experiments, problem solving and to use modern media for physics education	
Brief outline of the course: 1. Didactic methods, forms and tools in physics education 2. Graphs in education 3. Control, evaluation and assessment of students results, 4. Tests 5. Everyday physics and its application in education 6. Computer based measurements: 7. Using of Internet and multimedia in education 8. IBSE 9. Informal activities to support physics education 10. Life long learning, science teacher training 11. 12. Semestral project presentation	
Recommended literature: 1.J. Janovič a kol.: Didaktika fyziky, MFF UK Bratislava, 1990 2.J. Janovič a kol.: Vybrané kapitoly didaktiky fyziky, MFF UK Bratislava, 1999 3.E. Kašpar a kol.: Didaktika fyziky, SPN Praha, 1978 4.E. Mechlová: Didaktika fyziky 1, 2, PdF Ostrava, 1989 5.J. Fenclová: Úvod do teórie a metodológie didaktiky fyziky, SPN Praha, 1982 6.Vachek, J. a kol.: Fyzika pre 1. ročník gymnázia. SPN, Bratislava, 1984. 7.Svoboda, E. a kol. Fyzika pre 2. ročník gymnázia. SPN, Bratislava, 1985.	

8.Lepil, O. a kol.: Fyzika pre 3. ročník gymnázia. SPN, Bratislava, 1986.
 9.Pišút, J. a kol.: Fyzika pre 4. ročník gymnázia. SPN, Bratislava, 1987.
 10.Scholtz, E., Kireš, M.: Fyzika - Kinematika pre osemročné gymnáziá, SPN, Bratislava, 2001, 104 strán, ISBN 80-08-02848-3
 11.Blaško, M., Gajdušek, J., Kireš, M., Onderová, Ľ.: Molekulová fyzika a termodynamika pre osemročné gymnáziá, SPN, Bratislava, 2004, 120 strán, ISBN 80-10-00008-6
 12.Scholtz, E., Kireš, M.: Fyzika - Dynamika pre osemročné gymnáziá, SPN, Bratislava, 2007, 231 strán, ISBN 80-10-00013-2
 School textbooks for Physics education at upper secondary level

Course language:

Slovak, English

Notes:

Course assessment

Total number of assessed students: 12

A	B	C	D	E	FX
83.33	16.67	0.0	0.0	0.0	0.0

Provides: doc. RNDr. Marián Kireš, PhD., PaedDr. Iveta Štefančinová, Ph.D.

Date of last modification: 03.05.2015

Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.

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: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

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: 151					
A	B	C	D	E	FX
17.88	33.77	23.84	15.89	7.95	0.66
Provides: doc. RNDr. Ľubomír Šnajder, PhD., PaedDr. Ján Guniš, PhD.					
Date of last modification: 03.05.2015					
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚFV/ 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: regular consultations with diploma thesis supervisor about the progress of diploma project development, design of investigation plan	
Learning outcomes: Student has studied the theoretical background, formulates research questions, has designed investigation plan, has presented first results, eventually.	
Brief outline of the course: Development of diploma project	
Recommended literature: Recommended literature that is included in the diploma thesis assignments Regulations for diploma thesis preparation template for diploma thesis	
Course language: Slovak	
Notes:	
Course assessment Total number of assessed students: 10	
abs	n
100.0	0.0
Provides:	
Date of last modification: 03.05.2015	
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚFV/ 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: regular consultations with diploma thesis supervisor about the progress of diploma project development and about the investigation regular consultations study of available resources connected with the diploma thesis assignments first results	
Learning outcomes: Student understands the methods of investigation and he gains first results.	
Brief outline of the course: Work on the diploma project with regard to the assignments of the diploma thesis	
Recommended literature: Recommended literature that is included in the diploma thesis assignments Regulations for diploma thesis preparation template for diploma thesis	
Course language: Slovak	
Notes:	
Course assessment Total number of assessed students: 10	
abs	n
100.0	0.0
Provides:	
Date of last modification: 03.05.2015	
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚFV/ 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: regular consultations with diploma thesis supervisor about the progress of diploma project development and about the project results	
Learning outcomes: Student has enough knowledge to prepare a theoretical part of the diploma thesis and for practical part based on the problem analysis and drawing conclusions.	
Brief outline of the course: Work on the project with regard to the diploma thesis assignments	
Recommended literature: Recommended literature that is included in the diploma thesis assignments Regulations for diploma thesis preparation template for diploma thesis	
Course language: Slovak	
Notes:	
Course assessment Total number of assessed students: 18	
abs	n
100.0	0.0
Provides:	
Date of last modification: 03.05.2015	
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚFV/ 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:					
Conditions for course completion: Preparation and submission of diploma thesis in printed and electronic form. Presentation of diploma thesis results and its defence in front of examination board.					
Learning outcomes: Knowledge and skills connected with selected problem analysis and presentation of diploma thesis results in front of experts.					
Brief outline of the course: Preparation and submission of diploma thesis to central registration system. Printed version for reviewing. Presentation of diploma thesis results and answers to the questions of reviewers. Discussion on the content of diploma thesis and answers to the questions of examination board members.					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 18					
A	B	C	D	E	FX
77.78	11.11	11.11	0.0	0.0	0.0
Provides:					
Date of last modification: 03.05.2015					
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

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: Students can get a maximum of 90 points for the course: Part 1 of the assessment: participation in the training (30p) - replaces the classic lessons, students choose the date of the training at the introductory first meeting to the course, therefore their participation is necessary. As the training takes place in two days, participation in the entire training is required. If it is impossible to participate in both days of training, the student must change to another date of training, which he will be able to complete. The training takes place partly over the weekend and also outside the school or in the training center in Danišovce (it starts on Thursday evening and ends on Saturday with lunch). The costs of accommodation, meals and travel are paid by the student himself. 2nd part of assessment: workshops (20p) - they replace classic lectures, are held 4 times per semester and for each workshop the student can get 5p (a total of 20p for workshops). Part 3 of the assessment - preparation (10p) and implementation (10p) of block activities in pairs - a total of 20b. Students must send the prepared preparation of the block of activities on the chosen topic for the pair or an individual, which is evaluated with a maximum of 10 points, no later than one week before the date of their training. The preparation should include a clear goal, a description of the selected activities and their goals and justification on the topic, a description of the necessary tools, preparation of questions for discussion as well as activities in stock. The preparation will then be consulted by the lecturers and a possible correction will still be possible. The actual implementation of training activities will be evaluated by a maximum of 10 points, while evaluating the adequacy of selected activities with respect to the selected topic, to fulfill the goal of activities, ability to stimulate group discussion, equal distribution of all members in the group block with other members in the group. The minimum that needs to be achieved from the preparation and implementation of activities is at least 11 points. Part 4 of the assessment - knowledge test (20b). The exam will consist of 5-6 questions related to prevention and the social skills needed in prevention. Students will be able to answer these questions based on the study literature and participation in the training. The minimum number of points required for successful completion of the course in this part of the evaluation is 11 points. In total, students can get 90bp per subject and the final evaluation is as follows: 90 - 82: A 81 - 73: B 72-66: C 65 - 59: D 58 - 54: E 53 and less: FX. Any modifications to the implementation of the course in connection with the current order of the Rector are listed in the electronic board of the course.	
Learning outcomes:	

<p>To provide students with more detailed information on the psychological aspects of drug prevention through an interesting, engaging explanation of theory and practice. Development of skills for the work of teachers in the field of drug use prevention also thanks to the use of experiential methods in teaching and the possibility of developing professional skills in the work of a teacher and a prevention coordinator at school.</p>					
<p>Brief outline of the course:</p>					
<p>Recommended literature: Orosová, O. a kol. (2012). Základy prevencie užívania drog a problematického používania internetu v školskej praxi. Košice: UPJŠ. Sloboda, Z., & Bukoski, J. (Eds.). (2006). Handbook of Drug Abuse Prevention: Theory, Science, and Practice. New York: Springer.</p>					
<p>Course language: slovak</p>					
<p>Notes:</p>					
<p>Course assessment Total number of assessed students: 321</p>					
A	B	C	D	E	FX
50.78	40.19	8.1	0.93	0.0	0.0
<p>Provides: prof. PhDr. Oľga Orosová, CSc., Mgr. Marta Dobrowolska Kulanová, PhD., Mgr. Lucia Barbierik, PhD.</p>					
<p>Date of last modification: 16.02.2021</p>					
<p>Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.</p>					

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: Overall rating: –Evaluation requirements: a) Active work during the whole semester, continuous control of study results in exercises during the teaching part of the semester in the range of maximum 5 points. Preparation and presentation of a case study on a selected topic - max. 15 points. A more detailed explanation of the assignment and the work schedule of students will be the subject of an agreement for the 1st exercise of the semester. a) Presentation and processing of case studies from the school environment in a minimum range of 3 standard pages. Structure: -Introduction -Description of the case / problem -Suggestions for solutions from the position of an educational consultant. Maximum number of points per case report: 15 (evaluation: 5 points - presentation, 5 points - introduction and description of the problem, 5 points - suggestions for solution) b) Preparation and presentation of the project on a selected topic - number of points for presentation and written processing max. 30 Maximum number of points from the subject: 50 Minimum number required to complete the course: 31 Current modifications of the course are listed in the electronic bulletin board of the course before the beginning of each semester. Overall rating scale: 30 and less FX 31 - 34 E 35 - 38 D 39 - 42 C 43 - 46 B 47 - 50 A	
Learning outcomes:	

To provide students with quality and up-to-date information regarding the content of the work of an educational counselor and to introduce them to the issue of educational counseling in the school space. The content and formal aspects of the course are designed to not only expand students' theoretical knowledge and orientation in the organization and legislation on the system of educational counseling in our schools, but also to apply the acquired knowledge in practice. The teaching of the subject is closely connected with the practice, which increases the possibility of employment of the graduate of the subject.

Brief outline of the course:

Educational counseling in the education system, the role and position of the educational counselor in the school.

