

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚINF/ AFJ1a/15		<b>Course name:</b> Automata and formal languages			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 1 <b>Per study period:</b> 28 / 14 <b>Course method:</b> present					
<b>Number of credits:</b> 4					
<b>Recommended semester/trimester of the course:</b>					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b> Oral examination.					
<b>Learning outcomes:</b> To provide theoretical background for studying computer science in general, by giving the necessary knowledge in theory of automata.					
<b>Brief outline of the course:</b> Chomsky hierarchy of grammars and languages. Finite-state transducers and mapping, construction of a reduced automaton. Finite-state acceptors, nondeterministic acceptors, regular expressions. Closure properties of regular languages. Context-free grammars, Chomsky and Greibach normal forms. Pushdown automata, Pumping lemma. Closure properties of context-free languages.					
<b>Recommended literature:</b> J.E. Hopcroft, R.Motwani, J.D. Ullman: Introduction to automata theory, languages, and computation, Addison-Wesley, 2001. J. Shallit: A second course in formal languages and automata theory, Cambridge University press, 2009. M. Sipser: Introduction to the theory of computation, Thomson Course Technology, 2006.					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 804					
A	B	C	D	E	FX
24.75	17.79	24.0	18.41	9.95	5.1
<b>Provides:</b> Mgr. Alexander Szabari, PhD., prof. RNDr. Viliam Geffert, DrSc., RNDr. Zuzana Bednárová, PhD.					
<b>Date of last modification:</b> 25.02.2018					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚMV/ ALG2b/10		<b>Course name:</b> Algebra II			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 4 / 2 <b>Per study period:</b> 56 / 28 <b>Course method:</b> present					
<b>Number of credits:</b> 7					
<b>Recommended semester/trimester of the course:</b> 2.					
<b>Course level:</b> I.					
<b>Prerequisites:</b> ÚMV/ALGa/10					
<b>Conditions for course completion:</b> According to tests and to the exam.					
<b>Learning outcomes:</b> To obtain basic knowledge on matrices, linear spaces, linear transformations and polynomials and their roots over a field; to be able to apply the theory in concrete excercises.					
<b>Brief outline of the course:</b> Linear spaces, bases. Rank of a matrix. Systems of homogeneous linear equations. Linear transformations. Ring, fields. Polynomials over a field. Factorization into irreducible factors, roots. Roots of complex numbers. Cubic equations. Polynomials with several unknowns, symmetric polynomials.					
<b>Recommended literature:</b> A. Kurosh: Higher Algebra, Mir Publishers, 1975.					
<b>Course language:</b> Slovak					
<b>Course assessment</b> Total number of assessed students: 522					
A	B	C	D	E	FX
13.79	12.26	17.05	18.01	28.93	9.96
<b>Provides:</b> prof. RNDr. Danica Studenovská, CSc.					
<b>Date of last modification:</b> 27.02.2018					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚMV/ ALGa/10		<b>Course name:</b> Algebra I			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 3 / 3 <b>Per study period:</b> 42 / 42 <b>Course method:</b> present					
<b>Number of credits:</b> 7					
<b>Recommended semester/trimester of the course:</b> 1.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b> According to the results from the semester and in view of the results of the written and oral final exam..					
<b>Learning outcomes:</b> To obtain basic knowledge from number theory concerning divisibility and from linear algebra concerning systems of linear equations. To be able to apply it in concrete exercises.					
<b>Brief outline of the course:</b> Divisibility in $\mathbb{Z}$ . Fields. Systems of linear equations, Gauss elimination. Maps, permutations. Computing with matrices. Determinants, Cramer rule.					
<b>Recommended literature:</b> T.S Blyth, E.F. Robertson: Basic linear algebra, Springer Verlag, 2001. K. Jänich: Linear algebra, Springer Verlag, 1991.					
<b>Course language:</b> Slovak					
<b>Course assessment</b> Total number of assessed students: 1387					
A	B	C	D	E	FX
11.1	11.9	17.88	17.74	28.98	12.4
<b>Provides:</b> prof. RNDr. Danica Studenovská, CSc., RNDr. Igor Fabrici, Dr. rer. nat., RNDr. Martina Tamášová, Mgr. Simona Rindošová, Mgr. Ivana Varga					
<b>Date of last modification:</b> 27.02.2018					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KPE/ ALP/06		<b>Course name:</b> Alternative Education			
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present					
<b>Number of credits:</b> 2					
<b>Recommended semester/trimester of the course:</b> 4.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 180					
A	B	C	D	E	FX
66.11	30.56	0.56	1.11	0.56	1.11
<b>Provides:</b> Mgr. Katarína Petriková, PhD.					
<b>Date of last modification:</b> 23.08.2017					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚMV/ATC/10		<b>Course name:</b> Algebra and number theory			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 1 <b>Per study period:</b> 28 / 14 <b>Course method:</b> present					
<b>Number of credits:</b> 4					
<b>Recommended semester/trimester of the course:</b> 4.					
<b>Course level:</b> I.					
<b>Prerequisites:</b> ÚMV/ALG2b/10					
<b>Conditions for course completion:</b> It is based on the results of written checks carried out during the semester. Final evaluation is based on the results of written checks carried out during the semester, of test, written and oral exam.					
<b>Learning outcomes:</b> Obtain basic knowledge about groups and from the elementary number theory.					
<b>Brief outline of the course:</b> Groups, subgroups, quotient groups, homomorphism theorems for groups, selected topics of the number theory.					
<b>Recommended literature:</b> G.Birkoff, S.Mac Lane: A Survey of Modern Algebra, New York 1965 I.R. Shafarevich: Basic Notions of Algebra, Springer, 2005					
<b>Course language:</b> Slovak					
<b>Course assessment</b> Total number of assessed students: 146					
A	B	C	D	E	FX
11.64	19.18	28.08	20.55	16.44	4.11
<b>Provides:</b> doc. RNDr. Matúš Harminc, CSc.					
<b>Date of last modification:</b> 27.02.2018					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚBEV/ BDD/05		<b>Course name:</b> Biology of Children and Adolescents			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 0 <b>Per study period:</b> 28 / 0 <b>Course method:</b> present					
<b>Number of credits:</b> 2					
<b>Recommended semester/trimester of the course:</b> 4., 6.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b> Written test					
<b>Learning outcomes:</b> The aim of the subject is to gain the particular level of knowledge about human body and its development. It is necessary for the understanding of specific biological characteristics of children and adolescents linked to development.					
<b>Brief outline of the course:</b> Human ontogenesis. Postnatal development. Age specific features of skeletal and muscular, circulatory, respiratory, gastrointestinal and urinary systems. Reproductive system. Endocrine system. Nervous system. Age specifics of selected diseases and drug dependence arise. Human population and environment.					
<b>Recommended literature:</b> Drobný I., Drobná M.: Biológia dieťaťa pre špeciálnych pedagógov I. a II. Bratislava, PdF UK, 2000 Lipková V.: Somatický a fyziologický vývoj dieťaťa. Osveta Bratislava, 1980 Malá H., Klementa J.: Biológia detí a dorastu. Bratislava, SPN, 1989					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 1402					
A	B	C	D	E	FX
30.53	22.97	17.9	18.12	9.91	0.57
<b>Provides:</b> doc. RNDr. Monika Kassayová, CSc.					
<b>Date of last modification:</b> 21.08.2017					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚMV/ BKP2/14	<b>Course name:</b> Bachelor Project
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 1 <b>Per study period:</b> 14 <b>Course method:</b> present	
<b>Number of credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 5.	
<b>Course level:</b> I.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> To prepare and present a contribution related to thesis and its topic.	
<b>Learning outcomes:</b> To get students familiar with basic knowledge on the form and content of thesis and thesis presentation as well as with the support for its realisation.	
<b>Brief outline of the course:</b> Necessary elements and formal aspects of a thesis. WYSIWYG editors, LaTeX, drawing programs. Presentation software, Microsoft PowerPoint and its clones, Beamer. Suggestions for presentation and contribution making.	
<b>Recommended literature:</b> electronic information sources	
<b>Course language:</b> Slovak or English	
<b>Course assessment</b> Total number of assessed students: 115	
abs	n
100.0	0.0
<b>Provides:</b> doc. RNDr. Dušan Šveda, CSc.	
<b>Date of last modification:</b> 27.02.2018	
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.	

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚMV/ BPO/14		<b>Course name:</b> Bachelor thesis and its defence			
<b>Course type, scope and the method:</b> <b>Course type:</b> <b>Recommended course-load (hours):</b> <b>Per week: Per study period:</b> <b>Course method:</b> present					
<b>Number of credits:</b> 4					
<b>Recommended semester/trimester of the course:</b>					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b> Acquiring the required number of credits in the structure defined by the study plan.					
<b>Learning outcomes:</b> Evaluation of student's competences with respect to the profile of the graduate.					
<b>Brief outline of the course:</b> Presentation of results of the bachelor thesis, answering the questions of the thesis supervisor and answering the questions of members of evaluation committee.					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 45					
A	B	C	D	E	FX
57.78	26.67	8.89	4.44	2.22	0.0
<b>Provides:</b>					
<b>Date of last modification:</b> 27.02.2018					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					



## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KPPaPZ/ BPaoBP/15		<b>Course name:</b> Bachelor's Thesis Defense			
<b>Course type, scope and the method:</b> <b>Course type:</b> <b>Recommended course-load (hours):</b> <b>Per week: Per study period:</b> <b>Course method:</b> present					
<b>Number of credits:</b> 4					
<b>Recommended semester/trimester of the course:</b>					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 19					
A	B	C	D	E	FX
21.05	15.79	21.05	31.58	10.53	0.0
<b>Provides:</b>					
<b>Date of last modification:</b> 21.08.2017					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KFaDF/DF2p/03		<b>Course name:</b> History of Philosophy 2 (General Introduction)			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 1 <b>Per study period:</b> 28 / 14 <b>Course method:</b> present					
<b>Number of credits:</b> 4					
<b>Recommended semester/trimester of the course:</b> 6.					
<b>Course level:</b> I., II.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 738					
A	B	C	D	E	FX
60.84	13.82	12.6	8.67	3.39	0.68
<b>Provides:</b> doc. PhDr. Pavol Tholt, PhD., mim. prof., Doc. PhDr. Peter Nezník, CSc., PhDr. Katarína Mayerová, PhD., doc. Mgr. Róbert Stojka, PhD.					
<b>Date of last modification:</b> 31.08.2017					
<b>Approved:</b> Guarantee doc. RNDr. Ondrej Hutník, PhD. Guarantee prof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚMV/ DGS/15	<b>Course name:</b> Students' Digital Literacy
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present	
<b>Number of credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 1.	
<b>Course level:</b> I.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> continuous assessment and final project	
<b>Learning outcomes:</b> To acquire an overview of the current possibilities of digital technology to develop skills and competencies with emphasis on the area of communication, social interaction and personal. To acquire basic digital skills for working with advanced technologies (mobile phone, tablet, laptop, social media, online webtechnologies). To understand the value of existing advanced technologies for better and more effective learning, work and active life in higher education, lifelong learning and further career prospects.	
<b>Brief outline of the course:</b> Introduction to the problems of current, commonly available digital technology. Tools for access to online information source (mobile applications for access to information systems, databases, data books). Tools for collecting, generating direct information and data and its subsequent analysis and visualization. Tools for providing and sharing of electronic content (cloud technology - Google Drive, Youtube, Google+, Skydrive, Dropbox). Tools for communication, discussion and collaborative activities. Legal work with digital technologies and resources, plagiarism, critical evaluation of digital resources. Security, privacy, digital ethics and etiquette, digital citizenship.	
<b>Recommended literature:</b> 1. Bruff, D. (2009). Teaching with classroom response systems: Creating active learning environments. San Francisco: Jossey-Bass. 2. Byrne, R. (2012). Google Drive and Docs for Teachers. Free Tech for Teachers. 3. Kawasaki, G. (2012). What the Plus! Google+ for the Rest of Us. Amazon igital Services. 4. Kolb, L. (2011). Cell Phones in the Classroom: A Practical Guide for Educators. International Society for Technology in Education.	
<b>Course language:</b> Slovak	
<b>Course assessment</b> Total number of assessed students: 147	

abs	n
96.6	3.4
<b>Provides:</b> doc. RNDr. Stanislav Lukáč, PhD., doc. RNDr. Jozef Hanč, PhD., doc. RNDr. Ľubomír Šnajder, PhD.	
<b>Date of last modification:</b> 23.08.2017	
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.	

