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

Prerequisities:

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
Slovotvorba 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: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚMV/ ATA/14	**Course name:** Algebra and theoretical arithmetic

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: 4

Recommended semester/trimester of the course: 3.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:
Obtain knowledge about sets N, Z, Q and R, about their axiomatic building-up, the operations and the orderigs on them.

Brief outline of the course:

Recommended literature:

Course language:
Slovak

Notes:

Course assessment
Total number of assessed students: 27

A	B	C	D	E	FX
48.15	18.52	14.81	14.81	3.7	0.0

Provides: doc. RNDr. Matúš Harminc, CSc.

Date of last modification: 17.03.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPE/ ALP/06	**Course name:** Alternative Pedagogy

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

Number of credits: 2

Recommended semester/trimester of the course: 2.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 54

A	B	C	D	E	FX
85.19	12.96	0.0	0.0	0.0	1.85

Provides: Mgr. Ján Juščák, PhD.

Date of last modification: 04.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

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: 2.

Course level: I., II.

Prerequisities:

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: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚMV/ AIM/10	**Course name:** Application of ICT into mathematics teaching

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

Number of credits: 2

Recommended semester/trimester of the course: 3.

Course level: II.

Prerequisities: ÚMV/DDMa/14

Conditions for course completion:
two tests elaborated on the computer, solving problems from worksheets
final project

Learning outcomes:
To learn students standard work procedures with the basic types of mathematical softvare systems and to provide examples and ideas on the possibility of using these software systems in mathematics teaching. To develop the knowledge and skills of students to use investigation and modelling in the digital environment for mathematical problems solving. Develop creative and evaluation abilities of students allow to prepare mathematics lessons with effective and meaningful use of modern technologies.

Brief outline of the course:
Possibilities of using numerical and graphical tools of spreadsheet to solve mathematical problems. Use of dynamic geometry systems in solving geometry problems, examples of their use in the implementation of constructivist approaches to mathematics teaching. Mathematical modelling and solving of problems in a CAS environment. The use of modern IT for active acquisition of knowledge in mathematics teaching.

Recommended literature:
M. Černochová et al.: Využití počítače při vyučování, Portál, 1998.
S. Lukáč: Multimédiá a počítačom podporované učenie sa v matematike, PF UPJŠ Košice 2001.
J. Vaníček: Počítačové kognitivní technologie ve výuce geometrie. Univerzita Karlova v Praze, 2009.
Journals MFI, MIF a Obzory matematiky, fyziky a informatiky.

Course language:
Slovak

Notes:

Course assessment
Total number of assessed students: 159

A	B	C	D	E	FX
39.62	26.42	14.47	11.95	7.55	0.0

Provides: doc. RNDr. Stanislav Lukáč, PhD.

Date of last modification: 14.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ZEM1/04	**Course name:** Basic experimental apparatus methods

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: 4

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

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 2

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

Provides: prof. RNDr. Katarína Györyová, DrSc., prof. RNDr. Juraj Černák, CSc., doc. RNDr. Mária Reháková, CSc., doc. RNDr. Vladimír Zeleňák, PhD., doc. RNDr. Ivan Potočňák, PhD.

Date of last modification: 03.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ ZTOX/04	**Course name:** Basic Toxicology

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

Number of credits: 5

Recommended semester/trimester of the course: 1.

Course level: II.

Prerequisities:

Conditions for course completion:

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

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

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

Course language:

Notes:

Course assessment
Total number of assessed students: 250

A	B	C	D	E	FX
21.2	26.8	24.0	18.0	8.8	1.2

Provides: prof. RNDr. Katarína Györyová, DrSc.

Date of last modification: 03.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ BTC/03	**Course name:** Biotechnology

Course type, scope and the method:
Course type: Lecture
Recommended course-load (hours):
Per week: 3 **Per study period:** 42
Course method: present

Number of credits: 5

Recommended semester/trimester of the course: 2.

Course level: II.

Prerequisities:

Conditions for course completion:
test

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

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

Recommended literature:
E.M.T. El-Mansi et al. ,Fermentation microbiology ang biotechnology,second edition, 2007
Y.H. Hui, Food biochemistry & food processing,Blackwell Publishing 2006
J.E. Smith, Biotechnology, Cambridge university press 2009

Course language:

Notes:

Course assessment
Total number of assessed students: 84

A	B	C	D	E	FX
42.86	23.81	19.05	8.33	5.95	0.0

Provides: RNDr. Danica Sabolová, PhD.

Date of last modification: 03.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPE/ MT/09	**Course name:** Class Management

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

Number of credits: 2

Recommended semester/trimester of the course: 2.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 351

A	B	C	D	E	FX
58.4	30.48	8.55	1.14	0.28	1.14

Provides: PaedDr. Renáta Orosová, PhD.

Date of last modification: 04.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPPaPZ/KK/07	**Course name:** Communication and Cooperation

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

Number of credits: 2

Recommended semester/trimester of the course: 1.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 281

abs	n	z
98.22	1.78	0.0

Provides: Mgr. Ondrej Kalina, PhD.

Date of last modification: 04.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KGER/ NJKK/07	**Course name:** 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.

Prerequisities:

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: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: CJP/ PFAJKKA/07	**Course name:** Communicative Competence in English

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

Number of credits: 2

Recommended semester/trimester of the course:

Course level: I., II., N

Prerequisities:

Conditions for course completion:
ontrolný 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, schopnosťprijímať 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: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

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

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

Number of credits: 2

Recommended semester/trimester of the course:

Course level: I., II., N

Prerequisities:

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 najfrekventovanejších 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: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/MPPb/03	**Course name:** Continual pedagogic practice I

Course type, scope and the method:
Course type: Practice
Recommended course-load (hours):
Per week: Per study period: 3t
Course method: present

Number of credits: 1

Recommended semester/trimester of the course: 2.

Course level: II.

Prerequisities: ÚCHV/SPC1a/03

Conditions for course completion:

Learning outcomes:
The aim of this subject is to apply theoretical preparation from chemistry didactics by the creation of lesson plans for teaching

Brief outline of the course:
The practice runs 3 week and is realizes only in one school in Košice from both certificated subjects. Content of practise is obligate visitation at 8 lessons and unlearns minimal 10 lessons from each certificated subject. A part of practice is methodical and professional analysis unlearn lesson and active implication in out of class and school activities.

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 158

abs	n
100.0	0.0

Provides: doc. RNDr. Mária Ganajová, CSc., RNDr. Milena Kristofová

Date of last modification: 03.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/MPPc/04	**Course name:** Continual pedagogic practice II

Course type, scope and the method:
Course type: Practice
Recommended course-load (hours):
Per week: Per study period: 4t
Course method: present

Number of credits: 2

Recommended semester/trimester of the course: 3.

Course level: II.

Prerequisities: ÚCHV/MPPb/03 and ÚCHV/DCHa/03

Conditions for course completion:

Learning outcomes:
The aim of this subject is to apply theoretical preparation from chemistry didactics by the creation of lesson plans for teaching

Brief outline of the course:
The practice runs 4 week and is realizes only in one school in Košice from both certificated subjects. Content of practise is obligate visitation at 8 lessons and unlearns minimal 18 lessons from each certificated subject. A part of practice is methodical and professional analysis unlearn lesson and active implication in out of class and school activities.

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 138

abs	n
100.0	0.0

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

Date of last modification: 03.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/MPPd/05	**Course name:** Continual pedagogic practise III

Course type, scope and the method:
Course type: Practice
Recommended course-load (hours):
Per week: Per study period: 3t
Course method: present

Number of credits: 2

Recommended semester/trimester of the course: 4.

Course level: II.

Prerequisities: (ÚCHV/MPPc/04 or ÚCHV/MPPc/15) and ÚCHV/DCH2/15

Conditions for course completion:

Learning outcomes:
The aim of this subject is to apply theoretical preparation from chemistry didactics by the creation of lesson plans for teaching

Brief outline of the course:
The practice runs 3 week and is realizes only in one school in Košice from both certificated subjects. Content of practise is obligate visitation at 4 lessons and unlearns minimal 15 lessons from each certificated subject. A part of practice is methodical and professional analysis unlearn lesson and active implication in out of class and school activities.

