

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 credits: 2	
Recommended semester/trimester of the course:	
Course level: I., II., N	
Prerequisites:	
Conditions for course completion: kontrolný písomný test, aktivita na hodine záverečný písomný test povolené max. 2 absencie stupnica hodnotenia: A 93-100, B 86-92, C 79-85, D 72-78, E 65-71, FX 64 a menej aktivita na hodine predmet končí hodnotením, t.j. povolený je 1 opravný test	
Learning outcomes: Osvojenie si a rozvíjanie užitočných techník akademického písomného ako aj ústneho prejavu so zameraním na rozvoj jazykových kompetencií študenta, na upevňovanie a rozvíjanie všetkých jazykových zručností na stredne pokročilej až pokročilej úrovni ovládania jazyka (B2/C1 podľa Spoločného európskeho referenčného rámca pre jazyky). Predmet kladie dôraz na používanie akademickej angličtiny v akademickom prostredí.	
Brief outline of the course: Akademická angličtina a jej charakteristiky Čítanie odborných článkov, analýza, parafrázovanie Spájacie slová v akademickom písaní Formálna a neformálna angličtina a ich črty Vyjadrovanie príčiny, následku v akademickom jazyku Čítanie odbornej publikácie, analýza, parafrázovanie Slovo tvorba v anglickom jazyku- predpony a prípony Ako prezentovať v angličtine Parafrázovanie a definovanie Ako písať abstrakt Slovosled v akademickom diškurze	
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:					
Notes:					
Course assessment Total number of assessed students: 292					
A	B	C	D	E	FX
29.11	22.26	16.1	11.3	8.22	13.01
Provides: PaedDr. Gabriela Bednáriková					
Date of last modification: 06.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: KFaDF/AFS/05		Course name: Antique Philosophy and Present Times			
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present					
Number of credits: 2					
Recommended semester/trimester of the course: 6.					
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: 30					
A	B	C	D	E	FX
83.33	6.67	6.67	0.0	3.33	0.0
Provides: doc. PhDr. Pavol Tholt, PhD., mim.prof., Doc. PhDr. Peter Nezník, CSc.					
Date of last modification: 26.01.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚFV/ ZP2a/04	Course name: Bachelor Thesis
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present	
Number of credits: 2	
Recommended semester/trimester of the course: 5.	
Course level: I.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 59	
abs	n
100.0	0.0
Provides: doc. RNDr. Rastislav Varga, DrSc.	
Date of last modification: 18.02.2014	
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚFV/ ZP2b/04	Course name: Bachelor Thesis
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present	
Number of credits: 6	
Recommended semester/trimester of the course: 6.	
Course level: I.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 57	
abs	n
100.0	0.0
Provides: doc. RNDr. Rastislav Varga, DrSc.	
Date of last modification: 18.02.2014	
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚGE/OBP/07		Course name: Bachelor thesis defence			
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present					
Number of credits: 0					
Recommended semester/trimester of the course:					
Course level: I.					
Prerequisites: (ÚGE/ZBOb/13 and ÚGE/ZBOa/13) or (ÚGE/ZBGa/04 and ÚGE/ZBGb/04)					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 316					
A	B	C	D	E	FX
40.51	23.73	20.25	10.76	4.43	0.32
Provides:					
Date of last modification: 11.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚMV/ SMG/10		Course name: Basic statistics for geography			
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 1 / 2 Per study period: 14 / 28 Course method: present					
Number of credits: 3					
Recommended semester/trimester of the course: 4.					
Course level: I.					
Prerequisites:					
Conditions for course completion: Project and tests during the semester. Given at the basis of partial examination and final test.					
Learning outcomes: To understand basics of descriptive and inferential statistics used in natural sciences.					
Brief outline of the course: Data types. Frequencies. Measures of central tendency, variability and concentration. Quantiles. Basic theoretical probability distributions. Point and interval estimation. Basic hypothesis tests. Correlation and regression analysis.					
Recommended literature: Wonnacott, Wonnacott: Introductory Statistics, Wiley 1977 Rogerson P.: Statistical methods for geography, SAGE Publications, London, 2001					
Course language: Slovak					
Notes:					
Course assessment Total number of assessed students: 342					
A	B	C	D	E	FX
4.68	9.94	19.01	30.7	28.65	7.02
Provides: RNDr. Daniel Klein, PhD., RNDr. Veronika Kopčová, RNDr. Martina Hančová, PhD.					
Date of last modification: 14.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚGE/KAR/05		Course name: Basis of karstology and speleology			
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present					
Number of credits: 2					
Recommended semester/trimester of the course: 4.					
Course level: I.					
Prerequisites: ÚGE/GEM2/05					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 188					
A	B	C	D	E	FX
77.66	13.83	6.38	0.0	2.13	0.0
Provides: doc. RNDr. Zdenko Hochmuth, CSc., RNDr. Alena Gessert, PhD.					
Date of last modification: 11.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚGE/ ZVS/12		Course name: Basis of public administration			
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present					
Number of credits: 3					
Recommended semester/trimester of the course: 5.					
Course level: I., II.					
Prerequisites:					
Conditions for course completion: active participation					
Learning outcomes:					
Brief outline of the course: public administration, systems and models of public administration, history of public administration on the territory of Slovakia, division of public administration - state government, self-government - local and regional, local economic development, financial aspects of local administrative units, local government reform, intermunicipal reform, the city of Košice, territorial-administrative division, system of public administration in model states.					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 153					
A	B	C	D	E	FX
24.18	33.99	16.99	16.34	7.84	0.65
Provides: RNDr. Stela Csachová, PhD.					
Date of last modification: 11.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚBEV/ BDD/05		Course name: Biology of Children and Adolescents			
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 0 Per study period: 28 / 0 Course method: present					
Number of credits: 2					
Recommended semester/trimester of the course: 4., 6.					
Course level: I.					
Prerequisites:					
Conditions for course completion: Written test					
Learning outcomes: The aim of the subject is to gain the particular level of knowledge about human body and its development. It is necessary for the understanding of specific biological characteristics of children and adolescents linked to development.					
Brief outline of the course: Human ontogenesis. Postnatal development. Age specific features of skeletal and muscular, circulatory, respiratory, gastrointestinal and urinary systems. Reproductive system. Endocrine system. Nervous system. Age specifics of selected diseases and drug dependence arise. Human population and environment.					
Recommended literature: Drobný I., Drobná M.: Biológia dieťaťa pre špeciálnych pedagógov I. a II. Bratislava, PdF UK, 2000 Lipková V.: Somatický a fyziologický vývoj dieťaťa. Osveta Bratislava, 1980 Malá H., Klementa J.: Biológia detí a dorastu. Bratislava, SPN, 1989					
Course language:					
Notes:					
Course assessment Total number of assessed students: 1069					
A	B	C	D	E	FX
36.3	23.48	16.0	15.9	7.86	0.47
Provides: doc. RNDr. Monika Kassayová, CSc.					
Date of last modification: 13.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: KGER/ NJKK/07		Course name: Communication Competence in the 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 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: 42					
A	B	C	D	E	FX
57.14	14.29	7.14	4.76	14.29	2.38
Provides: Mgr. Eva Černáková, PhD.					
Date of last modification: 05.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, 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 credits: 2	
Recommended semester/trimester of the course:	
Course level: I., II., N	
Prerequisites:	
Conditions for course completion: ontroľný písomný test, aktivita na hodine záverečný písomný test stupnica hodnotenia A 93-100, B 86 - 92, C 79-85, D 72-78, E 65-71, FX menej ako 64 Povolené max. 2 absencie počas semestra predmet končí hodnotením, možnosť jedného opravného testu	
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 - úroveň B2.	
Brief outline of the course: Rodina, jej formy a problémy Vyjadrovanie pocitov a dojmov Dom, bývanie a budúcnosť Formy a dialekty v anglickom jazyku Život v meste a na vidieku Kolokácie a idiomy, zaužívané slovné spojenia Prázdniny a sviatky vo svete Životné prostredie a ekológia Výnimky zo slovosledu Frázové slovesá a ich použitie Charakteristiky neformálneho diškurzu	

Recommended literature:

McCarthy M., O'Dell F.: English Vocabulary in Use, 1994

Misztal M.: Thematic Vocabulary, 1998

Fictumova J., Ceccarelli J., Long T.: Angličtina, konverzace pro pokročilé, Barrister and Principal, 2008

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

www.bbclearningenglish.com

Jones L.: Communicative Grammar Practice, CUP, 1985

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

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

Total number of assessed students: 174

A	B	C	D	E	FX
36.78	22.41	18.39	9.77	8.05	4.6

Provides: PaedDr. Gabriela Bednáriková, Mgr. Silvia Marcinová, PhD.

Date of last modification: 06.02.2014

Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.

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 credits: 2	
Recommended semester/trimester of the course:	
Course level: I., II., N	
Prerequisites:	
Conditions for course completion: kontrolná písomná práca, záverečná písomná práca stupnica hodnotenia: A 93-100, B 86-92, C 79-85, D 65-71, 64 a menej - FX aktivita na hodinách, povolené 2 absencie predmet je ukončený hodnotením, možnosť jedného opravného testu	
Learning outcomes: Identifikovanie a odstránenie najfrekvencovanejších gramatických chýb v ústnom prejave, ako aj v písomnom styku. Rozvoj jazykových kompetencií študenta so zameraním na funkcie gramatiky anglického jazyka v každodennej interakcii, v komunikačnom akte na stredne pokročilej úrovni ovládania jazyka (B2 podľa Spoločného európskeho referenčného rámca pre jazyky).	
Brief outline of the course: Zvieratá a rastliny na zemi Zločin a trest Cestovanie po mori a vzduchom Jedlá a reštaurácie, národná kuchyňa Vzdelanie na vysokých školách História a viera Vybrané problémy anglickej výslovnosti, gramatiky (nepriama reč, slovotvorba, predložkové väzby, anglická syntax, kondicionály v angličtine a slovnej zásoby príslušného zamerania Vybrané funkcie praktického odborného jazyka potrebné na prácu s odborným textom	
Recommended literature: Misztal M.: Thematic Vocabulary, 1994 McCarthy, O'Dell: English Vocabulary in Use, 1994 Alexander L.G.: Longman English Grammar, Longman, 1988 Jones I. - Communicative Grammar Practice, CUP, 1992 Vince M.: Macmillan Grammar in Context, Macmillan, 2008 www.bbclearningenglish.com Gráf T., Peters S.: Time to practise, Polyglot, 2007	

Course language:					
Notes:					
Course assessment					
Total number of assessed students: 378					
A	B	C	D	E	FX
39.42	18.25	17.2	8.73	5.82	10.58
Provides: PaedDr. Gabriela Bednáriková					
Date of last modification: 06.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚGE/ KRS/08	Course name: Complex geographic characteristics of selected world regions
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present	
Number of credits: 3	
Recommended semester/trimester of the course: 6.	
Course level: I., II.	
Prerequisites:	
Conditions for course completion: At the beginning of semester, students will be told the topics to be drawn up as written report and presented in a slideshow. This part is 50 % of total grading. The results of tests written during the semester constitute another 50 % of total grading. To obtain A grade, weighted average of the both parts of examination must reach at least 90%, To obtain B it is 80%, for C it is 70%, for D 60% and for E 50%. Credits shall not be granted to a student who obtain less than 50 % from any of both parts of examination.	
Learning outcomes: Understanding of causal relations between individual geographic phenomena in spatial and temporal context of individual regions; extended knowledge about selected regions.	
Brief outline of the course: Geographic location, geologic history and structure, orography and shapes of coast, climate, hydrology, soils and biogeography, protection of nature, current landscape and its transformation, historical and political development, population and sites, economy and integration groupings in selected regions of the world.	
Recommended literature: DE BLIJ, H. J. et al: 2013: The World Today - Concepts and Regions in Geography, 6th edition. New York (Wiley), 528 p. HOBBS, J. J. 2010: Fundaments of World Regional Geography, 2nd edition. Belmont (Brooks/Cole), 438 p. WEIGHTMAN, B. 2010: Dragons and Tigers – A Geography of South, East and Southeast Asia, 3rd edition. Hoboken (Wiley), 523 p. BAAR, V. 2002: Národy na prahu 21. století. Emancipace nebo nacionalismus? Ostrava (Ostravská univerzita), 416 s. BRADSHAW, W. et al. 2012: Contemporary World Regional Geography, 4th edition. New York (McGrawHill), 620 p.	
Course language: Slovak and English	
Notes:	

Course assessment					
Total number of assessed students: 383					
A	B	C	D	E	FX
30.29	36.03	21.67	7.83	3.92	0.26
Provides: Mgr. Ladislav Novotný, PhD.					
Date of last modification: 11.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚFV/ PPFM/08		Course name: Computer-Based Physical Measurement			
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present					
Number of credits: 3					
Recommended semester/trimester of the course: 4.					
Course level: I.					
Prerequisites:					
Conditions for course completion: active participation at all labworks written laboratory records with data analysis					
Learning outcomes: Students is able to measure physical quantities and gains skills important for measuring and data processing with the help of computer. The result is deeper conceptual understanding of physical phenomena involved in the labworks that is connected mainly with the content of courses General Physics I,II,III.					
Brief outline of the course: The content of the course involves labworks in physics aimed at selected problems of General Physics I,II,II. Student learns about different methods of measurement of physical quantities, he gains skills concerning measurement and data processing with the help of computer. The set of labworks involves analysis of different phenomena followed by the data processing and written report.					
Recommended literature: 1. Halliday, Hajko, V., Daniel-Szabó, J.: Základy fyziky, Veda Bratislava 1983 2. Veis, Š., Maďar, J., Martišovits, V.: Všeobecná fyzika 1, Alfa, Bratislava, 1987 3. Hlavička, A. a kol.: Fyzika pre pedagogické fakulty, SPN Praha, 1971 4. Halliday, D., Resnick, R., Walker, J.: Fyzika, part1-4, VUT Brno, 2000					
Course language: Slovak					
Notes:					
Course assessment Total number of assessed students: 37					
A	B	C	D	E	FX
40.54	40.54	18.92	0.0	0.0	0.0
Provides: doc. RNDr. Zuzana Ješková, PhD., doc. RNDr. Marián Kireš, PhD.					