Cooperation between school and family, the main principles of conducting a counseling interview with the student and the parent.

Issues of school maturity, adaptation to the 1st year of elementary school. Identification of gifted children, possibilities of their education. The role of an educational counselor, cooperation with a psychologist in enrollment and in the first half of the first year of elementary school.

Specific developmental learning disorders, integration of students with SEP learning in primary and secondary school.

ADHD - identification, diagnostics, specifics of children with ADHD in the teaching process, the procedure for solving problems arising from ADHD at school

Autism spectrum disorders, Asperger's syndrome. identification, diagnostics, specifics of children with this type of disorder in the teaching process, the procedure for solving problems at school

Pupils' behavioral disorders - characteristics of behavioral disorders, identification and diagnostics, possible solutions in the school environment. Aggressive behavior of students at school, manifestations, causes, solutions to aggressive behavior

Crisis intervention.

Career choice and career development advice. Possibilities of VP and cooperation with CPPPAP.

Recommended literature:

Základná a odporúčaná literatúra je dostupná. Študentom budú sprostredkované v priebehu semestra aktuálne materiály týkajúce sa tém predmetu.

Základná štúdijská literatúra:

Mertin, V., Krejčová, L. a kol.: Výchovné poradenství, Praha: Wolters Kluwer, 2013

Odporúčaná štúdijská literatúra:

Beranová, E. a kol.: Metodický průvodce výchovného poradce. Praha: Raabe, 2014

Fontana David: Psychologie ve školní praxi, Praha: Portál, 2003

Kyriacou, Chris: Řešení výchovných problémů ve škole. Praha : Portál, 2005

Šefránková, Mária: Výchovný poradca . Bratislava : Iris, 2007

Vendel, Š.(2008): Kariérní poradenství. Praha: Grada.

Vendel, Š.: Poradenstvo pri voľbe povolania. In: Sprievodca triedneho učiteľa, str.1-54, 2006, ISBN 80-89182-03-8, Bratislava: vydavateľstvo Raabe.

Čáp, Mareš: Psychologie pro učitele. Praha: Portál

Vendel, Š.(2007): Pedagogická psychológia. Bratislava: Epos.

Pokorná, Věra: Teorie a náprava vývojových poruch učení a chování. Praha : Portál, 2001

Šefránková, Mária: Výchovný poradca. Bratislava Iris 2007.

Vágnerová, Marie: Školní poradenská psychologie pro pedagogy. Praha : Karolinum, 2005

Pešová, Ilona: Poradenská psychologie pro děti a mládež. Praha : Grada, 2006

Španteková, N. a kol. Krizová intervence pro praxi. Praha: Grada, 2011.

Matějček, Z.: Praxe dětského psychologického poradenství. Praha: Portál, 2011

Sheedy-Kurcinka, Mary: Problémové dítě v rodině a ve škole. Praha : Portál, 1998

Ronenová, T: Psychologická pomoc dětem v nesnázích : kognitivně-behaviorální přístupy při práci s dětmi. Praha : Portál, 2000
Martin, V.: Jak řešit problémy dětí se školou. Praha: Portal, 1997
Hvozdík, j.: Základy školskej psychológie. Bratislava: SPN, 1986.
Koščo, Jozef: Poradenská psychológia. Bratislava : SPN, 1987

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: 17.02.2021

Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.

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: 429					
A	B	C	D	E	FX
54.55	26.34	13.05	4.66	1.17	0.23
Provides: Mgr. Katarína Petříková, PhD.					
Date of last modification: 12.02.2021					
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

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: 299					
A	B	C	D	E	FX
47.16	37.12	13.71	2.01	0.0	0.0
Provides: PaedDr. Renáta Orosová, PhD., Mgr. Katarína Petříková, PhD.					
Date of last modification: 12.02.2021					
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

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: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚFV/ VBF2/15	Course name: General Biophysics II
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: 3	
Recommended semester/trimester of the course: 1., 3.	
Course level: II.	
Prerequisites:	
Conditions for course completion: Exam	
Learning outcomes: To provide information about the object, significance and role of biophysics in science. The main emphasis will be given on the understanding of the principles determining the structure and function of the most important biological structures (nucleic acids, proteins, biomembranes) as well as on the thermodynamics and kinetics of selected chemical and biophysical processes.	
Brief outline of the course: The definition of biophysics and its role in the science. Intra- and inter-molecular interactions in biological systems. Function and structure of the important biomacromolecules (nucleic acids, proteins, biomembranes, sugars). Conformational transitions in biopolymers: helix-coil transition in DNA, denaturation of proteins, phase transitions in biomembranes. Thermodynamics of biological processes. Gibbs energy and chemical equilibrium, chemical potential, binding constants of the ligand-macromolecule interactions, cooperativity of the binding between biological important molecules, membrane potential. Kinetics of the chemical and biophysical processes. The principles of chemical kinetics, enzymatic reactions, inhibition of the enzymes, membrane transport, introduction to the pharmacokinetics. Cell biophysics. The basic bioenergetic processes, oxidative phosphorylation, photosynthesis. Mechanisms of regulations and control processes in cells-the basic principles. Medicinal biophysics. Biophysical principles of selected diagnostic and therapeutical methods. Radiation and environmental biophysics. The influence of physico-chemical factors of the environment on the living systems.	
Recommended literature: 1. M. B. Jackson, Molecular and cellular biophysics, Cambridge University Press, 2006. 2. M. Daune, Molecular biophysics-Structures in motion, Oxford University Press, 2004. 3. R. Glaser, Biophysics, Springer Verlag, 2001. 4. M.V. Volkenštein, Biofizika, Nauka, Moskva 1988. 5. W.Hoppe and W. Lohmann, Biophysics, Springer Verlag, 1988.	

6. K.E.van Holde, W.C. Johnson and P. Shing Ho, Principles of physical biochemistry, Simon and Schuster, Prentice Hall, 1998.					
7. D.G. Nichols and S.J. Ferguson, Bioenergetics 3, Academic Press, Elsevier Science Ltd., 2002.					
Course language: Slovak					
Notes:					
Course assessment Total number of assessed students: 9					
A	B	C	D	E	FX
22.22	44.44	11.11	11.11	11.11	0.0
Provides: doc. Mgr. Daniel Jancura, PhD.					
Date of last modification: 03.05.2015					
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚFV/ DEJ1/99	Course name: History of Physics
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: I., II.	
Prerequisites:	
Conditions for course completion: written test and thesis exam	
Learning outcomes: Basic facts in the history of physics.	
Brief outline of the course: Evolution of knowledge before Galileo. Evolution of physics within the mechanical picture of the world. Evolution and limits of classical physics, phase of breakthrough in physics. Origin and evolution of the theory of relativity. Quantum physics and prospects of further evolution of physics and their application. Contemporary state of physical research and its application in technology, natural sciences and philosophy. Position of physics in our society.	
Recommended literature: 1. R.Zajac, J.Chrapan: Dejiny fyziky, skriptá, MFF UK, Bratislava, 1982. 2. V.Mališek: Co víte o dějinách fyziky, Horizont, Praha, 1986. 3. I.Kraus, Fyzika v kulturních dějinách Evropy, Starověk a středověk, Nakladatelství ČVUT, Praha, 2006. 4. A.I.Abramov: Istorija jadernoj fyziky, KomKniga, Moskva, 2006. 5. L.I.Ponomarev: Pod znakom kvanta, Fizmatlit, Moskva, 2006. 6. I.Kraus, Fyzika v kulturních dějinách Evropy, Od Leonarda ke Goethovi, Nakladatelství ČVUT, Praha, 2007. 7. I.Kraus, Fyzika od Thaléta k Newtonovi, Academia, Praha, 2007. 8. I.Štoll, Dějiny fyziky, Prometheus, Praha, 2009. 9. www-pages. 10.Brandt S., The harvest of a century, Discoveries of modern physics in 100 episodes, Oxford, 2009.	
Course language:	
Notes:	

Course assessment					
Total number of assessed students: 31					
A	B	C	D	E	FX
80.65	9.68	9.68	0.0	0.0	0.0
Provides: prof. RNDr. Stanislav Vokál, DrSc., doc. RNDr. Janka Vrláková, PhD.					
Date of last modification: 30.03.2020					
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

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: 88					
A	B	C	D	E	FX
64.77	11.36	12.5	3.41	0.0	7.95
Provides: prof. RNDr. Stanislav Krajčí, PhD.					
Date of last modification: 03.05.2015					
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

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: 151					
A	B	C	D	E	FX
15.23	33.77	21.19	14.57	11.92	3.31
Provides: doc. RNDr. Ľubomír Šnajder, PhD., PaedDr. Ján Guniš, PhD.					
Date of last modification: 01.04.2020					
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: KPPaPZ/UPN/17	Course name: Introduction into Psychology of Religion
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: The assessment is based on the interim evaluation.	
Learning outcomes: The aim of the subject is to gain a basic overview of the origin and current state of knowledge in the field of research and application of the psychology of religion. Students will acquire basic knowledge need for orientation in the field and emphasis will be given to individual reflection and critical thinking as well as application of already acquired knowledge from other (psychological) disciplines.	
Brief outline of the course: 1. History of psychology of religion in national and world context 2. Psychological perspective on religion and religious experience 3. Psychology of religion in an interdisciplinary context 4. Basic approaches to psychological interpretation and selected views 5. Different types of religious experience 6. Psychological view of religion from a biodromal perspective 7. Spirituality versus religiosity in a postmodern society 8. Coping in the context of religiosity 9. Psychotherapy and religion, pastoral psychology	
Recommended literature: Eliade, M. (1994). Posvátné a profánní. Praha: Česká křesťanská akademie. Eliade, M. (1995). Dějiny náboženského myšlení 1. Praha: Oikoymenh. Freud, S. (1999). Nutkavá jednání a náboženské úkony. In Freud, S., Spisy z let 1906–1909. Praha: Psychoanalytické nakladatelství. Fromm, E. (2003). Psychoanalýza a náboženství. Praha: Aurora Erikson, E. (1996). Mladý muž Luther: studie psychoanalytická a historická. Praha: Psychoanalytické nakladatelství. James, W. (1930). Druhy náboženské zkušenosti. Praha: Melantrich. Jung, C. G. (1993). Analytická psychologie: Její teorie a praxe. Praha: Academia. Křivohlavý, J. (2000). Pastorální péče. Praha: Oliva Pargament, K. (1997), Psychology of religion and coping,	

Říčan, P. (2007). Psychologie náboženství a spirituality. Praha: Portál.
Říčan P. (2002), Psychologie náboženství, Portál, Praha,
Stríženec, M. (2001) Súčasná psychológia náboženstva

Course language:

Notes:

Course assessment

Total number of assessed students: 11

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: 18.02.2021

Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.

