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

Course assessment
Total number of assessed students: 203

A	B	C	D	E	FX
40.39	29.06	14.29	9.85	6.4	0.0

Provides: doc. RNDr. Stanislav Lukáč, PhD.
Date of last modification: 27.02.2018
Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Oľga Orosová, CSc.Guaranteeprof. RNDr. Jozef Doboš, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ AMCU/15	**Course name:** Aktivizujúce metódy výučby chémie

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

Number of credits: 5

Recommended semester/trimester of the course: 2.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment
Total number of assessed students: 29

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

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

Date of last modification: 26.02.2018

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

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:
It is based on the results of written and oral exam.

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:
Sets of numbers N, Z, Q a R, their axiomatical building, operations and ordering.

Recommended literature:
J. Blažek a kol.: Algebra a teoretická aritmetika I. díl. SPN, Praha 1983
K. Hruša: Elementární aritmetika. Přírodovědecké vydavatelství, Praha 1953
W. Sierpinski: Arytmetyka teoretyczna. PWN, Varšava 1966
T. Šalát a kol.: Algebra a teoretická aritmetika (2). Alfa, Bratislava - SNTL Praha 1986

Course language:
Slovak

Course assessment
Total number of assessed students: 55

A	B	C	D	E	FX
52.73	23.64	9.09	12.73	1.82	0.0

Provides: doc. RNDr. Matúš Harminc, CSc.

Date of last modification: 27.02.2018

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

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:

Course assessment
Total number of assessed students: 100

A	B	C	D	E	FX
47.0	22.0	18.0	7.0	6.0	0.0

Provides: RNDr. Danica Sabolová, PhD.

Date of last modification: 26.02.2018

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

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:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment
Total number of assessed students: 88

A	B	C	D	E	FX
94.32	5.68	0.0	0.0	0.0	0.0

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

Date of last modification: 26.02.2018

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

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/DCH1/15	**Course name:** Didaktika chémie I

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

Number of credits: 4

Recommended semester/trimester of the course: 2.

Course level: II.

Prerequisities: ÚCHV/SPC1a/03

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment
Total number of assessed students: 78

A	B	C	D	E	FX
70.51	19.23	7.69	1.28	1.28	0.0

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

Date of last modification: 26.02.2018

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

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/DCH2/15	**Course name:** Didaktika chémie II

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

Number of credits: 4

Recommended semester/trimester of the course: 3.

Course level: II.

Prerequisities: ÚCHV/DCH1/15

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment
Total number of assessed students: 78

A	B	C	D	E	FX
76.92	15.38	6.41	1.28	0.0	0.0

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

Date of last modification: 26.02.2018

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

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

Course assessment
Total number of assessed students: 120

A	B	C	D	E	FX
37.5	38.33	15.83	5.83	2.5	0.0

Provides: doc. RNDr. Dušan Šveda, CSc.
Date of last modification: 27.02.2018
Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Oľga Orosová, CSc.Guaranteeprof. RNDr. Jozef Doboš, CSc.

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: 2 / 2 **Per study period:** 28 / 28
Course method: present

Number of credits: 4

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

Course assessment
Total number of assessed students: 136

A	B	C	D	E	FX
79.41	15.44	3.68	0.74	0.74	0.0

Provides: RNDr. Ingrid Semanišinová, PhD.

Date of last modification: 27.02.2018

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

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

Course assessment
Total number of assessed students: 442

A	B	C	D	E	FX
17.42	11.99	20.36	17.87	25.79	6.56

Provides: Mgr. Jozef Kiseľák, PhD.

Date of last modification: 27.02.2018

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

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

Course assessment
Total number of assessed students: 25

A	B	C	D	E	FX
56.0	32.0	8.0	4.0	0.0	0.0

Provides: doc. RNDr. Stanislav Lukáč, PhD.
Date of last modification: 27.02.2018
Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Oľga Orosová, CSc.Guaranteeprof. RNDr. Jozef Doboš, CSc.

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:

Course assessment
Total number of assessed students: 52

A	B	C	D	E	FX
78.85	19.23	1.92	0.0	0.0	0.0

Provides:

Date of last modification: 26.02.2018

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

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:	
Course assessment Total number of assessed students: 46	

abs	n
100.0	0.0

Provides:
Date of last modification: 26.02.2018
Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Oľga Orosová, CSc.Guaranteeprof. RNDr. Jozef Doboš, CSc.

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:	
Course assessment Total number of assessed students: 45	

abs	n
100.0	0.0

Provides:
Date of last modification: 26.02.2018
Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Oľga Orosová, CSc.Guaranteeprof. RNDr. Jozef Doboš, CSc.

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	
Course assessment Total number of assessed students: 88	

abs	n
100.0	0.0

Provides: doc. RNDr. Dušan Šveda, CSc.
Date of last modification: 27.02.2018
Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Oľga Orosová, CSc.Guaranteeprof. RNDr. Jozef Doboš, CSc.

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	
Course assessment Total number of assessed students: 89	

abs	n
98.88	1.12

Provides: prof. RNDr. Jozef Doboš, CSc.	
Date of last modification: 27.02.2018	
Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Oľga Orosová, CSc.Guaranteeprof. RNDr. Jozef Doboš, CSc.	

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	
Course assessment Total number of assessed students: 72	

abs	n
100.0	0.0

Provides:
Date of last modification: 27.02.2018
Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Oľga Orosová, CSc.Guaranteeprof. RNDr. Jozef Doboš, CSc.

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:	
Course assessment Total number of assessed students: 51	

abs	n
100.0	0.0

Provides:
Date of last modification: 26.02.2018
Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Oľga Orosová, CSc.Guaranteeprof. RNDr. Jozef Doboš, CSc.