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚMV/ DSMa/10		<b>Course name:</b> Discrete mathematics I			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 2 <b>Per study period:</b> 28 / 28 <b>Course method:</b> present					
<b>Number of credits:</b> 5					
<b>Recommended semester/trimester of the course:</b> 3.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b> Examination.					
<b>Learning outcomes:</b> To be familiar with some factual knowledge of combinatorics and graph theory. To understand and appreciate mathematical notions, definitions, and proofs, to solve problems requiring more than just standard recipes, and to express mathematical thoughts precisely and more rigorously.					
<b>Brief outline of the course:</b> Basic principles. Counting and binomial coefficients, Binomial theorem, polynomial theorem. Recurrence: Some miscellaneous problems, Fibonacci-type relations, Using generating functions, miscellaneous methods. The inclusion-exclusion principle. Rook polynomials. Introduction to graphs: The concept of graphs, paths in graphs. Connectivity. Trees, bipartite graphs. Planarity. Polyhedra. Traveling round a graph: Eulerian graphs, Hamiltonian graphs. Partitions and colourings: Vertex colourings of graphs. Edge colourings of graphs					
<b>Recommended literature:</b> 1. I. Anderson, A first course in discrete mathematics, Springer-Verlag London, 2001. 2. J. Matoušek and J. Nešetřil, Invitation to discrete mathematics, Oxford University Press Inc. , New York 1999.					
<b>Course language:</b> Slovak					
<b>Course assessment</b> Total number of assessed students: 567					
A	B	C	D	E	FX
13.76	11.64	17.46	22.57	26.28	8.29
<b>Provides:</b> RNDr. Mária Maceková, PhD., doc. RNDr. Roman Soták, PhD.					
<b>Date of last modification:</b> 27.02.2018					

**Approved:** Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Ol'ga Orosová, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚMV/ DSMb/10	<b>Course name:</b> Discrete mathematics II
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 2 <b>Per study period:</b> 28 / 28 <b>Course method:</b> present	
<b>Number of credits:</b> 5	
<b>Recommended semester/trimester of the course:</b> 4.	
<b>Course level:</b> I.	
<b>Prerequisites:</b> ÚMV/DSMa/10 or ÚMV/DSM3a/10	
<b>Conditions for course completion:</b> Two tests during the semester It is made on the base of results of two tests during the semester (50%) and a final written exam and an oral exam (50%)	
<b>Learning outcomes:</b> Mastered fundamental methods of graph theory. To be familiar with some possibilities of applications of graph theory	
<b>Brief outline of the course:</b> Introduction to graphs. Connectivity and distance in graphs. Trees, spanning subgraphs Independence and coverings. Introduction to the Ramsey theory. Introduction to the extremal graph theory. Matchings: Theorem of Hall, theorem of Berge, optimal assignment problems. Vertex colorings: Theorem of Brooks, Theorem of Erdos and Szekeres. Chromatic polynomials. Edge colourings, Theorem of Koenig. Introduction to directed graphs: Basic notions, connectivities, tournaments, acyclic graphs, base and kernel of a graph. Introduction to applications of graphs.	
<b>Recommended literature:</b> 1. A. Bondy and U.S.R. Murty: Graph theory, Springer-Verlag 2008 2. G. Chartrand, L. Lesniak, and P. Zhang, Graphs and digraphs, CRC Press, Boca Raton 2011 3. R. Diestel: Graph Theory, Springer-Verlag, New York, Inc. 1997 4. M.N.S. Swamy and K. Thulasiraman: Graphs, Networks and Algorithms. Willey Interscience Publ., New York 1981	
<b>Course language:</b> Slovak	
<b>Course assessment</b>	

Total number of assessed students: 386					
A	B	C	D	E	FX
11.92	9.59	17.36	19.17	28.24	13.73
<b>Provides:</b> RNDr. Igor Fabrici, Dr. rer. nat., RNDr. Mária Maceková, PhD.					
<b>Date of last modification:</b> 27.02.2018					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					



## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚMV/ DSMc/10	<b>Course name:</b> Discrete mathematics III
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 2 <b>Per study period:</b> 28 / 28 <b>Course method:</b> present	
<b>Number of credits:</b> 5	
<b>Recommended semester/trimester of the course:</b>	
<b>Course level:</b> I.	
<b>Prerequisites:</b> ÚMV/DSMb/10	
<b>Conditions for course completion:</b> Two tests during the semester It is made on the base of results of two tests during the semester (50%) and a final written exam and an oral exam (50%)	
<b>Learning outcomes:</b> Mastered fundamental methods of graph theory. Abilities of applications of graph theory.	
<b>Brief outline of the course:</b> Eulerian and Hamiltonian graphs. Connectivity: Theorem of Menger. Matching: Theorem of Tutte. Planar graphs: Theorem of Kuratowski. Plane graphs: Euler polyhedral formula and its consequences, Introduction to the theory of light graphs in plane graphs. Colourings of plane graphs. Crossing numbers of graphs. Introduction to the topological graph theory. Edge colourings: Theorem of Vizing. Application of Graph theory: The shortest path problem, the critical path method.	
<b>Recommended literature:</b> 1. A. Bondy and U.S.R. Murty: Graph theory, Springer-Verlag 2008 2. G. Chartrand, L. Lesniak, and P. Zhang, Graphs and digraphs, CRC Press, Boca Raton 2011 3. R. Diestel: Graph Theory, Springer-Verlag, New York, Inc. 1997 4. M.N.S. Swamy and K. Thulasiraman: Graphs, Networks and Algorithms. Willey Interscience Publ., New York 1981	
<b>Course language:</b> Slovak	
<b>Course assessment</b> Total number of assessed students: 64	

A	B	C	D	E	FX
12.5	34.38	14.06	29.69	9.38	0.0
<b>Provides:</b> prof. RNDr. Tomáš Madaras, PhD., RNDr. Mária Maceková, PhD.					
<b>Date of last modification:</b> 27.02.2018					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> KPPaPZ/ECO-C1/14	<b>Course name:</b> Team Work ECo-C1
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> combined, present	
<b>Number of credits:</b> 4	
<b>Recommended semester/trimester of the course:</b> 3., 5.	
<b>Course level:</b> I., N	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b>	
<b>Learning outcomes:</b>	
<b>Brief outline of the course:</b>	
<b>Recommended literature:</b>	
<b>Course language:</b>	
<b>Course assessment</b> Total number of assessed students: 49	
abs	n
97.96	2.04
<b>Provides:</b> PhDr. Anna Janovská, PhD.	
<b>Date of last modification:</b> 21.08.2017	
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.	

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> KPPaPZ/ECO-C2/14	<b>Course name:</b> Self Marketing ECo-C2
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> combined, present	
<b>Number of credits:</b> 4	
<b>Recommended semester/trimester of the course:</b> 4., 6.	
<b>Course level:</b> I., N	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b>	
<b>Learning outcomes:</b>	
<b>Brief outline of the course:</b>	
<b>Recommended literature:</b>	
<b>Course language:</b>	
<b>Course assessment</b> Total number of assessed students: 36	
abs	n
69.44	30.56
<b>Provides:</b> doc. PhDr. Beata Gajdošová, PhD., Mgr. Lucia Hricová, PhD.	
<b>Date of last modification:</b> 21.08.2017	
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.	

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> KPPaPZ/ECO-C3/14	<b>Course name:</b> Conflict Management ECo-C3
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> combined, present	
<b>Number of credits:</b> 4	
<b>Recommended semester/trimester of the course:</b> 3., 5.	
<b>Course level:</b> I., N	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b>	
<b>Learning outcomes:</b>	
<b>Brief outline of the course:</b>	
<b>Recommended literature:</b>	
<b>Course language:</b>	
<b>Course assessment</b> Total number of assessed students: 42	
abs	n
90.48	9.52
<b>Provides:</b> Mgr. Ondrej Kalina, PhD.	
<b>Date of last modification:</b> 21.08.2017	
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.	

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> KPPaPZ/ECO-C4/14	<b>Course name:</b> Communication ECo-C4
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> combined, present	
<b>Number of credits:</b> 4	
<b>Recommended semester/trimester of the course:</b> 4., 6.	
<b>Course level:</b> I., N	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b>	
<b>Learning outcomes:</b>	
<b>Brief outline of the course:</b>	
<b>Recommended literature:</b>	
<b>Course language:</b>	
<b>Course assessment</b> Total number of assessed students: 22	
abs	n
50.0	50.0
<b>Provides:</b> Mgr. Lucia Hricová, PhD.	
<b>Date of last modification:</b> 21.08.2017	
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.	

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚINF/EDS/15	<b>Course name:</b> Educational software
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 0 / 2 <b>Per study period:</b> 0 / 28 <b>Course method:</b> present	
<b>Number of credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 5.	
<b>Course level:</b> I.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> 1 Preparation of interim assignments: a) Worksheet for student (with custom graphics) b) Multimedia educational presentation (with pictures, animations and sounds) c) Interactive educational quiz (with several types of quiz items) d) Methodological guidance on the use of interactive applications in teaching selected topic of chosen school subject. 2 Creation and presentation of final project on the use of educational software in education.	
<b>Learning outcomes:</b> 1. To acquire an overview of the educational software types and its exploitation in education. 2. To gain or enhance basic skills in working with: a) presentation software, programs for creation and editing images, animations, diagrams, sounds, concept maps, b) programs for creation of quizzes, questionnaires, voting, c) simulation and modeling software, d) selected subject-oriented educational programs, 3. To create and present a final project on the use of educational software in education.	
<b>Brief outline of the course:</b> Educational software types. Onlilne educational sources and tools. Multimedia processing. Tools for creation of teaching aids.	
<b>Recommended literature:</b> 1. Digitálna gramotnosť učiteľa : učebný materiál- modul 1 / Rastislav Adámek ... [et al.]. - Košice : Ústav informácií a prognóz školstva, 2009. - 80 s. - ISBN 9788080861193(brož.). 2. Moderná didaktická technika v práci učiteľa : učebný materiál modul 2 / Rastislav Adámek ... [et al.] ; recenzenti Viliam Fedák, Anton Lavrin. - Košice : Elfa, 2010. - 200 s. - ISBN 9788080861353 (brož.). 3. Web, Multimédia / Martin Homola ... [et al.]. - Bratislava : Štátny pedagogický ústav, 2010. - 68 s. - Č. projektu: ŠPVV ĎVUi 26120130001. - ISBN 9788081180514 (brož.).	
<b>Course language:</b>	
<b>Notes:</b>	

Content of lessons will be flexibly adapted to the field of study of learners. Language learners will be able to work more with pictures and sounds, physicists with simulation programs, mathematicians with mathematical software, etc.

**Course assessment**

Total number of assessed students: 30

A	B	C	D	E	FX
63.33	20.0	13.33	0.0	3.33	0.0

**Provides:** doc. RNDr. Ľubomír Šnajder, PhD.

**Date of last modification:** 23.08.2017

**Approved:** Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.



## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚBEV/ ETOP/08		<b>Course name:</b> Etology			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 2 <b>Per study period:</b> 28 / 28 <b>Course method:</b> present					
<b>Number of credits:</b> 6					
<b>Recommended semester/trimester of the course:</b> 1., 3., 5.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b> Written test					
<b>Learning outcomes:</b> To teach the students to know and to be aware of the importance of the behavioural aspect in biological sciences					
<b>Brief outline of the course:</b> History and development of ethology. Ethological methods. The innate forms of behaviour. The simplest forms of learning – conditioning and instrumental learning. Higher form of learning. Social behaviour. Sexual behaviour. Play behaviour. Biological rhythms. Orientation in space and animal migrations. Communication systems of animals. Emotions. Aggression in animal and human behaviour. Abnormal forms of behaviour					
<b>Recommended literature:</b> 1. J.B. Balcome: Second nature. The inner life of animals. Palgrave. McMillan, 2010. 2. T.J. Carew: Behavioral Neurobiology. Sinauer Assoc., Sunderland, 2000.					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 521					
A	B	C	D	E	FX
32.44	30.33	26.87	7.68	2.69	0.0
<b>Provides:</b> RNDr. Igor Majláth, PhD., RNDr. Natália Pipová, PhD., RNDr. Adriana Pačuta, PhD.					
<b>Date of last modification:</b> 21.09.2017					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD. Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KFaDF/ FMOPs/15		<b>Course name:</b> History of Philosophy (for Students of Psychology)			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present					
<b>Number of credits:</b> 2					
<b>Recommended semester/trimester of the course:</b> 1.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 1535					
A	B	C	D	E	FX
31.21	18.89	17.2	13.49	16.87	2.35
<b>Provides:</b> PhDr. Katarína Mayerová, PhD.					
<b>Date of last modification:</b> 31.08.2017					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚMV/ GEO2a/15	<b>Course name:</b> Geometry I
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 3 / 2 <b>Per study period:</b> 42 / 28 <b>Course method:</b> present	
<b>Number of credits:</b> 5	
<b>Recommended semester/trimester of the course:</b> 6.	
<b>Course level:</b> I.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> Two written tests. Written and oral examinations For continuous evaluation - max. 40 points for the written test - max. 20 points for oral exams - max. 40 points) Final score: A: 100-91 points, B: 90-81, C: 80-71, D: 70-61, E: 60-51, F: less than 51 points Note: In each of the student needs to have at least 40% max. number of points	
<b>Learning outcomes:</b> To acquaint students with the analytical geometry of linear and quadratic figures in Affine and Euclidean space.	
<b>Brief outline of the course:</b> Affine n-dimensional space - definition. Linear coordinate system. Subspaces, the parametric and non-parametric representation. The relative position of the two subspaces. Bundles of lines. The arrangement of points on the line. Convex sets. Changing the system of linear coordinates. Euclidean space - definition of (scalar and outer product). Euclidean distances and deviations subspaces. The rate of the size of convex sets. Triangle and trigonometric theorems. Conic and line.	
<b>Recommended literature:</b> 1. M.Sekanina, L.Boček, M.Kočandrle, J.Šedivý: Geometrie 1, SPN Praha 1986 2. M.Hejný, V.Zaťko, P.Kršňák: Geometria 1, SPN Bratislava 1985 3. J.Eliaš, J.Horváth, J.Kajan: Zbierka úloh z vyššej matematiky 1, Alfa Bratislava 4. M.Trenkler: Materiály uvedené na Interneti.	