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: 297					
A	B	C	D	E	FX
13.8	10.44	13.8	23.57	29.97	8.42
Provides: doc. RNDr. Jozef Jirásek, PhD., RNDr. Rastislav Krivoš-Belluš, PhD.					
Date of last modification: 03.05.2015					
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

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: Evaluation of projects created for neural network applications. Written and oral exam.					
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. Mitchell, M. (1998). An introduction to genetic algorithms. MIT press.					
Course language: Slovak or English					
Notes: Content prerequisites: Basics of programming in Python, or another alternative programming language suitable for data analysis					
Course assessment Total number of assessed students: 439					
A	B	C	D	E	FX
14.12	17.08	22.55	19.13	22.78	4.33
Provides: RNDr. Ľubomír Antoni, PhD.					

Date of last modification: 10.02.2021

Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.

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: 266					
A	B	C	D	E	FX
22.93	11.28	13.16	24.44	26.32	1.88
Provides: RNDr. Ondrej Krídlo, PhD., prof. RNDr. Stanislav Krajčí, PhD.					
Date of last modification: 03.05.2015					
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

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: 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: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: KPPaPZ/SNP/09		Course name: Mobbing, Violence and Their Prevention			
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: Active participation in seminars. Processing of current research results related to bullying and subsequent presentation at a seminar. Implementation of bullying prevention activities in class.					
Learning outcomes: The student will acquire the latest information about bullying in schools and its consequences, about solving problematic situations associated with bullying as well as about possible ways of prevention. Within the seminars, students will develop professional skills through the implementation of prevention activities. At the same time, their sensitivity to the issue of bullying and their willingness to actively address it during their pedagogical practice will increase.					
Brief outline of the course: Aggressive behavior. Characteristics of actors of bullying (personality, characteristics of family environment). Manifestations and possible causes of bullying. Bullying as a group process. The role of teacher, school and parent in solving bullying. Possibilities of prevention of bullying at the level of school, class, individuals. Primary, secondary and tertiary prevention. Socio-psychological activities used in the prevention of bullying.					
Recommended literature: Kolář, M.: Bolest šikanování. Cesta k zastavení epidemie šikanování ve školách. Portál, Praha, 2001 Jánošová a kol. Psychologie školní šikany. Grada, Praha, 2016 Říčan, P.: Agresivita a šikana mezi dětmi. Portál, Praha, 1995					
Course language:					
Notes:					
Course assessment Total number of assessed students: 143					
A	B	C	D	E	FX
80.42	17.48	1.4	0.7	0.0	0.0
Provides: Mgr. Mária Bačíková, PhD.					

Date of last modification: 16.02.2021

Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚFV/ MDT06/19	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., 4.	
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: 50					
A	B	C	D	E	FX
34.0	44.0	14.0	4.0	4.0	0.0
Provides: doc. RNDr. Jozef Hanč, PhD.					
Date of last modification: 31.03.2020					
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚFV/ MFDF/15	Course name: Modern Physics from Didactics Point of View
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: 3	
Recommended semester/trimester of the course: 1.	
Course level: II.	
Prerequisites:	
Conditions for course completion: Active participation; completing reading assignments; realization of a chosen modern physics project with a practical application. Exam and defending own project	
Learning outcomes: 1. Achieving better conceptual understanding and getting an integrated view on fundamental ideas of contemporary modern physics, which every future physicist and physics teacher should have. Emphasis is not on abstract mathematical methods, but on using most recent knowledge and tools of Physics Education Research - computer modeling of physical phenomena and employing only elementary algebra and calculus. 2. Getting physical intuition and experience dealing with practical applications of modern physics.	
Brief outline of the course: 1. Fundamental ideas of modern mechanics: symmetry, event, worldline, spacetime diagram, principle of least action, conservation laws; practical applications. 2. Fundamental ideas of relativity: principle of relativity, space-time interval, conservation of momentum, metrics, principle of maximal aging; practical applications. 3. Fundamental ideas of quantum mechanics: probability amplitude, principle of democracy of histories, rules for amplitudes, propagator, Schrödinger's equation, stationary state, Feynman's diagrams; practical applications.	
Recommended literature: 1. Moore, T. A, Six Ideas That Shaped Physics - Unit C and Q, 2nd ed., Mc Graw Hill, Boston, 2003 2. Feynman, R.P., QED - The Strange theory of Light and Matter, Princeton University Press, Princeton, 1985 3. Hey, A., Walters, P., New Quantum Universe, Cambridge University Press, 2003 4. Taylor, E. F, Wheeler, J. A., Space-time Physics-Introduction to Special Relativity, 2nd ed., W.H. Freeman and Company, New York, 1992 5. Thorne, K. S., Black Holes and Time Warps, W.W. Norton, New York, 1995 6. Relevant resources from recent journal literature (American Journal of Physics, European Journal of Physics, Scientific American...)	

Course language: Slovak					
Notes:					
Course assessment Total number of assessed students: 3					
A	B	C	D	E	FX
33.33	33.33	33.33	0.0	0.0	0.0
Provides: doc. RNDr. Jozef Hanč, PhD.					
Date of last modification: 02.05.2017					
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: KPE/ PDK/17		Course name: Pedagogical Communication			
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:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 65					
A	B	C	D	E	FX
73.85	23.08	3.08	0.0	0.0	0.0
Provides: Mgr. Katarína Petříková, PhD.					
Date of last modification: 12.02.2021					
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: KPE/ PDD/17		Course name: Pedagogical Diagnostics			
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: 21					
A	B	C	D	E	FX
90.48	4.76	4.76	0.0	0.0	0.0
Provides: PaedDr. Janka Ferencová, PhD.					
Date of last modification: 12.02.2021					
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

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,KPPaPZ/PPgU/15	
Conditions for course completion: Obtaining the required number of credits in the prescribed composition by the study plan.	
Learning outcomes: Verification of the acquired competencies of the student in accordance with the profile of the graduate.ie required number of credits in the prescribed composition by the study plan.	
Brief outline of the course: Pedagogy: 1. Pedagogy, basic pedagogical categories, system of pedagogical scientific disciplines. 2. Education, pages and functions of education, educational process, self-education.3. Factors of education, educated individual, pedagogue, pedagogical profession, professional competencies.4. School education, family education. 5. Educational goals, taxonomy, requirements, classification of educational goals.6. Methods of education. 7. Pedagogical principles. 8. School system of the Slovak Republic. 9. Didactics, basic questions of didactics, current starting points of didactics. 10. Objectives of the teaching process, the teacher's work with the objectives of teaching.11. Content of education, basic curriculum, extension curriculum, elements and components of curriculum. 12. Assessment in school education, types, functions and criteria of assessment.13. Pedagogical control, methods and forms of pedagogical control.14. Teacher's work planning, written preparation of the teacher for teaching.15. Teaching process, stages of the teaching process and their didactic functions.16. Organizational forms of teaching, lesson, stages, types of lessons.17. Teaching methods, classification, functions, selection of teaching methods. 18. Didactic principles of the teaching process. 19. Basic pedagogical documents, textbook, functions and structural components of the textbook.20. Current concepts of the teaching process. Psychology: 1.Psychology as a science, goals and subject of psychology in terms of influential psychological directions.2.Pedagogical psychology in teacher training, its subject, function.3.Psychology in school practice: professional forms of control and assistance, psychological examination, counseling process. Crisis intervention. Code of ethics.4.Psychology in school practice: approaches and models of prevention, prevention spectrum, protective and risk factors of risk behavior of schoolchildren in the context of the theory of triadic influence.5.Psychology in school practice: effective strategies for prevention of substance use.6.Psychology of education from from the point of view of psychodynamic approach (Psychoanalysis and Individual Psychology) .7.Psychology of education from the point of	

view of humanistic psychology.8. Psychology of education from the point of view of cognitive psychology.9. Psychology of learning and types of learning supplemented by examples from school practice. / success in the context of individual theories of cognitive development.11. Nutritional peculiarities, school non-success / intelligence in terms of intelligence.12. Memory and developmental peculiarities, school non-success 13. Attention and developmental peculiarities, school non / success peculiarities of individual types of family, educational styles.15. Social relations at school, the modes of cognition of interaction U and Ž. Psychosocial climate of school class and school, methods of cognition, sociometry.16. Social influence: presence of others, interpersonal influences and meaningful understanding of social influence in teacher's work.17. Teacher as a professional, his professional ability, teaching style, attitudes towards students, expectations towards students, coping with stress, burnout syndrome.18. Students: gifted and talented, school failure, non-thriving pupils and failing pupils, pupils' self-efficacy.19. Types of research plans and their creation (setting goals, hypotheses, variables, selection of research sample) in the context of pedagogical-psychological research.20. Selected methods of pedagogical-psychological research - questionnaire, interview, observation and possibilities of their use in school practice.