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

Course assessment
Total number of assessed students: 18

A	B	C	D	E	FX
88.89	11.11	0.0	0.0	0.0	0.0

Provides:

Date of last modification: 27.02.2018

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

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:	
Course assessment Total number of assessed students: 8	

abs	n
100.0	0.0

Provides: doc. RNDr. Mária Ganajová, CSc.
Date of last modification: 26.02.2018
Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Oľga Orosová, CSc.Guaranteeprof. RNDr. Jozef Doboš, CSc.

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:	
Course assessment Total number of assessed students: 6	

abs	n
100.0	0.0

Provides: doc. RNDr. Mária Ganajová, CSc.
Date of last modification: 26.02.2018
Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Oľga Orosová, CSc.Guaranteeprof. RNDr. Jozef Doboš, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ DTCU/15	**Course name:** Digitálne technológie vo výučbe chémie

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

Number of credits: 5

Recommended semester/trimester of the course: 3.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment
Total number of assessed students: 10

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

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

Date of last modification: 26.02.2018

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

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

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

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

Number of credits: 4

Recommended semester/trimester of the course:

Course level: II.

Prerequisities:

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

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

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

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

Course language:
Slovak

Course assessment
Total number of assessed students: 34

A	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: 01.03.2018					
Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Oľga Orosová, CSc.Guaranteeprof. RNDr. Jozef Doboš, CSc.					

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:	
Course assessment Total number of assessed students: 65	

A	B	C	D	E	FX
87.69	10.77	0.0	0.0	0.0	1.54
Provides: prof. RNDr. Renáta Oriňaková, DrSc.					
Date of last modification: 21.09.2017					
Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Oľga Orosová, CSc.Guaranteeprof. RNDr. Jozef Doboš, CSc.					

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

Course assessment
Total number of assessed students: 399

A	B	C	D	E	FX
11.03	11.78	20.05	19.05	22.31	15.79

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

Date of last modification: 27.02.2018

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

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

Course assessment
Total number of assessed students: 88

A	B	C	D	E	FX
21.59	29.55	29.55	7.95	11.36	0.0

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

Date of last modification: 27.02.2018

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

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:

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: 26.02.2018
Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Oľga Orosová, CSc.Guaranteeprof. RNDr. Jozef Doboš, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: KSSFaK/ KJPUAP/15	**Course name:** Culture of Spoken Discourse

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

Number of credits: 2

Recommended semester/trimester of the course: 1.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment
Total number of assessed students: 0

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

Provides: PhDr. Iveta Bónová, PhD.

Date of last modification: 28.08.2017

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

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚTVŠ/ KP/12	**Course name:** Survival Course

Course type, scope and the method:
Course type: Practice
Recommended course-load (hours):
Per week: Per study period: 36s
Course method: present

Number of credits: 2

Recommended semester/trimester of the course:

Course level: I., II.

Prerequisities:

Conditions for course completion:
Conditions for course completion:
Attendance
Final assessment: continuous fulfilment of all tasks within the course

Learning outcomes:
Learning outcomes:
Students will be familiarized with principles of safe stay and movement in extreme natural conditions as they will obtain theoretical knowledge and practical skills to solve the extraordinary and demanding situations connected with survival and minimization of damage to health. The course develops team work and students will learn how to manage and face the situations that require overcoming of obstacles.

Brief outline of the course:
Brief outline of the course:
Lectures:
1. Principles of behaviour and safety for movement and stay in unknown mountains
2. Preparation and leadership of tour
3. Objective and subjective danger in mountains
4. Principles of hygiene and prevention of damage to health in extreme conditions
Exercises:
1. Movement in terrain, orientation and navigation in terrain (compasses, GPS)
2. Preparation of improvised overnight stay
3. Water treatment and food preparation.

Recommended literature:

Course language:

Course assessment
Total number of assessed students: 365

abs	n
44.38	55.62

Provides: MUDr. Peter Dombrovský, Mgr. Marek Valanský
Date of last modification: 18.08.2017
Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Oľga Orosová, CSc.Guaranteeprof. RNDr. Jozef Doboš, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPPaPZ/KPE/ EPU/15	**Course name:** Professional Ethics for Teachers and School Counsellors

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

Number of credits: 2

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

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment
Total number of assessed students: 281

A	B	C	D	E	FX
94.66	4.63	0.71	0.0	0.0	0.0

Provides: Mgr. Lucia Hricová, PhD.

Date of last modification: 21.08.2017

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

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚTVŠ/ LKSp/13

Course name: Summer Course-Rafting of TISA River

Course type, scope and the method:
Course type: Practice
Recommended course-load (hours):
Per week: Per study period: 36s
Course method: present

Number of credits: 2

Recommended semester/trimester of the course:

Course level: I., II.

Prerequisities:

Conditions for course completion:
Conditions for course completion:
Attendance
Final assessment: Raft control on the waterway (attended/not attended)

Learning outcomes:
Learning outcomes:
Students have knowledge of rafts (canoe) and their control on waterway.

Brief outline of the course:
Brief outline of the course:
1. Assessment of difficulty of waterways
2. Safety rules for rafting
3. Setting up a crew
4. Practical skills training using an empty canoe
5. Canoe lifting and carrying
6. Putting the canoe in the water without a shore contact
7. Getting in the canoe
8. Exiting the canoe
9. Taking the canoe out of the water
10. Steering
a) The pry stroke (on fast waterways)
b) The draw stroke
11. Capsizing
12. Commands

Recommended literature:

Course language:

Course assessment
Total number of assessed students: 142

abs	n
41.55	58.45

Provides: Mgr. Peter Bakalár, PhD.
Date of last modification: 18.08.2017
Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Oľga Orosová, CSc.Guaranteeprof. RNDr. Jozef Doboš, CSc.

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

Course assessment
Total number of assessed students: 55

A	B	C	D	E	FX
29.09	30.91	20.0	16.36	3.64	0.0

Provides:

Date of last modification: 27.02.2018

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

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚFV/ MDT06/15	**Course name:** Modern Didactical Technology

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

Number of credits: 2

Recommended semester/trimester of the course: 2.

Course level: II.