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 150

abs	n
100.0	0.0

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

Date of last modification: 03.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚMV/SPPb/10	**Course name:** Continuous teaching practice I

Course type, scope and the method:
Course type: Practice
Recommended course-load (hours):
Per week: Per study period: 3t
Course method: present

Number of credits: 1

Recommended semester/trimester of the course: 2.

Course level: II.

Prerequisities: ÚMV/SSM/10

Conditions for course completion:

Learning outcomes:
Enable students to gain first practical experience in teaching mathematics to apply theoretical knowledge in specific teaching situations, to develop their teaching skills. To acquaint students with the atmosphere and the organization of school.

Brief outline of the course:

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 145

abs	n
100.0	0.0

Provides: doc. RNDr. Dušan Šveda, CSc., RNDr. Ingrid Semanišinová, PhD.

Date of last modification: 14.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚMV/SPPc/10	**Course name:** Continuous teaching practice II

Course type, scope and the method:
Course type: Practice
Recommended course-load (hours):
Per week: Per study period: 4t
Course method: present

Number of credits: 2

Recommended semester/trimester of the course: 3.

Course level: II.

Prerequisities: ÚMV/SPPb/10

Conditions for course completion:

Learning outcomes:
Enable students to gain first practical experience in teaching mathematics to apply theoretical knowledge in specific teaching situations, to develop their teaching skills. To acquaint students with the atmosphere and the organization of school.

Brief outline of the course:

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 142

abs	n
100.0	0.0

Provides: doc. RNDr. Dušan Šveda, CSc., RNDr. Ingrid Semanišinová, PhD.

Date of last modification: 14.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚMV/ SPPd/10	**Course name:** Continuous teaching practice III
Course type, scope and the method: **Course type:** Practice **Recommended course-load (hours):** **Per week: Per study period:** 3t **Course method:** present	
Number of credits: 2	
Recommended semester/trimester of the course: 4.	
Course level: II.	
Prerequisities: ÚMV/SPPc/10	
Conditions for course completion:	
Learning outcomes: Enable students to gain first practical experience in teaching mathematics to apply theoretical knowledge in specific teaching situations, to develop their teaching skills. To acquaint students with the atmosphere and the organization of school.	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 92	
abs	n
100.0	0.0
Provides: doc. RNDr. Dušan Ševa, CSc., RNDr. Ingrid Semanišinová, PhD.	
Date of last modification: 14.02.2014	
Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚCHV/ KC/03	**Course name:** Cosmetic chemistry
Course type, scope and the method: **Course type:** Lecture / Practice **Recommended course-load (hours):** **Per week:** 2 / 1 **Per study period:** 28 / 14 **Course method:** present	
Number of credits: 4	
Recommended semester/trimester of the course: 3.	
Course level: II.	
Prerequisities:	
Conditions for course completion: Seminar report on the selected subjects of cosmetic chemistry and its oral presentation connected with discussion. Terminal examination by oral form.	
Learning outcomes: The basic chemical ingredients in cosmetic products, their isolation from natural sources. The construction of some interesting groups of the orgnaic structures and their application in cosmetic industry.	
Brief outline of the course: Skin and its components. The chemistry of lipids. Lipids, their classification (triacylglycerols, glycerophospholipids and sfingophoslipids), liposomes as transport systems. Fatty acids and alcohols, natural and synthetic waxes. Surfactants, their classification. Antioxidants. Dyes, their classification, organic and inorganic dyes, natural and synthetic. Biological active compounds (amino acids, peptides, proteins hydroxy acids, vitamins, polysaccharides) as the cosmetic ingredients. The chemistry of fragrances. Compounds derived from shikimic acid and mevalonic acid, their biosynthesis, Synthetic fragrances and their construction.	
Recommended literature: 1. S. V. Bhat, B. A. Nagasampagi, M. Sivakumar: Chemistry of Natural Products, Springer Narosa 2005, ISBN 81-7319-481-5. 2. G. Ohloff: Scent and Fragrances, Springer-Verlag Berlín Heidelberg 1994, ISBN 3-540-57108-6. 3. D. H. Pybus, CH. S. Sell: The chemistry of fragrances, Royal Society of Chemistry 1999, ISBN 0-8540-528-7. 4. J. McMurry: Organic chemistry, Brooks/Cole, a Thomson Learning Company 2004, Sixth Eddition, ISBN 0534389996.	
Course language:	
Notes:	

Course assessment
Total number of assessed students: 86

A	B	C	D	E	FX
79.07	15.12	4.65	1.16	0.0	0.0

Provides: doc. RNDr. Miroslava Martinková, PhD.

Date of last modification: 03.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KAE/ KAp/03	**Course name:** Cultural Anthropology

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

Number of credits: 2

Recommended semester/trimester of the course: 2.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 126

A	B	C	D	E	FX
84.92	14.29	0.79	0.0	0.0	0.0

Provides: Mgr. Adriana Jesenková, PhD.

Date of last modification: 29.01.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: KPPaPZ/RSEI/03	**Course name:** Development of Social and Emotional Intelligence
Course type, scope and the method: **Course type:** Practice **Recommended course-load (hours):** **Per week:** 2 **Per study period:** 28 **Course method:** present	
Number of credits: 2	
Recommended semester/trimester of the course: 2.	
Course level: II.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment
Total number of assessed students: 319

abs	n
97.18	2.82

Provides: Mgr. Lucia Hricová
Date of last modification: 04.02.2014
Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚMV/ DDMa/14	**Course name:** Didactics of mathematics

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

Number of credits: 5

Recommended semester/trimester of the course: 2.

Course level: II.

Prerequisities:

Conditions for course completion:
Continuous assessment - 60% of the total assessment, exam - 40% of the total assessment.

Learning outcomes:
Master the basic principles and methods of teaching of mathematics at primary and secondary schools. Gain knowledge of the various ways of teaching specific topics of school mathematics.

Brief outline of the course:
Subject of Didactics of Mathematics, the development of mathematics and mathematics education.
Aims and objectives of mathematics teaching
Planning in mathematics teaching
Logical and didactical curriculum analysis
Determination of learning objectives
Didactical principles, methods of mathematics teaching
Assessment of learning outcomes, the creation of didactic tests
Mathematical problems
Construction numeric fields, Theory of elementary functions, synthetic and analytic geometry

Recommended literature:
[1] M.Hejný a kol.: Teorie vyučovania matematiky, SPN Blava 1989, (in slovak)
[2] L.Frantíková,K.Hončarivová,O.Kopanev: Didaktika matematiky, UPJŠ 1982 (in slovak)
[3] R.Fischer,G.Malle: Člověk a matematika, SPN Bratislava 1992 (in slovak)
[4] Polya, G.: How to solve it, Princeton University Press, 1957.
[5] Hejný, M., Kuřina, F.: Dítě, škola a matematika: Konstruktivistické přístupy k vyučování. Portál, Praha 2001. (in czech)

Course language:
Slovak

Notes:

Course assessment
Total number of assessed students: 78

A	B	C	D	E	FX
29.49	43.59	19.23	5.13	2.56	0.0

Provides: doc. RNDr. Dušan Šveda, CSc.

Date of last modification: 14.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚMV/ DDMb/14	**Course name:** Didactics of mathematics

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: 3.

Course level: II.

Prerequisities: ÚMV/DDMa/14

Conditions for course completion:
Seminar paper - 40% of the total score.
Written exam - 40% of the total score.
Homework - 20% of the total score.
Evaluation A - at least 90% points,
evaluation B - at least 80%,
evaluation C at least 70%,
evaluationD at least 60%,
evaluationE rating of at least 50% of the points.
Credits shall not be granted to a student who receives less than 50% of the points.

Learning outcomes:
Students become familiar with some mathematical theories of education. They will acquire different teaching methods of selected topics of school mathematics. Become familiar with the potential use of history of mathematics in teaching. Students will be prepared to work in the educational process, focusing on the creative application of knowledge in mathematics.

Brief outline of the course:
Student learning process.
Language of mathematics, enactive iconic and symbolic representation.
Using history of mathematics in the teaching mathematics.
Students' learning difficulties and their possible causes.
Teaching mathematical proofs.
Combinatorics, probability, statistics.
Calculus.
Developing mathematical creativity. Motivation.