Date of last modification: 18.02.2014
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚFV/OZP/05		Course name: Defence of Bachelor Thesis			
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present					
Number of credits: 0					
Recommended semester/trimester of the course:					
Course level: I.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 110					
A	B	C	D	E	FX
88.18	9.09	2.73	0.0	0.0	0.0
Provides:					
Date of last modification: 08.08.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: KPE/ SL1/05		Course name: Education-related Legislation			
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present					
Number of credits: 2					
Recommended semester/trimester of the course: 6.					
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: 337					
A	B	C	D	E	FX
39.17	31.16	16.91	4.15	1.78	6.82
Provides: PaedDr. Renáta Orosová, PhD., Mgr. Zuzana Nováková, PhD.					
Date of last modification: 04.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚFV/ELP1/01		Course name: Electronics Practical			
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 3 Per study period: 42 Course method: present					
Number of credits: 3					
Recommended semester/trimester of the course: 6.					
Course level: I.					
Prerequisites: ÚFV/ELE1/07					
Conditions for course completion: Debate with students during practice, trial preparation and processing of theoretical and experimental results of their defense. Summary evaluation of student activities while working on set topics of study practices.					
Learning outcomes: Practical work of students in the design, construction and properties of the measurements of electronic circuits and interpretation of the results obtained to verify and consolidate the theoretical knowledge acquired in lectures on the subject Electronics.					
Brief outline of the course: 1. Combinatorial logical circuits. 2.Logical memory circuits. 3. Logical sequence circuits. 4. Rectifiers, filters, stabilizers. 5. Amplifier with bipolar transistor. 6. Stabilized DC power supplies. 7. Generators of harmonic signals. 8. Operational amplifiers and operational network interfaces. 9. Digital-to-analog converters. 10. Analog-to-digital converters. 11 Reserve.					
Recommended literature: 1. Delaney C.F.G.: Electronics for the Physicist with Applications. John Willey & Sons, New York, 1980. 2. Zbar P.B., Malvino A.P., Miller M.A.: Basic Electronics: a Text-Lab Manual. Macmillan/McGraw – Hill, New York, 1994.					
Course language: slovak or english					
Notes:					
Course assessment Total number of assessed students: 26					
A	B	C	D	E	FX
100.0	0.0	0.0	0.0	0.0	0.0
Provides: doc. RNDr. Rastislav Varga, DrSc., RNDr. Erik Čížmár, PhD., Mgr. Vladimír Komanický, PhD.					

Date of last modification: 18.02.2014
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚFV/ ELE1/07		Course name: Electronics			
Course type, scope and the method: Course type: Lecture Recommended course-load (hours): Per week: 3 Per study period: 42 Course method: present					
Number of credits: 5					
Recommended semester/trimester of the course: 5.					
Course level: I.					
Prerequisites: ÚFV/VF1b/03					
Conditions for course completion: Exam					
Learning outcomes: To explain physical principles of classical electronic components and systems and technologies of their realization. To perform analysis of properties and functions of basic electronic elements, electronic circuits and information transmission and processing systems. To introduce student into basic elements and devices in area of nanoelectronics and to explain methods of their fabrication and principles of their functioning.					
Brief outline of the course: Structure, properties and physical principles of the activity of selected electronic elements. Analysis of functions and properties of basic analog and digital electronic circuits. Nanoelectronics and selected building components of nanoelectronics: graphene, carbon nanotubes, selected types of nanodevices their properties, fabrication and integration to functional systems.					
Recommended literature: 1. Brown P.B., Frantz G.N., Moraff H.: Electronics for the Modern Scientist. Elsevier, 1982. 2. Delaney C.F.G.: Electronics for the Physicist with Applications. John Willey & Sons, 1980. 3. Wolt E. L.: Quantum Nanoelectronics, An introduction to electronic nanotechnology and quantum computing, Wiley-VCh, 2009					
Course language: Slovak					
Notes:					
Course assessment Total number of assessed students: 257					
A	B	C	D	E	FX
30.35	27.24	27.63	7.78	2.72	4.28
Provides: Mgr. Vladimír Komanický, PhD.					
Date of last modification: 18.02.2014					

Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚGE/AGS/08	Course name: English geographical seminar
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present	
Number of credits: 2	
Recommended semester/trimester of the course: 5.	
Course level: I., II.	
Prerequisites:	
Conditions for course completion: test	
Learning outcomes: The aim is to get students to work with the current language of geographers. The focus will primarily be on vocabulary of common geographical issues as geography of Europe, geography of the Slovak Republic, travel and tourism, project related English and some business English. Selected issues concerning the oral and written form of communication will be practised.	
Brief outline of the course: The subject aims to cover the most relevant issues of Human geography of Europe. Students actively participate on voluntary chosen topics: political division of Europe, population and settlements, main trends in economy of Europe, geographical description of European subregions or particular model national state.	
Recommended literature: Cihová, J. a kol., 2005: English for Students of Public Administration, Regional Development, European Integration. Bratislava: Geografika. ISBN 80-969338-2-5. Clark, A. N., 1998: Dictionary of Geography. Second edition. Penguin Books. ISBN 0-14-051388-4 Daniels, P., et al. 2005. An Introduction to Human Geography. Issues for the 21st Century. Pearson: Prentice Hall. ISBN 0-13-121766-6 Jordan, R.R., 1980: Academic Writing Course. London: Collins ELT. ISBN 0-00-370004-6 Swan, M., 2006: Practical English Usage. Oxford: OUP. ISBN 9780194420983 materials provided by the teacher	
Course language:	
Notes:	

Course assessment					
Total number of assessed students: 26					
A	B	C	D	E	FX
65.38	3.85	3.85	15.38	11.54	0.0
Provides: RNDr. Stela Csachová, PhD.					
Date of last modification: 11.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: CJP/ PFAJ4/07	Course name: English Language of Natural Science
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present	
Number of credits: 2	
Recommended semester/trimester of the course: 4.	
Course level: I.	
Prerequisites:	
Conditions for course completion: test na slovnú zásobu, ústna prezentácia, záverečný písomný test, účasť na seminároch (max. 2 absencie) stupnica hodnotenia: A 93-100, B 86-92, C 79-85, D 72-78, E 65-71, FX 64 a menej	
Learning outcomes: Rozvoj jazykových kompetencií študentov príslušného študijného odboru, upevňovanie a rozvíjanie všetkých jazykových zručností (hovorenie, písanie, čítanie, počúvanie) predovšetkým v odbornej/profesnej angličtine, na stredne pokročilej úrovni ovládania jazyka (B2). Dôraz sa kladie na aktívne správne používanie odbornej/profesnej angličtiny.	
Brief outline of the course: ANGLICKÝ JAZYK PRE GEOGRAFOV: Veda a výskum. Odbor geografia. Planéta Zem. Naša slnečná sústava. Litosféra, hydrosféra, atmosféra, biosféra. Zem - dynamická planéta. Tektonické platne. Sopečná činnosť. Zemetrasenia. Svetové oceány. Morské prúdy. Tsunami. Veľký koralový útes. Atmosféra - zloženie atmosféry. Kontinenty. Európa - krajiny, národnosti. ANGLICKÝ JAZYK PRE EKOLÓGOV: Veda a výskum. Odbor ekológia. Životné prostredie. Znečistenie a dôsledky. Sopečná činnosť, zemetrasenia. Great Pacific Garbage Patch. Globálne otepľovanie a dôsledky. Ľadovce. Počasie a klíma. Búrky, hurikány, tsunami. Život na Zemi. Ohrozené rastlinné a živočíšne druhy. ANGLICKÝ JAZYK PRE BIOLÓGOV: veda a výskum, odbor biológia morfológia rastlín, koreň	

stonka, list
rozmnožovanie rastlín, kvet
biológia človeka - telesné sústavy
slovná zásoba z oblasti botanickej a zoologickej nomenklatúry

ANGLICKÝ JAZYK PRE MATEMATIKOV:

Veda a výskum, odbor matematika
čísla a tvary v matematike
Elementárna algebra
Elementárna geometria
Výpočty v matematike
Pytagoras, Pytagorova veta
Grafy a diagramy
Štatistika

ANGLICKÝ JAZYK PRE FYZIKOV

Veda a výskum, odbor fyzika
Atómy a molekuly
Hmota a jej premeny
Elektrina, jej využitie
Zvuka, jeho prenos
Svetlo

Solárny systém
Matematické operácie

ANGLICKÝ JAZYK PRE CHEMIKOV:

Veda a výskum, odbor chémia:
História, alchímia
Nomenklatúra
Laboratórium a jeho vybavenie
Periodická tabuľka
Hmota a jej premeny
Organická chémia
Anorganická chémia

ANGLICKÝ JAZYK PRE INFORMATIKOV:

Veda a výskum, informatika
Život s počítačom
Typický PC
Zdravie a bezpečnosť, ergonómika
Programovanie
Emailovanie
Cybercrime
Trendy budúcnosti

Recommended literature:

študijné materiály dodané vyučujúcim
Velebná, V. English for Chemists.
Redman, S.: English Vocabulary in Use, Pre-intermediate, Intermediate. Cambridge University Press. 2003.
Powel, M.: Dynamic Presentations. CUP, 2010
Armer, T.: Cambridge English for Scientists. CUP, 2011
Wharton J.: Academic Encounters. The Natural World, CUP: 2009.
Murphy, R.: English Grammar in Use. Cambridge University Press. 1994.

Redman, s.: English Vocabulary in Use, Pre-intermediate, Intermediate. Cambridge University Press. 2003. P. Fitzgerald : English for ICT studies, Garnet Publishing, 2011					
Course language:					
Notes:					
Course assessment Total number of assessed students: 1860					
A	B	C	D	E	FX
31.72	25.54	18.28	11.94	9.52	3.01
Provides: PhDr. Helena Petruňová, CSc., PaedDr. Gabriela Bednáriková, Mgr. Marianna Škultétyová, Mgr. Silvia Marcinová, PhD.					
Date of last modification: 06.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: KPE/ ZSKP/05		Course name: Essentials of School Pedagogy			
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 1 / 1 Per study period: 14 / 14 Course method: present					
Number of credits: 2					
Recommended semester/trimester of the course: 6.					
Course level: I.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 268					
A	B	C	D	E	FX
11.19	16.42	26.49	19.03	5.6	21.27
Provides: PaedDr. Renáta Orosová, PhD.					
Date of last modification: 04.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚGE/ EXHG/07		Course name: Excursion from human geography			
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: Per study period: 6d Course method: present					
Number of credits: 1					
Recommended semester/trimester of the course: 6.					
Course level: I.					
Prerequisites: ÚGE/MHG1/03					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course: The aim of the excursion is to visit and experience humangeographical peculiarities over the territory of Slovakia. The students will visit the cities, interesting sites, industrial company, agricultural farm. Students are required to write out the final report.					
Recommended literature: Matlovič, R., Kandračová, V., Michaeli, E., 1998: Trasy za poznaním Slovenska. ATA, Akademická turistická agentúra, Prešov.					
Course language:					
Notes:					
Course assessment Total number of assessed students: 307					
A	B	C	D	E	FX
80.46	10.1	6.51	0.65	1.3	0.98
Provides: RNDr. Katarína Kozáková, PhD., Mgr. Ladislav Novotný, PhD., prof. RNDr. Peter Spišiak, CSc., RNDr. Janetta Nestorová-Dická, PhD., Mgr. Marián Kulla, PhD., RNDr. Stela Csachová, PhD.					
Date of last modification: 11.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚGE/ EXFG/07		Course name: Excursion of physical geography			
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: Per study period: 6d Course method: present					
Number of credits: 1					
Recommended semester/trimester of the course: 4.					
Course level: I.					
Prerequisites: ÚGE/FYG1/03					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course: Students get acquainted with the basic types of relief and structure of natural landscape of Slovakia - structural relief on flysh, sedimentary rocks and intrusive rocks, karst relief, aeolian landscape, glacial relief, antropogene landscape, and planation surfaces.					
Recommended literature: KOLEKTÍV, 1972: Slovensko, Príroda, Obzor Bratislava MATLOVIČ, R., KANDRÁČOVÁ, V., MICHAELI, E., 1998: Trasy za poznaním Slovenska. ATA, Akademická turistická agentúra, Prešov. 500 s. Topografické mapy v mierke 1:50 000, Geologické mapy Slovenska v mierke 1:50 000					
Course language:					
Notes:					
Course assessment Total number of assessed students: 315					
A	B	C	D	E	FX
91.43	6.35	2.22	0.0	0.0	0.0
Provides: Mgr. Michal Gallay, PhD., RNDr. Dušan Barabas, CSc., RNDr. Alena Gessert, PhD.					
Date of last modification: 11.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚGE/ ZBGa/04	Course name: Final work
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present	
Number of credits: 2	
Recommended semester/trimester of the course: 5.	
Course level: I.	
Prerequisites: ÚGE/HUG2a/05	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course: Defining the aim of the thesis, acquaint with the problematic of thesis writing, acquaint with already achieved results in the relevant problematic. Studying cartographic and statistical papers, consulting at institutions which own archive documents and papers, basic reconnaissance of the terrain (terrain work), building the conception of the thesis, literature studying and literature search.	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 153	
abs	n
99.35	0.65
Provides: doc. RNDr. Zdenko Hochmuth, CSc., prof. RNDr. Peter Spišiak, CSc., RNDr. Dušan Barabas, CSc., RNDr. Alena Gessert, PhD., RNDr. Janetta Nestorová-Dická, PhD., Mgr. Marián Kulla, PhD., Ing. Katarína Bónová, PhD., RNDr. Stela Csachová, PhD., RNDr. Katarína Kozáková, PhD., Mgr. Ladislav Novotný, PhD., prof. Mgr. Jaroslav Hofierka, PhD., Mgr. Michal Gallay, PhD., RNDr. Ján Kaňuk, PhD., prof. Ing. Vladimír Sedlák, PhD.	
Date of last modification: 11.02.2014	
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚGE/ ZBGb/04	Course name: Final work
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present	
Number of credits: 6	
Recommended semester/trimester of the course: 6.	
Course level: I.	
Prerequisites: ÚGE/ZBGa/04	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course: Defining the aim of the thesis, acquaint with the problematic of thesis writing, acquaint with already achieved results in the relevant problematic. Studying cartographic and statistical papers, consulting at institutions which own archive documents and papers, basic reconnaissance of the terrain (terrain work), building the conception of the thesis, literature studying and literature search.	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 139	
abs	n
98.56	1.44
Provides: doc. RNDr. Zdenko Hochmuth, CSc., prof. RNDr. Peter Spišiak, CSc., RNDr. Dušan Barabas, CSc., RNDr. Alena Gessert, PhD., RNDr. Janetta Nestorová-Dická, PhD., Mgr. Marián Kulla, PhD., Ing. Katarína Bónová, PhD., RNDr. Stela Csachová, PhD., prof. Mgr. Jaroslav Hofierka, PhD., Mgr. Michal Gallay, PhD., RNDr. Ján Kaňuk, PhD., prof. Ing. Vladimír Sedlák, PhD.	
Date of last modification: 11.02.2014	
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚGE/ ZKA/13		Course name: Fundamentals of Cartography			
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 2 Per study period: 28 / 28 Course method: present					
Number of credits: 7					
Recommended semester/trimester of the course: 2.					
Course level: I.					
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
9.35	19.42	23.02	17.27	26.62	4.32
Provides: prof. Mgr. Jaroslav Hofierka, PhD., RNDr. Ján Kaňuk, PhD.					
Date of last modification: 11.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚGE/ GEP2/13		Course name: Fundamentals of Geology for Geographers			
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 3 / 2 Per study period: 42 / 28 Course method: present					
Number of credits: 7					
Recommended semester/trimester of the course: 1.					
Course level: I.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course: Courses have following objectives: firstly, to introduce the current theories of processes which occur in the Earth (global tectonics, species of magmatism), secondly, to describe the rock-forming minerals, taxology of intrusive rocks, taxology of sedimentary rocks and rocks which had overcome metamorphosis, basics of the regional geology of Slovakia, basics of the historical geology and paleontology.					
Recommended literature: REICHWALDER, P., JABLONSKÝ, J., 2003: Všeobecná geológia I, II. UK, Bratislava, 507 s. MIŠÍK, M., CHLUPÁČ, I., CÍCHA, I., 1985: Stratigrafická a historická geológia. SPN, Bratislava, 570 s. HÓK, J., KAHAN, Š., AUBRECHT, R., 2001: Geológia Slovenska, PF UK, Bratislava, 47 s. BIELY, A. et al., 1996: Geologická mapa Slovenska. MŽP SR, GÚDŠ, Bratislava. BIZUBOVÁ, M., 2008: Základy geológie pre geografov. Univerzita Komenského Bratislava, 140 s. PELLANT, CH., PELLANTOVÁ, H., 1994: Horniny a minerály. Osveta, Martin, 256 s.					
Course language:					
Notes:					
Course assessment Total number of assessed students: 801					
A	B	C	D	E	FX
8.24	15.36	31.21	27.72	13.36	4.12
Provides: Ing. Katarína Bónová, PhD., Ing. Ján Bóna					
Date of last modification: 11.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚFV/ VBF1/08	Course name: General Biophysics 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 credits: 4	
Recommended semester/trimester of the course: 3., 5.	
Course level: I.	
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. D.G. Nichols and S.J. Ferguson, Bioenergetics 3, Academic Press, Elsevier Science Ltd., 2002. 7. D. T. Haynie, Biological thermodynamics, Cambridge University Press, 2001.	