Prerequisities:

Conditions for course completion:
All assignments must be uploaded by a student and accepted by a teacher according to assessment criteria.
Active participation at the seminar with minimum 80% participation.

Learning outcomes:
Student graduated from subject will be able:
- recognise basic tools for teaching activities,
- to use all types of actuall tools in education of science or humanities,
- to design and realise educational activities by using modern technologies.

Brief outline of the course:
0. Introduction
1. Cloud services
2. Digital notebooks
3. Digital imaging
4. Digital image processing
5. Digital text processing
6. Digital audio processing
7. Digital video, processing, videoconferencing
8. Google online services
9. Interactive didactical system (whiteboard, e-voting system, tablet)
10. Computer based laboratories
11. Digital technologies and virtual experiments
12. Didigital teacher`s workspace

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

Course language:

Slovak, English

Course assessment
Total number of assessed students: 44

A	B	C	D	E	FX
34.09	45.45	11.36	4.55	4.55	0.0

Provides: doc. RNDr. Jozef Hanč, PhD.

Date of last modification: 01.03.2018

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

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: KPE/ MPPa/15	**Course name:** Supervised Teaching Practice
Course type, scope and the method: **Course type:** Practice **Recommended course-load (hours):** **Per week: Per study period:** 36s **Course method:** present	
Number of credits: 2	
Recommended semester/trimester of the course: 1.	
Course level: II.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Course assessment Total number of assessed students: 692	

abs	n
99.86	0.14

Provides: doc. PhDr. Beata Gajdošová, PhD., PaedDr. Renáta Orosová, PhD., Mgr. Katarína Petríková, PhD.
Date of last modification: 05.02.2018
Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Oľga Orosová, CSc.Guaranteeprof. RNDr. Jozef Doboš, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚCHV/ MPPb/15	**Course name:** Scheduled practice teaching
Course type, scope and the method: **Course type:** Practice **Recommended course-load (hours):** **Per week: Per study period:** 36s **Course method:** present	
Number of credits: 1	
Recommended semester/trimester of the course: 2.	
Course level: II.	
Prerequisities: KPE/MPPa/15 and KPE/PDU/15 and (KPPaPZ/PaSPP/09 or KPPaPZ/PPgU/15)	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Course assessment Total number of assessed students: 236	

abs	n
100.0	0.0

Provides: RNDr. Ivana Sotáková, Ph.D., doc. RNDr. Mária Ganajová, CSc.
Date of last modification: 26.02.2018
Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Oľga Orosová, CSc.Guaranteeprof. RNDr. Jozef Doboš, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚCHV/MPPc/15	**Course name:** Continuous practice teaching I
Course type, scope and the method: **Course type:** Practice **Recommended course-load (hours):** **Per week: Per study period:** 4t **Course method:** present	
Number of credits: 2	
Recommended semester/trimester of the course: 3.	
Course level: II.	
Prerequisities: ÚCHV/MPPb/15 or ÚCHV/MPPb/03	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Course assessment Total number of assessed students: 78	

abs	n
100.0	0.0

Provides: RNDr. Ivana Sotáková, Ph.D., doc. RNDr. Mária Ganajová, CSc.
Date of last modification: 26.02.2018
Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Oľga Orosová, CSc.Guaranteeprof. RNDr. Jozef Doboš, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚCHV/ MPPd/15	**Course name:** Continuous practice teaching II
Course type, scope and the method: **Course type:** Practice **Recommended course-load (hours):** **Per week: Per study period:** 6t **Course method:** present	
Number of credits: 2	
Recommended semester/trimester of the course: 4.	
Course level: II.	
Prerequisities: ÚCHV/MPPc/15	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Course assessment Total number of assessed students: 57	

abs	n
100.0	0.0

Provides: RNDr. Ivana Sotáková, Ph.D., doc. RNDr. Mária Ganajová, CSc.
Date of last modification: 26.02.2018
Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Oľga Orosová, CSc.Guaranteeprof. RNDr. Jozef Doboš, CSc.

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 and ÚCHV/DCH2/15

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment
Total number of assessed students: 66

A	B	C	D	E	FX
54.55	33.33	10.61	1.52	0.0	0.0

Provides:

Date of last modification: 26.02.2018

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

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:

Course assessment
Total number of assessed students: 35

A	B	C	D	E	FX
80.0	11.43	5.71	2.86	0.0	0.0

Provides:

Date of last modification: 26.02.2018

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

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

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

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

Number of credits: 2

Recommended semester/trimester of the course: 2.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment
Total number of assessed students: 474

A	B	C	D	E	FX
53.38	33.76	9.49	1.69	0.63	1.05

Provides: PaedDr. Renáta Orosová, PhD.

Date of last modification: 05.02.2018

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

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KGER/ NJKG/07	**Course name:** Communicative Grammar in German Language

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

Number of credits: 2

Recommended semester/trimester of the course:

Course level: I., II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment
Total number of assessed students: 48

A	B	C	D	E	FX
54.17	12.5	10.42	4.17	10.42	8.33

Provides: PaedDr. Ingrid Puchalová, PhD., Mgr. Barbora Molokáčová

Date of last modification: 25.08.2017

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

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPPaPZ/PASZ/17	**Course name:** Problem and Aggressive Behaviour of Pupils. Etiology, Prevention and Intervention.

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

Number of credits: 2

Recommended semester/trimester of the course: 2.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment
Total number of assessed students: 24

A	B	C	D	E	FX
87.5	12.5	0.0	0.0	0.0	0.0

Provides: PhDr. Anna Janovská, PhD.

Date of last modification: 21.08.2017

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

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPE/ PDD/17	**Course name:** Pedagogical Diagnostics

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

Number of credits: 2

Recommended semester/trimester of the course: 2.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment
Total number of assessed students: 14

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

Provides: PaedDr. Janka Ferencová, PhD.