Recommended literature:
[1] M.Hejný a kol.: Teoria vyučovania matematiky, SPN Blava 1989.
[2] Hejný, M., Kuřina, F.: Dítě, škola a matematika: Konstruktivistické přístupy k vyučování. Portál, Praha 2001.
[3] Fischer, R., Malle, G.: Človek a matematika, SPN Bratislava 1992.
[4] Učebnice a zbierky úloh pre stredné a základné školy.

Course language:
Slovak

Notes:

Course assessment
Total number of assessed students: 92

A	B	C	D	E	FX
82.61	13.04	3.26	1.09	0.0	0.0

Provides: RNDr. Ingrid Semanišinová, PhD.

Date of last modification: 14.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚMV/ DFR/10	**Course name:** Differential equations

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: 1.

Course level: I., II.

Prerequisities:

Conditions for course completion:
Continuous assessment is taken the form of two tests during the semester. Final evaluation is given by continuous assessment (40%), written and oral part of the exam (30% and 30%).

Learning outcomes:
Theory of differential equations is one of the fundamental areas of mathematical analysis. It has numerous applications in various fields of science and technology. The main objective of this course is to familiarize students with the basics of the theory of ordinary differential equations and their systems, and methods for solving certain types of differential equations and systems. We consider them as possible mathematical models of real situations.

Brief outline of the course:
Basic concepts. Elementary methods for solving and applications of the first order differential equations. The existence and uniqueness of solutions to Cauchy problem for differential equations of the first order, the n-th order and for differential systems. The relationship between differential equations of the n-th order and systems. Linear differential equations of the n-th order and linear differential systems - the local and global theorem on the existence and uniqueness
of solutions to Cauchy problem, basic properties of solutions, fundamental system of solutions, structure of general solution, Lagrange method of variation of constants, linear differential equations and systems with constant coefficients. Reduction of the order of differential equations. Euler differential equations. Elimination method for solving the systems of differential equations.

Recommended literature:
1. L. Kluvánek, I. Mišík, M. Švec: Matematika II, SVTL, Bratislava, 1961 (in Slovak).
2. J. Eliaš, J. Horváth, J. Kajan: Zbierka úloh z vyššej matematiky 3, Alfa, Bratislava, 1980 (in Slovak).
3. S. J. Farlow: An introduction to differential equations and their applications, Dover Publications, New York, 2006.
4. W. Kohler, L. Johnson: Elementary differential equations with boundary value problems, Pearson Education, Boston, 2006.
5. M. Tenenbaum: Ordinary differential equations, Dover Publications, New York, 1985.
6. J. C. Robinson: An introduction to ordinary differential equations, Cambridge University Press, Cambridge, 2004.

7. J. Polking, A. Boggess, D. Arnold: Differential equations, Prentice Hall (Pearson), Upper Saddle River, 2006.

Course language:
Slovak

Notes:

Course assessment
Total number of assessed students: 406

A	B	C	D	E	FX
17.24	11.58	21.18	16.75	26.11	7.14

Provides: RNDr. Ivan Mojsej, PhD.

Date of last modification: 14.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚCHV/ DPP1/14	**Course name:** Diploma Project I
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of credits: 1	
Recommended semester/trimester of the course: 1.	
Course level: II.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment
Total number of assessed students: 12

abs	n
100.0	0.0

Provides:
Date of last modification: 17.02.2014
Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚMV/ DPP2a/14	**Course name:** Diploma Project I
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of credits: 1	
Recommended semester/trimester of the course: 1.	
Course level: II.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language: Slovak	
Notes:	
Course assessment Total number of assessed students: 68	
abs	n
100.0	0.0
Provides:	
Date of last modification: 14.02.2014	
Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚCHV/ DPP2/14	**Course name:** Diploma Project II
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of credits: 2	
Recommended semester/trimester of the course: 2.	
Course level: II.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 12	

abs	n
100.0	0.0

Provides: doc. Ing. Viera Vojteková, PhD.
Date of last modification: 17.02.2014
Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚMV/ DPP2b/14	**Course name:** Diploma Project II
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of credits: 2	
Recommended semester/trimester of the course: 2.	
Course level: II.	
Prerequisities: ÚMV/DPP2a/14	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language: Slovak	
Notes:	
Course assessment Total number of assessed students: 69	

abs	n
98.55	1.45

Provides:
Date of last modification: 14.02.2014
Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚMV/ DPP2c/14	**Course name:** Diploma Project III
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of credits: 2	
Recommended semester/trimester of the course: 3.	
Course level: II.	
Prerequisities: ÚMV/DPP2b/14	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language: Slovak	
Notes:	
Course assessment Total number of assessed students: 58	

abs	n
100.0	0.0

Provides:
Date of last modification: 14.02.2014
Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚCHV/ DPP3/14	**Course name:** Diploma Project III
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of credits: 2	
Recommended semester/trimester of the course: 3.	
Course level: II.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment
Total number of assessed students: 15

abs	n
100.0	0.0

Provides: doc. RNDr. Ivan Potočňák, PhD., doc. Ing. Viera Vojteková, PhD.
Date of last modification: 17.02.2014
Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/DPOU/14	**Course name:** Diploma Thesis and its Defence

Course type, scope and the method:
Course type:
Recommended course-load (hours):
Per week: Per study period:
Course method: present

Number of credits: 15

Recommended semester/trimester of the course:

Course level: II.

Prerequisities: ÚCHV/DPP3/14

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 16

A	B	C	D	E	FX
62.5	31.25	6.25	0.0	0.0	0.0

Provides:

Date of last modification: 17.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚCHV/ DSU1a/10	**Course name:** Diplomový seminár z chémie pre XCH
Course type, scope and the method: **Course type:** Practice **Recommended course-load (hours):** **Per week:** 2 **Per study period:** 28 **Course method:** present	
Number of credits: 2	
Recommended semester/trimester of the course: 2.	
Course level: II.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment
Total number of assessed students: 5

abs	n
100.0	0.0

Provides: doc. RNDr. Mária Ganajová, CSc., RNDr. Milena Kristofová
Date of last modification: 03.02.2014
Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚCHV/ DSU1b/10	**Course name:** Diplomový seminár z chémie pre XCH
Course type, scope and the method: **Course type:** Practice **Recommended course-load (hours):** **Per week:** 2 **Per study period:** 28 **Course method:** present	
Number of credits: 2	
Recommended semester/trimester of the course: 3.	
Course level: II.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment
Total number of assessed students: 1

abs	n
100.0	0.0

Provides: doc. RNDr. Mária Ganajová, CSc., RNDr. Milena Kristofová
Date of last modification: 03.02.2014
Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚMV/ DGE/10	**Course name:** Dynamic geometry

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: 3.

Course level: II.

Prerequisities:

Conditions for course completion:
test using a computer, didactic project and final exam

Learning outcomes:
To acquire commands and the concept of dynamic constructions in the program Geogebra and Cabri 3D. To learn to use a dynamic geometry environment for experimentation with geometric objects and their attributes and the investigation of invariant properties of geometric figures and relationships between objects in triangles, quadrilaterals, and conics basic solid figures.

Brief outline of the course:
Constructions and exploration of the properties of triangles, quadrilaterals, circles, and their use in solving construction tasks. Menelaus' theorem, Ceva's theorem, Varignon's theorem, Ptolemy's theorem, cyclic and tangential quadrilaterals, the centre point of polygons. The use of transformations in solving tasks. Constructions of conics and their use in solving problems. Mathematical modeling and exploration of functional dependencies, solving problems for searching of extremes. The cross positions of linear geometric shapes in space, cuts of solid figures, intersetion lines and solid figures. Analysis of the possibilities of using dynamic geometry environment to support active learning of mathematics.

Recommended literature:
1. Vaníček, J.: Počítačové kognitivní technologie ve výuce geometrie. Univerzita Karlova v Praze, 2009.
2. King, J., Schattschneider, D.: Geometry Turned On! Dynamic Software in Learning, Teaching, and Research. The Mathematical Association of America, 1997.
3. De Villiers, M., D.: Rethinking proof with the Geometer's Sketchpad. Key Curriculum Press, 2003.

Course language:
Slovak

Notes:

Course assessment
Total number of assessed students: 11

A	B	C	D	E	FX
63.64	27.27	0.0	9.09	0.0	0.0

Provides: doc. RNDr. Stanislav Lukáč, PhD.

