University: P. J.	Šafárik Univers	sity in Košice					
Faculty: Faculty	Faculty: Faculty of Science						
Course ID: ÚMV/ ALG2b/10Course name: Algebra II							
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 4 / 2 Per study period: 56 / 28 Course method: present							
Number of cred	lits: 7						
Recommended	semester/trime	ster of the cours	e: 2.				
Course level: I.							
Prerequisities:	ÚMV/ALGa/10						
Conditions for a According to test	course completions and to the example	on: am.					
Learning outcome To obtain basic their roots over	mes: knowledge on m a field; to be abl	natrices, linear spa e to apply the the	aces, linear transf ory in concrete e	formations and p excercises.	polynomials and		
Brief outline of Linear spaces, transformations. Ring, fields. Poly numbers. Cubic	the course: bases. Rank of ynomials over a equations. Poly	f a matrix. Syst field. Factorization nomials with seve	ems of homoge on into irreducible eral unknowns, s	neous linear eq factors, roots. R ymmetric polyno	quations. Linear coots of complex omials.		
Recommended A. Kurosh: High	literature: ner Algebra, Min	Publishers, 1975	5.				
Course language: Slovak							
Course assessment Total number of assessed students: 503							
A	В	С	D	Е	FX		
13.32	13.32 11.73 17.3 18.69 28.83 10.14						
Provides: prof. RNDr. Danica Studenovská, CSc.							
Date of last mod	lification: 22.02	2.2017					
Approved: Guar PhD.	Approved: Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Eugen Andreanský, PhD.						

University: P. J	. Šafárik Univers	ity in Košice			
Faculty: Facult	y of Science				
Course ID: ÚM ALGa/10	IV/ Course na	ame: Algebra I			
Course type, sc Course type: 1 Recommended Per week: 3 / 3 Course metho	ope and the met Lecture / Practice d course-load (h 3 Per study peri d: present	thod: c ours): od: 42 / 42			
Number of crea	lits: 7				
Recommended	semester/trimes	ster of the cours	e: 1.		
Course level: I.					
Prerequisities:					
Conditions for According to th exam	course completi e results from th	on: e semester and ir	n view of the res	sults of the written	and oral final
Learning outco To obtain basic concerning syst	mes: knowledge from ems of linear equ	number theory outions. To be ab	concerning divis le to apply it in	sibility and from liconcrete excercise	inear algebra es.
Brief outline of Divisibility in Computing with	the course: Z. Fields. System n matrices. Deter	ms of linear equ minants, Cramer	ations, Gauss o rule.	elimination. Maps	s, permutations.
Recommended T.S Blyth, E.F. K. Jänich: Line	literature: Robertson: Basic ar algebra, Sprin	e linear algebra, S ger Verlag, 1991	Springer Verlag,	2001.	
Course languag Slovak	ge:				
Course assessm Total number of	ent f assessed studen	ts: 1336			
А	В	С	D	E	FX
10.93	11.98	17.81	17.74	28.89	12.65
Provides: prof. Rindošová, RNI	RNDr. Danica Si Dr. Martina Tamá	tudenovská, CSc išová, Mgr. Erika	., RNDr. Igor Fa a Vojtková	abrici, Dr. rer. nat.	, Mgr. Simona
Date of last mo	dification: 22.02	2.2017			
Approved: Gua PhD.	ranteedoc. RND	r. Ondrej Hutník,	, PhD.Guarantee	eprof. PhDr. Euge	n Andreanský,

University: P. J	. Šafárik Univers	ity in Košice			
Faculty: Facult	y of Science				
Course ID: KP ALP/06	E/ Course n a	ame: Alternative	Education		
Course type, so Course type: 1 Recommende Per week: 2 P Course metho	cope and the met Practice d course-load (h er study period: d: present	thod: ours): 28			
Number of cre	dits: 2				
Recommended	semester/trimes	ster of the cours	se: 4.		
Course level: I.					
Prerequisities:					
Conditions for	course completi	on:			
Learning outco	omes:				
Brief outline of	the course:			-	
Recommended	literature:				
Course langua	ge:				
Course assessn Total number o	nent f assessed studen	ts: 143			
А	В	С	D	E	FX
66.43	29.37	0.7	1.4	0.7	1.4
Provides: Paed	Dr. Renáta Oroso	vá, PhD., Mgr. I	Katarína Petríkov	á, PhD.	
Date of last mo	dification: 07.02	2.2017			
Approved: Gua PhD.	aranteedoc. RND	r. Ondrej Hutník	, PhD.Guaranteej	prof. PhDr. Euger	n Andreanský,