Course language: Slovak					
Notes:					
Course assessment Total number of assessed students: 123					
A	B	C	D	E	FX
19.51	28.46	24.39	16.26	11.38	0.0
Provides: doc. Mgr. Daniel Jancura, PhD.					
Date of last modification: 10.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚGE/VGS/04		Course name: General physical and human geography and geography of Slovakia			
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present					
Number of credits: 0					
Recommended semester/trimester of the course:					
Course level: I.					
Prerequisites: ÚGE/GEM2/05 and ÚGE/FYG2/05 and ÚGE/OBY2/03 and ÚGE/HUG2a/05 and ÚGE/FGS/07 and ÚGE/HGS/07					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 462					
A	B	C	D	E	FX
16.23	24.03	24.03	19.7	13.64	2.38
Provides:					
Date of last modification: 11.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚFV/ VF1a/12	Course name: General Physics I
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 4 / 2 Per study period: 56 / 28 Course method: present	
Number of credits: 7	
Recommended semester/trimester of the course: 1.	
Course level: I.	
Prerequisites:	
Conditions for course completion: Monitoring tests during the calculus lessons 1. in the 6th week 2. in the 12th week Final assessment is based on the results of : - oral examination assessment of the calculus lessons (written tests, overall performance during the lessons)	
Learning outcomes: Basic knowledge about the mechanics, molecular physics and thermodynamics.	
Brief outline of the course: Basic knowledge of the calculus, vector algebra. Standards and units. Kinematics. Dynamics. The principle of relativity in the classical mechanics. Gravitation. Mechanics of many-particle systems. The motion of rigid bodies. Deformation, elasticity. Mechanics of fluids and gases. Laws of ideal gases. Kinetic theory. The thermodynamic laws. Statistical character of the second law. Entropy. Molecular phenomena in liquids and solids. Phase transitions.	
Recommended literature: Hajko V., Daniel-Szabó J.: Základy fyziky, VEDA, Bratislava 1983. Veis Š., Maďar J., Martišovits V.: Všeobecná fyzika I., Mechanika a molekulová fyzika, ALFA Bratislava, 1987. Fuka J., Šíroká M.: Obecná fyzika I / skriptum /, PF Univ. Palackého, Olomouc 1983. Hlavička A., a kol.: Fyzika pre pedagogické fakulty, SPN, Praha 1971. Hajko V., a kol.: Fyzika v príkladoch, ALFA Bratislava 1983. Ilkovič D.: Fyzika, SVTL Bratislava, 1962. Slaviček V., Wagner J.: Fyzika pro chemiky, SNTL Praha 1971. Krempaský J.: Fyzika, ALFA Bratislava 1982.	
Course language: Slovak	
Notes:	

Course assessment					
Total number of assessed students: 231					
A	B	C	D	E	FX
25.11	16.02	20.35	12.99	18.18	7.36
Provides: doc. RNDr. Zuzana Ješková, PhD., doc. RNDr. Alžbeta Orendáčová, DrSc., Doc. RNDr. Jozef Hanč, PhD.					
Date of last modification: 18.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚFV/ VF1b/03		Course name: General Physics II			
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 4 / 2 Per study period: 56 / 28 Course method: present					
Number of credits: 7					
Recommended semester/trimester of the course: 2.					
Course level: I.					
Prerequisites: ÚFV/VF1a/07 or ÚFV/VF1a/12					
Conditions for course completion: Test. Oral examination.					
Learning outcomes: To obtain a general view on basic electric magnetic phenomena and ability to solve basic problems of this subject.					
Brief outline of the course: Electric field in the free space. Work of the forces in the electrostatic field. Electrostatic field and steady current. Current in electrolytes, semiconductors, gasses and vacuum. Thermoelectric effects. Magnetic field in the free space. The interaction of moving charges with the electric current. Quasi steady electric field. Electromagnetic induction. Energy of magnetic field. AC current and circuits with ac current. Multiphase AC current. Rotating magnetic field. Electric effects in the substances. Magnetic properties of the substances. Magnetic polarization. Diamagnetism and paramagnetism, Magnetic ordering. Ferromagnetism.					
Recommended literature: I. S. Grant, W.R. Phillips, Electromagnetism, John Wiley&Sons, Ltd, England, 1990					
Course language: english					
Notes:					
Course assessment Total number of assessed students: 278					
A	B	C	D	E	FX
32.01	15.47	16.55	11.87	12.23	11.87
Provides: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Adriana Zelenáková, PhD., RNDr. Erik Čižmár, PhD.					
Date of last modification: 18.02.2014					

Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚFV/ VF1c/12		Course name: General Physics III			
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 4 / 2 Per study period: 56 / 28 Course method: present					
Number of credits: 7					
Recommended semester/trimester of the course: 3.					
Course level: I.					
Prerequisites: ÚFV/VF1b/03					
Conditions for course completion: Exam+ 2 succesfull test from seminars					
Learning outcomes: The objective is to acquaint the students with the basis of oscilations, waves and optics.					
Brief outline of the course: Undamped oscilations, Mathematical, Physical and Torsional pendulum, Damped oscilations, Fourier transformation, Forced oscilations. Waves, their generation, waves equation. Interference. Huyghens principle. Reflection, diffraction. Doppler effect. Waves speed in materials. Acoustics. Geometrical optics. Mirrors, lens. Fotometry. Light as electromagnetic wave. Dispersion, absorption, interference, diffraction, polarization. Photon's theory of light. Law of emision and absorption, Planck's law of radiation. Lasers.					
Recommended literature: 1. A. Hlavička et al., Fyzika pro pedagogické fakulty, SPN, 1971 2. R.P. Feynman et al., Feynmanove prednášky z Fyziky I,II,III, ALFA, 1985 3. D. Halliday et al., Fyzika-Vysokoškolská učebnice obecné fyziky, VUTIUM, 2010 4. J. Fuka, B. Havelka, Optika a atómová fyzika, SPN, 1961 5. A. Štrba, Všeobecná Fyzika 3 – Optika, ALFA, 1979					
Course language: slovak					
Notes:					
Course assessment Total number of assessed students: 95					
A	B	C	D	E	FX
32.63	25.26	25.26	12.63	4.21	0.0
Provides: doc. RNDr. Rastislav Varga, DrSc.					
Date of last modification: 18.02.2014					

Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚFV/ VF1d/12	Course name: General Physics IV
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 4 / 2 Per study period: 56 / 28 Course method: present	
Number of credits: 7	
Recommended semester/trimester of the course: 4.	
Course level: I.	
Prerequisites: ÚFV/VF1c/08 or ÚFV/VF1c/10 or ÚFV/VF1c/12	
Conditions for course completion: written tests exam	
Learning outcomes: Basic knowledge about the atomic structure and spectra and nuclei, and elementary particles. Basic experimental methods in nuclear physics and passage of nuclear radiation through media.	
Brief outline of the course: Wave character of particles. De Broglie waves. Experimental evidence for de Broglie waves. Structure and models of atoms. Atomic spectra. Magnetic properties of atoms. X-ray spectra. Basic characteristics of the atomic nuclei. Nuclear forces and models. Radioactivity. Applications of radioactivity. Nuclear reactions. Elementary particles, basic properties and classification. Types of interactions. Resonances. Cosmic rays. Passage of particles through matter. Detectors. Accelerators.	
Recommended literature: 1. Beiser A., Úvod do moderní fyziky, Praha, 1975. 2. Vanovič J.: Atómová fyzika, Bratislava, 1980. 3. Griffiths D. , Introduction to Elementary Particles, WILEY, 1987. 4. Úlehla I., Suk M., Trka Z.: Atómy, jadra, častice, Praha, 1990. 5. Síleš E., Martinská G.: Všeobecná fyzika IV, skriptá PF UPJŠ, 2. vydanie, Košice, 1992. 5. Hajko V. and team of authors, Physics in experiments, Bratislava, 1997. 6. Nosek D., Jádra a částice (Řešené příklady), Matfyzpress, MFF UK, Praha 2005, 7. Brandt S., The harvest of a century, Discoveries of modern physics in 100 episodes, Oxford, 2009.	
Course language: slovak and english	
Notes:	

Course assessment					
Total number of assessed students: 52					
A	B	C	D	E	FX
36.54	21.15	19.23	11.54	11.54	0.0
Provides: prof. RNDr. Stanislav Vokál, DrSc., RNDr. Janka Vrláková, PhD., RNDr. Adela Kravčáková, PhD.					
Date of last modification: 11.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚGE/ GEE2/07		Course name: Geoecology			
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14 Course method: present					
Number of credits: 5					
Recommended semester/trimester of the course: 5.					
Course level: I.					
Prerequisites: ÚGE/BIG/07 or ÚGE/FYG2/05					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course: Focus will be put on the development of this discipline, different dimensions of the physical – geographic complexes, regularities of the space differentiation of the physical – geographic sphere, evolution, and dynamics of the physical – geographic complexes. Synthesis of the principles of landscape and landscape-ecological planning.					
Recommended literature: BEDRNA, Z., a kol. 1992: Analýza a čiastkové syntézy zložiek krajinej štruktúry. Bratislava. Učebné texty, 95 s.. MIČIAN, Ľ., ZATKALÍK, F. 1984: Náuka o krajine a starostlivosť o životné prostredie. UK Bratislava skriptá,137s. MIČIAN, Ľ. 1989: Pokus o novú definíciu krajinej ekológie. Ekológia (ČSFR), 3,1,Veda, Bratislava, s. 7-12. MIČIAN, Ľ. 2008: Všeobecná geoekológia. Bratislava: Geo-grafika, 88 s. – Skriptá.					
Course language:					
Notes:					
Course assessment Total number of assessed students: 575					
A	B	C	D	E	FX
5.22	13.22	20.52	25.22	33.57	2.26
Provides: RNDr. Dušan Barabas, CSc., Mgr. Michal Gallay, PhD.					
Date of last modification: 11.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚGE/ GZP1/12		Course name: Geography and Natural Environment I.			
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14 Course method: present					
Number of credits: 5					
Recommended semester/trimester of the course: 5.					
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: 188					
A	B	C	D	E	FX
10.64	18.62	15.96	23.4	30.85	0.53
Provides: RNDr. Peter Bohuš					
Date of last modification: 11.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚGE/ MG/14	Course name: Geography of mining
Course type, scope and the method: Course type: Lecture Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present	
Number of credits: 3	
Recommended semester/trimester of the course: 4.	
Course level: I.	
Prerequisites:	
Conditions for course completion: The evaluation is based on a combination of continuous and final control. The continuous control is carried out during the teaching part by written test with a share of 30 % of the final evaluation. The final control is written and constitutes 70 % of the final evaluation. The resulting evaluation is a weighted average of the continuous (30 %) and final (70 %) controls. Credits will be awarded only to student who achieves the evaluation at the minimum level of the mark E in every part of the evaluation.	
Learning outcomes: To acquaint students with basic facts and knowledge of the history of mining science from the view of geographic aspect to obtain information overview of the history of world and Slovak mining for geographic purposes.	
Brief outline of the course: Historical foundations of the global mining industry, mining oldest written records of mining heyday in the Middle Ages, the first mining maps, Slovak ore mining in the Austro-Hungarian Empire, First World Mining Academy in Banská Štiavnica mining and migration of the population, the world "gold rush", salt roads Europe, coal mining and electrification of industry, environmental consequences of mining devastation, mining open-air museums in Slovakia and Europe and their importance for the promotion of tourism.	
Recommended literature: Odporúčaná literatúra: Ježek, B. a Hummel, J., 2006: Georgius Agricola, Dvanásť kníh o baníctve a hutníctve. Preklad z českého originálu: Petr, K. a Petrová, M., Ostrava: Montanex a.s., 2006, 546s., ISBN 80-7225-218-6. Puzder, J., 2000: Samuel Mikovíni, život a dielo. Košice: FBERG TU Košice, 115s. Vozár, J., 2000: Zlatá kniha baníctva. Košice: Tibor Turčan/Banská agentúra, 2000, 263s., ISBN 80-968421-4-5. Vozár, J., 2002: Kódex mestského a banského práva Banskej Štiavnice. Košice: Tibor Turčan/Banská agentúra, 2002, 71s., ISBN 80-968621-2-X.	

Zícha, Z., 2005: Back to the past. The history of technology and manpower in the mining is a legacy which cannot be forgotten. Ústí nad Labem: CDL Design s.r.o., 2005, 98p., ISBN 80-902278-9-9.

Course language:

Slovak

Notes:

without notices

Course assessment

Total number of assessed students: 18

A	B	C	D	E	FX
61.11	38.89	0.0	0.0	0.0	0.0

Provides: prof. Ing. Vladimír Sedlák, PhD.