<b>Course language:</b> Slovak					
<b>Course assessment</b> Total number of assessed students: 125					
A	B	C	D	E	FX
16.0	16.0	21.6	20.0	16.8	9.6
<b>Provides:</b> doc. RNDr. Dušan Šveda, CSc., Mgr. Katarína Čekanová					
<b>Date of last modification:</b> 27.02.2018					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KPE/ INP/17		<b>Course name:</b> Inclusive Pedagogy			
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present					
<b>Number of credits:</b> 2					
<b>Recommended semester/trimester of the course:</b> 5.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 0					
A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0
<b>Provides:</b>					
<b>Date of last modification:</b> 05.02.2018					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚMV/ IPU/10		<b>Course name:</b> Informatics course for teachers of mathematics			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 1 / 1 <b>Per study period:</b> 14 / 14 <b>Course method:</b> present					
<b>Number of credits:</b> 2					
<b>Recommended semester/trimester of the course:</b> 6.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b> Elaborating test by using a computer. Solving problems of worksheet and elaboration of seminar work.					
<b>Learning outcomes:</b> To develop the students' knowledge and skills in the basics of working with standard ICT, which provide opportunities for their use in mathematics education. To teach students to use the basic commands of Logo language for writing and generalization algorithms for constructing geometric shapes and basic principles of creation of constructions in the environment of dynamic geometry. To develop creative and evaluative students' ability to allow meaningful integration of modern technologies in mathematics education.					
<b>Brief outline of the course:</b> Basics of development of algorithms in Logo. Basics of working in the dynamic geometry environment. Educational applications and Internet in mathematics education. Use of numerical and graphical representations of data and modelling in the spreadsheet environment.					
<b>Recommended literature:</b> B. Brdička: The Role of Internetu in Education, 2003, <a href="http://it.pedf.cuni.cz/~bobr/role/econt.htm">http://it.pedf.cuni.cz/~bobr/role/econt.htm</a> . S. Lukáč a kol.: IKT vo vyučovaní matematiky, Asociácia projektu Infovek 2002. M. Černochová a kol.: Využití počítače při vyučování. Portál, 1998. Z. Šťastný: Matematické a statistické výpočty v Microsoft Excelu, Computer Press 2001.					
<b>Course language:</b> Slovak					
<b>Course assessment</b> Total number of assessed students: 147					
A	B	C	D	E	FX
53.74	26.53	10.88	6.8	2.04	0.0
<b>Provides:</b> doc. RNDr. Stanislav Lukáč, PhD.					
<b>Date of last modification:</b> 27.02.2018					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KPS/ KOGPS/11		<b>Course name:</b> Cognitive Psychology			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 3 / 2 <b>Per study period:</b> 42 / 28 <b>Course method:</b> present					
<b>Number of credits:</b> 7					
<b>Recommended semester/trimester of the course:</b> 2.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 1081					
A	B	C	D	E	FX
11.93	22.39	25.62	21.0	6.2	12.86
<b>Provides:</b> prof. PhDr. Ladislav Lovaš, CSc., Mgr. Ondrej Kalina, PhD., Mgr. Pavol Kačmár, PhD.					
<b>Date of last modification:</b> 21.09.2017					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚTVŠ/ KP/12	<b>Course name:</b> Survival Course
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week: Per study period:</b> 36s <b>Course method:</b> present	
<b>Number of credits:</b> 2	
<b>Recommended semester/trimester of the course:</b>	
<b>Course level:</b> I., II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> Conditions for course completion: Attendance Final assessment: continuous fulfilment of all tasks within the course	
<b>Learning outcomes:</b> 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.	
<b>Brief outline of the course:</b> 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.	
<b>Recommended literature:</b>	
<b>Course language:</b>	
<b>Course assessment</b> Total number of assessed students: 365	
abs	n
44.38	55.62



<b>Provides:</b> MUDr. Peter Dombrovský, Mgr. Marek Valanský
<b>Date of last modification:</b> 18.08.2017
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚMV/ LCO/10		<b>Course name:</b> Linear and integer programming			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 2 <b>Per study period:</b> 28 / 28 <b>Course method:</b> present					
<b>Number of credits:</b> 5					
<b>Recommended semester/trimester of the course:</b>					
<b>Course level:</b> I.					
<b>Prerequisites:</b> ÚMV/ALGa/10					
<b>Conditions for course completion:</b> Two tests, using software CASSIM, oral exam					
<b>Learning outcomes:</b> To learn the solving methods of linear programming					
<b>Brief outline of the course:</b> Formulation of linear and integer programs. Graphic solution. Simplex method, its variants and finiteness. Duality and its economic interpretation. Sensitivity analysis and parametric programming. Algorithms for integer programming.					
<b>Recommended literature:</b> Ch. Papadimitriou – K. Steiglitz: Combinatorial Optimization: Algorithms and Complexity, 1984 R.J. Vanderbei, Linear Programming: Foundations and Extensions (Kluwer 2001), electronic version: <a href="http://www.princeton.edu/~rvdb/LPbook/">http://www.princeton.edu/~rvdb/LPbook/</a>					
<b>Course language:</b> Slovak					
<b>Course assessment</b> Total number of assessed students: 146					
A	B	C	D	E	FX
21.23	14.38	21.23	21.23	21.23	0.68
<b>Provides:</b> doc. RNDr. Roman Soták, PhD., RNDr. Andrej Gajdoš					
<b>Date of last modification:</b> 27.02.2018					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD. Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KKF/ LJPS/07		<b>Course name:</b> Latin Language for Students of Psychology			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 1 / 1 <b>Per study period:</b> 14 / 14 <b>Course method:</b> present					
<b>Number of credits:</b> 2					
<b>Recommended semester/trimester of the course:</b> 2., 4.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 16					
A	B	C	D	E	FX
31.25	12.5	25.0	25.0	0.0	6.25
<b>Provides:</b> doc. PhDr. František Šimon, CSc.					
<b>Date of last modification:</b> 24.08.2017					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚTVŠ/ LKSp/13	<b>Course name:</b> Summer Course-Rafting of TISA River
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week: Per study period:</b> 36s <b>Course method:</b> present	
<b>Number of credits:</b> 2	
<b>Recommended semester/trimester of the course:</b>	
<b>Course level:</b> I., II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> Conditions for course completion: Attendance Final assessment: Raft control on the waterway (attended/not attended)	
<b>Learning outcomes:</b> Learning outcomes: Students have knowledge of rafts (canoe) and their control on waterway.	
<b>Brief outline of the course:</b> 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	
<b>Recommended literature:</b>	
<b>Course language:</b>	
<b>Course assessment</b> Total number of assessed students: 142	
abs	n
41.55	58.45

<b>Provides:</b> Mgr. Peter Bakalár, PhD.
<b>Date of last modification:</b> 18.08.2017
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚMV/ LTM/10		<b>Course name:</b> Logic and set theory			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 3 / 2 <b>Per study period:</b> 42 / 28 <b>Course method:</b> present					
<b>Number of credits:</b> 6					
<b>Recommended semester/trimester of the course:</b> 5.					
<b>Course level:</b> I.					
<b>Prerequisites:</b> ÚMV/MANb/19 or ÚMV/FRPb/19					
<b>Conditions for course completion:</b> Exam					
<b>Learning outcomes:</b> To obtain a basic knowledge on the mathematical notion of an infinity. Analysis of the notion of a proof.					
<b>Brief outline of the course:</b> Set as a mathematical formularization of an infinity. Properties of the set of reals. Mathematical induction. Relations and mappings. Finite and countable sets. Cardinality of continuum. Elementary cardinal arithmetics. Sentential calculus, an axiomatization. Completeness Theorem. Methods of proofs. Language of predicate calculus, examples. Axiomatizations of predicate calculus and the notion of a proof. Methods of proofs in predicate calculus.					
<b>Recommended literature:</b> E. Mendelson, Introduction to Mathematical Logic, van Nostrand 1964.					
<b>Course language:</b> Slovak					
<b>Course assessment</b> Total number of assessed students: 544					
A	B	C	D	E	FX
12.5	16.18	19.85	24.26	17.28	9.93
<b>Provides:</b> RNDr. Jaroslav Šupina, PhD.					
<b>Date of last modification:</b> 27.02.2018					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD. Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚMV/ MAE/10		<b>Course name:</b> Macroeconomics			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 1 <b>Per study period:</b> 28 / 14 <b>Course method:</b> present					
<b>Number of credits:</b> 4					
<b>Recommended semester/trimester of the course:</b> 5.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b> Final mark is given based on the results of the tests written during the semester and oral exam, that evaluates the verbal argument about the studied models.					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b> Basic macroeconomic notions: Gross domestic product, inflation, unemployment.. Analysis of goods markets. Financial markets. IS-LM model in closed economy. Open economy. IS-LM model in open economy. Models of labour market. Inflation and economic growth. High depth.					
<b>Recommended literature:</b> 1. Olivier Blanchard, Alessia Amighini, Francesco Giavazzi: MACROECONOMICS, A EUROPEAN PERSPECTIVE, Pearson Education, 2010 2. N.GREGORY MANKIW, MACROECONOMICS, 7th Edition, Harvard University, Worth Publishers 2009					
<b>Course language:</b> Slovak and English					
<b>Course assessment</b> Total number of assessed students: 75					
A	B	C	D	E	FX
21.33	14.67	21.33	22.67	13.33	6.67
<b>Provides:</b> prof. RNDr. Katarína Cechlárová, DrSc.					
<b>Date of last modification:</b> 27.02.2018					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚMV/ MAN1d/10		<b>Course name:</b> Mathematical analysis IV			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 4 / 2 <b>Per study period:</b> 56 / 28 <b>Course method:</b> present					
<b>Number of credits:</b> 7					
<b>Recommended semester/trimester of the course:</b>					
<b>Course level:</b> I.					
<b>Prerequisites:</b> ÚMV/MAN1c/10 or ÚMV/MAN2c/10					
<b>Conditions for course completion:</b> exam					
<b>Learning outcomes:</b> Understanding of the basic rigorous ideas of Mathematical Analysis.					
<b>Brief outline of the course:</b> Metric spaces. Complete, compact and connected sets. Rings sigma-rings. Measure. Outer measure. Lebesgue measure. Measurable sets. Measurable functions. Lebesgue integral. Lebesgue integral versus Riemann integral. Calculations of Lebesgue integrals. Applications.					
<b>Recommended literature:</b> B. S. Thomson, J. B. Bruckner, A. M. Bruckner: Elementary Real Analysis, Prentice Hall, 2001. A. M. Bruckner, J. B. Bruckner, B. S. Thomson: Real Analysis, Prentice Hall, 1997. T. Neubrunn, B. Riečan: Miera a integrál, Veda, Bratislava, 1981. B. Riečan, T. Neubrunn: Teória miery, Veda, Bratislava, 1992. G. S. Nelson, A User-Friendly Introduction to Lebesgue Measure and Integration, American Mathematical Society, 2015					
<b>Course language:</b> Slovak					
<b>Course assessment</b> Total number of assessed students: 222					
A	B	C	D	E	FX
4.05	4.95	13.06	22.52	42.79	12.61
<b>Provides:</b> prof. RNDr. Jozef Doboš, CSc., RNDr. Jaroslav Šupina, PhD.					
<b>Date of last modification:</b> 27.02.2018					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					



## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚMV/ MAN2c/10		<b>Course name:</b> Mathematical analysis III			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 2 <b>Per study period:</b> 28 / 28 <b>Course method:</b> present					
<b>Number of credits:</b> 5					
<b>Recommended semester/trimester of the course:</b> 3.					
<b>Course level:</b> I.					
<b>Prerequisites:</b> ÚMV/MANb/19					
<b>Conditions for course completion:</b> Two written test during semester and activity student to practice. Final evaluation is given by continuous assessment, written and oral part of the exam.					
<b>Learning outcomes:</b> The purpose of the course is to provide introductory knowledge in Riemann integral calculus of real functions of one real variable and series of real functions. To develop computational skills in the field and extend the student ability to use this theory in applications. To teach the basic knowledge of the subject mater in the syllabus and develop the ability to use this theory.					
<b>Brief outline of the course:</b> Definite Riemann integral - definition, elementary properties, calculation methods, applications. Improper Riemann integral. Sequences and series of real functions – pointwise and uniform convergence, properties of the limit function and the sum. Power series, Taylor series and their applications.					
<b>Recommended literature:</b> 1. O. Hutník: Určitý integrál, UPJŠ, Košice, 2012 (in Slovak). 2. Brannan, D.: A First Course in Mathematical Analysis, Cambridge University Press, Cambridge 2006. 3. Bruckner, A. M. - Bruckner J. B. - Thomson, B. S.: Real Analysis, Second Edition, ClassicalRealAnalysis.com, 2008. 4. Zorich, V. A.: Mathematical Analysis I, Springer-Verlag 2002.					
<b>Course language:</b> Slovak					
<b>Course assessment</b> Total number of assessed students: 657					
A	B	C	D	E	FX
7.61	6.85	13.09	18.57	42.31	11.57
<b>Provides:</b> doc. RNDr. Ondrej Hutník, PhD.					

<b>Date of last modification:</b> 27.02.2018
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Ol'ga Orosová, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚMV/ MAN2d/10	<b>Course name:</b> Mathematical analysis IV
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 2 <b>Per study period:</b> 28 / 28 <b>Course method:</b> present	
<b>Number of credits:</b> 5	
<b>Recommended semester/trimester of the course:</b> 4.	
<b>Course level:</b> I.	
<b>Prerequisites:</b> ÚMV/MANb/19	
<b>Conditions for course completion:</b> Continuous assessment is taken the form of small tests and two main tests during the semester. Final evaluation is given by continuous assessment (40%), written and oral part of the exam (60%).	
<b>Learning outcomes:</b> To teach the basic knowledge of the subject matter in the syllabus and develop the ability to use this theory. The students also learn mathematical culture, notation and mathematical way of thinking and expression.	
<b>Brief outline of the course:</b> 1. Metric space - Euclidean space, topological properties of points and sets in metric space. 2. Function of several real variables - basic concepts, limits and continuity. 3. Differential calculus of functions of several real variables - partial derivative, differentiability and total differential (also higher order), Taylor polynomials, directional derivative, local and global extrema, constrained local extrema. 4. Double (two dimensional) integral - definition, calculation methods, applications.	
<b>Recommended literature:</b> 1. L. Kľuvánek, I. Mišík, M. Švec: Matematika I, II, SVTL, Bratislava, 1959 (in Slovak). 2. Z. Došlá, O. Došlý: Diferenciální počet funkcí více proměnných, vysokoškolský učebný text, Masarykova univerzita v Brně, Brno, 2003 (in Czech). 3. R. E. Williamson, H. F. Trotter: Multivariable mathematics, Prentice Hall (Pearson), Upper Saddle River, 2004. 4. B. S. Thomson, J. B. Bruckner, A. M. Bruckner: Elementary real analysis, Prentice Hall (Pearson), Lexington, 2008. 5. J. Stewart: Calculus: Early transcendentals, Brooks Cole (Thomson), Toronto, 2008. 6. P. Pták: Calculus II (A course for engineers), ČVUT v Prahe, Praha, 1997. 7. J. Eliaš, J. Horváth, J. Kajan: Zbierka úloh z vyššej matematiky 3, 4, SVTL, Bratislava, 1966 (in Slovak).	
<b>Course language:</b> Slovak	
<b>Course assessment</b>	