University: P. J. Š	Šafárik Univers	ity in Košice				
Faculty: Faculty	of Science					
Course ID: ÚMV/ Course name: Algebra and number theory ATC/10						
Course type, scop Course type: Le Recommended Per week: 2 / 1 1 Course method:	pe and the met ecture / Practice course-load (h Per study perio : present	thod: c ours): od: 28 / 14				
Number of credit	ts: 4					
Recommended so	emester/trimes	ster of the cours	e: 4.			
Course level: I.						
Prerequisities: Ú	MV/ALG2b/10)				
Conditions for co It is based on the based on the resu exam.	ourse completi results of writt lts of written cl	on: en checks carried hecks carried out	l out during the s during the semes	emester. Final ev ster, of test, writ	valuation is ten and oral	
Learning outcom Obtain basic know	nes: wledge about g	roups and from t	he elementary nu	mber theory.		
Brief outline of the Groups, subgroup number theory.	he course: ps, quotient gro	oups, homomorp	hism theorems fo	or groups, select	ted topics of the	
Recommended li G.Birkoff, S.Mac I.R. Shafarevich:	terature: Lane: A Surve Basic Notions	ey of Modern Alg of Algebra, Sprin	gebra, New York nger, 2005	1965		
Course language Slovak	:					
Course assessme Total number of a	Course assessment Total number of assessed students: 132					
A	В	С	D	Е	FX	
10.61	19.7	27.27	21.21	16.67	4.55	
Provides: doc. RI	NDr. Matúš Ha	rminc, CSc.			•	
Date of last modi	ification: 22.02	2.2017				
Approved: Guara PhD.	inteedoc. RND	r. Ondrej Hutník,	PhD.Guaranteep	orof. PhDr. Euge	n Andreanský,	

University: P. J.	. Šafárik Univer	sity in Košice				
Faculty: Faculty	y of Science					
Course ID: ÚB BDD/05	Course ID: ÚBEV/ Course name: Biology of Children and Adolescents BDD/05					
Course type, sc Course type: I Recommended Per week: 2 / (Course metho	ope and the mo Lecture / Practic l course-load () Per study per d: present	ethod: e hours): iod: 28 / 0				
Number of crea	lits: 2					
Recommended	semester/trim	ester of the cours	e: 4., 6.			
Course level: I.						
Prerequisities:						
Conditions for Written test	course comple	tion:				
The aim of the side of the sid	subject is to gai is neccessary for olescents linked the course: nesis. Postnata piratory, gastro	n the particular let or the understandi to development. development. A intestinal and uri	vel of knowledg ng of specific bi Age specific fea nary systems. I	e about human bo iological characte atures of skeletal Reproductive sys	bdy and its cristics of and muscalar, stem. Endocrine	
population and	environment.	specifics of selec	teu uiseases and	a ang dependend	e anse. numan	
Recommended Drobný I., Drob 2000 Lipková V.: Son Malá H., Kleme	literature: oná M.: Biológia matický a fyziol enta J.: Biológia	a dieťaťa pre špec ogický vývoj diet detí a dorastu. Bi	iálnych pedagóg 'aťa. Osveta Bra ratislava, SPN, 1	gov I. a II. Bratisl tislava, 1980 1989	ava, PdF UK,	
Course languag	ge:					
Course assessm Total number of	ent f assessed stude	nts: 1337				
А	В	C	D	E	FX	
31.56	23.04	17.5	18.03	9.42	0.45	
Provides: doc. 1	RNDr. Monika l	Kassayová, CSc.			•	
Date of last mo	dification: 16.0	2.2017				
Approved: Gua PhD.	ranteedoc. RNI	Dr. Ondrej Hutník,	, PhD.Guarantee	eprof. PhDr. Euge	n Andreanský,	

University: P. J. Šafá	rik University in Košice					
Faculty: Faculty of S	Faculty: Faculty of Science					
Course ID: ÚMV/ BKP2/14	Course ID: ÚMV/ Course name: Bachelor Project BKP2/14					
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 1 Per study period: 14 Course method: present						
Number of credits: 2						
Recommended seme	ster/trimester of the cours	e: 5.				
Course level: I.						
Prerequisities:						
Conditions for cours To prepare and preser	e completion: nt a contribution related to the	hesis and its topic.				
Learning outcomes: To get students famili presentation as well a	iar with basic knowledge on as with the support for its rea	the form and content of thesis and thesis alisation.				
Brief outline of the c Necessary elements a Presentation software and contribution mak	Brief outline of the course: 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					
Recommended litera electronic information	ture: n sources					
Course language: Slovak or English						
Course assessment Total number of assessed students: 110						
	abs n					
100.0 0.0						
Provides: doc. RNDr. Dušan Šveda, CSc.						
Date of last modifica	tion: 22.02.2017					
Approved: Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Eugen Andreanský, PhD.						