Date of last modification: 05.02.2018

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

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPE/ PDK/17	**Course name:** Pedagogical Communication

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

Number of credits: 2

Recommended semester/trimester of the course: 1.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment
Total number of assessed students: 26

A	B	C	D	E	FX
80.77	15.38	3.85	0.0	0.0	0.0

Provides: Mgr. Katarína Petríková, PhD.

Date of last modification: 05.02.2018

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

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPE/ PDU/15	**Course name:** Teaching Methodology and Pedagogy

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

Number of credits: 5

Recommended semester/trimester of the course: 1.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment
Total number of assessed students: 1361

A	B	C	D	E	FX
11.83	25.2	27.48	19.99	8.52	6.98

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

Date of last modification: 05.02.2018

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

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

Learning outcomes:

Brief outline of the course:

Recommended literature:
Seal B.: Academic Encounters, CUP, 2002
T. Armer :Cambridge English for Scientists, CUP 2011
M. McCarthy M., O´Dell F. - Academic Vocabulary in Use, CUP 2008
Zemach, D.E, Rumisek, L.A: Academic Writing, Macmillan 2005
Olsen, A. : Active Vocabulary, Pearson, 2013
www.bbclearningenglish.com
Cambridge Academic Content Dictionary, CUP, 2009

Course language:
English language, level B2 according to CEFR.

Course assessment
Total number of assessed students: 344

A	B	C	D	E	FX
30.81	23.55	15.99	11.05	7.27	11.34

Provides: Mgr. Zuzana Naďová

Date of last modification: 06.02.2018

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

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

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

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

Number of credits: 2

Recommended semester/trimester of the course:

Course level: I., II., N

Prerequisities:

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

Learning outcomes:

Brief outline of the course:

Recommended literature:
Misztal M.: Thematic Vocabulary, Fragment, 1998
McCarthy, O'Dell: English Vocabulary in Use, 1994
Alexander L.G.: Longman English Grammar, Longman, 1988
Jones I. - Communicative Grammar Practice, CUP, 1992
Vince M.: Macmillan Grammar in Context, Macmillan, 2008
www.bbclearningenglish.com
Gráf T., Peters S.: Time to practise, Polyglot, 2007

Course language:

Course assessment
Total number of assessed students: 394

A	B	C	D	E	FX
39.34	18.53	17.01	8.88	6.09	10.15

Provides: Mgr. Lenka Klimčáková

Date of last modification: 06.02.2018

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

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

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

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

Number of credits: 2

Recommended semester/trimester of the course:

Course level: I., II., N

Prerequisities:

Conditions for course completion:
Active participation in class and completed homework assignments. Students are allowed to miss two classes at the most.
2 credit tests (presumably in weeks 6/7 and 12/13) and short academic presentations in English on selected topics.
Final grade will be calculated as follows: A 93-100 %, B 86-92%, C 79-85%, D 72-78%, E 65-71%, FX 64 % and less.

Learning outcomes:
Uplatnenie a aktívne používanie svojich teoretických vedomostí v praktických komunikačných situáciách. Zdokonalenie jazykových vedomostí a zručností študenta, rečovej, pragmatickej a vecnej kompetencie, predovšetkým zlepšujú komunikáciu, 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.

Brief outline of the course:
Rodina, jej formy a problémy
Vyjadrovanie pocitov a dojmov
Dom, bývanie a budúcnosť
Formy a dialekty v anglickom jazyku
Život v meste a na vidieku
Kolokácie a idiomy, zaužívané slovné spojenia
Prázdniny a sviatky vo svete
Životné prostredie a ekológia
Výnimky zo slovosledu
Frázové slovesá a ich použitie
Charakteristiky neformálneho diškurzu

Recommended literature:

www.bbclearningenglish.com
McCarthy M., O'Dell F.: English Vocabulary in Use, Upper-Intermediate. CUP, 1994.
Misztal M.: Thematic Vocabulary. SPN, 1998.
Fictumova J., Ceccarelli J., Long T.: Angličtina, konverzace pro pokročilé. Barrister and Principal, 2008.
Peters S., Gráf T.: Time to practise. Polyglot, 2007.
Jones L.: Communicative Grammar Practice. CUP, 1985.
Alexander L.G.: Longman English Grammar. Longman, 1988.

Course language:

English language, B2 level according to CEFR

Course assessment

Total number of assessed students: 220

A	B	C	D	E	FX
36.36	21.82	20.45	10.45	7.27	3.64

Provides: Mgr. Zuzana Naďová

Date of last modification: 06.02.2018

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

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: KPE/ PPD/15	**Course name:** Pedagogy and Psychology
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of credits: 1	
Recommended semester/trimester of the course:	
Course level: II.	
Prerequisities: KPE/PDU/15 and KPPaPZ/PPgU/15	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	

Course assessment

Total number of assessed students: 355

A	B	C	D	E	FX
29.01	24.79	25.07	15.77	3.66	1.69

Provides:
Date of last modification: 21.08.2017
Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Oľga Orosová, CSc.Guaranteeprof. RNDr. Jozef Doboš, CSc.

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:

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment
Total number of assessed students: 39

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: 19.02.2018

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

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPPaPZ/PPgU/15	**Course name:** Psychology and Educational Psychology

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

Number of credits: 5

Recommended semester/trimester of the course: 1.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment
Total number of assessed students: 1287

A	B	C	D	E	FX
10.18	18.57	22.46	22.84	22.84	3.11

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

Date of last modification: 21.08.2017

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

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 at least 50% in two written tests during the semester. Total evaluation based on written tests and oral exam.

Learning outcomes:
Student should obtain the knowledge about basic statistical methods and the ability to apply theoretical knowledge in practical problems solving.