Date of last modification: 14.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPE/APV/09	**Course name:** Educational Action Research

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

Number of credits: 2

Recommended semester/trimester of the course: 3.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 29

A	B	C	D	E	FX
86.21	13.79	0.0	0.0	0.0	0.0

Provides: prof. Volodymyr Starosta, DrSc.

Date of last modification: 04.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

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: 2.

Course level: I., II.

Prerequisities:

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: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPE/ ZMPPV/12	**Course name:** Fundamentals of Educational and Psychological Research Methodology

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

Number of credits: 4

Recommended semester/trimester of the course: 2.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 372

A	B	C	D	E	FX
20.97	27.42	22.85	20.43	7.53	0.81

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

Date of last modification: 04.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KAE/ ZET2/07	**Course name:** Fundamentals of Ethics 2

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: 2.

Course level: II.

Prerequisities: KAE/ZE1/07

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 50

A	B	C	D	E	FX
94.0	6.0	0.0	0.0	0.0	0.0

Provides: PhDr. Andrea Klimková, PhD.

Date of last modification: 29.01.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPE/ VPD/03	**Course name:** General Pedagogy and Didactics

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

Number of credits: 5

Recommended semester/trimester of the course: 1.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 958

A	B	C	D	E	FX
10.65	21.71	25.99	21.82	10.33	9.5

Provides: PaedDr. Renáta Orosová, PhD., Mgr. Zuzana Nováková, PhD.

Date of last modification: 04.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚMV/ GEO2b/10	**Course name:** Geometry II

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 3 / 2 **Per study period:** 42 / 28
Course method: present

Number of credits: 6

Recommended semester/trimester of the course: 1.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:
To obtain knowledge about affine, isometric, and similarity transformations and their properties.

Brief outline of the course:
1. Quadric surfaces (circular and general quadric surfaces)
2. Affine transformations (associated transformation, matrix representation, affinities, fixed points and lines, pseudo-reflections)
3. Isometric transformations (matrix representation, isometries, classification in the plane, composiion of reflections)
4. Similarity transformations (matrix representation, similarities, homothety, composition of homotheties)
5. Geometry of circles (the power of a point with respect to a circle, radical axis of two circles, pencils of circles)

Recommended literature:
1. M. Sekanina et al, Geometry 2, SPN, 1988 (in slovak).
2. O. Šedivý et al, Geometry 2, SPN, 1987 (in slovak).
3. H.S.M. Coxeter, Introduction to geometry, Wiley, 1989.
4. J.T. Smith, Methods of geometry, Wiley, 2000.

Course language:
Slovak

Notes:

Course assessment
Total number of assessed students: 355

A	B	C	D	E	FX
10.42	10.14	19.72	19.72	22.25	17.75

Provides: RNDr. Igor Fabrici, Dr. rer. nat., RNDr. Veronika Hubeňáková

Date of last modification: 14.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚMV/ GEO2c/10	**Course name:** Geometry III

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: 2.

Course level: II.

Prerequisities: ÚMV/GEO2b/10

Conditions for course completion:

Learning outcomes:
A new look on the classical geometric results.

Brief outline of the course:
1. Points and lines connected with a triangle (Menelaus's theorem, Ceva's theorem, points of interest, the incircle and excircles, pedal triangles, Euler line, nine-point circle)
2. Properties of circles (the power of a point with respect to a circle, radical axis of two circles, Simson lines, Ptolemy's theorem, Morley's theorem)
3. Collinearity and concurrence (quadrangles, Varignon's parallelogram, cyclic quadrangles, Brahmagupta's formula, Napoleon triangles)
4. Focal properties of regular conics (Dandelin spheres, tangents and directrix of a regular conic)
5. Inversion with respect to a circle (basic properties, composition of inversions and homotheties)

Recommended literature:
1. H.S.M. Coxeter, S.L. Greitzer, Geometry revisited, MAA, 1967.
2. R.A. Johnson, Advanced Euclidean geometry, Dover Publ., 2007.
3. A.V. Akopyan, A.A. Zaslavsky, Geometry of conics, AMS, 2007.
4. D.A. Brannan, M.F. Esplen, J.J. Gray, Geometry, Cambridge Univ. Press, 2007.

Course language:
Slovak

Notes:

Course assessment
Total number of assessed students: 45

A	B	C	D	E	FX
20.0	26.67	35.56	8.89	8.89	0.0

Provides: RNDr. Igor Fabrici, Dr. rer. nat.

Date of last modification: 14.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KGER/ NJKG/07	**Course name:** 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.

Prerequisities:

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: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

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: 2.

Course level: I., II.

Prerequisities:

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: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

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: 1.

Course level: I., II.

Prerequisities:

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: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ ZCVU/04	**Course name:** Chemical Engineering

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

Number of credits: 5

Recommended semester/trimester of the course: 2.

Course level: II., III.

Prerequisities:

Conditions for course completion:

Learning outcomes:

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

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 5

A	B	C	D	E	FX	N	P
20.0	60.0	20.0	0.0	0.0	0.0	0.0	0.0

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

Date of last modification: 03.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/CHE2/03	**Course name:** Chemical Excursion

Course type, scope and the method:
Course type: Practice
Recommended course-load (hours):
Per week: Per study period: 1t
Course method: present

Number of credits: 4

Recommended semester/trimester of the course: 2.

Course level: II.

Prerequisities: ÚCHV/ACHU/03 or ÚCHV/ACH2/03

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
93.42	6.58	0.0	0.0	0.0	0.0

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

Date of last modification: 03.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/MSSU1/14	**Course name:** Chemistry and Didactics of Chemistry I

Course type, scope and the method:
Course type:
Recommended course-load (hours):
Per week: Per study period:
Course method: present

Number of credits: 1

Recommended semester/trimester of the course:

Course level: II.

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

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 19

A	B	C	D	E	FX
36.84	36.84	21.05	5.26	0.0	0.0

Provides:

Date of last modification: 19.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/MSSU2/14	**Course name:** Chemistry and Didactics of Chemistry II

Course type, scope and the method:
Course type:
Recommended course-load (hours):
Per week: Per study period:
Course method: present

Number of credits: 1

Recommended semester/trimester of the course:

Course level: II.

Prerequisities: ÚCHV/VKOCH/03 and ÚCHV/DCH2/15

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 4

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

Provides:

Date of last modification: 19.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPPaPZ/SDaM/09	**Course name:** Child and Adolescent Sociology

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

Number of credits: 2

Recommended semester/trimester of the course: 4.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 704

A	B	C	D	E	FX
49.01	29.83	15.48	3.69	1.56	0.43

Provides: PhDr. Zlatica Buocová, CSc., Mgr. Alexander Onufrák, PhD.

Date of last modification: 04.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

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.	
Prerequisities:	
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: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

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.	
Prerequisities:	
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: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

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.	
Prerequisities:	
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: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

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.

Prerequisities:

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: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

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.	
Prerequisities:	
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: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

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.	
Prerequisities:	
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: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

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.	
Prerequisities:	
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: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

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.	
Prerequisities:	
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: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

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.	
Prerequisities:	
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: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

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.	
Prerequisities:	
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: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

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.

Prerequisities:

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: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

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.	
Prerequisities:	
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: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

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: 2.

Course level: I., II.

Prerequisities:

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: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: KPE/ MPPa/12	**Course name:** Interim Pedagogical-Psychological Training
Course type, scope and the method: **Course type:** Practice **Recommended course-load (hours):** **Per week: Per study period:** 36s **Course method:** present	
Number of credits: 2	
Recommended semester/trimester of the course: 1.	
Course level: II.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 691	

abs	n
99.86	0.14

Provides: PhDr. Beáta Gajdošová, PhD., PaedDr. Renáta Orosová, PhD., Mgr. Ján Juščák, PhD., Mgr. Zuzana Nováková, PhD.
Date of last modification: 04.02.2014
Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ UECH/03	**Course name:** Introduction to Environmental Chemistry

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

Number of credits: 5

Recommended semester/trimester of the course: 1.

Course level: I., II.