University: P. J	. Šafárik Univers	ity in Košice				
Faculty: Facult	y of Science			c		
Course ID: ÚM BPO/14	Course ID: ÚMV/ BPO/14Course name: Bachelor thesis and its defence					
Course type, so Course type: Recommende Per week: Pe Course metho	cope and the met d course-load (h r study period: od: present	thod: ours):				
Number of cre	dits: 4					
Recommended	semester/trimes	ster of the cours	e:			
Course level: I.						
Prerequisities:						
Conditions for Acquiring the r	course completi equired number o	on: of credits in the s	tructure defined	by the study pla	1.	
Learning outco Evaluation of s	omes: tudent's compete	nces with respec	t to the profile of	the graduate.		
Brief outline of Presentation of answering the c	f the course: results of the bac juestions of mem	chelor thesis, ans bers of evaluatio	wering the quest n commitee.	ions of the thesi	s supervisor and	
Recommended	literature:					
Course langua	ge:					
Course assessn Total number o	nent f assessed studen	ts: 41				
А	В	С	D	Е	FX	
56.1	56.1 29.27 7.32 4.88 2.44 0.0					
Provides:	·					
Date of last mo	dification: 22.02	2.2017				
Approved: Gua	aranteedoc. RND	r. Ondrej Hutník,	PhD.Guaranteer	prof. PhDr. Euge	n Andreanský,	

PhD.

University: P. J. Šafá	rik University in Košice						
Faculty: Faculty of S	cience						
Course ID: ÚMV/ DGS/15	Course ID: ÚMV/ Course name: Students' Digital Literacy DGS/15						
Course type, scope a Course type: Practic Recommended cour Per week: 2 Per stu Course method: pre	nd the method: ce rse-load (hours): dy period: 28 esent						
Number of credits: 2	2						
Recommended seme	ster/trimester of the course: 1.						
Course level: I.							
Prerequisities:							
Conditions for cours continuous assessment	e completion: nt and final project						
Learning outcomes: To acquire an overvie competencies with er To acquire basic digit laptop, social media, technologies for bette lifelong learning and	ew of the current possibilities of digital technology to develop skills and nphasis on the area of communication, social interaction and personal. tal skills for working with advanced technologies (mobile phone, tablet, online webtechnologies). To understand the value of existing advanced er and more effective learning, work and active life in higher education, further career prospects.						
Brief outline of the c Introduction to the pr online information so books). Tools for co and visualization. To Google Drive, Youtu collaborative activitie evaluation of digital to	ourse: oblems of current, commonly available digital technology. Tools for access to ource (mobile applications for access to information systems, databases, data llecting, generating direct information and data and its subsequent analysis ools for providing and sharing of electronic content (cloud technology - be, Google+, Skydrive, Dropbox). Tools for communication, discussion and es. Legal work with digital technologies and resources, plagiarism, critical resources. Security, privacy, digital ethics and etiquette, digital citizenship.						
Recommended litera 1. Bruff, D. (2009). T environments. San Fr	iture: Ceaching with classroom response systems: Creating active learning rancisco: 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.

Course language: Slovak

Course assessment

Total number of assessed students: 104

abs	n			
97.12	2.88			

Provides: doc. RNDr. Stanislav Lukáč, PhD., doc. RNDr. Jozef Hanč, PhD., doc. RNDr. Ľubomír Šnajder, PhD.

Date of last modification: 22.02.2017

Approved: Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Eugen Andreanský, PhD.

University: P. J. Šafárik University in Košice						
Faculty: Faculty of Science						
Course ID: ÚM DSMa/10	Course ID: ÚMV/ DSMa/10Course name: Discrete mathematics I					
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 2 Per study period: 28 / 28 Course method: present						
Number of cred	its: 5					
Recommended	semester/trimes	ter of the cours	e: 3.			
Course level: I.						
Prerequisities:						
Conditions for o Examination.	course completi	on:				
Learning outco To be familiar w appreciate math- just standard rec	Learning outcomes: To be familiar with some factual knowledge of combinatorics and graph theory. To understand an appreciate mathematical notions, definitions, and proofs, to solve problems requiring more than just standard recipes, and to express mathematical thoughts precisely and more rigorously					
Brief outline of the course: 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.						
 Recommended literature: 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. 						
Course language: Slovak						
Course assessment Total number of assessed students: 547						
А	A B C D E FX					
13.35	11.7	17.18	22.49	26.87	8.41	
Provides: Dr.h.c Juraj Valiska	. prof. RNDr. St	anislav Jendroľ,	DrSc., RNDr. M	ária Maceková, P	hD., RNDr.	