Date of last modification: 02.06.2014

Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚGE/OBY2/03	Course name: Geography of population and settlements
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14 Course method: present	
Number of credits: 4	
Recommended semester/trimester of the course: 3.	
Course level: I.	
Prerequisites: ÚGE/UGE1/07	
Conditions for course completion: Evaluation of student performance is carried out by combining ongoing review during the term of examination for the period of the semester. Continuous control consists of min. 80 % of the active participation of students in teaching and successfully solving assignments. If a student does not reach required active participation of teaching and successfully does not solve the given problem can not log on to the test.	
Learning outcomes: The student will acquire theoretical and methodological basis of Geography of Population and Settlements. Students will acquire a basic spatial differentiation of population and settlements in the world according to basic characteristics.	
Brief outline of the course: Population geography as a science discipline; Trends and forecasts of the world population; Distribution of population; Natural and mechanical movement of population (natality, mortality, balance natural movement of the population, model of demographic cycle, population migration); Population structure on the basis of biological, cultural and economic characteristics; Geography settlements as a scientific discipline; Settlement development and settlement systems; Geographical location of settlements; The structure of settlements by size, dynamics and morphology; Urban geography (definition of city, creation of city and functions cities); The hierarchy of settlements and Gravity; Urbanization (basic concepts, indicators, aspects and methods of research); Rural settlement systems (compact and scattered rural settlements and their geographical interpretation). Seminars Seminars during the semester are oriented to problem solving in order to practice, resp. demonstrate phenomena studied in different regional units of Slovakia, Europe or Worldwide.	
Recommended literature: BAŠOVSKÝ, O., MLÁDEK, J. 1989: Geografia obyvateľstva a sídel. Prírodovedecká fakulta UK, Bratislava, 221. CHALUPA, P., TARABOVÁ, Z. 1990: Geografie obyvateľstva, demografie, geografie sídel. MU, Brno.	

MATLOVIČ, R. 2001: Geografia relígií. Fakulta humanitných a prírodných vied Prešovskej univerzity v Prešove. Prešov, 375.

MLÁDEK, J. 1992: Základy geografie obyvateľstva. SPN Bratislava, 230.

MLÁDEK, J. a kol. 2006: Atlas obyvateľstva Slovenska. UK Bratislava, 168.

MLÁDEK, J., KUSEDOVÁ, D., MARENČÁKOVÁ, J., PODOLÁK, P., VAŇO, B. 2006: Demogeografická analýza Slovenska. UK Bratislava, 222.

PAVLÍK, Z., RYCHTAŘÍKOVÁ, J., ŠUBRTOVÁ, A. 1986: Základy demografie. Academia Praha.

VOTRUBEC, C. 1980: Lidská sídla, jejich typy a rozmístnění ve světě. Academia Praha.

SHORT, J. R. 1994: Lidská sídla. Velká geografická encyklopedie světa. Nakladatelský dům OP Praha

Course language:

Slovak

Notes:

Course assessment

Total number of assessed students: 593

A	B	C	D	E	FX
9.78	14.0	24.79	23.78	23.95	3.71

Provides: RNDr. Janetta Nestorová-Dická, PhD.

Date of last modification: 11.02.2014

Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚGE/ GEX1/05		Course name: Geological excursion			
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: Per study period: 3d Course method: present					
Number of credits: 1					
Recommended semester/trimester of the course: 2.					
Course level: I.					
Prerequisites: ÚGE/GEP2/13					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course: Visiting of different localities in the Western Carpathian tectonic units - Flysh belt, Klippen belt, Central Western Carpathians. Visiting of several localities of mining in Slovakia and getting to know the process of manufacturing of the rocks.					
Recommended literature: R. Seim, 1981: Minerale, Neuman Verlag, Leipzig.					
Course language:					
Notes:					
Course assessment Total number of assessed students: 415					
A	B	C	D	E	FX
89.4	10.36	0.24	0.0	0.0	0.0
Provides: Ing. Katarína Bónová, PhD., Ing. Ján Bóna					
Date of last modification: 11.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚGE/ GEM2/05		Course name: Geomorphology			
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 3 / 2 Per study period: 42 / 28 Course method: present					
Number of credits: 7					
Recommended semester/trimester of the course: 2.					
Course level: I.					
Prerequisites: ÚGE/GEP2/13					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 975					
A	B	C	D	E	FX
7.9	21.23	20.1	16.41	22.97	11.38
Provides: doc. RNDr. Zdenko Hochmuth, CSc., RNDr. Alena Gessert, PhD.					
Date of last modification: 11.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚGE/ NGS/06	Course name: German geographical seminar
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present	
Number of credits: 2	
Recommended semester/trimester of the course: 3.	
Course level: I., II.	
Prerequisites:	
Conditions for course completion: On the basis of part-time works, 5 in total (á 20 points), the student will receive the end evaluation of the subject. For each work he should aquire minimal 11 points, so 55 points in total.	
Learning outcomes: After the subject attendance the student should be able to communicate with proffesional german terminology in writing and oral presentation.	
Brief outline of the course: The academic geographical terminology on particular topics of physical and human geography will be concerned. The world professionals of geography in the past and present. The system of university studies in Germany, German geographical periodicals, monographs. Geography of Germany.	
Recommended literature: BAUER, J., ENGLERT, W., MEIER, U., MORGENEYER, F., WALDECK, W., 2002: Physische Geographie kompakt. Spektrum Akademischer Verlag Heidelberg. 192 s. HOLLERBACH, E., NESS, N., 2002: Rhein- von Mainz bis Koeln. Rahmel - VerlagGmbH, Pulheim. 96 s. KOLEKTIV, 2004: Deutschland. Verlag Karl Baedeker Ostfildern. 1182 s. KUBALLA, S., 2001: Unbekanntes Deutschland. ADAC Verlag GmbH Munchen. 432 s. STRAHLER, H.A., STRAHLER, N.A., 1999: Physische Geographie. Verlag Eugen Ulmer Stuttgart. 294 s. ZEPP, H., MÜLLER, M.J., 1999: Landschaftsökologie Erfassungsstandards. Flensburg. 312 s.	
Course language: slovak, german	
Notes:	

Course assessment					
Total number of assessed students: 14					
A	B	C	D	E	FX
64.29	21.43	0.0	0.0	7.14	7.14
Provides: RNDr. Alena Gessert, PhD.					
Date of last modification: 11.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: KGER/OJPV1/07		Course name: German Language for Specific Purposes - German in Natural Sciences 1			
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present					
Number of credits: 2					
Recommended semester/trimester of the course: 4.					
Course level: I.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 120					
A	B	C	D	E	FX
19.17	20.83	27.5	23.33	8.33	0.83
Provides: Mgr. Eva Černáková, PhD., Dr. rer. pol. Michaela Kováčová					
Date of last modification: 05.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚGE/ ZGIS/12		Course name: GIS basics			
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present					
Number of credits: 2					
Recommended semester/trimester of the course: 3.					
Course level: I.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course: The class is mainly practical focusing on practical skills in geographic information systems. Software structure, data types and input, visualisation, geodatabases, editing, choropleth maps, cartodiagrams, layout design, cartographic projections and transformations.					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 159					
A	B	C	D	E	FX
79.25	11.95	5.66	0.0	1.89	1.26
Provides: Mgr. Michal Gallay, PhD., RNDr. Ján Kaňuk, PhD.					
Date of last modification: 11.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: KGER/ NJKG/07		Course name: Grammar in the German Language 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 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: 46					
A	B	C	D	E	FX
54.35	13.04	8.7	4.35	10.87	8.7
Provides: Dr. rer. pol. Michaela Kováčová					
Date of last modification: 05.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚGE/ GNG/13		Course name: Graphic Tools in Geography			
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present					
Number of credits: 2					
Recommended semester/trimester of the course: 3.					
Course level: I.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 70					
A	B	C	D	E	FX
87.14	11.43	1.43	0.0	0.0	0.0
Provides: Mgr. Michal Gallay, PhD., RNDr. Alena Gessert, PhD., RNDr. Ján Kaňuk, PhD.					
Date of last modification: 11.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚGE/ HIG/06		Course name: Historical geography			
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present					
Number of credits: 2					
Recommended semester/trimester of the course: 3.					
Course level: I.					
Prerequisites: ÚGE/UGE1/07					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course: The following topics are addressed at the seminars - historical geography as a scientific discipline, the overview of historical geography in Slovakia, the epoches of human civilisation development, population-geographical research, settlement process and stages of urbanisation, economic activities and changes of natural landscape to cultural one, historical sights and events as touristic attractions.					
Recommended literature: BAKER, A.R.H., 1987: Některé aspekty vývoje britské historické geografie v letech 1966-1986. In: Historická geografie 26. Praha, 25-43. CHRASTINA, P. 2005 : Historická geografia na Slovensku: minulosť, súčasnosť a perspektívy. Historická geografie 33, s. 420-432. JELEČEK, L., 2005 : Tři alternativní koncepce historické geografie v Česku. Historická geografie 33. KAŠPAR, J., 1966: O předmětu a úkolech historické geografie. In: Z českých dějin. Praha MARTINKA, J.: Historická geografia. In: Zborník Acta geologica et geografica, UK, č. 3, 1963. RIEDLOVÁ, M., DEMEK, J., PECH, J. 1980: Úvod do studia geografie a dějiny geografie. Praha 1980.					
Course language:					
Notes:					
Course assessment Total number of assessed students: 408					
A	B	C	D	E	FX
85.54	14.22	0.0	0.0	0.25	0.0
Provides: prof. PhDr. Ladislav Tajták, PhD.					
Date of last modification: 11.02.2014					

Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: KFaDF/DF1/05		Course name: History of Philosophy and Philosophy of Education - Cultural and Socio-Anthropological Relations			
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14 Course method: present					
Number of credits: 4					
Recommended semester/trimester of the course: 5.					
Course level: I.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 392					
A	B	C	D	E	FX
63.52	16.58	10.97	5.87	2.55	0.51
Provides: doc. PhDr. Pavol Tholt, PhD., mim.prof., Doc. PhDr. Peter Nezník, CSc.					
Date of last modification: 26.01.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚGE/HUG/07	Course name: Human geography (nonproductive sphere)
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 3 Per study period: 42 Course method: present	
Number of credits: 3	
Recommended semester/trimester of the course: 5.	
Course level: I.	
Prerequisites: ÚGE/HUG2a/05	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course: Geography of tourism - theoretical and methodological background. Potential of the country for the development of tourism and its location conditions. Settlement types and regionalisation of Slovakia from the point of tourism development. Tourism regions in Slovakia. Foreign tourism. Domestic and foreign trade and its role. Regularities of the commodity movement. Basic methods of the transport studies. Use of geographic methods in the geography of transport. Service sector in Slovakia.	
Recommended literature: BOROVSKÝ, J. a kol., 2008: Cestovný ruch, trendy a perspektívy. Iura Edition, 280 s. HALÁS, M., 2000: Zahraničný obchod SR s ČR. Geographical Studies 7, Constantine the Philosopher University Nitra, s. 98-107. HALL, C.M. - PAGE, S.J. 2002: The geography of tourism and recreation, 2. edition, London and New York, 399 p. HAVRLANT, J., 2007: Geografie cestovního ruchu I. Základy geografie cestovního ruchu, Ostravská univerzita, 41 s. MARIOT, P., 1983: Geografia cestovného ruchu. Veda, Bratislava, 224 s. OTRUBOVÁ, E., 2003: Humánna geografia II (Geografia zahraničného obchodu, Geografia cestovného ruchu). Prírodovedecká fakulta UPJŠ, Košice, 105 s. ŠTEPÁNEK, KOPAČKA, ŠÍP, 2001: Geografie cestovního ruchu, Vydalo Karolinum Praha, 228s.	
Course language:	
Notes:	

Course assessment					
Total number of assessed students: 398					
A	B	C	D	E	FX
19.6	26.13	26.63	18.34	9.05	0.25
Provides: Mgr. Marián Kulla, PhD.					
Date of last modification: 11.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚGE/ HUG2a/05	Course name: Human geography (productive sphere)
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 3 / 1 Per study period: 42 / 14 Course method: present	
Number of credits: 5	
Recommended semester/trimester of the course: 4.	
Course level: I.	
Prerequisites: ÚGE/OBY2/03	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course: Location theories, factors and methods of industry evaluation. Territorial industrial units and regionalisation of the industry in Slovakia. Geographical characteristics of selected types of industry. Relationship of industry and environment. Trends in development and problems of the world economy. Development of agriculture and regularities of distribution of agricultural lands. The agricultural countries and their typology. The land use map. Geography of forests and its typology.	
Recommended literature: FALKOWSKI, J., KOSTROWICKI, J., 2001: Geografia rolnictwa świata. PWN, Warszawa, 516 p. KNOX, P., L., et al. 2010: Human geography. Places and regions in Global Context. pearson International Edition., 513 p. KOREC, P. 1994: Humánna geografia 1. Prírodovedecká fakulta, Univerzita Komenského, Bratislava, 120 s. MIRVALD, S., 2002: Geografie dopravy II. ZČU Plzeň, 56 s. MIRVALD, S., 2002: Geografie dopravy III. ZČU Plzeň, 43 s. POPJAKOVÁ, D., 1997: Základné kapitoly z geografie priemyslu, Prešov: PU, 144 s. SPIŠIAK, P., 2005: Základy geografie poľnohospodárstva a lesného hospodárstva. Prírodovedecká fakulta, Univerzita Komenského, Bratislava. 140 s. TOUŠEK, V. a kol., 2008: Ekonomická a sociální geografie, Plzeň, 2008, 411 s.	
Course language:	
Notes:	

Course assessment					
Total number of assessed students: 483					
A	B	C	D	E	FX
8.07	24.02	29.81	26.29	10.97	0.83
Provides: prof. RNDr. Peter Spišiak, CSc., Mgr. Marián Kulla, PhD.					
Date of last modification: 11.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚGE/ HGS/07		Course name: Human geography of the Slovak Republic			
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14 Course method: present					
Number of credits: 5					
Recommended semester/trimester of the course: 6.					
Course level: I.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course: Formation of territory of Slovakia from the historical perspective. National, linguistic and religious structure of population. Types of urban and rural settlements. Administrative division of Slovakia and its historical development. Economic structure – raw materials, agriculture, industry, transportation, education and tourism of Slovakia.					
Recommended literature: DUBCOVÁ, A. a kol., 2008: Geografia Slovenska. Učebnica geografie pre regionálny rozvoj. 350 s. LAUKO, V., TOLMÁČI, L., DUBCOVÁ, A., 2006: Humánna geografia Slovenskej republiky, Kartprint Bratislava, 200 s. LAUKO, V., TOLMÁČI, L., KRIŽAN, F., GURŇÁK, D., CÁKOCI, R., 2013: Geografia Slovenskej republiky, Humánna geografia. Geografika, 300 s. MICHAELI, E., 1996: Vybrané kapitoly z regionálnej geografie Slovenskej republiky, Cestovný ruch. Metodické centrum, Prešov, 65 s. MICHAELI, E. 1996: Vybrané kapitoly z regionálnej geografie Slovenskej republiky, Priemysel, poľnohospodárstvo. Metodické centrum, Prešov. 71 s. Trend TOP v priemysle, v cestovnom ruchu.					
Course language:					
Notes:					
Course assessment Total number of assessed students: 230					
A	B	C	D	E	FX
3.48	9.57	16.52	38.26	29.13	3.04
Provides: RNDr. Janetta Nestorová-Dická, PhD., RNDr. Alena Gessert, PhD., Mgr. Marián Kulla, PhD., doc. RNDr. Zdenko Hochmuth, CSc.					