Prerequisities:

Conditions for course completion:
Oral examination

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

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

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

Course language:

Notes:

Course assessment
Total number of assessed students: 189

A	B	C	D	E	FX
48.15	19.05	16.93	9.52	5.82	0.53

Provides: RNDr. Andrea Straková Fedorková, PhD.

Date of last modification: 03.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ FUMCH1/03	**Course name:** Introduction to Material Chemistry

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

Number of credits: 5

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

Course level: I., II.

Prerequisities:

Conditions for course completion:
Seminar work.
Examination.

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

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

Recommended literature:
W. D. Callister, Jr.: Fundamentals of Materials Science and Engineering, John Wiley & Sons, 2001.
Brian S. Mitchell: An Introduction to Materials Engineering and Science: For Chemical and Materials Engineers, John Wiley & Sons,
2004.

Course language:

Notes:

Course assessment
Total number of assessed students: 49

A	B	C	D	E	FX
85.71	12.24	0.0	0.0	0.0	2.04

Provides: doc. RNDr. Renáta Oriňáková, PhD.

Date of last modification: 03.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ USA/03	**Course name:** Introduction to Structure Analysis

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

Number of credits: 5

Recommended semester/trimester of the course: 1.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 1

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

Provides: doc. RNDr. Ivan Potočňák, PhD.

Date of last modification: 03.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚMV/ DPU/14	**Course name:** Magister Thesis and its Defense

Course type, scope and the method:
Course type:
Recommended course-load (hours):
Per week: Per study period:
Course method: present

Number of credits: 15

Recommended semester/trimester of the course:

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:
Slovak

Notes:

Course assessment
Total number of assessed students: 4

A	B	C	D	E	FX
75.0	25.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 14.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚMV/MDM/14	**Course name:** Mathematics and didactics of mathematics

Course type, scope and the method:
Course type:
Recommended course-load (hours):
Per week: Per study period:
Course method: present

Number of credits: 1

Recommended semester/trimester of the course:

Course level: II.

Prerequisities: ÚMV/GEO2b/10 and ÚMV/DDMa/14 and ÚMV/DDMb/14 and ((ÚMV/GEO2c/10 and ÚMV/ATA/14) or (ÚMV/GEO2c/10 and ÚMV/PSTb/10) or (ÚMV/GEO2c/10 and ÚMV/DFR/10) or (ÚMV/ATA/14 and ÚMV/PSTb/10) or (ÚMV/ATA/14 and ÚMV/DFR/10) or (ÚMV/PSTb/10 and ÚMV/DFR/10))

Conditions for course completion:
Acquiring the required number of credits in the structure defined by the study plan.

Learning outcomes:
Evaluation of student‘s competences with respect to the profile of the graduate.

Brief outline of the course:

Recommended literature:

Course language:
Slovak

Notes:

Course assessment
Total number of assessed students: 12

A	B	C	D	E	FX
25.0	33.33	16.67	25.0	0.0	0.0

Provides:

Date of last modification: 14.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/DCHa/03	**Course name:** Methodology of Chemistry Teaching I

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: 3

Recommended semester/trimester of the course: 2.

Course level: II.

Prerequisities: ÚCHV/SPC1a/03

Conditions for course completion:
Seminar work
Oral examination

Learning outcomes:
The aim of this subject is to apply the pedagogical, psychological and didactic relation of education with connection to theory and praxis. It is meant for education of chemistry on primary and secondary school.

Brief outline of the course:
Methodology of Teaching Chemistry as Science and as object of Teaching. Select, structural, compassion, documentation of curriculum chemistry, concretization of pedagogical-educational aims. View of forms Teaching chemistry, methods of Teaching and means disclosure of curriculum on the concrete subject of curriculum secondary chemistry. Complex summary of use material didactic resources in the academic too contemporary forms Teaching of chemistry. The use of didactic technology in theoretical and experimental Teaching of chemistry. Hobby and out of school activities in chemistry.

Recommended literature:
1. Ganajová, M.: Vybrané kapitoly zo všeobecnej didaktiky chémie, UPJŠ Košice 2009, ISBN 978-80-7097-756-9
2. Ganajová, M., Kalafutová, J.: http://moodle.science.upjs.sk e-kurz: Vybrané kapitoly zo všeobecnej didaktiky chémie pre rok 2008/2009

Course language:

Notes:

Course assessment
Total number of assessed students: 238

A	B	C	D	E	FX
68.07	18.91	6.72	3.78	1.68	0.84

Provides: doc. RNDr. Mária Ganajová, CSc., RNDr. Milena Kristofová

Date of last modification: 03.02.2014
Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/DCHb/03	**Course name:** Methodology of Chemistry Teaching II

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

Number of credits: 5

Recommended semester/trimester of the course: 3.

Course level: II.

Prerequisities: ÚCHV/DCHa/03

Conditions for course completion:
Seminar work
Oral examination

Learning outcomes:
The aim of this subject is an analysis of a concrete theme and themes of chemistry curriculum meant for secondary school. Students should familiarize with contents, selected teaching methods and possibility of ICT applying in chemistry education

Brief outline of the course:
Didactic of Atomic structure
Didactic of Molecular structure and chemical bonding
Didactic of Chemical action
Didactic of Periodic system of elements
Didactic of Chemical thermodynamics and kinetics
Didactic of Organic chemistry
Didactic of Chemistry of common life

Recommended literature:
1. Pachman E. a kol.: Speciální didaktika chemie. SPN Praha 1986.
2. Smik L. a kol.: Špeciálna didaktika chémie. Učebný text I. a II. UPJŠ 1984.
3. Pfeifer P.: Konkrete Fachdidaktik Chemie Oldenbourg Verlag GmbH. München 1992.
4. The primary and secondary textbook of chemistry
5. Journals: J. Chem. Educ., Chemie in der Schule, Přírodní vědy šk.

Course language:

Notes:

Course assessment
Total number of assessed students: 200

A	B	C	D	E	FX
61.5	21.5	12.5	2.5	2.0	0.0

Provides: doc. RNDr. Mária Ganajová, CSc., RNDr. Milena Kristofová
Date of last modification: 03.02.2014
Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚFV/ FEP1/07	**Course name:** Microcomputer Based Science Laboratory

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

Number of credits: 4

Recommended semester/trimester of the course:

Course level: II.

Prerequisities:

Conditions for course completion:
test 30 points
active participation 10 points
project (development of mathematical model, videomeasurement and physical experiment) 60 points
The final assessment is based on the sum of partial results

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

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

Recommended literature:
[1]Koubek, V., Pecen, I.: Fyzikálne experimenty a modely v školskom mikropočítačom podporovanom laboratóriu, Univerzita Komenského, Bratislava, 1999
[2]Príručka COACH
[3]http://physedu.science.upjs.sk/sis/fyzika/experimenty/index.htm

Course language:
Slovak

Notes:

Course assessment
Total number of assessed students: 34

A	B	C	D	E	FX
44.12	44.12	11.76	0.0	0.0	0.0

Provides: doc. RNDr. Zuzana Ješková, PhD.

Date of last modification: 18.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚFV/ MDT06/06	**Course name:** Modern Didactical Technics

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

Number of credits: 3

Recommended semester/trimester of the course:

Course level: I., II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

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: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

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.	
Prerequisities:	
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: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/NTVC/06	**Course name:** New Trends in Chemistry Teaching

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

Number of credits: 5

Recommended semester/trimester of the course: 2.

Course level: II.

Prerequisities:

Conditions for course completion:
Seminar work
Oral examination

Learning outcomes:
The aim of this subject is to acquaint future teachers of chemistry with brand new trends of education in European Union countries.