Date of last modification: 22.02.2017

Approved: Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Eugen Andreanský, PhD.

University: P. J. Šafá	rik University in Košice
Faculty: Faculty of S	cience
Course ID: ÚMV/ DSMb/10	Course name: Discrete mathematics II
Course type, scope a Course type: Lectur Recommended cour Per week: 2 / 2 Per Course method: pre	nd the method: re / Practice rse-load (hours): study period: 28 / 28 esent
Number of credits: 5	
Recommended seme	ster/trimester of the course: 4.
Course level: I.	
Prerequisities: ÚMV	/DSMa/10 or ÚMV/DSM3a/10
Conditions for cours Two tests during the It is made on the base and an oral exam (50	e completion: semester e of results of two tests during the semester (50%)and a final written exam %)
Learning outcomes: Mastered funamental applications of graph	methods of graph theory. To be familiar with some possibilities of theory
Introduction to graph Connectivity and dist Trees, spanning subg Independence and co Introduction to the Ra Introduction to the ex Matchings: Theorem Vertex colorings: The Chromatic polynomia Edge colourings, The Introduction to direct kernel of a graph. Introduction to applied	s. ance in graphs. raphs verings. amsey theory. attremal graph theory. of Hall, theorem of Berge, optimal assignment problems. eorem of Brooks, Theorem of Erdos and Szekeres. als. eorem of Koenig. ed graphs: Basic notions, connectivities, tounaments, acyclic graphs, base and cations of graphs.
Recommended litera 1. A. Bondy and U.S 2. G. Chartrand, L. L 3. R. Diestel: Graph 7 4.M.N.S. Swamy and Willey Interscience P Course language: Slovak	hture: R. Murty: Graph theory, Springer-Verlag 2008 esniak, and P. Zhang, Graphs and digraphs, CRC Press, Boca Raton 2011 Γheory, Springer-Verlag, New York, Inc. 1997 K. Thulasiraman: Graphs, Networks and Algorithms. Publ., New York 1981
Course assessment	

Total number of assessed students: 375						
А	В	С	D	Е	FX	
11.73	9.33	17.33	19.47	28.0	14.13	
Provides: Dr.h.c. prof. RNDr. Stanislav Jendrol', DrSc., RNDr. Mária Maceková, PhD.						
Date of last modification: 22.02.2017						
Approved: Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Eugen Andreanský, PhD.						

University: P. J. Šafá	rik University in Košice							
Faculty: Faculty of S	Faculty: Faculty of Science							
Course ID: ÚINF/ EDS/15	Course name: Educational software							
Course type, scope a Course type: Lectur Recommended cour Per week: 0 / 2 Per Course method: pre	nd the method: re / Practice rse-load (hours): study period: 0 / 28 esent							
Number of credits: 2								
Recommended seme	ster/trimester of the course: 5.							
Course level: I.								
Prerequisities:								
Conditions for cours 1 Preparation of inter a) Worksheet for stud b) Multimedia education c) Interactive education d) Methodological guid chosen school subject 2 Creation and preser Learning outcomes: 1. To acquire an over 2. To gain or enhanced a) presentation softwar concept maps, b) programs for creat	te completion: im assignments: lent (with custom graphics) tional presentation (with pictures, animations and sounds) onal quiz (with several types of quiz items) tidance on the use of interactive applications in teaching selected topic of t. ntation of final project on the use of educational software in education. view of the educational software types and its exploitation in education. view of the educational software types and its exploitation in education. e basic skills in working with: are, programs for creation and editing images, animations, diagrams, sounds, ion of quizes, questionnaires, voting,							
c) simulation and mo	deling software,							
3. To create and prese	ent a final project on the use of educational software in education.							
Brief outline of the c Educational software for creation of teaching	ourse: types. Onlilne educational sources and tools. Multimedia processing. Tools ng aids.							
Recommended litera 1. Digitálna gramotno Košice : Ústav inform 2. Moderná didaktick [et al.] ; recenzenti Vi 9788080861353 (bros 3. Web, Multimédiá / 68 s Č. projektu: Šl	nture: osť učiteľa : učebný materiál- modul 1 / Rastislav Adámek [et al.] nácií a prognóz školstva, 2009 80 s ISBN 9788080861193(brož.). sá technika v práci učiteľa : učebný materiál modul 2 / Rastislav Adámek iliam Fedák, Anton Lavrin Košice : Elfa, 2010 200 s ISBN ž.). Martin Homola [et al.] Bratislava : Štátny pedagogický ústav, 2010 PVV ĎVUi 26120130001 ISBN 9788081180514 (brož.).							
Course language:								
Notes:								

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: 25							
А	A B C D E FX						
56.0	24.0	16.0	0.0	4.0	0.0		
Provides: doc. RNDr. Ľubomír Šnajder, PhD.							
Date of last modification: 09.02.2017							
Approved: Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Eugen Andreanský, PhD.							