Recommended literature:

Pedagogika:

- Čapek, R.: Moderní didaktika. Praha: Grada, 2016.
Dytrtová, R., Krhutová, M. Učitel. Příprava na profesi. Praha: Grada, 2009.
Kalhous, Z. – Obst, O. 2002. Školní didaktika. Praha: Portál, 2002.
Petlák, E.: Kapitoly zo súčasnej didaktiky. Bratislava: IRIS, 2005.
Prucha, J.: Moderní pedagogika. Praha: Portál, 2012.
Turek, I.: Didaktika. Bratislava: Wolters Kluwer, 2014.
Vališová, A., Kasíková, H.: Pedagogika pro učitele. Praha: Grada, 2010.
Zormanová, L.: Obecná didaktika. Praha: Grada, 2014.

Psychológia:

- Mareš, J.: Pedagogická psychologie. Praha : Grada 2013.
Mareš, J., & ČÁP, J.: Psychologie pro učitele. Praha: Portál, 2001.
Džuka, J.: Základy pedagogickej psychológie. Prešov: UK 2003.
Orosová, O. a kol.: Psychológia a pedagogická psychológia 1. Košice: UPJŠ, 2005.
Orosová, O. a kol.: Základy prevencie užívania drog a problematického používania internetu v školskej praxi. Košice: UPJŠ 2012.
Bačiková, M., Janovská, A. (2019) . Základy metodológie pedagogicko-psychologického výskumu. Sprievodca pre študentov učiteľstva. 2. rozšírené vydanie. Šafárik press, Košice.
Gavora, P. a kol. (2010). Elektronická učebnica pedagogického výskumu. Bratislava: Univerzita Komenského, 2010. dostupné online na www.e-metodologia.fedu.uniba.sk.
Vágnerová, M.: Základy psychológie. Praha : Karolinum 2005.
Vágnerová, M.: Vývojová psychológie. Praha : Karolinum 2005.
Vágnerová, M.: Škoní podadenská psychologie pro pedagogy. Praha : Karolinum 2005. Výrost, J., Slaměník, I.: Sociální psychologie. Praha : Grada 2008.
Výrost, J., Salměník, I.: Aplikovaná sociální psychologie I. Praha: Portál 1998.
Strana: 2
Fontana, D. : Psychologie ve školní praxi. Praha: Portál 1997.
Zelina, M.: Stratégie a metódy rozvoja osobnosti. Bratislava, Iris: 1996.
Křivohlavý, J.: Pozitivní psychologie. Praha: Portál 2004.
Křivohlavý, J.: Psychologie zdraví. Praha: Portál 2003.

Course language:

Notes:					
Course assessment					
Total number of assessed students: 444					
A	B	C	D	E	FX
29.73	25.0	25.9	15.54	3.6	0.23
Provides:					
Date of last modification: 17.02.2021					
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚFV/ FPK1/15		Course name: Phase Transitions and Critical Phenomena			
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: 3					
Recommended semester/trimester of the course: 2.					
Course level: II.					
Prerequisites:					
Conditions for course completion: Grade					
Learning outcomes: To acquaint students with based problems of the phase transitions and critical phenomena.					
Brief outline of the course: Thermodynamics of phase transitions. Classification of phase transitions. Critical phenomena, universality. Microscopic models of the magnetic phase transitions. Ising model in one and two dimensions. Mean field theory of the Ising model. Landau theory of phase transitions.					
Recommended literature: 1. Stanley H.G.: Introduction to Phase Transitions and Critical Phenomena, Clarendon Press Oxford, Oxford, 1971. 2. Reichl L.E.: A Modern Course in Statistical Physics, University of Texas Press, Austin, 1980. 3. Plischke M., Bergersen B.: Equilibrium Statistical Physics, World Scientific, Singapore, 1994. 4. Kadanoff L.P.: Statistical Physics, Statistics, Dynamics and Renormalization, World Scientific, Singapore, 2000.					
Course language: Slovak					
Notes:					
Course assessment Total number of assessed students: 44					
A	B	C	D	E	FX
72.73	9.09	4.55	6.82	6.82	0.0
Provides: prof. RNDr. Andrej Bobák, DrSc.					
Date of last modification: 19.02.2021					
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚFV/ FYU1/15	Course name: Physical Problems
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: 3	
Recommended semester/trimester of the course: 1.	
Course level: II.	
Prerequisites:	
Conditions for course completion: On- line set of problems for self solving is available for students. One task is define for each seminar for testing of student preparation. Production and presentation of three own problems is necessary. problem solving 40 p obtained problem 10 p own problems 10 p oral examination 40 p Final: A 100-90 B 89-80 C 79-70 D 69-60 E 59-50 F 49-0	
Learning outcomes: Students will be ready for using of problem solving strategies at lower and upper secondary school levels. Classical problems are studied in more details from different point of view (students knowledge and skills, technologies, motivation, computer modelling and measurements).	
Brief outline of the course: Methods of problem solving are presented and trained. The sets of typical problems are analysed. Using of modelling and real experiments is discussed.	
Recommended literature: 1. Baláž, P. : Zbierka úloh z fyziky, SPN Bratislava, 1971 2. Bartuška, K.: Postup při řešení fyzikálních úloh, Sbíрка řešených úloh z fyziky pro střední školy I, Praha, Prometheus, 1997, s. 5-10. 3. Halpern, A.: 3000 solved problems in Physics, McGraw-Hill, Inc., USA, 1988 4. Janovič, J., Koubek, V. Pecen, I.: Vybrané kapitoly z didaktiky fyziky. Bratislava, UK, 1999, 5. Jurčová, M., Dohňanská, J., Pišút, J., Velmovská, K.: Didaktika fyziky – rozvíjanie tvorivosti žiakov a študentov. Bratislava, UK, 2001, 6. Kružík, M.: Sbíрка úloh z fyziky pro žáky středních škol, SPN, Praha, 1984 7. Lindner, H.: Řešené úlohy z fyziky, Alfa, Bratislava, 1973 8. Linhart, J. (1976): In: Volf, I.: Metodika řešení úloh ve výuce fyziky na základní škole. Hradec Králové, MAFY, 1998, 9. Pietrasiński, Z. (1964): In: Volf, I.: Metodika řešení úloh ve výuce fyziky na základní škole. Hradec Králové, MAFY, 1998,	

- 10.Scholtz, E., Kireš, M.: Fyzika – kinematika pre gymnázia s osemročným štúdiom. Bratislava, SPN, 2001,
 11.Šedivý,P., Volf, I.: Dopravní kinematika a grafy. Hradec Králové, MAFY, 1998.
 12.Volf,I. (1975): In: Bednařík, M., Lepil, O.: Netradiční typy fyzikálních úloh. Praha, PROMETHEUS,1995,
 13.Volf,I.: Jak řešit úlohy fyzikální olympiády, XXIII. Ročník soutěže fyzikální olympiády ve školním roce 1981/82, Praha, SPN, 1981,
 14.Volf,I.: Metodika řešení úloh ve výuce fyziky na základní škole. Hradec Králové, MAFY, 1998.
 15.Halpern, A.: 3000 solved problems in Physics, McGraw-Hill, Inc., USA, 1988

Course language:

Slovak, English

Notes:

Course assessment

Total number of assessed students: 16

A	B	C	D	E	FX
100.0	0.0	0.0	0.0	0.0	0.0

Provides: doc. RNDr. Marián Kireš, PhD., doc. RNDr. Zuzana Ješková, PhD.

Date of last modification: 23.01.2020

Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚFV/ MSSU/15		Course name: Physics and Didactics of Physics			
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: (ÚFV/DF1a/15,ÚFV/FKS/15,ÚFV/SJF1/15,ÚFV/DF1b/15,ÚFV/ASFU/15)					
Conditions for course completion: The graduate has knowledge of physics in wider context. He is able to implement and apply knowledge of physics into education. He is able to apply knowledge of theory of education to selected physical content.					
Learning outcomes: Competencies in accordance with the graduate profile.					
Brief outline of the course: The graduate has knowledge of physics in wider context. He is able to implement and apply knowledge of physics content into education. He is able to apply knowledge of theory of education to selected physical content. Physics: Selected problems of Solid state physics, Subnuclear physics and Astrophysics. Didactics of physics: State educational curriculum ISCED 2,3-Physics. Development of scientific literacy. Physical experiment. Active learning, inquiry-based education in physics. Formative and summative assessment. Talented students and informal education. Analysis of lower and upper secondary teaching units.					
Recommended literature:					
Course language: Slovak					
Notes:					
Course assessment Total number of assessed students: 8					
A	B	C	D	E	FX
75.0	25.0	0.0	0.0	0.0	0.0
Provides:					
Date of last modification: 11.04.2017					

Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚINF/ PDSII/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: 72	
abs	n
97.22	2.78
Provides: doc. RNDr. Ľubomír Šnajder, PhD.	
Date of last modification: 03.05.2015	
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: KPPaPZ/PASZ/17	Course name: Problem and Aggressive Behaviour of Pupils. Etiology, Prevention and Intervention.
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: Active participation in seminars - 5 points Research presentation (individual) - 10 points presentation; 10 points - written processing - a total of 20 points Paper from the topics covered - 5 questions / 1 question maximum 5 points - a total of 25 points Σ semester points: 50 Minimum number for completing the course - 31 Current information is available in el. the notice board of the subject before the beginning of each semester.	
Learning outcomes: Students will gain quality and up-to-date information on problem behavior of children and adolescents, including aggressive behavior, its etiology, prevention and intervention from the position of a teacher. Emphasis is placed on the independence and activity of students with an emphasis on linking theory with practice. Students will acquire knowledge and skills that develop their professional competencies and are applicable in the practice of the teacher.	
Brief outline of the course: General principles of mental development as a basis for recognizing mental disorders in children and adolescents. Etiology of mental disorders and developmental disorders in children and adolescents. Definition of aggressive behavior. Concepts of aggression vs. aggressiveness. Theoretical approaches to aggression. Causes and factors of aggressive behavior. Violence at school and in the family. Bullying. Psychology of problem students. Problems resulting from disturbed behavior. Problems arising from group relationships. Adolescent lifestyle issues. Problems resulting from impaired emotional experience. Solving problematic and aggressive behavior in the school environment. School classroom management, group preventive and intervention work with the classroom. Crisis intervention. Work with parents of problem students. Principles of interviewing a parent. Cooperation with other experts. Prevention of aggressive and problematic behavior at school. Classroom and school climate, school prevention programs. Viac o tomto zdrojovom texte Na získanie ďalších informácií o preklade sa vyžaduje zdrojový text Odoslať spätnú väzbu Bočné panely	

Recommended literature:

Study literature and material are available and will be supplemented with current information that will be provided to students.