Brief outline of the course:
Chemistry of everyday life both at home and abroad, educational texts, chemical experiments, CD-ROMs, Chemistry Nourishes Us, Chemistry of Water, Soil and Air
Chemical experiments of everyday life connected with the themes such as Chemistry Nourishes Us, Cosmetic Chemistry, Acids and Bases of Common Life, Project-based learning in chemistry, Teleprojects in chemistry, Using ICT in the teaching of themes: Chemical experiments of everyday life, Vitamins, Mineral substances and Mineral water

Recommended literature:
1. Ganajová, M. 2005: Chemické experimenty s vybranými produktami z obchodu. UPJŠ v Košiciach, Prírodovedecká fakulta, 110 s. ISBN 80-7097-611-X
2. Obendrauf, V., Becker, R., Ganajová, M., Dunčková, I., Müllerová, V., Kövaryová, E.: Chémia dnes. Košice: Prírodovedecká fakulta UPJŠ, 2001. 80s. ISBN 80-7097-472-9
3. http://kekule.science.upjs.sk

Course language:

Notes:

Course assessment
Total number of assessed students: 74

A	B	C	D	E	FX
93.24	5.41	1.35	0.0	0.0	0.0

Provides: doc. RNDr. Mária Ganajová, CSc., RNDr. Milena Kristofová

Date of last modification: 03.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚINF/ PES1/04	**Course name:** Pedagogical software

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

Number of credits: 4

Recommended semester/trimester of the course:

Course level: II.

Prerequisities:

Conditions for course completion:
Assessment of preliminary assignments - a review of selected educational software, specification of own educational software.
In final exam students will demonstrate an overview of types, evaluation and life cycle of educational software in written form and they will present and defend their own final project - educational interactive hypertext project (containing motivation, interactive simulation, collection of tasks, vocabulary, autotest), respectively an educational game (labyrinth, pexeso, quiz, crossword, interactive story, simulation) including methodological guide for teachers.including methodological guide for teachers.

Learning outcomes:
- To acquire an overview of the types of educational software, its evaluation, process development and use in education.
- To create your own educational interactive hypertext, respectively an educational game including methodological guide for teachers.

Brief outline of the course:
Typology of educational software, its evaluation, process development and use in education. Creation of educational interactive hypertext (containing motivation, interactive simulation, collection of tasks, vocabulary, autotest), respectively an educational game (labyrinth, pexeso, quiz, crossword, interactive story, simulation) including methodological guide for teachers.

Recommended literature:
LACHS, V. Making Multimedia in the Classroom. London : RoutledgeFalemer, 2000. ISBN 0415216842.
GÖBEL, S. et al. Technologies for Interactive Digital Storytelling and Entertainment (LNCS 4326). Darmstadt : Springer, 2006. ISBN 3540499342.
SCHURMANN, E. M., PARDI, W. J. Dynamické HTML v akci. Praha : Computer Press, 2001. ISBN 807226401X.
KOSEK, J. Téměř vše o WWW. [online] Dostupné na internete: <http://www.kosek.cz>.

Course language:

Notes:

Course assessment
Total number of assessed students: 94

A	B	C	D	E	FX
23.4	28.72	26.6	8.51	10.64	2.13

Provides: RNDr. Ľubomír Šnajder, PhD.

Date of last modification: 03.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPE/PP/14	**Course name:** Pedagogy and Psychology

Course type, scope and the method:
Course type:
Recommended course-load (hours):
Per week: Per study period:
Course method: present

Number of credits: 1

Recommended semester/trimester of the course:

Course level: II.

Prerequisities: KPE/VPD/03 and KPPaPZ/PPGS/04 or KPPaPZ/PaSPP/09

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 133

A	B	C	D	E	FX
16.54	30.83	28.57	21.05	1.5	1.5

Provides:

Date of last modification: 04.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPE/ PVC/09	**Course name:** Pedagogy of Leisure Time

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

Number of credits: 2

Recommended semester/trimester of the course: 3.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 222

A	B	C	D	E	FX
75.68	16.67	6.31	0.0	1.35	0.0

Provides: Mgr. Ján Juščák, PhD.

Date of last modification: 04.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: Dek. PF UPJŠ/PPZ/13	**Course name:** Personality Development and Key Competences for Success on a Labour Market

Course type, scope and the method:
Course type: Practice
Recommended course-load (hours):
Per week: Per study period: 14s
Course method: present

Number of credits: 2

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

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 39

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

Provides: RNDr. Peter Stefányi, PhD.

Date of last modification: 17.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚMV/ PSTb/10	**Course name:** Probability and statistics II

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

Number of credits: 5

Recommended semester/trimester of the course: 1.

Course level: I., II.

Prerequisities:

Conditions for course completion:
To obtain in two written tests during the semester at least 50%. Total evaluation based on written tests and oral exam.

Learning outcomes:
To provide a grounding in statistical methods and their applications for real life problems.

Brief outline of the course:
Random vectors, their distributions and characteristics. Joint and marginal distributions. Correlation and regression, properties of correlation coefficient. Random sample, sampling distributions and characteristics. Some important statistics and their distributions. Point estimators and their properties. Maximum likelihood method. Interval estimates, confidence interval construction.Testing of statistical hypothesis, critical region, level of significance. Methods for searching optimal critical regions. Some important parametric and nonparametric tests.

Recommended literature:
1. Skřivánková V.: Probability and statistics, UPJŠ, Košice, 2009.
2. Dekking at al.: A modern Introduction to Probability and Statistics. Springer, 2005.
3. Sincich T.: Statistics by example, Dellen Publishing Company, New Jersey, 1990.

Course language:
Slovak

Notes:

Course assessment
Total number of assessed students: 149

A	B	C	D	E	FX
17.45	19.46	20.13	24.83	12.75	5.37

Provides: doc. RNDr. Valéria Skřivánková, CSc., RNDr. Martina Hančová, PhD.

Date of last modification: 14.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPPaPZ/PPGS/04	**Course name:** Psychology and Educational Psychology

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

Number of credits: 5

Recommended semester/trimester of the course: 1.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 790

A	B	C	D	E	FX
10.13	17.22	21.39	22.03	24.81	4.43

Provides: Prof. PhDr. Oľga Orosová, CSc., PhDr. Karolína Barinková, PhD., Mgr. Lucia Hricová, PhDr. Anna Janovská, PhD.

Date of last modification: 04.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚTVŠ/ ÚTVŠ/CM/13	**Course name:** Seaside Aerobic Exercise
Course type, scope and the method: **Course type:** Practice **Recommended course-load (hours):** **Per week:** 36 **Per study period:** 504 **Course method:** present	
Number of credits: 2	
Recommended semester/trimester of the course:	
Course level: I., II.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
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: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ VKACH/03	**Course name:** Selected Topics in Analytical Chemistry

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

Number of credits: 5

Recommended semester/trimester of the course: 3.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

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

Recommended literature:
Skoog D.A.: Principles of Instrumental Analysis. Saunders Col. Publishing, New York 1985.
D.Harvey: Modern Analytical Chemistry. McGraw Hill, Boston, 2000.

Course language:

Notes:

Course assessment
Total number of assessed students: 3

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

Provides: doc. RNDr. Taťána Gondová, CSc.

Date of last modification: 03.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ VKA/04	**Course name:** Selected Topics in Inorganic Chemistry

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

Number of credits: 5

Recommended semester/trimester of the course: 3.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:
To make the acquaintance of actual status of research in inorganic chemistry.

Brief outline of the course:
Cu-Zn heterobimetallic compounds: preparation, structure and properties.
Biological and physicochemical properties of some zinc komplex compounds with bioactive ligands.
Pentacoordinated Copper(II) compounds: a trigonal bipyramid or a tetragonal pyramid?
Structure, spectral and thermal properties of cyanoargentates.
Hydrothermal synthesis in inorganic chemistry.
Materials on the basis of inclusion compounds, their structure, properties and application.

Recommended literature:
1. Greenwood, N.N., Earnshaw, A.: Chemistry of the elements I and II, Pergamon Press N.Y., 1993
2. J. E. Huheey, E.A. Keiter, R.L. Keiter: Inorganic Chemistry: Principles of Structure and Reactivity (4th Edition, Addison-Wesley Pub Co, 4th edition,1997

Course language:

Notes:

Course assessment
Total number of assessed students: 197

A	B	C	D	E	FX
41.62	27.41	17.77	8.12	5.08	0.0

Provides: prof. RNDr. Juraj Černák, CSc., prof. RNDr. Katarína Györyová, DrSc., doc. RNDr. Vladimír Zeleňák, PhD., doc. RNDr. Zuzana Vargová, Ph.D., doc. RNDr. Ivan Potočňák, PhD., doc. RNDr. Jozef Chomič, CSc., doc. RNDr. Mária Reháková, CSc., RNDr. Juraj Kuchár, PhD.