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.: Pravdepodobnosť v príkladoch, UPJŠ, Košice, 2006 (in Slovak)
2. Skřivánková V.-Hančová M.: Štatistika v príkladoch, UPJŠ, Košice, 2005 (in Slovak)
3. CASELLA, G., BERGER, R., Statistical Inference, 2nd ed., Duxbury Press, 2002
4. DeGroot, M. H., Schervish, M. J.: Probability and Statistics, 4th ed., Pearson, Boston, 2012
5. Utts, J.M., Heckard, R.F.: Mind od Statistics, 5th ed., Thomson Brooks/Cole, 2014
6. Anděl J.: Základy matematické statistiky, MatfyzPress, Praha, 2011 (in Czech)

Course language:
Slovak

Course assessment
Total number of assessed students: 175

A	B	C	D	E	FX
20.0	21.14	17.71	24.0	10.86	6.29

Provides: RNDr. Martina Hančová, PhD.

Date of last modification: 26.09.2017

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

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPPaPZ/PTPN/17	**Course name:** Psychology of Creativity and Working with Gifted Students in Teacher Practice

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

Number of credits: 2

Recommended semester/trimester of the course: 2.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment
Total number of assessed students: 18

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

Provides: Mgr. Lucia Hricová, PhD.

Date of last modification: 21.08.2017

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

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPPaPZ/PUDU/15	**Course name:** Drug Addiction Prevention in Educational Practice

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

Number of credits: 4

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

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment
Total number of assessed students: 257

A	B	C	D	E	FX
48.25	43.19	7.78	0.78	0.0	0.0

Provides: prof. PhDr. Oľga Orosová, CSc., Mgr. Marta Dobrowolska Kulanová, PhD.

Date of last modification: 21.08.2017

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

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPPaPZ/PsZ/15	**Course name:** Psychology of Health

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

Number of credits: 2

Recommended semester/trimester of the course: 3.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment
Total number of assessed students: 61

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

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

Date of last modification: 21.08.2017

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

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ SAZ1/15	**Course name:** Stereochemistry of Inorganic Compounds

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

Number of credits: 3

Recommended semester/trimester of the course:

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

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

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

Course language:

Course assessment
Total number of assessed students: 18

A	B	C	D	E	FX
50.0	16.67	22.22	11.11	0.0	0.0

Provides: prof. RNDr. Vladimír Zeleňák, PhD.

Date of last modification: 26.02.2018

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

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPO/ SDaM/15	**Course name:** Child and Adolescent Sociology

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

Number of credits: 2

Recommended semester/trimester of the course: 3.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment
Total number of assessed students: 844

A	B	C	D	E	FX
50.0	29.74	15.28	3.32	1.3	0.36

Provides: Mgr. Alexander Onufrák, PhD.

Date of last modification: 28.08.2017

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

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: 2.

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

Course assessment
Total number of assessed students: 144

A	B	C	D	E	FX
80.56	6.94	6.94	2.78	2.78	0.0

Provides: RNDr. Ingrid Semanišinová, PhD.
Date of last modification: 27.02.2018
Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Oľga Orosová, CSc.Guaranteeprof. RNDr. Jozef Doboš, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPPaPZ/SNP/09	**Course name:** Mobbing, Violence and Their Prevention

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

Number of credits: 2

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

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment
Total number of assessed students: 109

A	B	C	D	E	FX
77.06	20.18	1.83	0.92	0.0	0.0

Provides: Mgr. Mária Bačíková, PhD.

Date of last modification: 21.08.2017

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

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:

Course assessment
Total number of assessed students: 244

A	B	C	D	E	FX
65.16	27.05	6.97	0.82	0.0	0.0

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

Date of last modification: 26.02.2018

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

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

Course assessment
Total number of assessed students: 238

A	B	C	D	E	FX
39.5	28.57	19.75	8.4	3.78	0.0

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

Date of last modification: 26.02.2018

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

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚMV/ SSM/15	**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: 2.

Course level: II.

Prerequisities:

Conditions for course completion:
During the semester will be 3 written exams.
Evaluation A - at least 90% of the points, evaluation B - at least 80%, evaluation C at least 70%, evaluation D at least 60%, evaluation E 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 the tasks, methods of problem solving, solving strategies and with specific problems of teaching mathematics at primary and secondary schools.

Brief outline of the course:
Basic knowledge of school mathematics. Number theory tasks, tasks to optimize, word problems.

Recommended literature:
Hecht, T., Sklenáriková, Z., Metódy riešenia matematických úloh, Bratislava, SPN, 1992.
Hecht, T. a kol., Matematika pre 1.-4. ročník gymnázií a SOŠ, OrbisPictusIstropolitana, Bratislava 1999-2002.
Krantz, S.G., Techniques of Problem Solving, AMS, 1997.
Larson, L.C., Metódy riešenia matematických problémov, Bratislava, Alfa, 1990.

Course language:
Slovak

Course assessment
Total number of assessed students: 122

A	B	C	D	E	FX
45.08	23.77	10.66	9.84	10.66	0.0

Provides: doc. RNDr. Matúš Harminc, CSc.

Date of last modification: 27.02.2018

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

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ STA1/03	**Course name:** Structure Analysis

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

Number of credits: 6

Recommended semester/trimester of the course:

Course level: II.

Prerequisities:

Conditions for course completion:
2 written tests.
30 %
The final examination is in a written form. The final mark is based on the results from current and final tests.

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

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

Recommended literature:
Massa, W.: Crystal structure determination, 2nd edition. Springer 2004.
Clegg, W. et al.: Crystal structure analysis. Principles and practice. Oxford University Press 2009.
Hahn, T.: International tables for crystallography, Vol. A. Kluwer Academic Publishers 2002.
Stout, G.H. & Jensen, L.H.: X-ray Structure Determination. Macmillan Publishing Co., Inc. 1968.
Klug, H.P. & Alexander, L.E.: X-Ray diffraction procedures for polycrystalline and amorphous materials. John Wiley & Sons, Inc. 1970.

Course language:
Slovak and English

Course assessment
Total number of assessed students: 108

A	B	C	D	E	FX
27.78	16.67	26.85	19.44	8.33	0.93

Provides: doc. RNDr. Ivan Potočňák, PhD.