Vágnerová, M. (2005). Školní poradenská psychologie pro pedagogy. Praha: Karolinum.

Fontana, D. (2003). Psychologie ve školní praxi. Praha: Portál.

Train, A. (2001). Nejčastější poruchy chování dětí. Jak je rozpoznat a kdy se obrátit na odborníka. Praha: Portál.

Čáp, J., Mareš, J. (2007). Psychologie pro učitele. Praha. Portál

Matoušek, O., Matoušková, A. (2011). Mládež a delikvence. Možné příčiny, současná struktura, programy prevence kriminality mládeže. Praha: Portál.

Rogge, J.U. (1999). Dětské strachy a úzkosti. Praha: Portál.

Course language:**Notes:****Course assessment**

Total number of assessed students: 33

A	B	C	D	E	FX
75.76	24.24	0.0	0.0	0.0	0.0

Provides: PhDr. Anna Janovská, PhD.

Date of last modification: 17.02.2021

Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.

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: 1. Active participation in seminars (max. 1 absence) - 30p, 2. Preparation for the seminar - 40p, 3. Preparation (description and analysis) of the moral dilemma - 30p. By summing the points obtained during the semester, the student obtains the final evaluation according to the scale: A 87 - 100, B 77 - 86, C 69 - 76, D 61 - 68, E 56 - 60, FX 55 and less. Any adjustments to the implementation of the course in connection with the current order of the Rector and the exact criteria and method of evaluation are listed in the electronic board of the course.	
Learning outcomes: Getting acquainted with the teaching ethics and ethics of an educational counselor as one of the branches types of professional ethics, the subject of which is a theoretical reflection on ethical and moral issues teaching profession and the function of educational counselor (including the formulation of moral values, principles and standards of the teaching profession and the function of educational counselor in the form of codes of ethics) and on the other hand, it also includes the search for answers or solutions to practical moral problems. Students have the opportunity to freely discuss moral and ethical issues, which encourages their critical thinking. Teaching uses several methods, while the knowledge is presented in the form of an interesting explanation supplemented by experiential activities. Students will gain knowledge and experience in solving personal moral and ethical problems in pedagogical practice as well as in the use of this issue in education, which supports the development of their professional skills. The basis of teacher ethics and the ethics of an educational counselor is an interdisciplinary approach based on the interaction of philosophy, ethics, pedagogy and psychology.	
Brief outline of the course: Professional ethics, Ethics in helping professions, Pedagogical and teaching ethics, Concepts of teacher ethics, Ethics of work of educational counselor, Ethical and moral issues, Code of ethics, Psychology of morality, Moral reasoning, Moral conduct, Moral emotions, Solving moral and ethical dilemmas.	
Recommended literature: Ráčzová, Babinčák, P. Základy psychológie morálky. Košice : Equilibria, 2009. - 130 s. ISBN 9788070977866 (brož.).	

Gluchmanová, M. K niektorým terminologickým otázkam učiteľskej etiky. Pedagogická orientace 2007, č. 2, s. 11–25. ISSN 1211-4669.
 Malankievičová, S. Profesionálna etika: FF PU. 2008.
 Miezgová J., Vargová, D. Etika. SPN Mladé letá 2007.
 Remišová A. Dejiny etického myslenia v Európe a USA. Bratislava, Kalligram 2008.
 Zelina, M. Teória výchovy alebo hľadanie dobra. Bratislava SPN 2010.
 Gluchmanová, M. 2009. Uplatnenie princípov a hodnôt etiky sociálnych dôsledkov v učiteľskej etike. Prešov: FF PU, 2009. 222 s. ISBN 978-80-555-0042-3
 Campbell, E. 2003. The Ethical Teacher. Berkshire (England): Open University Press, 2003. 178 s. ISBN 03-3521-219-0.

Course language:

slovak

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 Barbierik, PhD.

Date of last modification: 16.02.2021

Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.

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: Practics 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: 218					
A	B	C	D	E	FX
34.4	19.27	17.43	14.22	10.55	4.13
Provides: RNDr. PhDr. Peter Písarčík, RNDr. Patrik Pekarčík					
Date of last modification: 07.09.2015					
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

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: Continuous assessment and examination. Electronic board of the course AIS2 - more information and news.	
Learning outcomes: Understanding of psychological, pedagogical-psychological peculiarities of experience and behavior of the teacher and the pupil, development of skills necessary for professional, competent performance of teaching practice. Acquisition and understanding of psychological knowledge necessary for working with students with educational problems, with disadvantaged pupils.	
Brief outline of the course: Introduction: The content of the course is based on current knowledge of psychological disciplines, especially pedagogical and school psychology. Teaching is realized by a combination of lectures with engaging narrative interpretation and seminars using interactive, experiential methods, discussion and open communication with mutual respect, support of independence, activity and motivation of students. Syllabus: The subject and goals of psychology and educational psychology. Professional forms of help in school practice. Implementation of psychological concepts of personality into school practice (Classical and contemporary psychoanalytic theory, Individual psychology, Humanistic psychology, Concept of creative-humanistic education; Cognitivism and Theory of personal constructs). Social psychology of school and family. Learning and teaching. Health and disease; risk / protective factors with healthy related risk behavior. Psychology of students with behavioral and learning problems. Psychology of students with psychosocial, socio-cultural, health disadvantages. Psychological examination. Consulting process. Crisis intervention. Programs for prevention of risky behavior of schoolchildren.	
Recommended literature: Mareš, J.: Pedagogická psychologie. Praha : Grada 2013. Mareš, J., & ČÁP, J.: Psychologie pro učitele. Praha: Portál, 2001. Džuka, J.: Základy pedagogickej psychológie. Prešov: UK 2003.	

Orosová, O. a kol: Psychológia a pedagogická psychológia 1. Košice: UPJŠ, 2005.
 Orosová, O. a kol.: Základy prevencie užívania drog a problematického používania internetu v školskej praxi. Košice: UPJŠ 2012.
 Vágnerová, M.: Základy psychológie. Praha : Karolinum 2005.
 Vágnerová, M.: Vývojová psychológie. Praha : Karolinum 2005.
 Vágnerová, M.: Škoní podadenská psychologie pro pedagogy. Praha : Karolinum 2005. Výrost, J., Slaměnik, I.: Sociální psychologie. Praha : Grada 2008.
 Výrost, J., Salměnik, I.: Aplikovaná sociální psychologie I. Praha: Portál 1998.
 Fontana, D. : Psychologie ve školní praxi. Praha: Portál 1997.
 Zelina, M.: Strategie a metody rozvoja osobnosti. Bratislava, Iris: 1996.
 Křivohlavý, J.: Pozitivní psychologie. Praha: Portál 2004.
 Křivohlavý, J.: Psychologie zdraví. Praha: Portál 2003.

Course language:

slovak

Notes:

Course assessment

Total number of assessed students: 1432

A	B	C	D	E	FX
10.47	18.37	23.04	23.25	22.0	2.86

Provides: prof. PhDr. Oľga Orosová, CSc., Mgr. Lucia Barbierik, PhD., PhDr. Anna Janovská, PhD.

Date of last modification: 16.02.2021

Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: KPPaPZ/PTPN/17	Course name: Psychology of Creativity and Working with Gifted Students in Teacher 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: 1. active participation in lessons (max. 2 absences) - 30p, 2. own output at the seminar - 40p, 3. seminar work - 30p. By summing the points obtained during the semester, the student obtains the final evaluation according to the given scale: A 87 - 100, B 77 - 86, C 69 - 76, D 61 - 68, E 56 - 60, FX 55 and less. Any adjustments to the implementation of the course in connection with the current order of the Rector and the exact criteria and method of evaluation are listed in the electronic board of the course.	
Learning outcomes: The key task of this course is to provide future teachers with quality information about the specifics of working with the gifted through understanding the basic factors and process of creativity, clarify methods of identifying giftedness, focus on supporting and developing giftedness in practice and ensure the development of professional skills. The teaching presents many current topics and encourages students to discuss practical problems arising not only in working with the gifted but also in the implementation of a creative-humanistic approach in education. The curriculum overlap is evident mainly with other subjects dealing with developmental and pedagogical psychology, methodology of pedagogical-psychological research, etc.	
Brief outline of the course: The concept of creativity. A brief history of the theory of creativity. Social, psychological and biological factors of creativity. Cognitive processes in creativity. Creativity and cognitive style. Development of creativity. Talent and giftedness. Methods of determining creativity and talent. Methods of developing creativity and talent. Creativity and talent development programs. Specifics of working with the gifted children.	
Recommended literature: Povinná literatúra: DOČKAL, V. (2006): Inteligencia a tvorivosť, tvorivé nadanie od intelektovej schopnosti po štruktúru osobnosti. In: KUSÁ, D. a kol. EDS. (2006): Zjavná a skrytá tvorivosť. Bratislava: Slovak Academic Press HŘÍBKOVÁ, L. (2009): Nadání a nadaní. Pedagogicko- psychologické přístupy, modely, výzkumy a jejich vztah ke školské praxi. Praha: Grada Publishing Odporúčaná literatúra:	

DACEY, J.S.- LENNON, K.H. (2000): Kreativita. Praha: Grada
 GROSS, M.U.M. (2009): Highly Gifted Young People: Development from Childhood to Adulthood. In: SHAVININA, L. (2009): International Handbook on Giftedness. Part one. Springer
 KUSÁ, D. a kol. EDS. (2006): Zjavná a skrytá tvorivosť. Bratislava: Slovak Academic Press
 KOLKOVÁ, S. (2000): Tvorivosť a jej rozvoj vo voľnočasových aktivitách detí (v školskom klube). Bratislava: Metodické centrum v Bratislave
 LOKŠOVÁ, I., - LOKŠA, J.: (2003): Tvořivé vyučování. Praha: Grada
 LAZNIBATOVÁ, J. (2004): Špecifiká vývinu a vzdelávania nadaných detí. In: Psychológia a patopsychológia dieťaťa, roč.39, č. 2-3
 LAZNIBATOVÁ, J. (2001): Nadané dieťa, jeho vývin, vzdelávanie a podporovanie. Bratislava: Iris
 MESÁROŠOVÁ, M. (1998): Nadané deti. Poznávanie a rozvíjanie ich osobnosti. Prešov: Manacon
 SZOBIOVÁ, E. (2004): Tvorivosť – Od záhady k poznaniu. Bratislava: Stimul - Centrum informatiky a vzdelávania FIF UK

Course language:

slovak

Notes:

Course assessment

Total number of assessed students: 28

A	B	C	D	E	FX
100.0	0.0	0.0	0.0	0.0	0.0

Provides: Mgr. Lucia Barbierik, PhD.