Total number of assessed students: 293					
A	B	C	D	E	FX
9.56	9.9	17.75	19.45	34.13	9.22
<b>Provides:</b> RNDr. Lenka Halčinová, PhD.					
<b>Date of last modification:</b> 27.02.2018					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Ol'ga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚMV/ MANa/10		<b>Course name:</b> Mathematical analysis I			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 3 / 3 <b>Per study period:</b> 42 / 42 <b>Course method:</b> present					
<b>Number of credits:</b> 7					
<b>Recommended semester/trimester of the course:</b> 1.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b> Two written test during semester and activity student to practice. Final evaluation is given by continuous assessment, written and oral part of the exam.					
<b>Learning outcomes:</b> The aim of the course is to give introductory knowledge about real numbers, sequences and series of real numbers, and to develop certain calculation skills in the field.					
<b>Brief outline of the course:</b> Real numbers - axioms and properties. Real functions - basic properties (monotone, bounded, even/odd, inverse), transformations of graphs of functions. Infinite sequences - operations, boundedness, monotonicity, convergence. Infinite series - operations, convergence, criteria of convergence.					
<b>Recommended literature:</b> 1. Brannan, D.: A First Course in Mathematical Analysis, Cambridge University Press, Cambridge 2006. 2. Bruckner, A. M., Bruckner J. B., Thomson, B. S.: Real Analysis, Second Edition, ClassicalRealAnalysis.com, 2008. 3. Zorich, V. A.: Mathematical Analysis I, Springer-Verlag 2002.					
<b>Course language:</b> Slovak					
<b>Course assessment</b> Total number of assessed students: 1350					
A	B	C	D	E	FX
6.3	7.7	12.3	13.56	35.26	24.89
<b>Provides:</b> doc. RNDr. Ondrej Hutník, PhD., RNDr. Lenka Halčinová, PhD., Mgr. Zuzana Ontkovičová					
<b>Date of last modification:</b> 27.02.2018					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚMV/ MANb/10		<b>Course name:</b> Mathematical analysis II			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 4 / 3 <b>Per study period:</b> 56 / 42 <b>Course method:</b> present					
<b>Number of credits:</b> 8					
<b>Recommended semester/trimester of the course:</b> 2.					
<b>Course level:</b> I.					
<b>Prerequisites:</b> ÚMV/MANa/10					
<b>Conditions for course completion:</b> Two written test during semester and activity student to practice. Final evaluation is given by continuous assessment, written and oral part of the exam.					
<b>Learning outcomes:</b> The purpose of the course is to provide introductory knowledge in differential and integral calculus of real functions of one real variable and to develop computational skills in the field.					
<b>Brief outline of the course:</b> Limit and continuity of real functions, elementary functions. Differential calculus - derivatives of the first and of higher orders, the basic theorems of differential calculus and their use to study properties and behavior of functions. Indefinite integral - basic methods for finding primitive functions. Newton integral and its basic properties.					
<b>Recommended literature:</b> 1. Brannan, D.: A First Course in Mathematical Analysis, Cambridge University Press, Cambridge 2006. 2. Bruckner, A. M., Bruckner J. B., Thomson, B. S.: Real Analysis, Second Edition, ClassicalRealAnalysis.com, 2008. 3. Zorich, V. A.: Mathematical Analysis I, Springer-Verlag 2002.					
<b>Course language:</b> Slovak					
<b>Course assessment</b> Total number of assessed students: 867					
A	B	C	D	E	FX
8.65	8.3	12.57	18.69	36.68	15.11
<b>Provides:</b> doc. RNDr. Ondrej Hutník, PhD., RNDr. Lenka Halčinová, PhD., Mgr. Katarína Lučivjanská, PhD.					
<b>Date of last modification:</b> 27.02.2018					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚMV/ MIE/13		<b>Course name:</b> Microeconomics			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 1 <b>Per study period:</b> 28 / 14 <b>Course method:</b> present					
<b>Number of credits:</b> 4					
<b>Recommended semester/trimester of the course:</b> 5.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b> The minimum necessary number of points from tests written during semester is 50%, plus the ability of verbal argumentation in the final oral exam.					
<b>Learning outcomes:</b> Understanding of basic principles of microeconomics and ability to apply them in practical situations.					
<b>Brief outline of the course:</b> Economics and economy. Supply and demand. Consumer Theory. Theory of firm. Perfect competition. Monopoly. Labour market. Market failure. Externalities and Public goods.					
<b>Recommended literature:</b> 1. <a href="http://umv.science.upjs.sk/cechlarova/MIE/MIE.htm">http://umv.science.upjs.sk/cechlarova/MIE/MIE.htm</a> - podklady k prednáška, testy na cvičenia, materiály z dennej tlače 2. H.L. Varian, Intermediate Mikroekonomics, WW Norton, 1993 3. J.M. Perloff, Microeconomics, 6th Edtion, Addison Wesley, 2012 4. J. Sloman, Economics, 6th Edition, Prentice Hall, 2006					
<b>Course language:</b> Slovak					
<b>Course assessment</b> Total number of assessed students: 69					
A	B	C	D	E	FX
24.64	20.29	18.84	21.74	13.04	1.45
<b>Provides:</b> prof. RNDr. Katarína Cechlárová, DrSc., RNDr. Veronika Jurková, PhD.					
<b>Date of last modification:</b> 27.02.2018					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KPE/MMKV/17		<b>Course name:</b> Multiculturalism and Multicultural Education			
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present					
<b>Number of credits:</b> 2					
<b>Recommended semester/trimester of the course:</b> 4.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 48					
A	B	C	D	E	FX
31.25	27.08	37.5	2.08	2.08	0.0
<b>Provides:</b> PaedDr. Janka Ferencová, PhD.					
<b>Date of last modification:</b> 05.02.2018					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					



## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KPPaPZ/ MMOSP/15		<b>Course name:</b> Methodology of Teaching Psychology			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present					
<b>Number of credits:</b> 3					
<b>Recommended semester/trimester of the course:</b> 1.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 95					
A	B	C	D	E	FX
6.32	7.37	22.11	27.37	28.42	8.42
<b>Provides:</b> PhDr. Anna Janovská, PhD.					
<b>Date of last modification:</b> 21.08.2017					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚMV/MRUa/15		<b>Course name:</b> Mathematical problem solving strategies I			
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present					
<b>Number of credits:</b> 2					
<b>Recommended semester/trimester of the course:</b> 4.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b> Evaluation will be awarded on the basis of continuous assessment and final test.					
<b>Learning outcomes:</b> To acquaint students with problems and strategies for the solutions of the problems at the primary and secondary school, and with the specific problems of teaching mathematics at primary and secondary school.					
<b>Brief outline of the course:</b> Basic knowledge of school mathematics, different strategy of problem solution, problems from mathematical competitions concerning Equations and inequalities and their systems, Functions, Financial Mathematics.					
<b>Recommended literature:</b> [1] Hejný, M. a kol., Teória vyučovania matematiky 2. SPN, Bratislava 1989 (in Slovak) [2] Kopka, J., Hrozny problémů ve školské matematice, Univerzita J. E. Purkyně, Ústí nad Labem 1999 (in Czech) [3] Učebnice a zbierky úloh z matematiky ZŠ a SŠ (in Slovak)					
<b>Course language:</b> Slovak					
<b>Course assessment</b> Total number of assessed students: 157					
A	B	C	D	E	FX
31.85	21.02	22.93	12.1	11.46	0.64
<b>Provides:</b> doc. RNDr. Stanislav Lukáč, PhD.					
<b>Date of last modification:</b> 27.02.2018					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚMV/MRUB/15		<b>Course name:</b> Mathematical problem solving strategies II			
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present					
<b>Number of credits:</b> 2					
<b>Recommended semester/trimester of the course:</b> 5.					
<b>Course level:</b> I.					
<b>Prerequisites:</b> ÚMV/MRUa/15					
<b>Conditions for course completion:</b> The award is based on the results of written checks carried out during the semester. The resulting trial is granted on the basis of continuous assessment and seminar work.					
<b>Learning outcomes:</b> To acquaint students with problems and strategies for the solutions of the problems at the primary and secondary school, and with the specific problems of teaching mathematics at primary and secondary school.					
<b>Brief outline of the course:</b> Basic knowledge of school mathematics, various methods for the task, the role of mathematical competitions for thematic units Planimetry, stereometry, goniometry.					
<b>Recommended literature:</b> [1] Hejný, M. a kol., Teória vyučovania matematiky 2. SPN, Bratislava 1989 (in Slovak) [2] Kopka, J., Hrozny problémů ve školské matematice, Univerzita J. E. Purkyně, Ústí nad Labem 1999 (in Czech) [3] Jonson-Wilder.S., Mason.J.: Developing thinking in Geometry, Sage, 2009 [4] Učebnice a zbierky úloh z matematiky ZŠ a SŠ					
<b>Course language:</b> Slovak					
<b>Course assessment</b> Total number of assessed students: 126					
A	B	C	D	E	FX
34.13	23.81	26.98	9.52	5.56	0.0
<b>Provides:</b> doc. RNDr. Dušan Šveda, CSc.					
<b>Date of last modification:</b> 27.02.2018					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚMV/MRUc/15		<b>Course name:</b> Mathematical problem solving strategies III			
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present					
<b>Number of credits:</b> 2					
<b>Recommended semester/trimester of the course:</b> 6.					
<b>Course level:</b> I.					
<b>Prerequisites:</b> ÚMV/MRUb/15					
<b>Conditions for course completion:</b> 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.					
<b>Learning outcomes:</b> Students become familiar with the tasks, methods of problem solving, solving strategies and with specific problems of teaching mathematics at primary and secondary schools to topics combinatorics, probability and statistics.					
<b>Brief outline of the course:</b> Basic knowledge of school mathematics, from the topics: combinatorics, probability and statistics.					
<b>Recommended literature:</b> Hecht, T., Sklenáriková, Z., Metódy riešenia matematických úloh, Bratislava, SPN, 1992. (in slovak) Hecht, T. a kol., Matematika pre 1.-4. ročník gymnázií a SOŠ, OrbisPictusIstropolitana, Bratislava 1999-2002. (in slovak) Krantz, S.G., Techniques of Problem Solving, AMS, 1997. Larson, L.C., Metódy riešenia matematických problémov, Bratislava, Alfa, 1990. (in slovak)					
<b>Course language:</b> Slovak					
<b>Course assessment</b> Total number of assessed students: 129					
A	B	C	D	E	FX
27.91	31.78	22.48	11.63	6.2	0.0
<b>Provides:</b> RNDr. Ingrid Semanišinová, PhD.					
<b>Date of last modification:</b> 27.02.2018					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚMV/ MTM/14		<b>Course name:</b> Mathematics			
<b>Course type, scope and the method:</b> <b>Course type:</b> <b>Recommended course-load (hours):</b> <b>Per week: Per study period:</b> <b>Course method:</b> present					
<b>Number of credits:</b> 1					
<b>Recommended semester/trimester of the course:</b>					
<b>Course level:</b> I.					
<b>Prerequisites:</b> ÚMV/MAN2c/10 and ÚMV/ALG2b/10 and ÚMV/ATC/10					
<b>Conditions for course completion:</b> Acquiring the required number of credits in the structure defined by the study plan.					
<b>Learning outcomes:</b> Evaluation of student's competences with respect to the profile of the graduate.					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b> Slovak					
<b>Course assessment</b> Total number of assessed students: 44					
A	B	C	D	E	FX
27.27	13.64	29.55	25.0	4.55	0.0
<b>Provides:</b>					
<b>Date of last modification:</b> 27.02.2018					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚBEV/ NATM/15		<b>Course name:</b> Neuroanatomy			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 2 <b>Per study period:</b> 28 / 28 <b>Course method:</b> present					
<b>Number of credits:</b> 5					
<b>Recommended semester/trimester of the course:</b> 2.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b> To provide the students with basic knowledge, principles and function of human nervous system.					
<b>Brief outline of the course:</b> Introduction to neuroanatomy, development,classification of the Nervous System,dividing of the Nervous System (CNS and PNS), Spinal Cord and Spinal Nerves (structure, reflexes, gray matters and intrinsic pathways,Ascendig, Descending Tracts), Brain Stem and Cranial Nerves, Cerebellum, Diencephalon, Telencephalon,Limbic System, Cerebrospinal Fluid System, Vegetative Nervous System, Functional Systems (Motor systems - pyramidal tract,extrapyramidal Motor System,motor pathway), (Sensory system - pathway of Epicritic Sensibility, Pathway of Prothopatic Sensibility, Optic Pathway, Auditory Trect, Vestibular Tract)					
<b>Recommended literature:</b> Kahle W., Leonhardt H., Platzer W.: Color Atlas and Textbook of Human Anatomy, Volume 3. Nervous System and Sensory Organs, 1993 Georg Thieme Verlag Stuttgart, New York Hendelman W.J.: Atlas of functional neuroanatomy CRC Press LLC, 2000 Kopf-Mäier P.: Wolf-Heideggers Atlas of Human Anatomy Kärger, 2000 Miklošová M.: Anátómia PF, UPJŠ, 2011, Equilibria Haines,D.E.: Neuroanatomy, Lippincott Williams,Wilkins, 2011					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 71					
A	B	C	D	E	FX
12.68	12.68	22.54	16.9	12.68	22.54
<b>Provides:</b> RNDr. Juraj Ševc, PhD., Mgr. René Šebeňa, PhD.					
<b>Date of last modification:</b> 21.09.2017					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KGER/ NJKG/07		<b>Course name:</b> Communicative Grammar in German Language			
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present					
<b>Number of credits:</b> 2					
<b>Recommended semester/trimester of the course:</b>					
<b>Course level:</b> I., II.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 48					
A	B	C	D	E	FX
54.17	12.5	10.42	4.17	10.42	8.33
<b>Provides:</b> PaedDr. Ingrid Puchalová, PhD., Mgr. Barbora Molokáčová					
<b>Date of last modification:</b> 25.08.2017					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KGER/ NJPS1/06		<b>Course name:</b> German Language for Students of Psychology I			
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present					
<b>Number of credits:</b> 2					
<b>Recommended semester/trimester of the course:</b> 1., 3.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 108					
A	B	C	D	E	FX
60.19	30.56	5.56	1.85	1.85	0.0
<b>Provides:</b> Mgr. Andreas Schiestl					
<b>Date of last modification:</b> 25.08.2017					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					



## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KGER/ NJPS2/06		<b>Course name:</b> German Language for Students of Psychology II			
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present					
<b>Number of credits:</b> 2					
<b>Recommended semester/trimester of the course:</b> 2., 4.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 128					
A	B	C	D	E	FX
55.47	28.13	7.81	2.34	5.47	0.78
<b>Provides:</b> Mgr. Andreas Schiestl					
<b>Date of last modification:</b> 25.08.2017					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KGER/OJPV1/07		<b>Course name:</b> Specialised German Language - Natural Sciences 1			
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present					
<b>Number of credits:</b> 2					
<b>Recommended semester/trimester of the course:</b> 4.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 136					
A	B	C	D	E	FX
21.32	22.79	25.0	22.06	8.09	0.74
<b>Provides:</b> Mgr. Andreas Schiestl					
<b>Date of last modification:</b> 25.08.2017					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KPE/ OLŠ/15		<b>Course name:</b> School Administration and Legislation			
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present					
<b>Number of credits:</b> 2					
<b>Recommended semester/trimester of the course:</b> 3., 5.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 168					
A	B	C	D	E	FX
35.71	30.36	22.02	8.33	2.98	0.6
<b>Provides:</b> PaedDr. Renáta Orosová, PhD.					
<b>Date of last modification:</b> 23.08.2017					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> KOP/OPaPDV/14	<b>Course name:</b> Civil Law and Intellectual Property Rights
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present	
<b>Number of credits:</b> 4	
<b>Recommended semester/trimester of the course:</b> 3., 5.	
<b>Course level:</b> I., N	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b>	
<b>Learning outcomes:</b>	
<b>Brief outline of the course:</b>	
<b>Recommended literature:</b>	
<b>Course language:</b>	
<b>Course assessment</b> Total number of assessed students: 67	
abs	n
94.03	5.97
<b>Provides:</b> doc. JUDr. Renáta Bačárová, PhD., LL.M., prof. JUDr. Peter Vojčík, CSc.	
<b>Date of last modification:</b> 18.01.2018	
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.	