Date of last modification: 26.02.2018
Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Oľga Orosová, CSc.Guaranteeprof. RNDr. Jozef Doboš, CSc.

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

Course assessment
Total number of assessed students: 86

A	B	C	D	E	FX
98.84	1.16	0.0	0.0	0.0	0.0

Provides: prof. RNDr. Tomáš Madaras, PhD.

Date of last modification: 27.02.2018

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

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPE/ TTUP/15	**Course name:** Creating Text Teaching Aids

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

Number of credits: 2

Recommended semester/trimester of the course: 2.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment
Total number of assessed students: 129

A	B	C	D	E	FX
51.94	31.01	10.85	4.65	1.55	0.0

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

Date of last modification: 05.02.2018

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

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

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

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

Number of credits: 2

Recommended semester/trimester of the course: 1.

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

Prerequisities:

Conditions for course completion:
Conditions for course completion:
Min. 80% of active participation in classes.

Learning outcomes:
Learning outcomes:
Increasing physical condition and performance within individual sports. Strengthening the relationship of students to the selected sports activity and its continual improvement.

Brief outline of the course:
Brief outline of the course:
Within the optional subject, the Institute of Physical Education and Sports of Pavol Jozef Šafárik University provides for students the following sports activities: aerobics, basketball, badminton, floorball, yoga, pilates, swimming, body-building, indoor football, self-defence and karate, table tennis, sports for unfit persons, streetball, tennis, and volleyball.
In the first two semesters of the first level of education students will master basic characteristics and particularities of individual sports, motor skills, game activities, they will improve level of their physical condition, coordination abilities, physical performance, and motor performance fitness. Last but not least, the important role of sports activities is to eliminate swimming illiteracy and by means of a special program of medical physical education to influence and mitigate unfitness.
In addition to these sports, the Institute offers for those who are interested winter and summer physical education trainings with an attractive program and organises various competitions, either at the premises of the faculty or University or competitions with national or international participation.

Recommended literature:

Course language:

Course assessment
Total number of assessed students: 11672

abs	abs-A	abs-B	abs-C	abs-D	abs-E	n	neabs
88.42	0.01	0.0	0.0	0.0	0.03	7.59	3.96

Provides: Mgr. Peter Bakalár, PhD., Mgr. Dana Dračková, PhD., Mgr. Agata Horbacz, PhD., Mgr. Dávid Kaško, Mgr. Zuzana Küchelová, PhD., doc. PaedDr. Ivan Uher, PhD., Mgr. Marek Valanský, prof. RNDr. Stanislav Vokál, DrSc., Mgr. Marcel Čurgali, Ing. Iveta Cimboláková, PhD.
Date of last modification: 18.08.2017
Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Oľga Orosová, CSc.Guaranteeprof. RNDr. Jozef Doboš, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

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

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

Number of credits: 2

Recommended semester/trimester of the course: 2.

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

Prerequisities:

Conditions for course completion:
Conditions for course completion:
Final assessment and active participation in classes - min. 75%.

Learning outcomes:
Learning outcomes:
Increasing physical condition and performance within individual sports. Strengthening the relationship of students to the selected sports activity and its continual improvement.

Brief outline of the course:
Brief outline of the course:
Within the optional subject, the Institute of Physical Education and Sports of Pavol Jozef Šafárik University provides for students the following sports activities: aerobics, basketball, badminton, floorball, yoga, pilates, swimming, body-building, indoor football, self-defence and karate, table tennis, sports for unfit persons, streetball, tennis, and volleyball.
In the first two semesters of the first level of education students will master basic characteristics and particularities of individual sports, motor skills, game activities, they will improve level of their physical condition, coordination abilities, physical performance, and motor performance fitness. Last but not least, the important role of sports activities is to eliminate swimming illiteracy and by means of a special program of medical physical education to influence and mitigate unfitness.
In addition to these sports, the Institute offers for those who are interested winter and summer physical education trainings with an attractive program and organises various competitions, either at the premises of the faculty or University or competitions with national or international participation.

Recommended literature:

Course language:

Course assessment
Total number of assessed students: 10971

abs	abs-A	abs-B	abs-C	abs-D	abs-E	n	neabs
85.37	0.57	0.02	0.0	0.0	0.05	10.13	3.86

Provides: Mgr. Peter Bakalár, PhD., Mgr. Dana Dračková, PhD., Mgr. Agata Horbacz, PhD., Mgr. Dávid Kaško, Mgr. Zuzana Küchelová, PhD., doc. PaedDr. Ivan Uher, PhD., Mgr. Marek Valanský, prof. RNDr. Stanislav Vokál, DrSc., Mgr. Marcel Čurgali, Ing. Iveta Cimboláková, PhD.
Date of last modification: 18.08.2017
Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Oľga Orosová, CSc.Guaranteeprof. RNDr. Jozef Doboš, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

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

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

Number of credits: 2

Recommended semester/trimester of the course: 3.

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

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment
Total number of assessed students: 6910

abs	abs-A	abs-B	abs-C	abs-D	abs-E	n	neabs
89.84	0.04	0.0	0.0	0.0	0.03	4.23	5.86

Provides: Mgr. Marcel Čurgali, Mgr. Peter Bakalár, PhD., Mgr. Dana Dračková, PhD., Mgr. Agata Horbacz, PhD., Mgr. Dávid Kaško, Mgr. Zuzana Küchelová, PhD., doc. PaedDr. Ivan Uher, PhD., Mgr. Marek Valanský, prof. RNDr. Stanislav Vokál, DrSc., Ing. Iveta Cimboláková, PhD.

Date of last modification: 18.08.2017

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

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚTVŠ/ TVd/11	**Course name:** Sports Activities IV.

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

Number of credits: 2

Recommended semester/trimester of the course: 4.