Date of last modification: 16.02.2021

Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.

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: Active participation in seminars, preparation and presentation of seminar work, final evaluation	
Learning outcomes: The aim of the course is to provide students with the latest knowledge and background of Health Psychology as well as forms of its application in order to improve the mental and physical health of individuals and society. The graduate of the course will understand the principles of health psychology, will be familiar with the current social discourse on the topics covered. The student will learn to use the acquired knowledge in school practice.	
Brief outline of the course: 1. Health psychology. Definition of health. Bio-psycho-social model of health. 2. Mental health and quality of life, well being. 3. Physiological aspects of mental health, lifestyle 4. Stress. Coping, resilience. 5. Psychosomatic diseases, placebo. 6. Social support and its importance for health. 7. Burnout syndrome. 8. The meaning of life, faith. 9. Health-related behavior and prevention. Risky behavior, excessive use of the Internet and screens. 10. Socio-economic inequalities in health. Unemployment and health.	
Recommended literature: Křivohlavý, J.: Psychologie zdraví. Praha: Portál, 2001 Kebza, V.: Psychosociální determinanty zdraví. Praha: Academia, 2005 Křivohlavý, J.: Psychologie nemoci. Praha : Grada, 2002 Sarafino, E.P.: Health Psychology: Biopsychosocial Interactions, John Wiley & Sons, 2007 Taylor, E.: Health Psychology. Singapore: McGraw-Hill, 2006 Vollrath M.E.: Handbook of Personality and Health. Chichester: John Wiley & Sons, 2006	
Course language:	
Notes:	

Course assessment					
Total number of assessed students: 81					
A	B	C	D	E	FX
100.0	0.0	0.0	0.0	0.0	0.0
Provides: Mgr. Mária Bačíková, PhD.					
Date of last modification: 16.02.2021					
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

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: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.	

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: 181	
abs	n
97.24	2.76
Provides:	
Date of last modification: 03.05.2015	
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.	

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,KPE/PDU/15,(KPPaPZ/PaSPP/09 and leboKPPaPZ/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.	
Date of last modification: 03.05.2015	

Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚFV/ 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,KPE/PDU/15,(KPPaPZ/PaSPP/09 and leboKPPaPZ/PPgU/15)	
Conditions for course completion: Student observes 11 physics lessons and leads one own physics lesson under the guidance of a teacher trainer. Confirmation of classroom visits. Written assessment made by teacher trainer.	
Learning outcomes: Students acquire knowledge by observing the practical applications of teaching skills for teaching the subject of physics and getting known about the organization of school work. Studneets gain first experience with teaching the subject of physics.	
Brief outline of the course: Students observe the process of teaching physics at lower and upper secondary schools and analyze it with teacher trainer. Practice takes place continuously durin the course of the semester. Practice is scheduled once a week at the time of the first to third lesson at schools. The first two lessons are obeservation/teaching, the third lesson - analysing the teaching process under the guidance of the teacher trainer.	
Recommended literature:	
Course language: Slovak	
Notes:	
Course assessment Total number of assessed students: 64	
abs	n
100.0	0.0
Provides: doc. RNDr. Jozef Hanč, PhD.	
Date of last modification: 03.05.2015	
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚFV/ FEP1/15	Course name: School Computer-Based Physical Laboratory
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: 3	
Recommended semester/trimester of the course: 3.	
Course level: II.	
Prerequisites:	
Conditions for course completion: The final assessment is based on the sum of partial results Test 30 points active participation 10 points project (development of mathematical model, videomeasurement and physical experiment) 60 points	
Learning outcomes: After the course student gains an overview about the possible use of digital technologies to support active learning in physics. He gains skills to use and develop activities on measuring data with the help of datalogging, measuring on videorecordings and picture and modeling physical processes. Student is able to implement such activities in physics 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, measurement from the picture and modeling tools. Mathematical modeling is based on dynamical modeling of physical phenomena. Within the course students carry out computer-based experiments, videomeasurements and measurement on the picture and create corresponding models. The activities involve selected topics of secondary school physics. 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: 10					
A	B	C	D	E	FX
70.0	30.0	0.0	0.0	0.0	0.0
Provides: doc. RNDr. Zuzana Ješková, PhD.					
Date of last modification: 03.05.2015					
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚFV/ PSP1a/05		Course name: School Physical Experiments I			
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: 2					
Recommended semester/trimester of the course: 1.					
Course level: II.					
Prerequisites:					
Conditions for course completion: continuous written tests being active in practises final oral examination					
Learning outcomes: To gain basic skills with demonstration and physics interpretation of school physics experiments belonging to the subject matter in Physics classes at basic schools and high schools. To become familiar with didactic procedures related to using school experiments in different phases of the educational process.					
Brief outline of the course: The practices are aimed at practical realization and physics interpretation of school demonstration experiments from selected topics of the physics subject matter for basic-school and high-school pupils. The emphasis is on familiarizing with teaching aids and didactic devices used in performing school physics experiments and on getting basic skills with their utilization in physics teaching.					
Recommended literature: 1. Kašpar, E., Vachek, J.: Pokusy z fyziky na středních školách, I. díl, SPN Praha, 1967 2. Koubek, V. a kol.: Školské pokusy z fyziky, SPN Bratislava, 1992 3. http://physedu.science.upjs.sk/sis/fyzika/experimenty/index.htm					
Course language: Slovak					
Notes:					
Course assessment Total number of assessed students: 75					
A	B	C	D	E	FX
49.33	20.0	17.33	6.67	4.0	2.67
Provides: doc. RNDr. Zuzana Ješková, PhD., doc. RNDr. Marián Kireš, PhD., PaedDr. Iveta Štefančinová, Ph.D.					

Date of last modification: 03.05.2015

Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚFV/ PSP1b/04		Course name: School Physical 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: 2					
Recommended semester/trimester of the course: 2.					
Course level: II.					
Prerequisites:					
Conditions for course completion: continuous written tests being active in practises final oral examination					
Learning outcomes: Students should gain knowledge and broaden skills necessary for understanding methods, techniques and physical interpretations of all types of school physical experiments that are parts of the subject matter in physics classes at basic and high schools.					
Brief outline of the course: The practises are aimed at practical realization and physics interpretation of school demonstration experiments from selected topics of the physics subject matter for basic- and high-school pupils and their convenient incorporation into educational process. The emphasis is on familiarizing with teaching aids and didactic devices used in performing school physics experiments and on extending skills with their utilization in physics teaching.					
Recommended literature: 1. Onderová, L., Kireš, M., Ješková, Z., Degro, J.: Praktikum školských pokusov z fyziky II., PF UPJŠ 2. Kašpar, E., Vachek, J.: Pokusy z fyziky na středních školách, I. díl, SPN Praha, 1967 3. Žouželka, J., Fuka, J.: Pokusy z fyziky na středních školách, II. díl, SPN Praha, 1971 4. http://physedu.science.upjs.sk/sis/fyzika/experimenty/index.htm					
Course language: Slovak					
Notes:					
Course assessment Total number of assessed students: 67					
A	B	C	D	E	FX
52.24	10.45	29.85	4.48	1.49	1.49

Provides: doc. RNDr. Zuzana Ješková, PhD., doc. RNDr. Marián Kireš, PhD.