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KPPaPZ/P/15		<b>Course name:</b> Psychology			
<b>Course type, scope and the method:</b> <b>Course type:</b> <b>Recommended course-load (hours):</b> <b>Per week: Per study period:</b> <b>Course method:</b> present					
<b>Number of credits:</b> 1					
<b>Recommended semester/trimester of the course:</b>					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 26					
A	B	C	D	E	FX
15.38	19.23	15.38	26.92	23.08	0.0
<b>Provides:</b>					
<b>Date of last modification:</b> 21.08.2017					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice		
<b>Faculty:</b> Faculty of Science		
<b>Course ID:</b> KPPaPZ/PAN/07	<b>Course name:</b> Psychological Aspects of Unemployment	
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present		
<b>Number of credits:</b> 2		
<b>Recommended semester/trimester of the course:</b> 4., 6.		
<b>Course level:</b> I.		
<b>Prerequisites:</b>		
<b>Conditions for course completion:</b>		
<b>Learning outcomes:</b>		
<b>Brief outline of the course:</b>		
<b>Recommended literature:</b>		
<b>Course language:</b>		
<b>Course assessment</b> Total number of assessed students: 63		
abs	n	z
100.0	0.0	0.0
<b>Provides:</b> Mgr. Mária Bačíková, PhD.		
<b>Date of last modification:</b> 21.08.2017		
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.		

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KPS/ PDV/07		<b>Course name:</b> Child Development Disorders			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 2 <b>Per study period:</b> 28 / 28 <b>Course method:</b> present					
<b>Number of credits:</b> 6					
<b>Recommended semester/trimester of the course:</b> 2., 4.					
<b>Course level:</b> I.					
<b>Prerequisites:</b> KPS/VP1/05					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b> Provide the foundations of child psychopathology and development pathopsychology					
<b>Brief outline of the course:</b> The concept of health and disease. The concept of optimal development. Pathogenic factors of development. Classification of developmental disorders according to ICD. Psychology sick and disabled child. Disorders of speech and language. Specific learning disabilities. Mental retardation and pervasive disorder. Emotional and behavioral disorders in childhood and adolescence. Social development problems. Eating disorders. Problems with alcohol and substance abuse. Disorders of psychosexual development. Children at risk environment, abused and neglected children. School maturity and its disorders. Helping professions and psychological assistance to children with disorders of psychological development.					
<b>Recommended literature:</b> M. Lewis & K.D.Rudolph (Eds.), Handbook of developmental psychopathology (3rd ed). New York, NY: Plenum Press. ISBN 978-1-4614-9608-3					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 614					
A	B	C	D	E	FX
20.36	27.52	27.52	16.45	3.91	4.23
<b>Provides:</b> Mgr. Miriam Slavkovská, PhD.					
<b>Date of last modification:</b> 21.09.2017					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KPPaPZ/PDZ/09		<b>Course name:</b> Drug Addiction Prevention			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 1 <b>Per study period:</b> 28 / 14 <b>Course method:</b> present					
<b>Number of credits:</b> 4					
<b>Recommended semester/trimester of the course:</b> 3., 5.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 245					
A	B	C	D	E	FX
53.47	18.78	15.1	8.57	2.45	1.63
<b>Provides:</b> prof. PhDr. Oľga Orosová, CSc., Mgr. Marta Dobrowolska Kulanová, PhD.					
<b>Date of last modification:</b> 21.08.2017					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					



## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> KPS/ PEM/05	<b>Course name:</b> Psychology of Emotions and Motivation
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 2 <b>Per study period:</b> 28 / 28 <b>Course method:</b> present	
<b>Number of credits:</b> 6	
<b>Recommended semester/trimester of the course:</b> 1.	
<b>Course level:</b> I.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> term paper, written tests, activity in seminars, demonstrations interim evaluation of 40%, 60% final evaluation	
<b>Learning outcomes:</b> The course aims to provide students with a systematic interpretation of the foundations of psychological knowledge about emotion and motivation with emphasis on the interpretation of recent research findings.	
<b>Brief outline of the course:</b> 1 Psychology of emotion and motivation - definition of basic concepts. The relationship of emotion and motivation. 2 Traditional approaches to the study of emotions - historical, philosophical, biological, social and psychological approaches. 3 Evolutionary psychological and psychophysiological theory of emotions. 4 Vocal communication of emotions and facial expressions. 5 Regulation of emotions. Personality and emotions. 6 Function, development and education of emotions. 7 Basic concepts of psychology of motivation. 8 Classical approaches to the study of motivation. Homeostatic theories of motivation. 9 Humanistic theory of motivation. 10 Achievement motivation. 11 Attribution theory and cognitive approaches. 12 Current theories of motivation. 13 Use knowledge about emotions and motivation in learning, counseling, psychotherapy.	
<b>Recommended literature:</b> Required 1. Lectures 2. PLHÁKOVÁ, A.: Učebnice obecné psychologie. Praha, Academia, 2003, s..319-444. 3. STUHLÍKOVÁ, I.: Základy psychologie emocí. Praha : Portál, 2002. Recommended texts: 1. LEWIS, M.-HAVILAND-JONES, J.: Handbook of emotions. 2.ed.New York, London: The Guilford Press, 2004. ISBN 1-59385-0029-2. 2. GORMAN, P.: Motivation and Emotion: Textbook. London: Routledge. 2002. 3. MADSEN, K.B.. Moderní teorie motivace. Praha: Academia, 1979. 4. IZARD, C. et al.: Temperament, cognitive ability, emotion knowledge, and adaptive social behavior. Imagination, cognition and personality, roč, 19, 1999-2000, č.4, s.305-309 vrátane	

5. JAMES, W. Principles of Psychology. The emotion.1890 (od genézy emócií) Prístupné:<http://www.des.emory.edu/mfp/james.html>
6. ATKINSON, J. W.: Personality Dynamics, s. 263-267 (ffweb)
7. GREWAL, D. - SALOVEY, P: Feeling Smart: A Science of Emotional Intelligence: American Scientist, roč. 93, 2005, č. 4, s. 330-339
8. GASPER, K.- BRAMESFELD, K.: Imparting wisdom: Magda Arnold's contribution to research on emotion and motivation. Preview. In Cognition and Emotion. vol 20, 2006, c. 7, s. 1001-1013 - prístup k článku cez databázu EBSCO, vyhľadat časopis Cognition and Emotion, rok. 2006, č. 6
9. DECI, E. L., & RYAN, R. M. (2008). Self-Determination Theory: A Macrotheory of Human Motivation, Development, and Health. Canadian Psychology, 49(3), 182-185.
10. McCLELLAND, D. C. (1967). Money as a Motivator: Some Research Insights. Mckinsey Quarterly, 4(2), 10-21.
11. WEINER, B. (2010). The Development of an Attribution-Based Theory of Motivation: A History of Ideas. Educational Psychologist, 45(1), 28-36.
12. MASLOW, A.: Theory of Human Motivation. Psychological Review 1943 50, 370-396.
13. EDWARD L. DECI: On The Nature And Eunctions of Motivation Theories. Psychological Science, Vol. 3, No. 3, May 1992, S. 167-171
14. LEWIS, M., HAVILAND-JONES, J.M., FELDMAN BARRETT, L.: Handbook of Emotions. Third ed. New York, Guilford Press, 2010. ISBN 978-1-60918-044-7

**Course language:**

Slovak language

**Course assessment**

Total number of assessed students: 1174

A	B	C	D	E	FX
11.93	12.78	17.38	22.66	22.4	12.86

**Provides:** prof. PhDr. Margita Mesárošová, CSc., PhDr. Radka Čopková, PhD., Mgr. Marta Dobrowolska Kulanová, PhD.

**Date of last modification:** 21.09.2017

**Approved:** Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> CJP/ PFAJ4/07	<b>Course name:</b> English Language of Natural Science
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week: 2 Per study period: 28</b> <b>Course method:</b> present	
<b>Number of credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 4.	
<b>Course level:</b> I.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> Active participation in class and completed homework assignments. Students are allowed to miss 2 classes at the most. Continuous assessment: 2 credit tests (presumably in weeks 6 and 13) and academic presentation in English. In order to be admitted to the final exam, a student has to score at least 65 % as a sum of both credit tests. The exam test results represent 50% of the final grade for the course, continuous assessment results represent the other 50% of the final grade. The final grade for the course will be calculated as follows: A 93-100, B 86-92, C 79-85, D 72-78, E 65-71, FX 64 and less.	
<b>Learning outcomes:</b> Enhancement of students' language skills (speaking, writing, reading and listening comprehension) in English for specific purposes and development of students' language competence (familiarization with selected phonological, lexical and syntactic phenomena), improvement of students' pragmatic competence (familiarization with selected language functions) and improvement of presentation skills at B2 level (CEFR) with focus on terminology of English for natural science.	
<b>Brief outline of the course:</b> <b>ANGLICKÝ JAZYK PRE GEOGRAFOV:</b> Veda a výskum. Odbor geografia. Planéta Zem. Naša slnečná sústava. Zemetrasenia, Sopečná činnosť. Svetové oceány a ľadovce. Životné prostredie a geografia. Počasie a klíma. <b>ANGLICKÝ JAZYK PRE EKOLÓGOV:</b> Veda a výskum. Odbor ekológia. Životné prostredie. Znečistenie a dôsledky. Sopečná činnosť, zemetrasenia. Great Pacific Garbage Patch.	

Globálne otepľovanie a dôsledky. Ľadovce.  
 Počasie a klíma. Búrky, hurikány, tsunami.  
 Život na Zemi. Ohrozené rastlinné a živočíšne druhy.  
**ANGLICKÝ JAZYK PRE BIOLÓGOV:**  
 veda a výskum, odbor biológia.  
 morfológia rastlín, koreň.  
 stonka, list.  
 rozmnožovanie rastlín, kvet.  
 biológia človeka - telesné sústavy.  
 slovná zásoba z oblasti botanickej a zoologickej nomenklatúry.  
**ANGLICKÝ JAZYK PRE MATEMATIKOV:**  
 Veda a výskum, odbor matematika.  
 čísla a tvary v matematike.  
 Elementárna algebra.  
 Elementárna geometria.  
 Výpočty v matematike.  
 Pytagoras, Pytagorova veta.  
 Grafy a diagramy.  
 Štatistika.  
**ANGLICKÝ JAZYK PRE FYZIKOV**  
 Veda a výskum, odbor fyzika.  
 Atómy a molekuly.  
 Hmota a jej premeny.  
 Elektrina, jej využitie.  
 Zvuka, jeho prenos.  
 Svetlo.  
 Solárny systém.  
 Matematické operácie.  
**ANGLICKÝ JAZYK PRE CHEMIKOV:**  
 Veda a výskum, odbor chémia.  
 História, Každodenná chémia.  
 Laboratórium a jeho vybavenie.  
 Periodická tabuľka.  
 Hmota a jej premeny.  
 Životné prostredie a chémia.  
**ANGLICKÝ JAZYK PRE INFORMATIKOV:**  
 Veda a výskum, informatika.  
 Život s počítačom.  
 Typický PC.  
 Zdravie a bezpečnosť, ergonomika.  
 Programovanie.  
 Emailovanie.  
 Cybercrime.  
 Trendy budúcnosti.

### **Recommended literature:**

study materials provided by the course instructor  
 Royds-Irmak, D.E. Beginning Scientific English. Nelson, 1975.  
 Velebná, B. English for Chemists. [ffweb.ff.upjs.sk/vyuka/](http://web.ff.upjs.sk/vyuka/)  
 Redman, S.: English Vocabulary in Use, Pre-intermediate, Intermediate. Cambridge University Press, 2003.