Date of last modification: 03.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ VKOCH/03	**Course name:** Selected topics in organic chemistry

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

Number of credits: 5

Recommended semester/trimester of the course: 3.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 74

A	B	C	D	E	FX
35.14	17.57	21.62	17.57	8.11	0.0

Provides: doc. RNDr. Ján Imrich, CSc.

Date of last modification: 03.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚMV/ VMA/10	**Course name:** Selected topics on mathematical analysis

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: 3

Recommended semester/trimester of the course: 2.

Course level: II.

Prerequisities:

Conditions for course completion:
Final evaluation is given by continuous assessment, written and oral part of the exam.

Learning outcomes:
Extend knowledge of improper integrals, development functions into infinite series obtained in the basic course of mathematical analysis.

Brief outline of the course:
Improper and parametric integral. Fourier's series.

Recommended literature:
I. Kluvánek, L. Mišík, M. Švec, Matematika II; SVTL, Bratislava, 1959.
2. J.C. Bowman, Honours Calculus, Math.117/118, University of A. Edmond, Canada, 2010.
3. S. Lang, Undegraduate Analysis, Springer, 1997.

Course language:
Slovak

Notes:

Course assessment
Total number of assessed students: 53

A	B	C	D	E	FX
16.98	5.66	26.42	18.87	26.42	5.66

Provides: Mgr. Jozef Kiseľák, PhD., doc. RNDr. Ondrej Hutník, PhD.

Date of last modification: 26.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚMV/ SHM/10	**Course name:** Seminar on history of mathematics

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.

Prerequisities:

Conditions for course completion:
Homework, presentation on the chosen topic during the seminar.
More than 91 points - evaluation of A.
81-90 points - evaluation of B.
71-80 points - rating C.
61-70 points - evaluation of D.
51-60 points - evaluation of E.
Less than 50 points - FX evaluation.

Learning outcomes:
Students get an overview of the history of the development of certain mathematical disciplines and selected terms and about parallel between phylogenesis and ontogenesis of mathematical thinking.

Brief outline of the course:
Mathematics in Early Civilizations. Greek Mathematics. Mathematics in the Near and Far East (Arabia, China, India). Medieval European Mathematics. The Renaissance of Mathematics. The Beginning of Modern Mathematics.

Recommended literature:
Burton, D. M.: The History of Mathematics: An Introduction. McGraw−Hill, 2007.
Devlin, K.: Jazyk matematiky. Dokořán, 2002 (in czech)
Kolman, A.: Dejiny matematiky ve starověku. Academia, Praha, 1968 (in slovak)
Juškevič, A. P.: Dejiny matematiky ve středověku. Academia, Praha 1977 (in slovak)
Znám,Š. a kol.: Pohľad do dejín matematiky. Alfa, Bratislava, 1986 (in slovak)
Konforovič, A.G.: Významné matematické úlohy, SPN Praha, 1989 (in slovak)

Course language:
Slovak

Notes:

Course assessment
Total number of assessed students: 111

A	B	C	D	E	FX
80.18	5.41	9.01	2.7	2.7	0.0

Provides: RNDr. Ingrid Semanišinová, PhD.

Date of last modification: 14.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚMV/SSM/10	**Course name:** Seminar on school mathematics

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

Number of credits: 2

Recommended semester/trimester of the course: 1.

Course level: II.

Prerequisities:

Conditions for course completion:
written tests, seminar paper
final test

Learning outcomes:
To teach students various methods of solving mathematical problems of primary and secondary schools. Point out the different approaches to solving specific problems in mathematics teaching at primary and secondary schools.

Brief outline of the course:
Basic knowledge of five topics in school mathematics determined SEP. Solving of equations, inequations and their systems. Properties of elementary functions. Sequences and number series. Properties and construction of geometric figures. Geometric transformations. Propositional logic and mathematical proofs. The use of statistical methods for data processing.

Recommended literature:
[1] Hejný, M. et al., Dvacet pět kapitol z didaktiky matematiky. Charles university in Prague, 2004.
[2] Kopka, J., Hrozny problémů ve školské matematice, Univerzita J. E. Purkyně, Ústí nad Labem 1999.
[3] Textbooks and collections of tasks of mathematics at PS and SS.

Course language:
slovak

Notes:

Course assessment
Total number of assessed students: 144

A	B	C	D	E	FX
34.72	12.5	22.22	18.06	12.5	0.0

Provides: doc. RNDr. Stanislav Lukáč, PhD.

Date of last modification: 24.04.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚMV/ SMO/10	**Course name:** Seminar to mathematical olympiad

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., II.

Prerequisities:

Conditions for course completion:
Individual problem solving during seminars and homework.
More than 91 points - evaluation of A.
81-90 points - evaluation of B.
71-80 points - rating C.
61-70 points - evaluation of D.
51-60 points - evaluation of E.
Less than 50 points - FX evaluation.

Learning outcomes:
Students become familiar with solving problems from mathematical olympiads and mathematical competitions. They acquire theoretical basics necessary to lead mathematical group of talented children.

Brief outline of the course:
Number theory.
Equations, inequations, inequalities.
Word problems.
Planimetry.
Stereometry.
Combinatorics. Pigeonhole principle. Combinatorial geometry. Probability.
Math games. Interesting problems.

Recommended literature:
Brožúry z edície Škola mladých matematikov. (in slovak)
Séria brožúr: XY. ročník matematickej olympiády. (in slovak)
Ziegler, G.M.: Matematika Vám to spočítá, Universum, Praha, 2011. (in czech)
Zhouf, J. a kol.: Matematické příběhy z korespondenčních seminářu, Prometheus, Praha, 2006. (in czech)

Course language:
Slovak

Notes:

Course assessment
Total number of assessed students: 128

A	B	C	D	E	FX
67.19	12.5	10.16	7.03	3.13	0.0

Provides: RNDr. Ingrid Semanišinová, PhD.

Date of last modification: 14.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPPaPZ/SPVKE/07	**Course name:** Social-Psychological Training of Coping with Critical Life Situations

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

Number of credits: 2

Recommended semester/trimester of the course: 2.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 101

abs	n	z
97.03	2.97	0.0

Provides:

Date of last modification: 04.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ SPC1a/03	**Course name:** Special practising the school experiments I

Course type, scope and the method:
Course type: Practice
Recommended course-load (hours):
Per week: 4 **Per study period:** 56
Course method: present

Number of credits: 5

Recommended semester/trimester of the course: 1.

Course level: II.

Prerequisities:

Conditions for course completion:
Continuous checking of theoretical preparation, development of report and presentation.
Semestral test

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

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

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

Course language:

Notes:

Course assessment
Total number of assessed students: 181

A	B	C	D	E	FX
61.88	29.83	7.18	1.1	0.0	0.0

Provides: doc. RNDr. Mária Ganajová, CSc., RNDr. Milena Kristofová

Date of last modification: 03.02.2014
Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ SPC1b/03	**Course name:** Special practising the school experiments II

Course type, scope and the method:
Course type: Practice
Recommended course-load (hours):
Per week: 3 **Per study period:** 42
Course method: present

Number of credits: 3

Recommended semester/trimester of the course: 2.

Course level: II.

Prerequisities:

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

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

Brief outline of the course:
Qualitative analysis of organic compounds
Alkanes - preparation of methane
Alkenes preparation and addition reactions of ethene, addition reactionf of β-carotene
Alkynes, Aromatic hydrocarbons and their derivatives – preparation of benzene, aromatic electrophilic substitution reactions – nitration of toluene and naphthalene, preparation of benzyl bromide
Halogenoderivatives – preparation of chloroethane, chloroform, methyl iodide, iodoform
Hydroxoderivatives – properties and reactivity - methanol, ethanol, ethylene glycol, glycerol, preparation of sodium ethanolate and sodium phenoxide, bromation of phenol, colour reactions of phenols, naphtols
Oxoderivatives – diethyl ether – preparation and properties, Aldehydes and Ketones – preparation of formaldehyde, oxidation of formaldehyde, acetone – addition of sodium hydrogensulfite
Carboxylic acids and their derivatives – preparation and properties of soap
Natural compounds – carbohydrates, proteins, amino acids, lipids
Factors that affect the rate of chemical reactions – temperature and concentration
Isolation of the fragrant components using steam distillation

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

Course language:
slovak

Notes:

Course assessment
Total number of assessed students: 160

A	B	C	D	E	FX
33.75	29.38	20.0	11.88	5.0	0.0

Provides: RNDr. Jana Špaková Raschmanová, PhD., RNDr. Ján Elečko, RNDr. Margaréta Takácsová, RNDr. Kvetoslava Stanková, PhD.