Date of last modification: 02.04.2020

Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚFV/ VPSP/04	Course name: School Physics Experiments III
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: 3.	
Course level: II.	
Prerequisites:	
Conditions for course completion: continuous written tests active work in practises final oral examination	
Learning outcomes: The students gain skills and competencies to the own and effective organisation and solving of experimental tasks, use of activities enhanced by digital technologies for physics teaching at lower and upper secondary level.	
Brief outline of the course: The practices are aimed at practical realization and physics interpretation of different forms of selected school demonstration. The emphasis is on creative utilization of teaching aids and didactic devices and computer-aided experiments.	
Recommended literature: Šucha, J.: Metodická príručka pre rozkladný transformátor, Učebné pomôcky B.Bystrica, 1973 Demkanin, P. a kol. Počítačom podporované prírodovedné laboratórium, FMFI UK Bratislava, 2006, ISBN:80-89186-10-6 Ješková, Z., a kol. Využitie informačných a komunikačných technológií v predmete Fyzika pre stredné školy : učebný materiál - modul 3. - 1. vyd. - Košice : Elfa, 2010. - 242 s., ISBN 978-80-8086-146-9 Duľa, I. a kol. Využitie informačných a komunikačných technológií v predmete Fyzika pre základné školy : učebný materiál - modul 3. - 1. vyd. - Košice : Elfa, 2010. - 240 s., ISBN 978-80-8086-154-4 Ješková, Z., Degro, J., Onderová, L.: Počítačom podporovaná výučba fyziky, PF UPJŠ, Košice, ISBN 80 - 7097 - 451 -6 http://physedu.science.upjs.sk/sis/fyzika/experimenty/index.htm	
Course language: Slovak	
Notes:	

Course assessment					
Total number of assessed students: 2					
A	B	C	D	E	FX
0.0	100.0	0.0	0.0	0.0	0.0
Provides: doc. RNDr. Zuzana Ješková, PhD., doc. RNDr. Marián Kireš, PhD., RNDr. Ľudmila Onderová, PhD.					
Date of last modification: 03.05.2015					
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚTVŠ/ ÚTVŠ/CM/13	Course name: Seaside Aerobic Exercise
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: Per study period: 36s Course method: combined, 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: 41	
abs	n
12.2	87.8

Provides: Mgr. Agata Horbacz, PhD.
Date of last modification: 15.03.2019
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚFV/ DEX/15		Course name: Selected Demonstration Experiments			
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: 3					
Recommended semester/trimester of the course: 2.					
Course level: II.					
Prerequisites:					
Conditions for course completion: Seminar work – a project dealing with hands-on experiments and their role in Physics teaching. Oral examination					
Learning outcomes: The goal of the course is to develop pedagogic skills and creativity of further Physics teachers through non-traditional physical experiments.					
Brief outline of the course: The aim of the lecture is to show a lot of non-traditional physical experiments which can help students understand physical phenomena and find their connection with everyday life. The experiments are mainly hands-on ones which can be performed with simple tools and don't require any special equipment. The experiments are carried out by students themselves. Through these experiments students are able to gain practical skills, develop experimental habits and verify their theoretical knowledge.					
Recommended literature: 1. Onderová L.: Netradičné experimenty vo vyučovaní fyziky, MC Prešov, 2002 2. Lorbeer, G.L., Nelsonová, L.W.: Fyzikální pokusy pro děti, Portál, Praha, 1998 3. Kostič, Ž.: Medzi hrou a fyzikou, Alfa, Bratislava, 1971 4. Kireš, M., Onderová, L.: Fyzika každodenného života v experimentoch a úlohách, JSMF Bratislava 2001, ISBN 80-7097-446-X 5. http://phisedu.science.upjs.sk/sis/fyzika/experimenty/index.htm					
Course language: Slovak					
Notes:					
Course assessment Total number of assessed students: 4					
A	B	C	D	E	FX
100.0	0.0	0.0	0.0	0.0	0.0

Provides: doc. RNDr. Marián Kireš, PhD.
Date of last modification: 28.03.2020
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚFV/ VPF1/15	Course name: Selected General Physics Problems I
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: 3	
Recommended semester/trimester of the course: 2.	
Course level: II.	
Prerequisites:	
Conditions for course completion: 1. writing exam 20 points 2. writing exam 20 points self examples 60 bodov A 100-90 B 89-80 C 79-70 D 69-60 E 59-50 F 49-0	
Learning outcomes: Physics interpretation of everyday phenomena can help with deeper understanding of physics problems.	
Brief outline of the course: 1. Kinematics and dynamics 2. Hydrostatics and hydrodynamics 3. Surface properties of liquids 4. Thermics and Thermodynamics 5. Thermics and Thermodynamics II 6. Electrostatics 7. Electric field 8. Magnetic field 9. Mechanical oscillations, resonance, waves 10. Acoustics 11. Ray Optics 12. Wave Optics 13. Student assignments presentation	
Recommended literature: 1. Nahodil, J.: Fyzika v bežnom živote, Prometheus, Praha, 1996 2. Tulčinský, : Zbierka kvalitatívnych úloh z fyziky, SPN, Bratislava, 1990 3. Kašpar, E. : Problémové vyučovanie a problémové úlohy, SPN, Praha 1982 4. Feynman, R.P. : Feynmanove prednášky z fyziky 1-5, Alfa, 1985 5. Landau, Kitajgorodskij : Fyzika pre každého, Alfa 1972 6. Lange, V.: To chce vtip!, Alfa, Bratislava, 1988 7. http://kekule.science.upjs.sk/fyzika	

8. http://physedu.science.upjs.sk					
Course language: Slovak, English					
Notes:					
Course assessment Total number of assessed students: 10					
A	B	C	D	E	FX
90.0	10.0	0.0	0.0	0.0	0.0
Provides: doc. RNDr. Marián Kireš, PhD.					
Date of last modification: 28.03.2020					
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚFV/ VPF2/15	Course name: Selected General Physics Problems II
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: 3	
Recommended semester/trimester of the course: 3.	
Course level: II.	
Prerequisites:	
Conditions for course completion: presentation of selected problem 30 p writing exam 70 p A 100-90 B 89-80 C 79-70 D 69-60 E 59-50 F 49-0	
Learning outcomes: Everyday phenomena are used for deeper and conceptual understanding of physics problem.	
Brief outline of the course: 1.Mechanics •Coriolisova force •How Swing works •Bicycle •Tides •Inertia 2.Hydromechanics •Archimedes screw •Water flow •Archimedes principle in Action 3.Kapilarity •Water in plant •Kapilár hysteresis •Bubbles and soap •Floating on water surface 4.Acoustic •Signal production •Human voice •Space acoustic •Home ciname 5.Optics •Sight •Opticalillusions	

- Space imaging
 - Atmospheric acoustic
- 6.Probléms IYPT
- Magnetohydrodynamics
 - Bulbs
 - Falling spring
 - Ship movement
 - Thermal exchange
- 7.Differenct problems
- Sonoluminiscence
 - Ice pick
 - Kelvin water droplet
 - Water stain
- 8.Student work presentation

Recommended literature:

1. Walker, J.: The Flying Circus of Physics with answers, John Wiley & Sons, 2005
 2. Gnädig, P., Honyek, G., Riley, K.: 200 Puzzling Physics Problems with Hints and Solutions, Cambridge University Press, 2001
 3. Stepan, J.: Targeting Studnets ` Misconceptions, Showboard, 2003
 4. Swartz, C.: Back of the Envelope Physics, The John Hopkins Uni. Press, Baltimore, 2003
 5. Nahodil, J.: Fyzika v bežnom živote, Prometheus, Praha, 1996
 6. Tulčinský, : Zbierka kvalitatívnych úloh z fyziky, SPN, Bratislava, 1990
 7. Kašpar, E. : Problémové vyučovanie a problémové úlohy, SPN, Praha 1982
 8. Feynman, R.P. : Feynmanove prednášky z fyziky 1-5, Alfa, 1985
 9. Landau, Kitajgorodskij : Fyzika pre každého, Alfa 1972
 10. Lange, V.: To chce vtip!, Alfa, Bratislava, 1988
- actual articles

Course language:

Slovak, English

Notes:

Course assessment

Total number of assessed students: 9

A	B	C	D	E	FX
100.0	0.0	0.0	0.0	0.0	0.0

Provides: doc. RNDr. Marián Kireš, PhD.

Date of last modification: 03.05.2015

Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.

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: ÚINF/PDSI1/15	
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, IEEExplore, 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: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.	

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: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.	

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: 96					
A	B	C	D	E	FX
14.58	29.17	33.33	12.5	10.42	0.0
Provides: PhDr. Iveta Bónová, PhD., PhDr. Lucia Jasinská, PhD., Mgr. Lena Ivančová, PhD.					
Date of last modification: 15.05.2019					
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚFV/ FKS/15		Course name: Solid State Physics			
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: 3					
Recommended semester/trimester of the course: 1.					
Course level: II.					
Prerequisites:					
Conditions for course completion: oral examination					
Learning outcomes: A general introductory course in solid state physics and material science.					
Brief outline of the course: Crystal structures and methods of structure analysis. Defects in crystalline solids. Chemical bonding in solids. Thermal properties of crystal lattice. "Free" electrons in metals. The electronic band structure of solids. Transport phenomena in metals and semiconductors. Superconductivity and superfluidity. Magnetic properties of solids. New problems of condensed matter physics.					
Recommended literature: H. Ibach, H. Lüth: Solid-State Physics. Springer - Verlag, Berlin, 1993. Ch. Kittel: Introduction to Solid State Physics. John Wiley & Sons, Inc. 1976.					
Course language:					
Notes:					
Course assessment Total number of assessed students: 12					
A	B	C	D	E	FX
41.67	41.67	8.33	8.33	0.0	0.0
Provides: Dr.h.c. prof. RNDr. Alexander Feher, DrSc., prof. RNDr. Peter Kollár, DrSc., prof. Ing. Martin Orendáč, CSc.					
Date of last modification: 03.05.2015					
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚFV/ TRS/15		Course name: Special Theory of Relativity			
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: To acquaint students with principles of a special theory of relativity.					
Brief outline of the course: Galilean transformations and Galilean principle of relativity. Ether's hypothesis. Michelson experiment. Einstein's principles of the special theory of relativity. Lorentz transformation and its physical consequences. Interval and light cone. Proper time. Minkowski's space-time. Mathematical apparatus of special relativity. Relativistic electrodynamics. Relativistic mechanics.					
Recommended literature: 1. Greiner W.: Classical Mechanics-Point Particles and Relativity, Springer-Verlag, New York, 2004. 2. Goldstein H., Poole Ch., Safko J.: Classical Mechanics, Addison Wesley, San Francisco, 2002. 3. Landau L.D., Lifšic E.M.: The Classical Theory of Fields, Pergamon Press, Oxford, 1975.					
Course language: Slovak					
Notes:					
Course assessment Total number of assessed students: 42					
A	B	C	D	E	FX
33.33	40.48	9.52	9.52	7.14	0.0
Provides: prof. RNDr. Andrej Bobák, DrSc.					
Date of last modification: 10.07.2017					
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚTVŠ/ TVa/11	Course name: Sports Activities I.
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: combined, 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 unfitnes. 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: 14050							
abs	abs-A	abs-B	abs-C	abs-D	abs-E	n	neabs
88.48	0.07	0.0	0.0	0.0	0.04	7.51	3.9
Provides: Mgr. Dana Dračková, PhD., Mgr. Agata Horbacz, PhD., Mgr. Dávid Kaško, PhD., Mgr. Zuzana Küchelová, PhD., doc. PaedDr. Ivan Uher, PhD., Mgr. Marek Valanský, prof. RNDr. Stanislav Vokál, DrSc., Mgr. Marcel Čurgali, Mgr. Patrik Berta, Mgr. Ladislav Kručanica, PhD.							
Date of last modification: 18.03.2019							
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.							