Powel, M.: Dynamic Presentations. CUP, 2010.  
 Armer, T.: Cambridge English for Scientists. CUP, 2011.  
 Wharton J.: Academic Encounters. The Natural World. CUP, 2009.  
 Murphy, R.: English Grammar in Use. Cambridge University Press, 1994.  
 Redman, S.: English Vocabulary in Use, Pre-intermediate, Intermediate. Cambridge University Press, 2003.  
 P. Fitzgerald : English for ICT studies. Garnet Publishing, 2011.  
<https://worldservice/learningenglish>, <https://spectator.sme.sk>

**Course language:**

**Course assessment**

Total number of assessed students: 2443

A	B	C	D	E	FX
34.55	25.83	17.6	10.89	8.8	2.33

**Provides:** Mgr. Zuzana Naďová, Mgr. Lenka Klimčáková

**Date of last modification:** 06.02.2018

**Approved:** Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> CJP/ PFAJAKA/07		<b>Course name:</b> Academic English			
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> combined, present					
<b>Number of credits:</b> 2					
<b>Recommended semester/trimester of the course:</b>					
<b>Course level:</b> I., II., N					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b> 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					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b> 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 <a href="http://www.bbclearningenglish.com">www.bbclearningenglish.com</a> Cambridge Academic Content Dictionary, CUP, 2009					
<b>Course language:</b> English language, level B2 according to CEFR.					
<b>Course assessment</b> Total number of assessed students: 344					
A	B	C	D	E	FX
30.81	23.55	15.99	11.05	7.27	11.34
<b>Provides:</b> Mgr. Zuzana Naďová					
<b>Date of last modification:</b> 06.02.2018					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> CJP/ PFAJGA/07		<b>Course name:</b> Communicative Grammar in English			
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> combined, present					
<b>Number of credits:</b> 2					
<b>Recommended semester/trimester of the course:</b>					
<b>Course level:</b> I., II., N					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b> 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.					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b> 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 <a href="http://www.bbclearningenglish.com">www.bbclearningenglish.com</a> Gráf T., Peters S.: Time to practise, Polyglot, 2007					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 394					
A	B	C	D	E	FX
39.34	18.53	17.01	8.88	6.09	10.15
<b>Provides:</b> Mgr. Lenka Klimčáková					
<b>Date of last modification:</b> 06.02.2018					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> CJP/ PFAJKKA/07	<b>Course name:</b> Communicative Competence in English
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> combined, present	
<b>Number of credits:</b> 2	
<b>Recommended semester/trimester of the course:</b>	
<b>Course level:</b> I., II., N	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> 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.	
<b>Learning outcomes:</b> Uplatnenie a aktívne používanie svojich teoretických vedomostí v praktických komunikačných situáciách. Zdokonalenie jazykových vedomostí a zručností študenta, rečovej, pragmatickej a vecnej kompetencie, predovšetkým zlepšujú komunikáciu, schopnosť prijímať a formulovať výpovede, efektívne vyjadrovať svoje myšlienky ako aj orientovať sa v obsahovom pláne výpovede. Precvičovanie rečových intencií kontaktných (napr. pozdravy, oslovenia, pozvanie, oslovenie), informatívnych (napr. získavanie a podávanie informácií, vyjadrenie priestorových a časových vzťahov), regulačných (napr. prosba, poďakovanie, zákaz, pochvala, súhlas, nesúhlas) a hodnotiacich (napr. vyjadrenie vlastného názoru, stanoviska, želania, emócií). Výsledkom budovania praktickej jazykovej kompetencie majú byť vedomosti a zručnosti zodpovedajúce požiadavkám a kritériám dokumentu Spoločný európsky referenčný rámec pre vyučovanie jazykov.	
<b>Brief outline of the course:</b> 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. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> CJP/ PFAJPSYCH1/07		<b>Course name:</b> Professional English for Psychology 1			
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present					
<b>Number of credits:</b> 2					
<b>Recommended semester/trimester of the course:</b> 1., 3.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b> Active classroom participation, max.2 absences. 2 tests (6th/7th week, 12th/13th week), no retake. Oral presentation. Final assessment = the average obtained in tests. Grading scale: A 93-100%, B 86-92%, C 79-85%, D 72-78%, E 65-71%, FX 64% and less.					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 83					
A	B	C	D	E	FX
33.73	18.07	16.87	12.05	4.82	14.46
<b>Provides:</b> Mgr. Zuzana Kolaříková, PhD.					
<b>Date of last modification:</b> 21.09.2017					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> CJP/ PFAJPSYCH2/07		<b>Course name:</b> Professional English for Psychology 2			
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week: 2 Per study period: 28</b> <b>Course method:</b> present					
<b>Number of credits:</b> 2					
<b>Recommended semester/trimester of the course:</b> 2., 4.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b> Active classroom participation, max.2 absences. 2 tests (6th/7th week, 12th/13th week), no retake. Oral presentation. Final assessment = the average obtained in tests. Grading scale: A 93-100%, B 86-92%, C 79-85%, D 72-78%, E 65-71%, FX 64% and less.					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 16					
A	B	C	D	E	FX
18.75	12.5	12.5	25.0	25.0	6.25
<b>Provides:</b> Mgr. Zuzana Kolaříková, PhD.					
<b>Date of last modification:</b> 21.09.2017					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KPPaPZ/PKŽ/15		<b>Course name:</b> Psychology of Everyday Life			
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present					
<b>Number of credits:</b> 2					
<b>Recommended semester/trimester of the course:</b> 3.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 116					
A	B	C	D	E	FX
43.1	14.66	30.17	8.62	2.59	0.86
<b>Provides:</b> Mgr. Ondrej Kalina, PhD.					
<b>Date of last modification:</b> 21.08.2017					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚMV/ PMA/18	<b>Course name:</b> Math proseminar
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present	
<b>Number of credits:</b> 0	
<b>Recommended semester/trimester of the course:</b> 1.	
<b>Course level:</b> I.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b>	
<b>Learning outcomes:</b>	
<b>Brief outline of the course:</b>	
<b>Recommended literature:</b>	
<b>Course language:</b>	
<b>Course assessment</b> Total number of assessed students: 0	
abs	n
0.0	0.0
<b>Provides:</b> RNDr. Igor Fabrici, Dr. rer. nat., RNDr. Lenka Halčinová, PhD.	
<b>Date of last modification:</b> 27.04.2018	
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.	

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KPPaPZ/PP/15		<b>Course name:</b> Positive Psychology			
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present					
<b>Number of credits:</b> 2					
<b>Recommended semester/trimester of the course:</b> 4., 6.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 165					
A	B	C	D	E	FX
97.58	1.21	0.61	0.0	0.61	0.0
<b>Provides:</b> Mgr. Jozef Benka, PhD. et PhD.					
<b>Date of last modification:</b> 21.08.2017					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> KPPaPZ/PSBc/06	<b>Course name:</b> Bachelor's Thesis Seminar
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present	
<b>Number of credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 5.	
<b>Course level:</b> I.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b>	
<b>Learning outcomes:</b>	
<b>Brief outline of the course:</b>	
<b>Recommended literature:</b>	
<b>Course language:</b>	
<b>Course assessment</b> Total number of assessed students: 81	
abs	n
100.0	0.0
<b>Provides:</b> Mgr. Jozef Benka, PhD. et PhD.	
<b>Date of last modification:</b> 21.08.2017	
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.	

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KPPaPZ/PSO/09		<b>Course name:</b> Psychology of Personality			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 2 <b>Per study period:</b> 28 / 28 <b>Course method:</b> present					
<b>Number of credits:</b> 6					
<b>Recommended semester/trimester of the course:</b> 3.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 1210					
A	B	C	D	E	FX
18.93	19.59	22.31	18.93	16.45	3.8
<b>Provides:</b> prof. PhDr. Oľga Orosová, CSc., Mgr. Miroslava Köverová, PhD., Mgr. Jozef Benka, PhD. et PhD.					
<b>Date of last modification:</b> 21.08.2017					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					



## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚMV/ PSTa/10		<b>Course name:</b> Probability and statistics I			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 2 <b>Per study period:</b> 28 / 28 <b>Course method:</b> present					
<b>Number of credits:</b> 5					
<b>Recommended semester/trimester of the course:</b> 4.					
<b>Course level:</b> I.					
<b>Prerequisites:</b> ÚMV/MAN1c/10 or ÚMV/MAN2c/10 or ÚMV/MAN3c/10					
<b>Conditions for course completion:</b> To obtain at least 50% in two written tests during the semester. Total evaluation based on written tests and oral exam.					
<b>Learning outcomes:</b> To obtain knowledge of the axiomatic theory of probability, random variables and their characteristics, special types of distributions and their applications.					
<b>Brief outline of the course:</b> Probability space, definitions and properties of probability. Conditional probability and independence. Random variables, their distribution function and characteristics. Mean, variance and skewness.. Discrete and absolutely continuous distributions. Quantile and characteristic functions, their properties. Relation between characteristic function and moments. Median and mode. Transformation of random variables. Special types of distributions with applications (binomial, Poisson, geometric, uniform, exponential, normal, chí-square, Student, Fisher). Central limit theorem.					
<b>Recommended literature:</b> 1. Skřivánková V.: Pravdepodobnosť v príkladoch, UPJŠ, Košice, 2006 (in Slovak) 2. DeGroot, M. H., Schervish, M. J.: Probability and Statistics, 4th ed., Pearson, Boston, 2012 3. Evans, M. J., Rosenthal, J. S.: Probability and Statistics: The Science of Uncertainty, 2nd Ed., W. H. Freeman, 2009 4. Riečan et al.: Pravdepodobnosť a matematická štatistika, Alfa, Bratislava, 1984 (in Slovak)					
<b>Course language:</b> Slovak					
<b>Course assessment</b> Total number of assessed students: 334					
A	B	C	D	E	FX
8.08	14.37	17.37	25.75	23.95	10.48
<b>Provides:</b> RNDr. Daniel Klein, PhD.					
<b>Date of last modification:</b> 27.02.2018					

**Approved:** Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Ol'ga Orosová, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚMV/ PSTb/10		<b>Course name:</b> Probability and statistics II			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 2 <b>Per study period:</b> 28 / 28 <b>Course method:</b> present					
<b>Number of credits:</b> 5					
<b>Recommended semester/trimester of the course:</b>					
<b>Course level:</b> I., II.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b> To obtain at least 50% in two written tests during the semester. Total evaluation based on written tests and oral exam.					
<b>Learning outcomes:</b> Student should obtain the knowledge about basic statistical methods and the ability to apply theoretical knowledge in practical problems solving.					
<b>Brief outline of the course:</b> 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.					
<b>Recommended literature:</b> 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)					
<b>Course language:</b> Slovak					
<b>Course assessment</b> Total number of assessed students: 175					
A	B	C	D	E	FX
20.0	21.14	17.71	24.0	10.86	6.29
<b>Provides:</b> RNDr. Martina Hančová, PhD.					
<b>Date of last modification:</b> 26.09.2017					

**Approved:** Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Ol'ga Orosová, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KPPaPZ/PUDB/15		<b>Course name:</b> Drug Addiction Prevention in University Students			
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present					
<b>Number of credits:</b> 2					
<b>Recommended semester/trimester of the course:</b> 3., 5.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 256					
A	B	C	D	E	FX
77.34	20.31	2.34	0.0	0.0	0.0
<b>Provides:</b> prof. PhDr. Oľga Orosová, CSc., Mgr. Marta Dobrowolska Kulanová, PhD.					
<b>Date of last modification:</b> 21.08.2017					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KPE/ Pg/15		<b>Course name:</b> Pedagogy			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present					
<b>Number of credits:</b> 2					
<b>Recommended semester/trimester of the course:</b> 3., 5.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 406					
A	B	C	D	E	FX
20.94	18.97	26.11	19.46	13.55	0.99
<b>Provides:</b> Mgr. Katarína Petriková, PhD.					
<b>Date of last modification:</b> 23.08.2017					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KPPaPZ/Ps/15		<b>Course name:</b> Psychology			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present					
<b>Number of credits:</b> 2					
<b>Recommended semester/trimester of the course:</b> 1.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 318					
A	B	C	D	E	FX
16.04	11.01	24.53	23.9	20.75	3.77
<b>Provides:</b> prof. PhDr. Oľga Orosová, CSc., PhDr. Anna Janovská, PhD., Mgr. Jozef Benka, PhD. et PhD.					
<b>Date of last modification:</b> 21.08.2017					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> KPPaPZ/RKS/14	<b>Course name:</b> Resolving Conflict Situations in Educational Practice
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 1 / 2 <b>Per study period:</b> 14 / 28 <b>Course method:</b> present	
<b>Number of credits:</b> 4	
<b>Recommended semester/trimester of the course:</b> 3., 5.	
<b>Course level:</b> I., N	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b>	
<b>Learning outcomes:</b>	
<b>Brief outline of the course:</b>	
<b>Recommended literature:</b>	
<b>Course language:</b>	
<b>Course assessment</b> Total number of assessed students: 85	
abs	n
95.29	4.71
<b>Provides:</b> PhDr. Anna Janovská, PhD., Mgr. Lucia Hricová, PhD.	
<b>Date of last modification:</b> 21.08.2017	
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.	



## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KPPaPZ/RP1/08		<b>Course name:</b> Research Project			
<b>Course type, scope and the method:</b> <b>Course type:</b> <b>Recommended course-load (hours):</b> <b>Per week: Per study period:</b> <b>Course method:</b> present					
<b>Number of credits:</b> 6					
<b>Recommended semester/trimester of the course:</b> 4.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 0					
A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0
<b>Provides:</b> Mgr. Mária Bačíková, PhD.					
<b>Date of last modification:</b> 21.08.2017					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚMV/ SHM/10		<b>Course name:</b> Seminar on history of mathematics			
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present					
<b>Number of credits:</b> 2					
<b>Recommended semester/trimester of the course:</b> 6.					
<b>Course level:</b> I., II.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b> 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.					
<b>Learning outcomes:</b> 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.					
<b>Brief outline of the course:</b> 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.					
<b>Recommended literature:</b> 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)					
<b>Course language:</b> Slovak					
<b>Course assessment</b> Total number of assessed students: 144					
A	B	C	D	E	FX
80.56	6.94	6.94	2.78	2.78	0.0

<b>Provides:</b> RNDr. Ingrid Semanišínová, PhD.
<b>Date of last modification:</b> 27.02.2018
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KPPaPZ/SI2/09		<b>Course name:</b> Statistical Methods II			
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 3 <b>Per study period:</b> 42 <b>Course method:</b> present					
<b>Number of credits:</b> 3					
<b>Recommended semester/trimester of the course:</b> 6.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 60					
A	B	C	D	E	FX
96.67	0.0	3.33	0.0	0.0	0.0
<b>Provides:</b> Mgr. Jozef Benka, PhD. et PhD.					
<b>Date of last modification:</b> 21.08.2017					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚMV/ SMK/17	<b>Course name:</b> Seminar to mathematical clubs
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present	
<b>Number of credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 6.	
<b>Course level:</b> I.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> Individual problem solving during seminars and homework. More than 91 points - evaluation of A. 81-90 points - evaluation of B. 71-80 points - rating C. 61-70 points - evaluation of D. 51-60 points - evaluation of E. Less than 50 points - FX evaluation.	
<b>Learning outcomes:</b> Students become familiar with solving problems from mathematical olympiads and mathematical competitions. They acquire theoretical basics necessary to lead mathematical group of talented children.	
<b>Brief outline of the course:</b> Number theory. Equations, inequations, inequalities. Word problems. Planimetry. Stereometry. Combinatorics. Pigeonhole principle. Combinatorial geometry. Probability. Math games. Interesting problems.	
<b>Recommended literature:</b> Brožury z edície Škola mladých matematikov. (in slovak) Sériá brožúr: XY. ročník matematickej olympiády. (in slovak) Ziegler, G.M.: Matematika Vám to spočítá, Universum, Praha, 2011. (in czech) Zhouf, J. a kol.: Matematické příběhy z korespondenčních seminářů, Prometheus, Praha, 2006. (in czech)	
<b>Course language:</b> Slovak	
<b>Course assessment</b> Total number of assessed students: 81	

A	B	C	D	E	FX
55.56	16.05	13.58	12.35	2.47	0.0
<b>Provides:</b> RNDr. Ingrid Semanišínová, PhD.					
<b>Date of last modification:</b> 27.02.2018					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KPS/ SOC/05		<b>Course name:</b> Sociology			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 1 <b>Per study period:</b> 28 / 14 <b>Course method:</b> present					
<b>Number of credits:</b> 5					
<b>Recommended semester/trimester of the course:</b> 3.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 725					
A	B	C	D	E	FX
40.28	25.66	16.55	9.93	5.79	1.79
<b>Provides:</b> Mgr. Alexander Onufrák, PhD.					
<b>Date of last modification:</b> 28.08.2017					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KPO/ SPKVV/15		<b>Course name:</b> Social and Political Context of Education			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present					
<b>Number of credits:</b> 2					
<b>Recommended semester/trimester of the course:</b> 4., 6.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 11					
A	B	C	D	E	FX
9.09	0.0	45.45	36.36	9.09	0.0
<b>Provides:</b> Dr.h.c. prof. PhDr. Marcela Gbúrová, CSc.					
<b>Date of last modification:</b> 23.08.2017					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					



## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KPPaPZ/SPMOS/16		<b>Course name:</b> Social Psychology for Double-Major Study			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 2 <b>Per study period:</b> 28 / 28 <b>Course method:</b> present					
<b>Number of credits:</b> 6					
<b>Recommended semester/trimester of the course:</b> 4.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 29					
A	B	C	D	E	FX
17.24	20.69	24.14	20.69	13.79	3.45
<b>Provides:</b> Mgr. Ondrej Kalina, PhD.					
<b>Date of last modification:</b> 21.08.2017					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KPPaPZ/SV1/08		<b>Course name:</b> Social-Psychological Training I			
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present					
<b>Number of credits:</b> 3					
<b>Recommended semester/trimester of the course:</b> 1., 3.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 79					
A	B	C	D	E	FX
97.47	0.0	0.0	2.53	0.0	0.0
<b>Provides:</b>					
<b>Date of last modification:</b> 21.08.2017					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KPPaPZ/SV2/08		<b>Course name:</b> Social-Psychological Training II			
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present					
<b>Number of credits:</b> 3					
<b>Recommended semester/trimester of the course:</b>					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 52					
A	B	C	D	E	FX
100.0	0.0	0.0	0.0	0.0	0.0
<b>Provides:</b>					
<b>Date of last modification:</b> 21.08.2017					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚMV/ SVK/10		<b>Course name:</b> Students scientific conference			
<b>Course type, scope and the method:</b> <b>Course type:</b> <b>Recommended course-load (hours):</b> <b>Per week: Per study period:</b> <b>Course method:</b> present					
<b>Number of credits:</b> 4					
<b>Recommended semester/trimester of the course:</b>					
<b>Course level:</b> I., II.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b> Individual scientific work of students. Publishing of obtained results in a written form and as a public presentation.					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b> With respect to the research problematics (article in journals, books).					
<b>Course language:</b> Slovak or English					
<b>Course assessment</b> Total number of assessed students: 86					
A	B	C	D	E	FX
98.84	1.16	0.0	0.0	0.0	0.0
<b>Provides:</b> prof. RNDr. Tomáš Madaras, PhD.					
<b>Date of last modification:</b> 27.02.2018					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KPS/ SYP/06		<b>Course name:</b> Systems of Psychology			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 2 <b>Per study period:</b> 28 / 28 <b>Course method:</b> present					
<b>Number of credits:</b> 6					
<b>Recommended semester/trimester of the course:</b> 1., 3.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b> Hergenbahn. An introduction to the history of psychology.					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 703					
A	B	C	D	E	FX
14.94	23.76	33.14	19.2	6.97	1.99
<b>Provides:</b> Mgr. René Šebeňa, PhD.					
<b>Date of last modification:</b> 21.09.2017					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚMV/TCS/10		<b>Course name:</b> Number theory			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present					
<b>Number of credits:</b> 3					
<b>Recommended semester/trimester of the course:</b> 5.					
<b>Course level:</b> I.					
<b>Prerequisites:</b> ÚMV/ATC/10					
<b>Conditions for course completion:</b> According to tests and exam.					
<b>Learning outcomes:</b> To obtain knowledge on quadratic congruences.					
<b>Brief outline of the course:</b> Chinese remainder theorem, Euler function, quadratic congruences, Pythagorean equation.					
<b>Recommended literature:</b> M. B. Nathanson: Elementary Methods in Number Theory. Springer, 2000. H. E. Rose: A Course in Number Theory. Clarendon Press, Oxford, 1994.					
<b>Course language:</b> Slovak					
<b>Course assessment</b> Total number of assessed students: 550					
A	B	C	D	E	FX
27.27	26.91	29.64	11.27	2.55	2.36
<b>Provides:</b> doc. RNDr. Matúš Harminec, CSc.					
<b>Date of last modification:</b> 27.02.2018					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KPS/TPP/15		<b>Course name:</b> Theory of Psychological Assessment and Psychometrics			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 2 <b>Per study period:</b> 28 / 28 <b>Course method:</b> present					
<b>Number of credits:</b> 6					
<b>Recommended semester/trimester of the course:</b> 5.					
<b>Course level:</b> I.					
<b>Prerequisites:</b> KPS/STA1/06 or KPS/USM/15					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 77					
A	B	C	D	E	FX
6.49	23.38	18.18	20.78	27.27	3.9
<b>Provides:</b> doc. PhDr. Ján Ferjenčík, CSc., Mgr. Jozef Benka, PhD. et PhD.					
<b>Date of last modification:</b> 23.02.2018					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KPE/TVE/08		<b>Course name:</b> Theory of Education			
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present					
<b>Number of credits:</b> 2					
<b>Recommended semester/trimester of the course:</b> 4., 6.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 378					
A	B	C	D	E	FX
27.25	36.77	23.81	7.41	1.85	2.91
<b>Provides:</b> Mgr. Katarína Petriková, PhD.					
<b>Date of last modification:</b> 23.08.2017					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					



## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice							
<b>Faculty:</b> Faculty of Science							
<b>Course ID:</b> ÚTVŠ/ TVa/11		<b>Course name:</b> Sports Activities I.					
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week: 2 Per study period: 28</b> <b>Course method:</b> present							
<b>Number of credits:</b> 2							
<b>Recommended semester/trimester of the course:</b> 1.							
<b>Course level:</b> I., I.II., II.							
<b>Prerequisites:</b>							
<b>Conditions for course completion:</b> Conditions for course completion: Min. 80% of active participation in classes.							
<b>Learning outcomes:</b> Learning outcomes: Increasing physical condition and performance within individual sports. Strengthening the relationship of students to the selected sports activity and its continual improvement.							
<b>Brief outline of the course:</b> 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.							
<b>Recommended literature:</b>							
<b>Course language:</b>							
<b>Course assessment</b> 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. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.

## COURSE INFORMATION LETTER

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

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice							
<b>Faculty:</b> Faculty of Science							
<b>Course ID:</b> ÚTVŠ/ TVc/11		<b>Course name:</b> Sports Activities III.					
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present							
<b>Number of credits:</b> 2							
<b>Recommended semester/trimester of the course:</b> 3.							
<b>Course level:</b> I., I.II., II.							
<b>Prerequisites:</b>							
<b>Conditions for course completion:</b>							
<b>Learning outcomes:</b>							
<b>Brief outline of the course:</b>							
<b>Recommended literature:</b>							
<b>Course language:</b>							
<b>Course assessment</b> 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
<b>Provides:</b> 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.							
<b>Date of last modification:</b> 18.08.2017							
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.							

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice							
<b>Faculty:</b> Faculty of Science							
<b>Course ID:</b> ÚTVŠ/ TVd/11		<b>Course name:</b> Sports Activities IV.					
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present							
<b>Number of credits:</b> 2							
<b>Recommended semester/trimester of the course:</b> 4.							
<b>Course level:</b> I., I.II., II.							
<b>Prerequisites:</b>							
<b>Conditions for course completion:</b>							
<b>Learning outcomes:</b>							
<b>Brief outline of the course:</b>							
<b>Recommended literature:</b>							
<b>Course language:</b>							
<b>Course assessment</b> 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
<b>Provides:</b> 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.							
<b>Date of last modification:</b> 18.08.2017							
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.							

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚMV/ UAD/10		<b>Course name:</b> Introduction to data analysis			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 1 / 1 <b>Per study period:</b> 14 / 14 <b>Course method:</b> present					
<b>Number of credits:</b> 2					
<b>Recommended semester/trimester of the course:</b> 3.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b> Test and individual project work. Oral presentation of the individual project work.					
<b>Learning outcomes:</b> To know the basic purpose of statistical data analysis, its methods and statistical thinking and understand its importance for science and practical life. To understand elementary statistical concepts. To gain experience in handling real data using spreadsheet Excel and statistical software R.					
<b>Brief outline of the course:</b> 1. Introduction (the basic philosophy and aim of statistical data analysis, descriptive and inductive statistics) 2. Collecting Data (types of data, random sample, randomized experiment) 3. Handling Data (visualization, summarizing – measures of center, measures of variability, skewness and kurtosis, relationships in data – introduction to regression and correlation) 4. Statistical inference (elementary view into estimation and testing hypothesis)					
<b>Recommended literature:</b> 1. Anděl, J.: Statistické metody, Matfyzpress, Praha, 1998 (in Czech) 2. Rossman, A.J. et al.: Workshop Statistics: Discovery with Data and Fathom, 3rd ed. Wiley, 2009 3. Utts, J.M.: Seeing Through Statistics, 4th ed., Thomson Brooks/Cole, Belmont, 2014 4. Utts, J.M., Heckard R.F.: Mind on Statistics, 5th ed. Thomson Brooks/Cole, Belmont, 2014 5. Zvára, K., Štěpán, J.: Pravděpodobnost a matematická statistika, Matfyzpress, Praha, 2001 (in Czech)					
<b>Course language:</b> Slovak					
<b>Course assessment</b> Total number of assessed students: 272					
A	B	C	D	E	FX
29.41	27.21	30.51	11.76	0.74	0.37

<b>Provides:</b> doc. RNDr. Ivan Žežula, CSc., RNDr. Martina Hančová, PhD.
<b>Date of last modification:</b> 27.02.2018
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Ol'ga Orosová, CSc.



## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚMV/ UDM/10		<b>Course name:</b> Introduction to mathematics			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 1 / 2 <b>Per study period:</b> 14 / 28 <b>Course method:</b> present					
<b>Number of credits:</b> 3					
<b>Recommended semester/trimester of the course:</b> 1.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b> Two tests during the semester.					
<b>Learning outcomes:</b> Repetition of problematic sections of the secondary mathematics by interesting tasks.					
<b>Brief outline of the course:</b> Simplification of algebraic expressions. Real number, absolute value of real numbers; equations and inequalities. Irrational equations and inequalities. Concept of function. Linear and quadratic function; equations and inequalities. Exponential and logarithmic function; equations and inequalities. Goniometric functions; equations and inequalities. Complex numbers.					
<b>Recommended literature:</b> 1. V. Medek - L. Mišík - T. Šalát: REPETITÓRIUM STREDOŠKOLSKEJ MATEMATIKY, Alfa Bratislava, 1976 2. S. Richtárová - D. Kyselová: MATEMATIKA (pomôcka pre maturantov a uchádzačov o štúdium na vysokých školách), Enigma Nitra, 1998 3. O. Hudec – Z. Kimáková – E. Švidroňová: PRÍKLADY Z MATEMATIKY (pre uchádzačov o štúdium na TU v Košiciach), EF TU Košice, 1999 4. F. Peller – V. Šáner – J. Eliáš – Ľ. Pinda: MATEMATIKA – Podklady na prijímacie testy pre uchádzačov o štúdium, Ekonóm Bratislava, 2000/2001 5. F. Vesajda – F. Talafous: ZBIERKA ÚLOH Z MATEMATIKY pre stredné všeobecnovzdelávacie školy a gymnáziá, SPN Bratislava, 1973 6. J. Lukášová – O. Odvárko – B. Riečan – J. Šedivý – J. Vyšín: ÚLOHY Z MATEMATIKY pre 4. ročník gymnázia, SPN Bratislava, 1976					
<b>Course language:</b> Slovak					
<b>Course assessment</b> Total number of assessed students: 460					
A	B	C	D	E	FX
22.61	16.09	17.17	16.09	16.3	11.74

<b>Provides:</b> doc. RNDr. Matúš Harminc, CSc., RNDr. Tadeáš Gavala
<b>Date of last modification:</b> 27.02.2018
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> KPS/ USM/15	<b>Course name:</b> Introduction to Statistical Methods
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 2 <b>Per study period:</b> 28 / 28 <b>Course method:</b> present	
<b>Number of credits:</b> 6	
<b>Recommended semester/trimester of the course:</b> 2.	
<b>Course level:</b> I.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> 2 tests plus continuous assessment of activity and preparedness during exercises. Three absences maximally are allowed on labs. Maximum of 100 points consists of max 40 points for continuous assessment and max 60 for final assessment. Combined exam (theory + practical solving of examples). To be allowed to take an exam, a student must obtain at least 20 points from continuous assessment.	
<b>Learning outcomes:</b> The aim of the subject is to make students understand the purpose of using of statistical methods in practice, to learn theoretical background and become able to apply them in practical situations.	
<b>Brief outline of the course:</b> meaning, structure and nature of statistical methods – graphic and numerical representation of data files – determination of nature and closeness between the variables – probability – its character, determination and meaning in statistics – statistical judgment (hypotheses and algorithms) – difference statistics: parametric and non-parametric	
<b>Recommended literature:</b> Povinná: 1. FERJENČÍK, J.: Základy štatistických metód v sociálnych vedách. Košice: UPJŠ, 2006 JELEŇOVÁ, I.: Zbierka úloh zo základov štatistiky pre sociálne vedy. Košice: UPJŠ, 2012 2. HENDL, J.: Přehled statistických metod zpracování dat. Praha: Portál, 2004 3. <a href="http://www.statsoft.com/textbook/stathome.html">www.statsoft.com/textbook/stathome.html</a> Odporúčaná: 1. <a href="http://www.prenhall.com/mcclave">www.prenhall.com/mcclave</a> 2. <a href="http://badame.vse.cz/iastat">http://badame.vse.cz/iastat</a> 3. CLAUSS, G., EBNER, H.: Základy štatistiky pre psychologov, pedagógov a sociológov. Bratislava: SPN, 1988	
<b>Course language:</b>	
<b>Course assessment</b> Total number of assessed students: 1726	

A	B	C	D	E	FX
8.75	13.21	13.27	15.59	33.08	16.11
<b>Provides:</b> doc. PhDr. Ján Ferjenčík, CSc., doc. Ing. Mgr. Jozef Bavoľár, PhD.					
<b>Date of last modification:</b> 21.09.2017					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> Dek. PF UPJŠ/USPV/13	<b>Course name:</b> Introduction to Study of Sciences
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week: Per study period:</b> 12s / 3d <b>Course method:</b> present	
<b>Number of credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 1.	
<b>Course level:</b> I.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b>	
<b>Learning outcomes:</b>	
<b>Brief outline of the course:</b>	
<b>Recommended literature:</b>	
<b>Course language:</b>	
<b>Course assessment</b> Total number of assessed students: 1356	
abs	n
88.86	11.14
<b>Provides:</b>	
<b>Date of last modification:</b> 19.02.2018	
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.	

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚMV/ VEM/10		<b>Course name:</b> Selected topics in elementary mathematics			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 1 / 1 <b>Per study period:</b> 14 / 14 <b>Course method:</b> present					
<b>Number of credits:</b> 3					
<b>Recommended semester/trimester of the course:</b> 5.					
<b>Course level:</b> I.					
<b>Prerequisites:</b> ÚMV/MAN2c/10					
<b>Conditions for course completion:</b> exam					
<b>Learning outcomes:</b> Obtain knowledge about the structure of elementary mathematics with respect to advanced mathematics; the development of mathematical skills of prospective teachers.					
<b>Brief outline of the course:</b> Language of Mathematics; syntax and semantics; sets, relations, rational and irrational numbers, equations and inequations in reals; elementary functions					
<b>Recommended literature:</b> W.W. Esty: The Language of Mathematics, Montana State University, 2007. F. Klein: Elementary mathematics from an advanced standpoint, Dower Publications, 1945.					
<b>Course language:</b> Slovak					
<b>Course assessment</b> Total number of assessed students: 178					
A	B	C	D	E	FX
20.22	16.85	19.66	17.98	23.03	2.25
<b>Provides:</b> prof. RNDr. Jozef Doboš, CSc.					
<b>Date of last modification:</b> 27.02.2018					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚMV/ VKA/10		<b>Course name:</b> Selected topics in algebra			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 1 <b>Per study period:</b> 28 / 14 <b>Course method:</b> present					
<b>Number of credits:</b> 4					
<b>Recommended semester/trimester of the course:</b> 6.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b> According to tests and to the exam.					
<b>Learning outcomes:</b> To obtain basic knowledge on universal algebra; to be able to apply the theory in concrete situations.					
<b>Brief outline of the course:</b> Relations, operations, algebraic structures. Substructures. Congruences, homomorphism theorems. Automorphism groups and endomorphism monoids. Terms, term operations, identities, varieties.					
<b>Recommended literature:</b> B. Jónsson: Topics in Universal Algebra, Springer-Verlag 1972 M. Kolibiar a kol.: Algebra a príbuzné disciplíny, Bratislava 1992					
<b>Course language:</b> Slovak					
<b>Course assessment</b> Total number of assessed students: 96					
A	B	C	D	E	FX
6.25	18.75	25.0	26.04	21.88	2.08
<b>Provides:</b> prof. RNDr. Danica Studenovská, CSc.					
<b>Date of last modification:</b> 27.02.2018					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KFaDF/VKFV/07		<b>Course name:</b> Selected Topics in Philosophy of Education (General Introduction)			
<b>Course type, scope and the method:</b> <b>Course type:</b> <b>Recommended course-load (hours):</b> <b>Per week: Per study period:</b> <b>Course method:</b> present					
<b>Number of credits:</b> 2					
<b>Recommended semester/trimester of the course:</b> 3., 5.					
<b>Course level:</b> I.					
<b>Prerequisites:</b> KFaDF/DF1/05					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 0					
A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0
<b>Provides:</b> doc. PhDr. Pavol Tholt, PhD., mim. prof.					
<b>Date of last modification:</b> 23.08.2017					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					



## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KPPaPZ/VPMOS/16		<b>Course name:</b> Developmental Psychology for Double-Major Study			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 2 <b>Per study period:</b> 28 / 28 <b>Course method:</b> present					
<b>Number of credits:</b> 6					
<b>Recommended semester/trimester of the course:</b> 4.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 29					
A	B	C	D	E	FX
20.69	24.14	27.59	20.69	6.9	0.0
<b>Provides:</b> Mgr. Mária Bačíková, PhD.					
<b>Date of last modification:</b> 21.08.2017					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚMV/ ZBR/14	<b>Course name:</b> Bridge Fundamentals
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present	
<b>Number of credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 5.	
<b>Course level:</b> I.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> Active participation on exercises.	
<b>Learning outcomes:</b> A student gets acquainted with fundamentals of the contract bridge, develops his/her logical thinking and consolidates his/her habits of positive social behaviour.	
<b>Brief outline of the course:</b> Bridge rules. Principles of the bidding system Standard American. Basic techniques of declarer's play. Basic techniques of the defence. Lead conventions, signals. Common bidding conventions. Selected advanced techniques of the card play. Partnership cooperation in the contract bridge. Bridge ethics.	
<b>Recommended literature:</b> T. Menyhért: Kurz bridžu 2013, <a href="http://new.bridgekosice.sk/kurz-bridzu-2013/">http://new.bridgekosice.sk/kurz-bridzu-2013/</a> R. Pavlicek: Learn To Play Bridge!, <a href="http://www.rpbridge.net/1a00.htm">http://www.rpbridge.net/1a00.htm</a> ACBL SAYC System Booklet, <a href="http://ebookbrowse.net/acbl-sayc-pdf-d201415187">http://ebookbrowse.net/acbl-sayc-pdf-d201415187</a>	
<b>Course language:</b> Slovak or English	
<b>Notes:</b> Minimum number of participants is 4.	
<b>Course assessment</b> Total number of assessed students: 17	
abs	n
94.12	5.88
<b>Provides:</b> doc. RNDr. Miroslav Ploščica, CSc., prof. RNDr. Mirko Hornák, CSc.	

<b>Date of last modification:</b> 27.02.2018
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Ol'ga Orosová, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> KPS/ ZKP/06	<b>Course name:</b> The Fundamentals of Clinical Psychology
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 2 <b>Per study period:</b> 28 / 28 <b>Course method:</b> present	
<b>Number of credits:</b> 6	
<b>Recommended semester/trimester of the course:</b> 3., 5.	
<b>Course level:</b> I.	
<b>Prerequisites:</b> KPS/VP2/06	
<b>Conditions for course completion:</b> Maximum 40 points per semester, minimum 22 per semester. Test max 20/ min 11p. Oral presentation of written essay on chosen topic max 16/ min 11p. Semester 40%, exam 60% Result mark Sum of points from semester and exam: A 90 – 100 B 80 – 89 C 70 – 79 D 60 – 69 E 51 – 59 FX 50 and less	
<b>Learning outcomes:</b> The course introduces present information from applied psychological discipline - Clinical Psychology. It presents some actual theories, which explain basis of health, illness, dysfunction and disability. It concentrates on practical abilities, which are necessary for clinical psychology praxis.	
<b>Brief outline of the course:</b> <ol style="list-style-type: none"> <li>1. Subject of clinical psychology, its position in the system of psychological sciences</li> <li>2. History of clinical psychology development</li> <li>3. Practical questions of the work of a clinical psychologist</li> <li>3. Concepts of normality / abnormality</li> <li>4. Etiopathogenesis of mental disorders, biopsychosocial model</li> <li>5. Specifics of psychogenic factors for the development of mental disorders</li> <li>6. Methodology of research and individual approach in clinical psychology</li> <li>7. Specifics of clinical psychological interview</li> <li>8. Psychodiagnostics in clinical psychology</li> <li>9. Collection of anamnestic information</li> <li>10. Ethics in clinical psychology</li> </ol>	
<b>Recommended literature:</b> Heretik, A., Heretik, A., a spol. (2007). Klinická psychológia, Nové Zámky: Psychoprof.	

Trull, T.J., Prinstein, M. (2012). Clinical psychology. Wadsworth: Cengage Learning. Baštecká, B., Goldman, P. (2001). Základy klinické psychologie, Praha: Portál. Baštecká, B. a kol. (2006). Klinická psychologie v praxi, Praha: Portál. Křivohlavý, J. (2003). Psychologie zdraví. Praha: Portal. Ondrášová, M. (2005). Psychiatria. Bratislava: Osveta. Říčan, P., Krejčířová, D. a kol. (2006). Dětská klinická psychologie, Praha: Grada.					
<b>Course language:</b> Slovak, English					
<b>Course assessment</b> Total number of assessed students: 612					
A	B	C	D	E	FX
40.69	32.52	15.2	7.52	2.61	1.47
<b>Provides:</b> Mgr. Monika Hricová, PhD.					
<b>Date of last modification:</b> 21.09.2017					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD. Guaranteeprof. PhDr. Ol'ga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚBEV/ ZNFYZM/15		<b>Course name:</b> Basics of Neurophysiology			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present					
<b>Number of credits:</b> 3					
<b>Recommended semester/trimester of the course:</b> 3.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 34					
A	B	C	D	E	FX
5.88	38.24	26.47	11.76	14.71	2.94
<b>Provides:</b> RNDr. Ján Gálik, CSc.					
<b>Date of last modification:</b> 21.09.2017					
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KPS/ ZPSP/06		<b>Course name:</b> The Fundamentals of Psychology of Work			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 2 <b>Per study period:</b> 28 / 28 <b>Course method:</b> present					
<b>Number of credits:</b> 6					
<b>Recommended semester/trimester of the course:</b> 3., 5.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b> -Credit test (20p) - Semester assignment - essay (20p) Semester 40%, exam 60% - Credit test (20p), min. 13p - semester assignment (20p), min. 13p - exam (60p), min. 30p - together min. 56p					
<b>Learning outcomes:</b> - Familiarize students with content of work psychology field - Orientation in central questions of work psychology - Opportunities and examples of fulfillment of psychologist in different society life areas					
<b>Brief outline of the course:</b> Definition of work psychology, historical preconditions of constitution of work psychology, work and her conditions, work analysis, psychological profesigraphy, work performance, motivation to work and work satisfaction, forming of work environment					
<b>Recommended literature:</b> Landy, F.J., Conte, J.M., 2007. Work in the 21st century. An introduction to industrial and organizational psychology. Blackwell Publishing, 2nd edition. Matthewman, L., Rose, A., Hetherington, A. 2009. Work psychology. Oxford University Press. Arnold, J. eds. 2005. Work Psychology. Understanding Human Behaviour in the workplace. Prentice Hall, 4th edition.					
<b>Course language:</b> Slovak, English					
<b>Course assessment</b> Total number of assessed students: 595					
A	B	C	D	E	FX
37.31	30.59	16.81	9.24	5.21	0.84

<b>Provides:</b> PhDr. Denisa Fedáková, PhD., Mgr. Pavol Kačmár, PhD.
<b>Date of last modification:</b> 21.09.2017
<b>Approved:</b> Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.



## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚTVŠ/ ÚTVŠ/CM/13	<b>Course name:</b> Seaside Aerobic Exercise
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week: Per study period:</b> 36s <b>Course method:</b> present	
<b>Number of credits:</b> 2	
<b>Recommended semester/trimester of the course:</b>	
<b>Course level:</b> I., II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> Conditions for course completion: Attendance	
<b>Learning outcomes:</b> 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.	
<b>Brief outline of the course:</b> 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	
<b>Recommended literature:</b>	
<b>Course language:</b>	
<b>Course assessment</b> Total number of assessed students: 33	
abs	n
12.12	87.88
<b>Provides:</b> Mgr. Alena Buková, PhD., Mgr. Agata Horbacz, PhD.	
<b>Date of last modification:</b> 18.08.2017	

**Approved:** Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Ol'ga Orosová, CSc.