Date of last modification: 11.02.2014
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚGE/ MGS/06		Course name: Hungarian geographical seminar			
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present					
Number of credits: 2					
Recommended semester/trimester of the course: 5.					
Course level: I.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course: Hungarian geographical terminology on particular topics in geology, geomorphology, climatology, hydrography, pedogeography, biogeography. The professionals from the past in Hungary, the system of university studies in Hungary. Hungarian geographical periodicals, monographs.					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 12					
A	B	C	D	E	FX
100.0	0.0	0.0	0.0	0.0	0.0
Provides: prof. PhDr. Ladislav Tajták, PhD.					
Date of last modification: 11.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚGE/ HYP/06		Course name: Hydrological practicum			
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present					
Number of credits: 2					
Recommended semester/trimester of the course: 4.					
Course level: I.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course: The course is aimed at: - The collection, evaluation methods and processing of hydrological data, - Field respect specifically to measure water levels and flow rates, level of groundwater chemistry, pH, conductivity etc.. - Interpretation of the data - Processing balances					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 27					
A	B	C	D	E	FX
100.0	0.0	0.0	0.0	0.0	0.0
Provides: RNDr. Dušan Barabas, CSc.					
Date of last modification: 11.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: KFaDF/KDF/05		Course name: Chapters from History of Philosophy of 19th and 20th Centuries (General Introduction)			
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present					
Number of credits: 2					
Recommended semester/trimester of the course: 6.					
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: 10					
A	B	C	D	E	FX
50.0	20.0	10.0	0.0	10.0	10.0
Provides: doc. PhDr. Pavol Tholt, PhD., mim.prof.					
Date of last modification: 26.01.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: KFaDF/ FVp/04		Course name: Chapters from Philosophy of Education			
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present					
Number of credits: 2					
Recommended semester/trimester of the course: 5.					
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: 3					
A	B	C	D	E	FX
100.0	0.0	0.0	0.0	0.0	0.0
Provides: doc. PhDr. Pavol Tholt, PhD., mim.prof.					
Date of last modification: 26.01.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice		
Faculty: Faculty of Science		
Course ID: R UPJŠ/ IB10/14	Course name: IB10 - Medzinárodný certifikát ECo-C	
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present		
Number of credits: 16		
Recommended semester/trimester of the course:		
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: 0		
abs	n	neabs
0.0	0.0	0.0
Provides:		
Date of last modification: 11.08.2014		
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.		

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice		
Faculty: Faculty of Science		
Course ID: R UPJŠ/ IB11/14	Course name: IB11 - Medzinárodný certifikát ECDL	
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present		
Number of credits: 14		
Recommended semester/trimester of the course:		
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: 0		
abs	n	neabs
0.0	0.0	0.0
Provides:		
Date of last modification: 11.08.2014		
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.		

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice		
Faculty: Faculty of Science		
Course ID: R UPJŠ/ IB12/14	Course name: IB12 - Používanie, administrácia a vývoj v systéme SAP	
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present		
Number of credits: 54		
Recommended semester/trimester of the course:		
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: 0		
abs	n	neabs
0.0	0.0	0.0
Provides:		
Date of last modification: 11.08.2014		
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.		

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice		
Faculty: Faculty of Science		
Course ID: R UPJŠ/IB1/14	Course name: IB1 - Etika v biomedicínskych vedách pre zdravotnícku prax	
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present		
Number of credits: 16		
Recommended semester/trimester of the course:		
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: 0		
abs	n	neabs
0.0	0.0	0.0
Provides:		
Date of last modification: 11.08.2014		
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.		

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice		
Faculty: Faculty of Science		
Course ID: R UPJŠ/IB2/14	Course name: IB2 - Právne minimum – súkromnoprávne aspekty	
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present		
Number of credits: 16		
Recommended semester/trimester of the course:		
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: 0		
abs	n	neabs
0.0	0.0	0.0
Provides:		
Date of last modification: 11.08.2014		
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.		

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice		
Faculty: Faculty of Science		
Course ID: R UPJŠ/ IB3/14	Course name: IB3 - Právne minimum – verejnoprávne aspekty	
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present		
Number of credits: 16		
Recommended semester/trimester of the course:		
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: 0		
abs	n	neabs
0.0	0.0	0.0
Provides:		
Date of last modification: 11.08.2014		
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.		

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice		
Faculty: Faculty of Science		
Course ID: R UPJŠ/ IB4/14	Course name: IB4 - Projektový manažment	
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present		
Number of credits: 20		
Recommended semester/trimester of the course:		
Course level: 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: 0		
abs	n	neabs
0.0	0.0	0.0
Provides:		
Date of last modification: 11.08.2014		
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.		

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice		
Faculty: Faculty of Science		
Course ID: R UPJŠ/IB5/14	Course name: IB5 - Manažérska ekonomika	
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present		
Number of credits: 16		
Recommended semester/trimester of the course:		
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: 0		
abs	n	neabs
0.0	0.0	0.0
Provides:		
Date of last modification: 11.08.2014		
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.		

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice		
Faculty: Faculty of Science		
Course ID: R UPJŠ/IB6/14	Course name: IB6 - Riešenie konfliktných a krízových situácií v školskej praxi	
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present		
Number of credits: 16		
Recommended semester/trimester of the course:		
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: 0		
abs	n	neabs
0.0	0.0	0.0
Provides:		
Date of last modification: 11.08.2014		
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.		

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice		
Faculty: Faculty of Science		
Course ID: R UPJŠ/ IB7/14	Course name: IB7 - Štatistika pre prax	
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present		
Number of credits: 16		
Recommended semester/trimester of the course:		
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: 0		
abs	n	neabs
0.0	0.0	0.0
Provides:		
Date of last modification: 11.08.2014		
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.		

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice		
Faculty: Faculty of Science		
Course ID: R UPJŠ/IB8/14	Course name: IB8 - Environmentálne aspekty záťaže životného prostredia	
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present		
Number of credits: 16		
Recommended semester/trimester of the course:		
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: 0		
abs	n	neabs
0.0	0.0	0.0
Provides:		
Date of last modification: 11.08.2014		
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.		

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice		
Faculty: Faculty of Science		
Course ID: R UPJŠ/IB9/14	Course name: IB9 - Medzinárodný certifikát TOEFL	
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present		
Number of credits: 17		
Recommended semester/trimester of the course:		
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: 0		
abs	n	neabs
0.0	0.0	0.0
Provides:		
Date of last modification: 11.08.2014		
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.		

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: KFaDF/IH1/03		Course name: Idea Humanitas 1 (General Introduction)			
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present					
Number of credits: 2					
Recommended semester/trimester of the course: 6.					
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: 9					
A	B	C	D	E	FX
55.56	11.11	0.0	11.11	22.22	0.0
Provides: Doc. PhDr. Peter Nezník, CSc.					
Date of last modification: 26.01.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚINF/ IKTP/10		Course name: Information and Communication Technologies			
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present					
Number of credits: 2					
Recommended semester/trimester of the course: 4.					
Course level: I.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course: Text processing using a word processor. Processing and evaluation of information using a spreadsheet. Search, retrieval and exchange of information via the Internet. Creating presentations.					
Recommended literature: 1. Franců, M: Jak zvládnout testy ECDL. Praha : Computer Press. 2007. 160 s. ISBN 978-80-251-1485-8 2. Jančařík, A. et al.: S počítačem do Evropy – ECDL. 2. vydanie. Praha : Computer Press, 2007. 152 s. ISBN 80-251-1844-3 3. Kolektív autorov: Syllabus ECDL verzia 5.0. [on-line] [citované 9.2.2010]. Dostupné na internete: < http://www.ecdl.sk/buxus/docs//interne_informacie/Syllabus_V5.0/20090630ECDL-SyllabusV50_SK-V01_FIN.pdf > 4. Kalakay, R. et al: Informačné a komunikačné technológie - prezenčný kurz. [on-line] [citované 9.2.2010]. Dostupné na internete: < http://moodle.science.upjs.sk/course/view.php?id=90 >					
Course language:					
Notes:					
Course assessment Total number of assessed students: 970					
A	B	C	D	E	FX
66.8	17.63	6.91	3.51	1.75	3.4
Provides: Mgr. Alexander Szabari, PhD., RNDr. Jozef Studenovský, CSc., RNDr. Zuzana Bednárová, PhD., doc. Ing. Štefánia Gallová, CSc.					
Date of last modification: 03.02.2014					

Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚINF/ IKTD/10		Course name: Information and Communication Technologies - distance learning			
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present					
Number of credits: 2					
Recommended semester/trimester of the course: 4.					
Course level: I.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course: Text processing using a word processor. Processing and evaluation of information using a spreadsheet. Search, retrieval and exchange of information via the Internet. Creating presentations.					
Recommended literature: 1. Franců, M: Jak zvládnout testy ECDL. Praha : Computer Press. 2007. 160 s. ISBN 978-80-251-1485-8 2. Jančařík, A. et al.: S počítačem do Evropy – ECDL. 2. vydanie. Praha : Computer Press, 2007. 152 s. ISBN 80-251-1844-3 3. Kolektív autorov: Syllabus ECDL verzia 5.0. [on-line] [citované 9.2.2010]. Dostupné na internete: < http://www.ecdl.sk/buxus/docs//interne_informacie/Syllabus_V5.0/20090630ECDL-SyllabusV50_SK-V01_FIN.pdf > 4. Kalakay, R. et al: Informačné a komunikačné technológie - prezenčný kurz. [on-line] [citované 9.2.2010]. Dostupné na internete: < http://moodle.science.upjs.sk/course/view.php?id=90 >					
Course language:					
Notes:					
Course assessment Total number of assessed students: 113					
A	B	C	D	E	FX
75.22	7.08	3.54	0.0	3.54	10.62
Provides: doc. Ing. Štefánia Gallová, CSc., RNDr. Jozef Studenovský, CSc., RNDr. Zuzana Bednárová, PhD.					
Date of last modification: 03.02.2014					

Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚFV/ UVF/05	Course name: Introduction to General Physics
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present	
Number of credits: 2	
Recommended semester/trimester of the course: 1.	
Course level: I.	
Prerequisites:	
Conditions for course completion: Active presentation during the lessons twice a year Solved assignments Positive results at two written tests	
Learning outcomes: Conceptual understanding of the key concepts of the topics of Mechanics and Molecular Physics gained with the help of problem solving, physical experiments and multimedial support that is inevitable precondition for the further study at University level. At the end of this course the student will be able to follow with the courses proceeding from the course General Physics I.	
Brief outline of the course: The subject is a supportive subject to the course General physics 1 - Mechanics and Molecular Physics. The content involves key concepts in mechanics and molecular physics with the help of school experiments, interactive multimedial teaching materials and physical tasks and problems. The aim is to help students to overcome difficulties connected with knowledge gained during the previous study towards the conceptual understanding of the University course content.	
Recommended literature: 1. Sutton, R.M., Demonstration Experiments in Physics, AAPT, 2003 2. Pizzo, J.: Interactive Physics demonstration, AAPT, 2001 3. Cunningham, J, Herr, N.: Hands on Physics Activities, Jossey-Bass A Wiley Imprint, 1994 4. Halliday D., Resnick R., Walker J.: Fyzika. Část 1- 5., Vysokoškolská učebnica fyziky, VUTIUM, Brno, 2000 5. Walker, J.: The Flying Circus of Physics with answers, John Wiley&Sons, 2005 6. Hajko, V., Daniel-Szabó, J. a kol. Fyzika v príkladoch, Alfa, 1983	
Course language: Slovak	
Notes:	

Course assessment					
Total number of assessed students: 188					
A	B	C	D	E	FX
38.3	16.49	23.4	13.83	7.45	0.53
Provides: doc. RNDr. Zuzana Ješková, PhD., doc. RNDr. Marián Kireš, PhD., Doc. RNDr. Jozef Hanč, PhD., RNDr. Brigita Balogová					
Date of last modification: 18.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚFV/ UVF2/07	Course name: Introduction to General Physics II
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present	
Number of credits: 2	
Recommended semester/trimester of the course: 2.	
Course level: I.	
Prerequisites:	
Conditions for course completion: Active presentations during the lessons twice a year Solved assignments Postive results at two written tests.	
Learning outcomes: Conceptual understanding of the key concepts of the topics of Electricity and Magnetism with the help of problem solving, physical experiments and multimedial support that is inevitable precondition for the further study at University level. At the end of the course the studnet will be able to follow with the courses, proceeding from the course General physics II.	
Brief outline of the course: The subject is a supportive subject to the course General Physics 2 - Electricity and Magnetism. The content involves key concepts of electricity and magntism with the help of school experiments, interactive multimedial teaching materials and physical tasks and problems. The aim is to help students to overcome difficulties connected with knowledge gained during the previous study towards the conceptual understanding of the University course content.	
Recommended literature: 1. Sutton, R.M., Demonstration Experiments in Physics, AAPT, 2003 2. Pizzo, J.: Interactive Physics demonstration, AAPT, 2001 3. Cunningham, J, Herr, N.: Hands on Physics Activities, Jossey-Bass A Wiley Imprint, 1994 4. Halliday D., Resnick R., Walker J.: Fyzika. Část 1- 5., Vysokoškolská učebnica fyziky, VUTIUM, Brno, 2000 5. Walker, J.: The Flying Circus of Physics with answers, John Wiley&Sons, 2005	
Course language: Slovak	
Notes:	

Course assessment					
Total number of assessed students: 158					
A	B	C	D	E	FX
41.77	16.46	22.15	8.86	10.76	0.0
Provides: doc. RNDr. Zuzana Ješková, PhD.					
Date of last modification: 18.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚGE/ UGE1/07	Course name: Introduction to geography
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present	
Number of credits: 3	
Recommended semester/trimester of the course: 1.	
Course level: I.	
Prerequisites:	
Conditions for course completion: Participation in exercises, successfully processed award, graduation the final test. Credits will not be awarded to students, who will not have successfully processed award and does not pass the final test min. to 60%.	
Learning outcomes: Students profit a basic orientation in the position and structure of the department, current development trends and literature. Students will create a comprehensive picture of discovering Earth and the gradual development of geography from the earliest times to the present in the context of the most important personalities and milestones of development. Students profit a basic information about the personality of Geography and applications of geography into practice.	
Brief outline of the course: Home geographic discipline is to provide students a basic orientation – object Geography, subject Geography, Landscape sphere of the Earth, System of geographic sciences (Haggett model, Demko model, model of Mičian, Lauko model), application geographic knowledge into practice, development of geographic thought (Period before Antik - oldest maps, market, strategic importance of geographic information, Ancient period - Greek geography, cosmological ideas - Roman geography, new cartographic methods, Mediaeval period - Arab geography, market, belief, cartography, compass, Period of large geographic discoveries - rediscovery of America, Around the World, Australia, Antarctica, Northern sea way), personality Geography (Humboldt, Ritter, Hetner, Bel, Hromádka, Lukniš), Human Geography, Regional Geography (basic theories and their representatives), Hettner School, use geography in practice.	
Recommended literature: RIEDLOVÁ, M., DEMEK, J., PECH, J. 1980: Úvod do studia geografie, dějiny geografie. Praha, SPN, 158 s. DEMEK, J. 1987: Úvod do štúdia teoretickej geografie. Bratislava, SPN. 241 s. KVITKOVIČ, J. 2000: Alexander von Humbolt - priekopník modernej geografie. Geografia, 8, 2, 73-78 s. LUKNIŠ, M. 1987: prof. Ján Hromádka ako vedec, pedagóg a človek. Geografický časopis, 38, 2-3, 118-125 s. TIBENSKÝ, J. a kol. 1987: Matej Bel - doba, život, dielo. Bratislava, Vyd. VEDA. 411 s.	