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

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment
Total number of assessed students: 5045

abs	abs-A	abs-B	abs-C	abs-D	abs-E	n	neabs
85.09	0.3	0.04	0.0	0.0	0.0	6.82	7.75

Provides: Mgr. Marcel Čurgali, Mgr. Peter Bakalár, PhD., Mgr. Dana Dračková, PhD., Mgr. Agata Horbacz, PhD., Mgr. Dávid Kaško, Mgr. Zuzana Küchelová, PhD., doc. PaedDr. Ivan Uher, PhD., Mgr. Marek Valanský, prof. RNDr. Stanislav Vokál, DrSc., Ing. Iveta Cimboláková, PhD.

Date of last modification: 18.08.2017

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

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., 3.

Course level: I., II.

Prerequisities:

Conditions for course completion:
Oral examination

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

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

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

Course language:

Course assessment
Total number of assessed students: 209

A	B	C	D	E	FX
48.8	20.57	15.79	8.61	6.22	0.0
Provides: doc. RNDr. Andrea Straková Fedorková, PhD.					
Date of last modification: 21.09.2017					
Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Oľga Orosová, CSc.Guaranteeprof. RNDr. Jozef Doboš, CSc.					

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPPaPZ/UPN/17	**Course name:** Introduction into Psychology of Religion

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

Number of credits: 2

Recommended semester/trimester of the course: 2.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment
Total number of assessed students: 5

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

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

Date of last modification: 21.08.2017

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

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: KPPaPZ/UPR/15	**Course name:** The Art of Aiding by Verbal Exchange

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

Number of credits: 2

Recommended semester/trimester of the course: 2.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment
Total number of assessed students: 84

A	B	C	D	E	FX
90.48	2.38	4.76	1.19	1.19	0.0

Provides: Mgr. Ondrej Kalina, PhD.

Date of last modification: 21.08.2017

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

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

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

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

Number of credits: 5

Recommended semester/trimester of the course: 3.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:
Greenwood, N.N., Earnshaw, A.: Chemistry of the elements I and II, Pergamon Press N.Y., 1993.
C. N. R. Rao, A. Muller, A. K. Cheetham: The Chemistry of Nanomaterials (Vol. 1,2), Wiley-VCH,2006.
Atkins O., Overton T., Rourke J., Weller M., Armstrong F.: Inorganic Chemistry, University Press, Oxford, 2006.

Course language:

Course assessment
Total number of assessed students: 47

A	B	C	D	E	FX
46.81	25.53	19.15	4.26	4.26	0.0

Provides: prof. RNDr. Vladimír Zeleňák, PhD.

Date of last modification: 26.02.2018

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

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:

Course assessment
Total number of assessed students: 179

A	B	C	D	E	FX
22.35	26.26	35.2	13.41	2.23	0.56

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

Date of last modification: 26.02.2018

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

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:

Course assessment
Total number of assessed students: 105

A	B	C	D	E	FX
35.24	24.76	20.0	14.29	5.71	0.0

Provides: doc. RNDr. Ján Imrich, CSc.

Date of last modification: 26.02.2018

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

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.

Learning outcomes:
Extend knowledge of improper integrals,properties of integrals dependent on a parameter, TBA

Brief outline of the course:
1. Improper Riemann integral: definition, computation, existence criterions.
2. Riemann integrals dependent on a parameter: basic properties of proper and improper parametric integral (continuity, integrability, differentiability).
3. TBA

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

Course assessment
Total number of assessed students: 57

A	B	C	D	E	FX
17.54	5.26	29.82	17.54	24.56	5.26

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

Date of last modification: 27.02.2018

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

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

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

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

Number of credits: 2

Recommended semester/trimester of the course: 2.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment
Total number of assessed students: 133

A	B	C	D	E	FX
60.15	24.81	9.02	4.51	1.5	0.0

Provides: PhDr. Anna Janovská, PhD.

Date of last modification: 21.08.2017

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

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚMV/ VPPb/15	**Course name:** Scheduled practice teaching
Course type, scope and the method: **Course type:** Practice **Recommended course-load (hours):** **Per week: Per study period:** 36s **Course method:** present	
Number of credits: 1	
Recommended semester/trimester of the course: 2.	
Course level: II.	
Prerequisities: KPE/MPPa/15 and KPE/PDU/15 and (KPPaPZ/PaSPP/09 or KPPaPZ/PPgU/15)	
Conditions for course completion:	
Learning outcomes: 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: Slovak	
Course assessment Total number of assessed students: 120	

abs	n
100.0	0.0

Provides: doc. RNDr. Dušan Šveda, CSc., RNDr. Ingrid Semanišinová, PhD.
Date of last modification: 27.02.2018
Approved: Guaranteedoc. RNDr. Mária Ganajová, CSc.Guaranteeprof. PhDr. Oľga Orosová, CSc.Guaranteeprof. RNDr. Jozef Doboš, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPPaPZ/VPU/17	**Course name:** Developmental Psychology for Teachers

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

Number of credits: 2

Recommended semester/trimester of the course: 1.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment
Total number of assessed students: 24

A	B	C	D	E	FX
50.0	33.33	8.33	8.33	0.0	0.0

Provides: Mgr. Mária Bačíková, PhD.

Date of last modification: 21.08.2017

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

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KSSFaK/VSJU/15	**Course name:** Slovak Language for Teachers

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

Number of credits: 2

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

Course level: II.

Prerequisities:

Conditions for course completion:
passing a final test

Learning outcomes:
Mastering of standard Slovak in spoken and written discouse. Becoming familiarized with codification manuals, acquiring skills related to bibliography and quotation standards. Mastering of written communication in accordance with current orthographical rules. Mastering of basic characteristics of expressions of text and style and fundamentals of text composition.

Brief outline of the course:
Characteristics of basic terms of general linguistics (language – speech, language functions, the sign character of language, language levels, content and form in language, individual and general aspect of language units) on interdisciplinary background and with the application to Slovak as a national language. Language standard, codification, usus. Basic codification manuals. Application of orthographic rules in practical documents. Sound culture, pronunciation styles. Orthoepic phenomena in vowels and consonants. Application of rhythmic law and its exceptions. Assimilation and its specific features in Slovak. Style, stylization – methods and demonstration of structure of text components.