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚTVŠ/ TVb/11	Course name: Sports Activities II.
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: combined, 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 unfitnes. 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: 11330							
abs	abs-A	abs-B	abs-C	abs-D	abs-E	n	neabs
85.75	0.56	0.02	0.0	0.0	0.05	9.87	3.75
Provides: Mgr. Dana Dračková, PhD., Mgr. Agata Horbacz, PhD., Mgr. Dávid Kaško, PhD., Mgr. Zuzana Küchelová, PhD., doc. PaedDr. Ivan Uher, PhD., Mgr. Marek Valanský, prof. RNDr. Stanislav Vokál, DrSc., Mgr. Marcel Čurgali, Mgr. Patrik Berta, Mgr. Ladislav Kručanica, PhD.							
Date of last modification: 18.03.2019							
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.							

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice							
Faculty: Faculty of Science							
Course ID: ÚTVŠ/ TVc/11		Course name: Sports Activities III.					
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: combined, 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: 8383							
abs	abs-A	abs-B	abs-C	abs-D	abs-E	n	neabs
90.11	0.05	0.01	0.0	0.0	0.02	4.04	5.76
Provides: Mgr. Marcel Čurgali, Mgr. Dana Dračková, PhD., Mgr. Agata Horbacz, PhD., Mgr. Dávid Kaško, PhD., Mgr. Zuzana Küchelová, PhD., doc. PaedDr. Ivan Uher, PhD., Mgr. Marek Valanský, prof. RNDr. Stanislav Vokál, DrSc., Mgr. Patrik Berta, Mgr. Ladislav Kručanica, PhD.							
Date of last modification: 03.05.2015							
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.							

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice							
Faculty: Faculty of Science							
Course ID: ÚTVŠ/ TVd/11		Course name: Sports Activities IV.					
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: combined, 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: 5101							
abs	abs-A	abs-B	abs-C	abs-D	abs-E	n	neabs
85.2	0.29	0.04	0.0	0.0	0.0	6.76	7.7
Provides: Mgr. Marcel Čurgali, Mgr. Dana Dračková, PhD., Mgr. Agata Horbacz, PhD., Mgr. Dávid Kaško, PhD., Mgr. Zuzana Küchelová, PhD., doc. PaedDr. Ivan Uher, PhD., Mgr. Marek Valanský, prof. RNDr. Stanislav Vokál, DrSc., Mgr. Patrik Berta, Mgr. Ladislav Kručanica, PhD.							
Date of last modification: 03.05.2015							
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.							

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚFV/ SVKD/04		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:					
Course level: II.					
Prerequisites:					
Conditions for course completion: presentation of results of studnets' research work at Students' scientific conference					
Learning outcomes: Student gains experience and skills in processing and presentation of results of his research work.					
Brief outline of the course: Presentation of results of studnets' research work at Students' scientific conference.					
Recommended literature: Based on the recommendations of supervisor					
Course language: Slovak					
Notes:					
Course assessment Total number of assessed students: 45					
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: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

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: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚFV/ SJF1/15		Course name: Subnuclear Physics			
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: written test and thesis exam					
Learning outcomes: Preview of basic characteristics and classification of elementary particles, their structures, theoretical description and experimental technique.					
Brief outline of the course: Historical introduction to the particle physics. The forces in nature. Elementary and composite particles..Classification of particles. Symmetries and conservation laws. Standard model.					
Recommended literature: 1. Close F.: The Cosmic Onion - Quarks and the Nature of the Universe, Oxford, 1990. 2. Hajko V. and team of authors, Physics in experiments, Bratislava, 1997. 3. Kapitonov I.M., Vvedeniye v fiziku jadra i chastic (Russian), Moscow, 2004. 4. Brandt S., The harvest of a century, Discoveries of modern physics in 100 episodes, Oxford, 2009.					
Course language: Slovak					
Notes:					
Course assessment Total number of assessed students: 34					
A	B	C	D	E	FX
32.35	5.88	5.88	23.53	23.53	8.82
Provides: prof. RNDr. Stanislav Vokál, DrSc., doc. RNDr. Janka Vrláková, PhD.					
Date of last modification: 30.03.2020					
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚTVŠ/ LKSp/13	Course name: Summer Course-Rafting of TISA River
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: Per study period: 36s Course method: combined, 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: 153	
abs	n
45.75	54.25
Provides: Mgr. Dávid Kaško, PhD.	
Date of last modification: 18.03.2019	
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.	

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: 503	
abs	n
100.0	0.0
Provides: doc. PhDr. Beata Gajdošová, PhD., PaedDr. Renáta Orosová, PhD., Mgr. Katarína Petříková, PhD.	
Date of last modification: 12.02.2021	
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚTVŠ/ KP/12	Course name: Survival Course
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: Per study period: 36s Course method: combined, 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: 393	
abs	n
44.53	55.47
Provides: MUDr. Peter Dombrovský, Mgr. Marek Valanský	
Date of last modification: 15.03.2019	
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.	

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: 550					
A	B	C	D	E	FX
27.27	28.55	25.64	13.27	4.55	0.73
Provides: PaedDr. Renáta Orosová, PhD., Mgr. Katarína Petříková, PhD., PaedDr. Janka Ferencová, PhD.					
Date of last modification: 12.02.2021					
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

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: 15.02.2021					
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

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,KPE/PDU/15	
Conditions for course completion: - active participation in seminars, presentation of assignments in groups, final exam	
Learning outcomes: The graduate of the course will gain information about the research methodology, will understand the basic methods of pedagogical and psychological research that can be used in the practice of the teacher. Within the seminars, students will develop professional skills through their own demonstration of a specific research method. The graduate of the course will be able to carry out simple scientific research, present the results of research and read the results of the latest research in the field of pedagogy and psychology.	
Brief outline of the course: Research in pedagogy and psychology. Scientific research, scientific thinking. Parts of a research project. Research planning. Topic selection, research problem formulation. Types of research plans. Hypothesis, variables, operationalization. Ethical issues of scientific research. Experiment (experiment problems, control of variables in the experiment). Experimental plans, quasi-experiment. Reliability and validity of research. Research sample, methods of sample selection. Data collection techniques - questionnaire, interview, sociometry, semantic differential, observation, tests. Introduction to qualitative methodology. Possibilities of quantitative data processing. How to write a scientific article, presentation, poster, qualification work. Interpretation of findings, integration of findings into context.	
Recommended literature: Bačíková, M., Janovská, A., Orosová, O. Základy metodológie pedagogicko-psychologického výskumu. 2.doplnené vydanie. Šafárik Press, 2019. dostupné online: https://unibook.upjs.sk/img/cms/2019/FF/zaklady-metodologie-ped-psych-vyskumu-2-vyd-web.pdf Gavora, P.: Úvod do pedagogického výskumu. Bratislava, UK 1999. Švec, Š. a kol.: Metodológia vied o výchove. Bratislava, Iris 1998. Turek, I.: K základom pedagogického výskumu. Prešov, KPÚ 1991. Ferjenčík, J.: Úvod do metodológie psychologického výskumu. Praha, Portál 2000. http://www.e-metodologia.fedu.uniba.sk/	
Course language:	

Notes:					
Course assessment Total number of assessed students: 447					
A	B	C	D	E	FX
18.79	26.4	23.49	19.02	12.08	0.22
Provides: Mgr. Mária Bačíková, PhD., PhDr. Anna Janovská, PhD.					
Date of last modification: 16.02.2021					
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚFV/ VMV1/15	Course name: Using Multimedia in Education
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: 3	
Recommended semester/trimester of the course: 3.	
Course level: II.	
Prerequisites:	
Conditions for course completion: 9. moduls assignments: 45 points presentation and discussion about the project 55 points A 100-90 B 89-80 C 79-70 D 69-60 E 59-50 F 49-0	
Learning outcomes: Student will have overview and skills in field of using multimedia in education.	
Brief outline of the course: 1. Computer graphics as visualisation tools 2. Preparation and using of graphic elements 3. Computer animation 4. Digital audio and educational activities 5. Educational video 6. Interactive multimedia 7. Videotechnologies in education 8. Computer based school laboratory 9. Interactove acitvites in multimedia classroom 10. Educational project creation 11. Educational project creation 12. Project presentation	
Recommended literature: 1. Kireš, M., Šnajder L., Kalakay, R.: Multimédiá pre učiteľa, Asociácia projektu Infovek, UIPŠ Bratislava 2002, 96 strán, 400 ks, ISBN 80-7098-317-5 2. Kireš, M. a kol.: IKT pre učiteľa fyziky, Asociácia projektu Infovek, UIPŠ Bratislava 2002, 79 strán, 400 ks, ISBN 80-7098-316-7 3. Šnajder, L., Kireš, M.: Práca s multimédiami pre stredné školy, tematický zošit, SPN Bratislava, 2005, 48 strán, 1. vydanie: ISBN 80-10-00422-7, 2006, 1.vydanie maďarská jazyková mutácia: ISBN 80-10-01031-6, 2007, 2.vydanie: ISBN 978-80-10-01224-4	
Course language: Slovak, English	

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: doc. RNDr. Marián Kireš, PhD.					
Date of last modification: 03.05.2015					
Approved: prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc.					