Course language: Slovak					
Notes:					
Course assessment Total number of assessed students: 705					
A	B	C	D	E	FX
5.96	11.63	28.37	27.94	24.4	1.7
Provides: RNDr. Katarína Kozáková, PhD.					
Date of last modification: 11.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚFV/ ZMF/07	Course name: Introduction to Mathematics for Physicists
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present	
Number of credits: 2	
Recommended semester/trimester of the course: 1.	
Course level: I.	
Prerequisites:	
Conditions for course completion: two control tests during semester, solving of three sets of problems, active participation. Summary evaluation of active participation during semester, completed sets of problems and two tests	
Learning outcomes: The aim is the understanding and mastery of basic mathematical concepts and skills of the vector, differential and integral calculus and ordinary differential equations required for introductory physics course.	
Brief outline of the course: The course introduces basic mathematical background to general physics courses: Mechanics & Molecular Physics and Electricity & magnetism. The content deals with understanding the basic concepts of vector algebra and analysis, differential and integral calculus and differential equations. After the course student should be familiar with the concepts: vector, scalar, vector and scalar fields, the function of one variable, derivative, integral, differential equation; to be able to interpret these concepts in real phenomena and acquire basic mathematical skills related to these concepts in problems.	
Recommended literature: 1. Hughes-Hallet, D. et al, Applied Calculus, 4th ed., John Wiley & Sons, 2010 2. Stewart, J., Calculus: early transcendentals, 6th ed., Brooks Cole, 2008 3. Zel'dovič, J.B., Jaglom, I.M.: Higher Math for Beginners (Mostly Physicists and Engineers), Mir, Moskva, 1988	
Course language: Slovak	
Notes:	

Course assessment					
Total number of assessed students: 166					
A	B	C	D	E	FX
38.55	18.67	21.08	11.45	10.24	0.0
Provides: Doc. RNDr. Jozef Hanč, PhD.					
Date of last modification: 18.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: Dek. PF UPJŠ/USPV/13	Course name: Introduction to Study of Sciences
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: Per study period: 12s / 3d Course method: present	
Number of credits: 2	
Recommended semester/trimester of the course: 1.	
Course level: I.	
Prerequisites:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 539	
abs	n
95.18	4.82
Provides: doc. RNDr. Mária Kožurková, CSc., prof. RNDr. Katarína Cechlárová, DrSc., prof. RNDr. Beňadik Šmajda, CSc., prof. Mgr. Jaroslav Hofierka, PhD., doc. RNDr. Ivan Žežula, CSc., doc. RNDr. Vladimír Zelenák, PhD., Doc. RNDr. Jozef Hanč, PhD., RNDr. Ondrej Krídlo, PhD., Mgr. Vladislav Kolarčík, PhD., RNDr. Janetta Nestorová-Dická, PhD.	
Date of last modification: 17.02.2014	
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚGE/ KVA/08		Course name: Landscape at quarternary			
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14 Course method: present					
Number of credits: 5					
Recommended semester/trimester of the course: 5.					
Course level: I., II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course: A land in a quarternary era: The main content of this class are the climatic changes leading to a morfogenic precesses. This how the main land types were created. A quarternary era should be defined by the alternation of the cold seasons (glacial) and hot seasons (interglacial). This alternation leads to a changing of the climatic zones, vegetal and zoological formations. The appearance of a paleolithic man is also important, such as a evolution of the social formations, according to identification of archeologic artefacts.					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 225					
A	B	C	D	E	FX
47.56	32.89	12.89	5.33	1.33	0.0
Provides: Ing. Katarína Bónová, PhD., Ing. Ján Bóna					
Date of last modification: 11.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚGE/MHG1/03		Course name: Mapping course of human geography			
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: Per study period: 4d Course method: present					
Number of credits: 1					
Recommended semester/trimester of the course: 5.					
Course level: I.					
Prerequisites: ÚGE/HUG2a/05					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course: In the course of four day field mapping, students will practice the concrete methods of humangeographical research. The assignments students have to do are oriented on statistical collection of data on population, settlements, overall evaluation of landscape and land use, statistical equipment of households etc. The gained data are then appropriately transformed to cartographical outputs.					
Recommended literature: DUBCOVÁ, A. a kol., 2013: Didaktika geografie v teréne. UKF Nitra, 394 s. MLÁDEK, J. a kol. 1983: Cvičenia zo socioekonomickej geografie. Vysokoškolské skriptá, Prírodovedecká fakulta UK, Bratislava, 185 s. ŽIGRAI, F., 2004: Integrovaný význam štúdia využitia zeme pri výskume kultúrnej krajiny. In: Fyzickogeografický zborník 2. MU Brno, s. 7-13.					
Course language:					
Notes:					
Course assessment Total number of assessed students: 289					
A	B	C	D	E	FX
98.62	0.35	0.69	0.0	0.35	0.0
Provides: RNDr. Katarína Kozáková, PhD., Mgr. Ladislav Novotný, PhD., prof. RNDr. Peter Spišiak, CSc., RNDr. Janetta Nestorová-Dická, PhD., Mgr. Marián Kulla, PhD., RNDr. Stela Csachová, PhD.					
Date of last modification: 11.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚMV/ MTFa/13		Course name: Mathematics I for physicists			
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 2 Per study period: 28 / 28 Course method: present					
Number of credits: 6					
Recommended semester/trimester of the course: 1.					
Course level: I.					
Prerequisites:					
Conditions for course completion: Two written tests and one homework with exercises from the whole semester. The final evaluation is given according to the results from the semester and in view of the results of the written final test.					
Learning outcomes: To obtain basic knowledge on functions of one variable and their properties; to be able to apply the theory in concrete exercises.					
Brief outline of the course: Functions, basic properties. Elementary functions. Continuous functions. Limits. Derivation and its geometric applications. Theorems about continuous functions. Behaviour of functions. Indefinite integrals, basic methods of integration. Definite integral and its applications.					
Recommended literature: S. Lang: A First Course in Calculus, Springer Verlag, 1998					
Course language: Slovak					
Notes:					
Course assessment Total number of assessed students: 304					
A	B	C	D	E	FX
7.57	8.22	13.82	19.41	30.26	20.72
Provides: doc. RNDr. Roman Soták, PhD.					
Date of last modification: 14.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚMV/MTFb/13		Course name: Mathematics II for physicists			
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 2 Per study period: 28 / 28 Course method: present					
Number of credits: 5					
Recommended semester/trimester of the course: 2.					
Course level: I.					
Prerequisites: ÚMV/MTFa/13					
Conditions for course completion: Two written tests and one homework with excercises from the whole semester, final test. According to the results from the semester and in view of the results of the written final test.					
Learning outcomes: To develop acquired knowledge of mathematical analysis with knowledge on linear algebra and functions of more variables. To learn to solve basic types of differential equations and know how to use them to model real-world phenomena. To learn to solve problems about infinite series.					
Brief outline of the course: System of linear algebraic equations, determinants. Functions of more variables, continuity and limits, partial derivations, local extremes of functions of two variables. Some types of differential equations. Series, functional series, Taylor and MacLaurin series.					
Recommended literature: 1. S. Lang: A First Course in Calculus, Springer Verlag, 1998 2. Huťka V., Benko E., Ďurikovič V.: Matematika, Alfa, Bratislava 1991. 3. Došlá, Z.: Matematika pro chemiky, 1.díl. Masarykova univerzita, Brno, 2010.					
Course language: Slovak					
Notes:					
Course assessment Total number of assessed students: 171					
A	B	C	D	E	FX
9.94	15.79	12.28	26.32	30.41	5.26
Provides: doc. RNDr. Stanislav Lukáč, PhD.					
Date of last modification: 14.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚFV/ SDF1/99		Course name: Methods of Data Processing in Physics			
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14 Course method: present					
Number of credits: 4					
Recommended semester/trimester of the course: 3.					
Course level: I.					
Prerequisites:					
Conditions for course completion: Five tasks in Matlab/Octave. Exam interview - 60%, tasks - 40%.					
Learning outcomes: Methods of data processing in physics.					
Brief outline of the course: 1. Numerical methods. 2. Regression analysis. 3. Computational physics.					
Recommended literature: Buchanan J. L., Turner P. R.: Numerical Methods and Analysis. McGraw-Hill, Inc., New York, 1992. Siegel A. F.: Statistics and Data Analysis. An Introduction. J. Wiley&Sons, NY, 1988.					
Course language: slovak, basics of english					
Notes:					
Course assessment Total number of assessed students: 113					
A	B	C	D	E	FX
23.01	27.43	20.35	14.16	3.54	11.5
Provides: RNDr. Erik Čižmár, PhD.					
Date of last modification: 18.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚFV/ MDT06/06		Course name: Modern Didactical Technics			
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present					
Number of credits: 3					
Recommended semester/trimester of the course: 5.					
Course level: I., II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 76					
A	B	C	D	E	FX
97.37	1.32	0.0	0.0	0.0	1.32
Provides: doc. RNDr. Marián Kireš, PhD.					
Date of last modification: 18.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚFV/ MTF/07	Course name: Modern Trends in 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 credits: 4	
Recommended semester/trimester of the course: 4.	
Course level: I.	
Prerequisites:	
Conditions for course completion: test test	
Learning outcomes: Presentation of scientific goals and experimental facilities on the Institute of Physics. Discussion of new trends in physics of micro-world, astrophysics, biophysics and physics of condensed matter.	
Brief outline of the course: The present state of the micro-world physics – fundamental particles and the interaction forces. Theoretical description of the micro-world – the Standard Model. Experimental tests of the Standard Model - the discovery of neutral currents and intermediate W^{+-} , Z^0 bosons. Heavy ion collisions and the search for new state of matter - quark gluon plasma - on the most powerful accelerators RHIC (Relativistic Heavy Ion Collider), Brookhaven National Laboratory) , USA and on the constructed LHC (Large Hadron Collider), CERN, Geneva. Big Bang and the quark gluon plasma. Some open questions – search for Higgs boson, responsible for the mass of fundamental particles and quark gluon plasma in laboratory conditions. Practical activities – demonstration of the knowledge from lectures at identification of the real Z^0 decay events in experimental data from the LEP accelerator, CERN, Switzerland. New trends in astrophysical investigation: Solar system planets and exoplanets; cataclysmic variables, blazars and polars; black holes; quasars and active galactic nuclei, clusters of galaxies and web structure of Universe; gravitational lensing, dark matter and dark energy; gamma ray bursts. Topical problems in biophysics Low temperatures as a tool for the study of physical properties of matter. Non-Fermi liquid materials... Geometrically frustrated systems. Quantum tunneling in molecular magnets. Application of quantum magnets. Excursion in the Centre of Excellence of Low Temperature Physics. Soft magnetic nanostructure materials prepared by milling and alloying: magnetic properties of small particles, magnetization processes, domain structure, milling and alloying.	
Recommended literature: S. Chikazumi: Physics of Magnetism, J. Willey and Sons, Inc. New York, London, Sydney, 1997. C. Suryanarayana, Progress in Materials Science 46 (2001), 1-184	