Recommended literature:
Krátky slovník slovenského jazyka. Bratislava: Veda 1997.
Slovník súčasného slovenského jazyka. Bratislava: Veda 2006.
Slovník súčasného slovenského jazyka. Bratislava: Veda 2011.
Pravidlá slovenského pravopisu. Bratislava: Veda 2000.
KRÁĽ, Á.: Pravidlá slovenskej výslovnosti. Bratislava, SPN 1984; 1988. 632 s.
ONDRUŠ, Š. – SABOL, J.: Úvod do štúdia jazykov. 3. vyd. Bratislava, SPN 1987. 343s.
SABOL, J.- SLANČOVÁ, D. - SOKOLOVÁ, M.: Kultúra hovoreného slova. Prešov, FF UPJŠ 1989.
SABOL, J. – BÓNOVÁ, I. – SOKOLOVÁ, M.: Kultúra hovoreného prejavu. Prešov: FF PU 2006.
FINDRA, J.: Štylistika slovenčiny. Martin : Osveta, 2004.
FINDRA, Ján: Štylistika slovenčiny v cvičeniach. Martin : Osveta, 2005.
SLANČOVÁ, D.: Praktická štylistika. 2., upravené a doplnené vydanie. Prešov: Slovacontact 1996. 178 s. ISBN 80-901417-9-X.

Course language:

Course assessment
Total number of assessed students: 57

A	B	C	D	E	FX
17.54	33.33	24.56	17.54	7.02	0.0

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

Date of last modification: 24.08.2017

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

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚMV/VSPc/15	**Course name:** Continuous practice teaching I

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

Number of credits: 2

Recommended semester/trimester of the course: 3.

Course level: II.

Prerequisities: ÚMV/VPPb/15

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:
Slovak

Course assessment
Total number of assessed students: 137

abs	n
100.0	0.0

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

Date of last modification: 27.02.2018

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

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚMV/ VSPd/15	**Course name:** Continuous practice teaching II

Course type, scope and the method:
Course type: Practice
Recommended course-load (hours):
Per week: Per study period: 6t
Course method: present

Number of credits: 2

Recommended semester/trimester of the course: 4.

Course level: II.

Prerequisities: ÚMV/VSPc/15

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:
Slovak

Course assessment
Total number of assessed students: 126

abs	n
100.0	0.0

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

Date of last modification: 27.02.2018

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

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., 4.

Course level: I., II., III.

Prerequisities:

Conditions for course completion:

Learning outcomes:

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

Recommended literature:

Course language:

Course assessment
Total number of assessed students: 12

A	B	C	D	E	FX	N	P
16.67	58.33	25.0	0.0	0.0	0.0	0.0	0.0

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

Date of last modification: 26.02.2018

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

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPPaPZ/ZMPPV/15	**Course name:** The Fundamentals of Pedagogico-Psychological Research Methodology

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

Number of credits: 4

Recommended semester/trimester of the course: 2.

Course level: II.

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

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment
Total number of assessed students: 381

A	B	C	D	E	FX
15.49	23.62	25.2	21.52	13.91	0.26

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

Date of last modification: 21.08.2017

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

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPE/ ZSP/15	**Course name:** Essentials of Special Education

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

Number of credits: 2

Recommended semester/trimester of the course: 3.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment
Total number of assessed students: 279

A	B	C	D	E	FX
44.8	32.26	15.77	5.73	1.43	0.0

Provides: Mgr. Katarína Petríková, PhD.

Date of last modification: 05.02.2018

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

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:

Course assessment
Total number of assessed students: 303

A	B	C	D	E	FX
20.46	27.39	25.08	17.82	7.92	1.32

Provides: RNDr. Miroslava Matiková-Maľarová, PhD.

Date of last modification: 26.02.2018

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

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPE/ ZZP/12	**Course name:** Experiential Education

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

Number of credits: 4

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

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment
Total number of assessed students: 213

A	B	C	D	E	FX
39.44	42.25	15.96	2.35	0.0	0.0

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

Date of last modification: 05.02.2018

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

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚTVŠ/ ÚTVŠ/CM/13	**Course name:** Seaside Aerobic Exercise

Course type, scope and the method:
Course type: Practice
Recommended course-load (hours):
Per week: Per study period: 36s
Course method: present

Number of credits: 2

Recommended semester/trimester of the course:

Course level: I., II.

Prerequisities:

Conditions for course completion:
Conditions for course completion:
Attendance

Learning outcomes:
Learning outcomes:
Students will be provided an overview of possibilities how to spend leisure time in seaside conditions actively and their skills in work and communication with clients will be improved. Students will acquire practical experience in organising the cultural and art-oriented events, with the aim to improve the stay and to create positive experiences for visitors.

Brief outline of the course:
Brief outline of the course:
1. Basics of seaside aerobics
2. Morning exercises
3. Pilates and its application in seaside conditions
4. Exercises for the spine
5. Yoga basics
6. Sport as a part of leisure time
7. Application of projects of productive spending of leisure time for different age and social groups (children, young people, elderly)
8. Application of seaside cultural and art-oriented activities in leisure time

Recommended literature:

Course language:

Course assessment
Total number of assessed students: 33

abs	n
12.12	87.88

Provides: Mgr. Alena Buková, PhD., Mgr. Agata Horbacz, PhD.

Date of last modification: 18.08.2017

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

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KSSFaK/ ČGUAP/15	**Course name:** Reading Literacy in Educational Process

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

Number of credits: 2

Recommended semester/trimester of the course: 2.

Course level: II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment
Total number of assessed students: 18

abs	n
100.0	0.0

Provides: doc. PaedDr. Ivica Hajdučeková, PhD.

Date of last modification: 28.08.2017

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