Date of last modification: 03.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/STOX/04	**Course name:** Special Toxicology

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

Number of credits: 5

Recommended semester/trimester of the course: 3.

Course level: II.

Prerequisities: ÚCHV/ZTOX/04

Conditions for course completion:

Learning outcomes:
Goal of the course is to provide the students with a knowledge of toxicology of organic and inorganic compounds, drugs, food additives, e.g., safety of substances, designation of substances in accordance of norm of European Union and order of Government of Slovak Republic.

Brief outline of the course:
Goal of the course is to provide the students with a knowledge of toxicology of organic and inorganic compounds, drugs, food additives, e.g., safety of substances, designation of substances in accordance of norm of European Union and order of Government of Slovak Republic.

Recommended literature:
J. A. Timbrell: Introduction to Toxicology, Taylor and Francis, London 1989.
H. Kenneth Dillon, Mat H. Ho: Biological Monitoring of Exposure to
Chemicals: Metals, John Wiley & Sons, New York 1991.
V. E. Forbes, T. L. Forbes: Toxicology in Theory and Practice, Chapmane Hall, London 1994.
H. M. Stahr: Analytical Methods in Toxicology, John Wiley & Sons, New York 1991.

Course language:

Notes:

Course assessment
Total number of assessed students: 192

A	B	C	D	E	FX
50.52	23.96	17.19	6.25	2.08	0.0

Provides: prof. RNDr. Katarína Györyová, DrSc.

Date of last modification: 03.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚTVŠ/ TVa/11	**Course name:** Sports Activities I.

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

Number of credits: 2

Recommended semester/trimester of the course: 1.

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

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

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: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚTVŠ/ TVb/11	**Course name:** Sports Activities II.

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

Number of credits: 2

Recommended semester/trimester of the course: 2.

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

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

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: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚTVŠ/ TVc/11	**Course name:** Sports Activities III.

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

Number of credits: 2

Recommended semester/trimester of the course: 3.

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

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

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: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚTVŠ/ TVd/11	**Course name:** Sports Activities IV.
Course type, scope and the method: **Course type:** Practice **Recommended course-load (hours):** **Per week:** 2 **Per study period:** 28 **Course method:** present	
Number of credits: 2	
Recommended semester/trimester of the course: 4.	
Course level: I., I.II., II.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
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: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/SAZ1/03	**Course name:** Stereochemistry of Inorganic Compounds

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: 4

Recommended semester/trimester of the course: 1.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

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

Recommended literature:
Kepert, D. L.: Inorganic Stereochemistry. Springer-Verlag, Berlin, 1982.
Kettle, S. F. A.: Symmetry and Structure. John Wiley & Sons, New York, 1985.

Course language:

Notes:

Course assessment
Total number of assessed students: 41

A	B	C	D	E	FX
58.54	21.95	17.07	0.0	2.44	0.0

Provides: doc. RNDr. Vladimír Zeleňák, PhD.

Date of last modification: 03.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚMV/ SVK/10	**Course name:** Students scientific conference

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:

Course level: I., II.

Prerequisities:

Conditions for course completion:

Learning outcomes:
Individual scientific work of students. Publishing of obtained results in a written form and as a public presentation.

Brief outline of the course:

Recommended literature:
With respect to the research problematics (article in journals, books).

Course language:
Slovak or English

Notes:

Course assessment
Total number of assessed students: 47

A	B	C	D	E	FX
97.87	2.13	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 14.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚTVŠ/ LKSp//13	**Course name:** Summer Course-Rafting of TISA River
Course type, scope and the method: **Course type:** Practice **Recommended course-load (hours):** **Per week:** 36 **Per study period:** 504 **Course method:** present	
Number of credits: 2	
Recommended semester/trimester of the course:	
Course level: I., II.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
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: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚTVŠ/ KP/12	**Course name:** Survival Course
Course type, scope and the method: **Course type:** Practice **Recommended course-load (hours):** **Per week:** 36 **Per study period:** 504 **Course method:** present	
Number of credits: 2	
Recommended semester/trimester of the course:	
Course level: I., II.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
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: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPPaPZ/UPR/03	**Course name:** The Art of Aiding by Verbal Exchange

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

Number of credits: 2

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

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 47

A	B	C	D	E	FX
87.23	4.26	2.13	2.13	0.0	4.26

Provides: Mgr. Ondrej Kalina, PhD.

Date of last modification: 04.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚFV/ VMV1/04	**Course name:** Using Multimedia in Education

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

Number of credits: 4

Recommended semester/trimester of the course: 2.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 85

A	B	C	D	E	FX
85.88	10.59	0.0	0.0	1.18	2.35

Provides: doc. RNDr. Marián Kireš, PhD., RNDr. Rastislav Adamek, PhD.

Date of last modification: 18.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ VKCH/10	**Course name:** Vybrané kapitoly z chémie

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

Number of credits: 4

Recommended semester/trimester of the course: 1.

Course level: II.

Prerequisities:

Conditions for course completion:
Terminal examination by written form.

Learning outcomes:
Organic chemistry:
The general review on the basic chemistry of saccharides, lipids, amino acids and peptides.
Inorganic chemstry:
To get acquaintance of the students with the stereochemistry of inorganic compounds, methods of the study and its influence on the properties of the compounds. Moreover to get acqaintance of the students with actual direction of inorganic chemistry in the area of nanomaterials.

Brief outline of the course:
Organic chemistry:
Nomenclature of monosaccharides, their stereochemistry (the Fischer projection, the Haworth projection, conformation of sugars). Monosaccharide derivatives. Ascending reactions. Oligosaccharides and polysaccharides.
Lipids, their structure and classification. Groups of lipids. Triacylglycerols, glycerophospholipids sfingophospholipids, glycosphingolipids.
Amino acids, their nomenclature, classification and stereochemistry. Synthesis of amino acids. Nonribosomal construction of peptides.
Inorganic chemistry:
Symmetry, elements of symmetry, point groups, symmetrical properties of orbitals and bonds. Principles of stereochemistry, VSEPR, configuration of molecules, polyhedra, regular and semiregular polyhedra, the use of concept of symmetry in IR and UV-VIS spectroscopy. Nanochemistry - definition, bonds in nanoparticles and nanopowders, interactions between nanoparticles. Unique properties of nanomaterials, new methods of the synthesis of nanomaterials.

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

Course language:

Notes:

Course assessment
Total number of assessed students: 101

A	B	C	D	E	FX
16.83	20.79	36.63	20.79	3.96	0.99

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

Date of last modification: 03.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚTVŠ/ ZKLS//13	**Course name:** Winter Ski Training Course
Course type, scope and the method: **Course type:** Practice **Recommended course-load (hours):** **Per week:** 36 **Per study period:** 504 **Course method:** present	
Number of credits: 2	
Recommended semester/trimester of the course:	
Course level: I., II.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
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: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ XBCH/04	**Course name:** Xenobiochemistry

Course type, scope and the method:
Course type: Lecture
Recommended course-load (hours):
Per week: 3 **Per study period:** 42
Course method: present

Number of credits: 5

Recommended semester/trimester of the course: 2.

Course level: II.

Prerequisities:

Conditions for course completion:
test

Learning outcomes:
Students obtained modern knowledge of xenobiotics metabolism in living organisms

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

Recommended literature:
Z. Ďuračková: Voľné radikály a antioxidanty v medicíne, Slovak akademik press 1998.
Z.Vodrážka : Biochémia, Praha, 1996.
A. Jindra: Biochémia, molekulárnobiologické a farmakologické aspekty, Praha, 1985.

Course language:

Notes:

Course assessment
Total number of assessed students: 32

A	B	C	D	E	FX
59.38	21.88	12.5	3.13	3.13	0.0

Provides: RNDr. Danica Sabolová, PhD.

Date of last modification: 03.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., prof. RNDr. Jozef Doboš, CSc., prof. Volodymyr Starosta, DrSc.