F. Close : The Cosmic Onion, 1990 Cindy Schwarz :A Tour of the Subatomic Zoo, 1997 Frank Close, Michael Marten, Christine Sutton : The Particle Odyssey- A Journey to the Heart of Matter, 2002 http://vk.upjs.sk/~epog/2006/ Scientific journals	
Course language: english	
Notes:	
Course assessment Total number of assessed students: 53	
abs	n
100.0	0.0
Provides: Dr.h.c. prof. RNDr. Alexander Feher, DrSc.	
Date of last modification: 18.02.2014	
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚTVŠ/ NJ//13	Course name: Naval Yachting
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 36 Per study period: 504 Course method: present	
Number of 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: 2	
abs	n
100.0	0.0
Provides: doc. Mgr. Rastislav Feč, PhD.	
Date of last modification: 15.01.2014	
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚGE/ FYG1/03		Course name: Physical geography 1			
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 3 / 1 Per study period: 42 / 14 Course method: present					
Number of credits: 5					
Recommended semester/trimester of the course: 3.					
Course level: I., II.					
Prerequisites: ÚGE/GEM2/05					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course: Hydrology of the running water, genesis and development of river basins, measuring of water and its flow. Genesis and the main types of lakes, temperatures, water movements. Sea and water currents, its chemical properties, relief of the sea-floor. Subsurface waters, glaciers. In the section of soil science and soil geography, physical and chemical nature of soils will be treated as well as actual and presently used systems of the soil classification. Distribution of different soil types in the world and Slovakia, principles of the soil zonality.					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 558					
A	B	C	D	E	FX
2.33	4.3	19.18	27.96	38.53	7.71
Provides: RNDr. Dušan Barabas, CSc., RNDr. Alena Gessert, PhD.					
Date of last modification: 11.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚGE/ FYG2/05		Course name: Physical geography 2			
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 3 / 1 Per study period: 42 / 14 Course method: present					
Number of credits: 5					
Recommended semester/trimester of the course: 4.					
Course level: I.					
Prerequisites: ÚGE/FYG1/03					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course: Atmospheric conditions and their physical origins, general planetary air circulation, most important climatic types and the climate of Slovakia. Measuring of the basic meteorological events will be done by students in the practical part of this course. In the study of biogeography we will focus on the biosphere as a part of the physical-geographic sphere. Further focus will be put on the function and position of organisms on the surface, as well as the main regularities of their distribution throughout the world. Phytogeographical and zoogeographical regions of the world and Slovakia. In the practical part students acquaint with the soil profiles and important kinds of plants in Slovakia.					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 520					
A	B	C	D	E	FX
30.0	25.38	26.15	10.77	7.12	0.58
Provides: doc. RNDr. Zdenko Hochmuth, CSc., RNDr. Alena Gessert, PhD.					
Date of last modification: 11.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚGE/FGS/07		Course name: Physical geography of the Slovak Republic			
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14 Course method: present					
Number of credits: 6					
Recommended semester/trimester of the course: 5.					
Course level: I.					
Prerequisites: ÚGE/BIG/07 or ÚGE/FYG2/05					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course: The position of Slovakia within the fundamental European macrostructures. Geology of Slovakia, basic geological units, geomorphological evolution of the Slovak landscape, geomorphological units. Climate and phenology of Slovakia, superficial and subsurface waters of Slovakia, river network, soils and biogeography of Slovakia, landscape structure.					
Recommended literature: .					
Course language:					
Notes:					
Course assessment Total number of assessed students: 541					
A	B	C	D	E	FX
19.78	31.42	26.8	13.86	6.47	1.66
Provides: doc. RNDr. Zdenko Hochmuth, CSc., RNDr. Alena Gessert, PhD., RNDr. Janetta Nestorová-Dická, PhD.					
Date of last modification: 11.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚFV/ ZVF/03		Course name: Physics			
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present					
Number of credits: 0					
Recommended semester/trimester of the course:					
Course level: I.					
Prerequisites: ((ÚFV/VF1a/07 or ÚFV/VF1a/12) or ÚFV/VF1b/03 and (ÚFV/VF1c/08 or ÚFV/VF1c/10 or ÚFV/VF1c/12) and (ÚFV/VF1d/08 or ÚFV/VF1d/12) and ÚFV/TMEU/03 and ÚFV/TEP1/03 and					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 69					
A	B	C	D	E	FX
17.39	21.74	36.23	14.49	5.8	4.35
Provides:					
Date of last modification: 18.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚFV/ FDE/07		Course name: Physics in Demonstration Experiments			
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present					
Number of credits: 3					
Recommended semester/trimester of the course: 3.					
Course level: I.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes: The goal of the course is to get better the understanding of basic physical concepts and phenomena through demonstrational physical experiments.					
Brief outline of the course: The course is aimed at the conceptual understanding of basic physical concepts and phenomena with the help of selected demonstrational experiments. The experiments concern the content of the subject Introductory physics and their realization is based on students' active participation.					
Recommended literature: 1. D.Halliday, R.Resnick, J.Walker: Fyzika, VUTIUM, Brno, 2000 2.K.Cummings, P.W.Law, E.F.Redish, P.J.Cooney: Understanding Physics, John Wiley & Sons, Inc., 2004 3.P.G.Hewitt: Conceptual Physics, tenth edition, Pearson, Addison Wesley, 2006 4.Ľ.Onderová, M.Kireš, Z.Ješková, J.Degro: Praktikum školských pokusov II, PF UPJŠ, 2004					
Course language:					
Notes:					
Course assessment Total number of assessed students: 66					
A	B	C	D	E	FX
50.0	25.76	24.24	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: 18.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚFV/ ZFP1a/03	Course name: Physics Practical 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 credits: 3	
Recommended semester/trimester of the course: 2.	
Course level: I.	
Prerequisites:	
Conditions for course completion: The active work during semester and hand in all reports. Vindication of reports.	
Learning outcomes: Developing proper laboratory habits, skills and verify their theoretical knowledge.	
Brief outline of the course: The goal of this laboratory exercises is to familiarize the students with measurement methods, with kinds and calculus of mistakes, with measured results processing, and with presentation of results. The students gain practical skills, and verify their theoretical knowledge of first semester introductory physics course. They develop proper laboratory habits. Laboratory assignment: 1. Density measurements of liquids and solids. 2. Radius measurements of spherical cap. Measurements of surface using planimeter. 3. Gravitational acceleration measurements using mathematical and physical pendulum. 4. Moment of inertia measurement using physical and torsion pendulum. 5. Measurements of Young's modulus. 6. Measurement of coefficient of viscosity. 7. Measurement of the speed of sound. 8. Measurements of general gas constant and Boltzmann constant. 9. Measurements of thermal expansivity of air. 10. Measurements of thermal capacity of matter. 11. Measurement of the surface tension.	
Recommended literature: Degro, J., Ješková, Z., Onderová, L., Kireš, M.: Základné fyzikálne praktikum I. (Basic physical measurements I), Ed. PF UPJŠ Košice 2007. Standards STN ISO 31. Slovenský inštitút normalizácie v Bratislave (Slovak institute of technical standards in Bratislava), 1997.	

Ješková, Z.: Computer based experiments in thermodynamics using IP COACH,ed. PF UPJŠ in Košice, 2004.					
Course language: english					
Notes:					
Course assessment Total number of assessed students: 174					
A	B	C	D	E	FX
54.02	27.01	12.64	5.17	1.15	0.0
Provides: doc. RNDr. Adriana Zelenáková, PhD., doc. RNDr. Zuzana Ješková, PhD., doc. RNDr. Marián Kireš, PhD., RNDr. Ľudmila Onderová, PhD., RNDr. Marcela Kajňáková, PhD.					
Date of last modification: 18.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚFV/ ZFP1b/03		Course name: Physics Practical 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 credits: 3					
Recommended semester/trimester of the course: 3.					
Course level: I.					
Prerequisites: ÚFV/ZFP1a/03					
Conditions for course completion: Measuring of experimental tasks, their appreciation in the form of a written report, defending. Further evaluation is also a good theoretical preparation for the measurement of the task.					
Learning outcomes: The objectives of the laboratory are: a. To gain some physical insight into some of the concepts presented in the lectures. b. To gain some practice in data collection, analysis and interpretation of results. c. To gain experience and report writing presentation and results.					
Brief outline of the course: Students on practical exercises are working in pairs experimental tasks in the field of electrical, electromagnetic and magnetic properties of matters.					
Recommended literature: Tumanski S, Handbook of magnetic measurements, CRC press, 2011. Fiorillo F, Characterization and Measurement of Magnetic Materials, Elsevier, 2004.					
Course language: Slovak					
Notes:					
Course assessment Total number of assessed students: 150					
A	B	C	D	E	FX
64.0	19.33	14.0	2.0	0.0	0.67
Provides: doc. RNDr. Adriana Zeleňáková, PhD., doc. RNDr. Ján Füzer, PhD.					
Date of last modification: 18.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚGE/ PLG/11	Course name: Planetary geography
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present	
Number of credits: 3	
Recommended semester/trimester of the course: 1.	
Course level: I.	
Prerequisites:	
Conditions for course completion: The evaluation is based on a combination of the continuous and final control. The continuous control is carried out in the form of tasks on an individual work with a share of 30% of the resultant evaluation. The final control is written and constitutes 70% of the resultant evaluation. The resultant evaluation is a weighted average from the continuous (30%) and final (70%) control. Credits will be awarded only to student who achieves the evaluation at the minimum level of the mark E in every part of the evaluation.	
Learning outcomes: Basic theoretical knowledge about the universe, the solar system, astronomy and astrophysics. The principles of operation of the solar system mechanics in order to obtain a basic understanding of the planetary geography.	
Brief outline of the course: A brief overview of astronomy. The emergence and development of fundamental knowledge about the Earth and the universe. Space system components and building solar system: origin and evolution of the solar system and solar system objects. Mechanics of the solar system - Kepler's laws of planetary orbits elements, aspects and anomalies, solar system objects. Celestial sphere. Movements of the sun, moon and celestial bodies. Basic data on the Earth. Movements of Earth and their geographical implications. Coordinate systems and basic orientation on the surface. Time and calendar, timing and time zones.	
Recommended literature: Andrlé, P., 1971: Základy nebeskej mechaniky. Praha: Academia, 1971, 305s. Brázdil, R., Mucha, L., Okáč, Z., 1981: Matematická geografie. Praha: NTL, 1981, 273s. Brázdil, R. a kol., 1988: Úvod do studia planety Země. Praha: SPN, 1988, 365 s. Čeman, R., Pittich E., 2005: Vesmír I - Slnečná sústava. Bratislava: MAPA Slovakia, 2005, 383s. Čapek, R. 1992: Planetární geografie. Praha: Karolinum, Praha, 84s. Dušek, J., Grigar, J. a Pokorný, Z., 2009: Náš vesmír. Praha: Aventinum, 2009, 255s., ISBN: 9788086858654. Farndon, J., 2003: 1000 zaujímavostí o vesmíre. Bratislava: Belimex, 2003, 224s., ISBN: 80-89083-33-1. Ferris, T., 2005: Všetko o vesmíre. Bratislava: Remedium, 2005, 415s., ISBN: 8088993857.	

Grego, D., 2011: Neuveriteľný vesmír, Praha: Albatros, 2011, 120s., ISBN: 978-80-00-02818-7.
Hilbert, H., 2001: Vybrané kapitoly z planetárnej geografie. Banká Štiavnica: UMB Fakulta prírodných vied, 2001, 96s.
Hlaváč, Z., 2000: Základy sférické astronomie a nebeské mechaniky, Plzeň: Západočeská univerzita, 2000, ISBN 80-7082-694-0.
Jakeš, P., 1984: Planeta Země. Praha: Mladá fronta, 1984, 416s.
Némethová, J. a Garai, Z., 2008: Zbierka otázok a úloh z planetárnej geografie. Nitra: UKF, 2009, ISBN: 9788080945602.
Astronomická ročenka 2013, 2014, journal, Hurbanovo: Slovenská ústredná hviezdáreň (Slovak Central Observatory).

Course language:

Slovak

Notes:

without notes

Course assessment

Total number of assessed students: 746

A	B	C	D	E	FX
20.11	21.31	26.01	19.57	10.72	2.28

Provides: prof. Ing. Vladimír Sedlák, PhD.

Date of last modification: 11.02.2014

Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚGE/ PVS/12	Course name: Population development of Slovakia
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14 Course method: present	
Number of credits: 5	
Recommended semester/trimester of the course: 6.	
Course level: I., II.	
Prerequisites:	
Conditions for course completion: The evaluation of student's performance is implemented through a combination of current, random control during the term and the examination part within a particular period of the semester. This type of continuous control includes at least 80% of students' active participation in teaching and successful solutions of given assignments. If a student does not follow and fulfil these two conditions, i. e. compulsory active learning part of the course, together with active participation and in addition will not solve assigned tasks successfully cannot register, assign for the examination (oral/written). If the student receives more than 51% in the written form may proceed to the oral form. If a student does not demonstrate particular knowledge during the oral examination student has to take both forms of the examination once again.	
Learning outcomes: The Student shall acquires deeper knowledge of the population of Slovakia in terms of time and 3-D.	
Brief outline of the course: Development of the population and its spatial differentiation, population Dynamics (natural, migration, the total movement); Reproduction of the population; Migration for work, Foreign and internal migration; The ageing of the population; The specificities of the Roma population in Slovakia; The educational structure of the population; Economic, social, according to the marital status of the population structure; Ethnic and religions structure of the population ; Slovakia in the EU in terms of population processes; The demographic future of Slovakia. Seminars Workshops during the semester are focused on filling the solution of tasks in order to practice or demonstrate the phenomena studied in the different regional units.	
Recommended literature:	
Course language:	
Notes:	

Course assessment					
Total number of assessed students: 96					
A	B	C	D	E	FX
76.04	1.04	5.21	5.21	8.33	4.17
Provides: RNDr. Janetta Nestorová-Dická, PhD.					
Date of last modification: 11.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚFV/ ZPJF/03		Course name: Practical Course 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 credits: 3					
Recommended semester/trimester of the course: 5.					
Course level: I.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes: Practice in nuclear physics.					
Brief outline of the course: Geiger-Müller counter. Analysing power of coincidence circuit by random coincidences. Statistic distribution of measured quantities. Measurement time scale selection. Absorption of beta rays. Backward scattering of beta rays. Gamma rays absorption. Scintillation gamma spectrometer. Determination of ⁶⁰ Co preparat activity using beta-gamma coincidences. Emulsion detector. Dosimetry measurements. Semiconductor detector. Franck Hertz experiment.					
Recommended literature: 1. J.Vrláková, S.Vokál: Základné fyzikálne praktikum, skriptá PF UPJŠ, Košice, 2012, dostupné na http://www.upjs.sk/public/media/5596/Zakladne-fyzikalne-praktikum-III.pdf					
Course language:					
Notes:					
Course assessment Total number of assessed students: 121					
A	B	C	D	E	FX
64.46	26.45	6.61	0.83	1.65	0.0
Provides: RNDr. Janka Vrláková, PhD., RNDr. Adela Kravčáková, PhD., RNDr. Igor Parnahaj, PhD., RNDr. Zuzana Fecková					
Date of last modification: 11.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: KPPaPZ/PPZBc/12		Course name: Psychology and Health Psychology (Bc. study)			
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 1 / 2 Per study period: 14 / 28 Course method: present					
Number of credits: 4					
Recommended semester/trimester of the course: 5.					
Course level: I.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 92					
A	B	C	D	E	FX
14.13	20.65	25.0	28.26	11.96	0.0
Provides: PhDr. Anna Janovská, PhD., PhDr. Karolína Barinková, PhD., Mgr. Lucia Hricová					
Date of last modification: 04.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚFV/ KVM/08		Course name: Quantum Mechanics I.			
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 3 / 2 Per study period: 42 / 28 Course method: present					
Number of credits: 7					
Recommended semester/trimester of the course: 5.					
Course level: I.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes: To become familiar with elementary principles of quantum mechanics and to illustrate its possible applications on selected examples.					
Brief outline of the course: A subject matter, experimental and theoretical foundations of quantum mechanics (QM). Basic axioms of QM. Schrödinger equation and its solution for a square potential well, harmonic oscillator and spherically symmetric potentials. Tunnel effect and over-barrier reflection. Spin and Pauli matrices. Systems of identical particles, bosons, fermions and Pauli exclusion principle.					
Recommended literature: 1. Ľ. Tóth, M. Tóthová, Kvantová a štatistická fyzika I, Rektorát Univerzity P. J. Šafárika, 1982. (in Slovak language) 2. Ľ. Skála, Úvod do kvantovej mechaniky, Academia, Praha, 2005. (in Czech language) 3. J. Pišút, L. Gomolčák, Úvod do kvantovej mechaniky, Bratislava 1983. (in Slovak language) 4. W. Greiner, Quantum Mechanics, 4th edition, Springer, Berlin, 2000. 5. A. C. Philips, Introduction to Quantum Mechanics, Wiley, Weinheim, 2003. 6. D. J. Griffiths, Introduction to Quantum Mechanics, Prentice Hall, New Jersey, 1995.					
Course language: EN - english					
Notes:					
Course assessment Total number of assessed students: 90					
A	B	C	D	E	FX
22.22	16.67	17.78	15.56	21.11	6.67
Provides: doc. RNDr. Jozef Strečka, PhD.					
Date of last modification: 31.01.2014					

Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚGE/ DPZ/12		Course name: Remote sensing			
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present					
Number of credits: 3					
Recommended semester/trimester of the course: 4.					
Course level: I., II.					
Prerequisites: ÚGE/ZKA/13					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course: Remote Sensing includes – electromagnetic radiation, electromagnetic spectrum, radiometric quantities. Radiation sources, interaction with the surrounding, reflection, impact of the atmosphere, diffusion in the atmosphere, absorption in the atmosphere, landscape objects and their identification and appreciation, data acquire - basic division, cameras, film material, types of aerial images, radiometer, mechanical scanner, electronic scanner, carriers, satellites and their instrumentation, principals of remote sensing data postprocessing, interpretation of satellite and aerial images, remote sensing applications.					
Recommended literature: Lillesand, T. M., Kiefer, R. W., 2002: Remote Sensing and Image Interpretation., New York, John Wiley&Sons, x, 724 s.					
Course language:					
Notes:					
Course assessment Total number of assessed students: 261					
A	B	C	D	E	FX
19.16	24.14	31.03	16.48	9.2	0.0
Provides: Mgr. Michal Gallay, PhD., prof. Mgr. Jaroslav Hofierka, PhD.					
Date of last modification: 11.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚGE/ RUR/08		Course name: Rural geography			
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14 Course method: present					
Number of credits: 5					
Recommended semester/trimester of the course: 6.					
Course level: I., II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course: Rural Geography - theory, methodology, development, position within Geography, affiliating science disciplines, topics in rural geography – regional, settlement, economic, rural as a object of research, rural settlement, rural (alternatively) urban (suburban), second housing, quality of life in the country, rural communities, marginal rural regions, rural structures in Slovakia to 1989 and after 1989, transition of rural space in selected countries of central Europe, rural areas in the world.					
Recommended literature: PACIONE, M., 1984: Rural Geography. Harper and Row, London and New York ROBINSON, G.,M., 1998: Conflict and Change in the countryside. John Wiley & Sons. Chichester. 483 pp. SPIŠIAK, P., a kol., 2005: Agorurálne štruktúry Slovenska po roku 1989. Geo-grafika, Bratislava, 183 s. SPIŠIAK, P. , 2007: Základy geografie poľnohospodárstva a lesného hospodárstva, Vyd.UK, I. vyd. Bratislava, 147 s. ZUBRICZKÝ, G. , 2003: Rurálna geografia. Mapa Slovakia, Škola, s r.o. Bratislava, pp. 64.					
Course language:					
Notes:					
Course assessment Total number of assessed students: 236					
A	B	C	D	E	FX
38.98	31.78	19.07	8.05	1.27	0.85
Provides: prof. RNDr. Peter Spišiak, CSc., RNDr. Katarína Kozáková, PhD.					
Date of last modification: 11.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, 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: 36 Per study period: 504 Course method: present	
Number of 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: 7	
abs	n
57.14	42.86
Provides: Mgr. Alena Buková, PhD., Mgr. Agata Horbacz, PhD.	
Date of last modification: 15.01.2014	
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚGE/ SBP1/07	Course name: Seminar of bachelor work
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present	
Number of credits: 2	
Recommended semester/trimester of the course: 5.	
Course level: I.	
Prerequisites:	
Conditions for course completion: Verification of acquired basic methodologic and formal procedures of the final thesis creation by presentation (70% of rating) and written examination (30%). To obtain A grade, weighted average of the both parts of examination must reach at least 90%, To obtain B it is 80%, for C it is 70%, for D 60% and for E 50%. Credits shall not be granted to a student who obtain less than 50% from any of both parts of examination.	
Learning outcomes: Mastering basic theoretical, methodological and formal scientific procedures of bachelor thesis creation.	
Brief outline of the course: The content and form of selected parts of thesis writing (abstract, introduction, conclusion, etc.) Ethics and culture of writing diploma thesis, citations and references, types of sources (printed, electronic, etc.). Formal aspects of the thesis. Linguistic adjustment (terminology, stylistics, syntax, grammar, typography). Rules of presentation of the thesis. Presentation of current results and state of diploma thesis.	
Recommended literature: HOVORKA, D., KOMÁREK, K., CHRAPAN, J. 2011: Ako písať a komunikovať. Martin (Vydavateľstvo Osveta), 247 s. KATUŠČÁK, D. 2008: Ako písať záverečné a kvalifikačné práce. Nitra (Enigma), 162 s. ÚTVAR REKTORA UPJŠ (2011): Smernica č. 1/2011, Dostupné na internete: < http://www.upjs.sk/public/media/2438/smernica-1-2011.pdf >, 25 s.	
Course language: Slovak	
Notes:	

Course assessment					
Total number of assessed students: 202					
A	B	C	D	E	FX
97.03	1.49	0.0	0.0	1.49	0.0
Provides: Mgr. Ladislav Novotný, PhD., prof. Mgr. Jaroslav Hofierka, PhD.					
Date of last modification: 11.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚGE/ SBP2/07		Course name: Seminar of bachelor work			
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present					
Number of credits: 2					
Recommended semester/trimester of the course: 6.					
Course level: I.					
Prerequisites:					
Conditions for course completion: Verification of acquired methodological and formal procedures of the creation of bachelor thesis by the presentation of current thesis creation by presentation of own bachelor thesis (100% of rating). To obtain A grade, the rating of student's presentation must reach at least 90%, To obtain B it is 80%, for C it is 70%, for D 60% and for E 50%. Credits shall not be granted to a student who obtain rating less than 50%.					
Learning outcomes: Acquired skills to apply theoretical, methodological and formal scientific procedures of diploma thesis creation.					
Brief outline of the course: The seminary is focused to the topics of individual diploma thesis. Students present current state of their thesis, its content and its particular parts. Each diploma thesis is discussed at scientific level.					
Recommended literature: HOVORKA, D., KOMÁREK, K., CHRAPAN, J. 2011: Ako písať a komunikovať. Martin (Vydavateľstvo Osveta), 247 s. KATUŠČÁK, D. 2008: Ako písať záverečné a kvalifikačné práce. Nitra (Enigma), 162 s. ÚTVAR REKTORA UPJŠ (2011): Smernica č. 1/2011, Dostupné na internete: < http://www.upjs.sk/public/media/2438/smernica-1-2011.pdf >, 25 s.					
Course language: Slovak					
Notes:					
Course assessment Total number of assessed students: 191					
A	B	C	D	E	FX
90.58	4.71	3.14	1.05	0.52	0.0
Provides: Mgr. Ladislav Novotný, PhD., prof. Mgr. Jaroslav Hofierka, PhD.					
Date of last modification: 11.02.2014					

Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚFV/ FKS/03		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 credits: 5					
Recommended semester/trimester of the course: 6.					
Course level: I.					
Prerequisites: ÚFV/KVM/08					
Conditions for course completion: oral examination					
Learning outcomes: A general introductory course in solid state physics and material science. A student will be able to understand basic theoretical concepts used in solid state physics and interpret selected experimental data. She/he will also be able to adopt simpler experimental techniques.					
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: 125					
A	B	C	D	E	FX
17.6	31.2	17.6	16.8	16.8	0.0
Provides: Dr.h.c. prof. RNDr. Alexander Feher, DrSc., prof. Ing. Martin Orendáč, CSc.					
Date of last modification: 18.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, 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: present		
Number of credits: 2		
Recommended semester/trimester of the course: 1.		
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: 7160		
abs	n	neabs
88.42	7.82	3.76
Provides: PaedDr. Imrich Staško, doc. PhDr. Ivan Šulc, CSc., doc. Mgr. Rastislav Feč, PhD., Mgr. Ivan Matúš, PhD., Mgr. Zuzana Küchelová, Mgr. Peter Bakalár, PhD., doc. PaedDr. Ivan Uher, PhD., PaedDr. Milena Švedová, PhD., Mgr. Agata Horbacz, PhD., Mgr. Marek Valanský, Mgr. Dávid Kaško		
Date of last modification: 15.01.2014		
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, 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: present		
Number of credits: 2		
Recommended semester/trimester of the course: 2.		
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: 6364		
abs	n	neabs
84.95	11.06	3.99
Provides: PaedDr. Imrich Staško, doc. Mgr. Rastislav Feč, PhD., doc. PhDr. Ivan Šulc, CSc., Mgr. Ivan Matúš, PhD., Mgr. Zuzana Küchelová, doc. PaedDr. Ivan Uher, PhD., Mgr. Peter Bakalár, PhD., PaedDr. Milena Švedová, PhD., Mgr. Agata Horbacz, PhD., Mgr. Marek Valanský, Mgr. Dávid Kaško		
Date of last modification: 15.01.2014		
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, 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: present		
Number of 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: 4191		
abs	n	neabs
89.91	4.72	5.37
Provides: PaedDr. Imrich Staško, doc. Mgr. Rastislav Feč, PhD., doc. PhDr. Ivan Šulc, CSc., Mgr. Ivan Matúš, PhD., Mgr. Zuzana Küchelová, doc. PaedDr. Ivan Uher, PhD., PaedDr. Milena Švedová, PhD., Mgr. Peter Bakalár, PhD., Mgr. Agata Horbacz, PhD., Mgr. Marek Valanský, Mgr. Dávid Kaško		
Date of last modification: 15.01.2014		
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, 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: present		
Number of 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: 3363		
abs	n	neabs
86.14	6.78	7.08
Provides: PaedDr. Imrich Staško, doc. Mgr. Rastislav Feč, PhD., doc. PhDr. Ivan Šulc, CSc., Mgr. Ivan Matúš, PhD., Mgr. Zuzana Küchelová, PaedDr. Milena Švedová, PhD., Mgr. Peter Bakalár, PhD., doc. PaedDr. Ivan Uher, PhD., Mgr. Agata Horbacz, PhD., Mgr. Marek Valanský, Mgr. Dávid Kaško		
Date of last modification: 15.01.2014		
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.		

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚFV/STA1N/08		Course name: Statistical Physics			
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 2 Per study period: 28 / 28 Course method: present					
Number of credits: 6					
Recommended semester/trimester of the course: 6.					
Course level: I.					
Prerequisites: ÚFV/KVM/08					
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
43.08	24.62	23.08	6.15	3.08	0.0
Provides: prof. RNDr. Michal Jaščur, CSc., RNDr. Jana Čisárová, PhD.					
Date of last modification: 31.01.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚGE/ SVG/04		Course name: Students scientific conference of geography			
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present					
Number of credits: 4					
Recommended semester/trimester of the course: 6.					
Course level: I., II.					
Prerequisites:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course: After choosing a topic suggested by supervisors implying a geographical problem, the students will work on the topic, write a thesis and defense it before the committee.					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 140					
A	B	C	D	E	FX
100.0	0.0	0.0	0.0	0.0	0.0
Provides: doc. RNDr. Zdenko Hochmuth, CSc., prof. RNDr. Peter Spišiak, CSc., RNDr. Dušan Barabas, CSc., RNDr. Alena Gessert, PhD., RNDr. Janetta Nestorová-Dická, PhD., Mgr. Marián Kulla, PhD., Ing. Katarína Bónová, PhD., RNDr. Stela Csachová, PhD.					
Date of last modification: 11.02.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, 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: 36 Per study period: 504 Course method: present	
Number of 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: 63	
abs	n
41.27	58.73
Provides: Mgr. Peter Bakalár, PhD.	
Date of last modification: 15.01.2014	
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, 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: 36 Per study period: 504 Course method: present	
Number of 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: 185	
abs	n
41.62	58.38
Provides: Mgr. Marek Valanský	
Date of last modification: 15.01.2014	
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚFV/TMEU/03		Course name: Theoretical Mechanics			
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14 Course method: present					
Number of credits: 4					
Recommended semester/trimester of the course: 3.					
Course level: I.					
Prerequisites: ÚFV/VF1a/12					
Conditions for course completion: Two tests to deal with specific tasks mechanics. Final examination.					
Learning outcomes: To acquaint students with principles of the theoretical mechanics.					
Brief outline of the course: Mechanics of particle system with constraints. Principle of virtual work and d'Alembert's principle. Lagrange's function and Lagrange's equations of motion. Hamilton's principle, Hamilton's function and Hamilton's canonical equations of motion. Mechanics of rigid body. Kinematics and dynamics of rigid body.					
Recommended literature: 1. Meirovitch L.: Methods of Analytical dynamics, McGraw-Hill, New York, 1970. 2. Taylor T.T.: Mechanics: Classical and Quantum, Pergamon Press, Oxford, 1976. 3. Strelkov S.P.: Mechanics, Mir Publishers, Moscow, 1985. 4. Greiner W.: Classical Mechanics, Springer-Verlag, Berlin, 2010. 5. Goldstein H.: Classical Mechanics, Addison-Wesley, London, 1970. 6. Barger V., Olsson M.: Classical Mechanics: A Modern Perspective, McGraw-Hill, London, 1973.					
Course language: Slovak					
Notes:					
Course assessment Total number of assessed students: 134					
A	B	C	D	E	FX
15.67	18.66	14.93	21.64	24.63	4.48
Provides: prof. RNDr. Andrej Bobák, DrSc., RNDr. Michal Borovský					
Date of last modification: 31.01.2014					

Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚFV/TEP1/03		Course name: Theory of the Electromagnetic Field			
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 3 / 1 Per study period: 42 / 14 Course method: present					
Number of credits: 5					
Recommended semester/trimester of the course: 4.					
Course level: I.					
Prerequisites: ÚFV/VF1b/03					
Conditions for course completion: Two tests to deal with specific tasks theory of the electromagnetic field. Examination.					
Learning outcomes: To acquaint students with principles of a theory of the electromagnetic field.					
Brief outline of the course: Maxwell equations in vacuum. Scalar and vector potentials. Conservation laws. Electrostatic field. Static magnetic field. Maxwell equations in macroscopic media. Quasistatic electromagnetic field. Electromagnetic waves. Radiation of electromagnetic waves.					
Recommended literature: 1. Jackson J.D.: Classical Electrodynamics, John Wiley, New York, 1975. 2. Rao N.N.: Basic Electromagnetics with Applications, Prentice-Hall, New Jersey, 1972. 3. Greiner W.: Classical Electrodynamics, Springer-Verlag, New York, 1998.					
Course language: 1. Slovak, 2. English					
Notes:					
Course assessment Total number of assessed students: 238					
A	B	C	D	E	FX
26.89	7.56	17.65	23.11	16.39	8.4
Provides: prof. RNDr. Andrej Bobák, DrSc., RNDr. Tomáš Lučivjanský, PhD.					
Date of last modification: 31.01.2014					
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚTVŠ/ ZKLS//13	Course name: Winter Ski Training Course
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 36 Per study period: 504 Course method: present	
Number of 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: 59	
abs	n
25.42	74.58
Provides: PaedDr. Imrich Staško, doc. PhDr. Ivan Šulc, CSc.	
Date of last modification: 15.01.2014	
Approved: prof. RNDr. Peter Kollár, DrSc., doc. RNDr. Zdenko Hochmuth, CSc.	