University: P. J. Šafá	rik University in Košice
Faculty: Faculty of S	cience
Course ID: ÚMV/ GEO2a/15	Course name: Geometry I
Course type, scope a Course type: Lectur Recommended cou Per week: 3 / 2 Per Course method: pre	nd the method: re / Practice rse-load (hours): study period: 42 / 28 esent
Number of credits: 5	;
Recommended seme	ster/trimester of the course: 6.
Course level: I.	
Prerequisities:	
Two written tests. Written and oral exam For continuous evalue for the written test - 1 for oral exams - max Final score: A: 100-91 points, B: Note: In each of the s	ninations ation - max. 40 points nax. 20 points . 40 points) 90-81, C: 80-71, D: 70-61, E: 60-51, F: less than 51 points student needs to have at least 40% max. number of points
Learning outcomes: To acquaint students Euclidean space.	with the analytical geometry of linear and quadratic figures in Afinne and
Brief outline of the c Affine n-dimensional Linear coordinate sys Subspaces, the param The relative position Bundles of lines. The arrangement of p Convex sets. Changing the system Euclidean space - det Euclidean distances a The rate of the size o Triangle and trigonon Conic and line.	ourse: space - definition. stem. netric and non-parametric representation. of the two subspaces. points on the line. of linear coordinates. finition of (scalar and outer product). and deviations subspaces. f convex sets. netric theorems.
Recommended litera 1. M.Sekanina, L.Bo 2. M.Hejný, V.Zaťko 3. J.Eliaš, J.Horváth, 4. M.Trenkler: Mater	a ture: ček, M.Kočandrle, J.Šedivý: Geometrie 1, SPN Praha 1986 , P.Kršňák: Geometria 1, SPN Bratislava 1985 J.Kajan: Zbierka úloh z vyššej matematiky 1, Alfa Bratislava iály uvedené na Internete.

Course language: Slovak							
Course assessment Total number of assessed students: 113							
А	В	С	D	Е	FX		
15.93	16.81	23.01	17.7	15.93	10.62		
Provides: doc. RNDr. Dušan Šveda, CSc., RNDr. Lucia Janičková							
Date of last modification: 22.02.2017							
Approved: Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Eugen Andreanský, PhD.							

University: P. J.	Šafárik Univers	ity in Košice			
Faculty: Faculty	of Science				
Course ID: KPE/ INP/17Course name: Inclusive Pedagogy					
Course type, sc Course type: F Recommended Per week: 2 Po Course metho	ope and the met Practice I course-load (h er study period: d: present	thod: ours): 28			
Number of crec	lits: 2				
Recommended	semester/trimes	ster of the cours	se: 5.		
Course level: I.					
Prerequisities:					
Conditions for	course completi	on:			
Learning outco	mes:				
Brief outline of	the course:				
Recommended	literature:				
Course languag	ge:				
Course assessm Total number of	ent assessed studen	its: 0			
А	В	С	D	Е	FX
0.0	0.0	0.0	0.0	0.0	0.0
Provides: Mgr.	Lucia Diheneščí	ková, PhD.			
Date of last mo	dification: 13.06	5.2017			
Approved: Gua PhD.	ranteedoc. RND	r. Ondrej Hutník	, PhD.Guaranteep	prof. PhDr. Euger	n Andreanský,

University: P. J. S	Safárik Univers	ity in Košice			
Faculty: Faculty	of Science				
Course ID: ÚMV IPU/10	Course na	me: Informatics	course for teach	ers of mathemati	CS
Course type, sco Course type: Le Recommended Per week: 1 / 1 Course method	pe and the met octure / Practice course-load (h Per study perio	hod: ours): od: 14 / 14			
Number of credi	ts: 2				
Recommended se	emester/trimes	ster of the cours	e: 6.		
Course level: I.					
Prerequisities:					
Conditions for co Elaborating test b work.	ourse completi by using a comp	on: outer. Solving pro	oblems of works	heet and elaborat	ion of seminar
To develop the st provide opportun commands of Log shapes and basic To develop creati technologies in m Brief outline of t	udents' knowled ities for their us go language for principles of cr ve and evaluati athematics edu	dge and skills in se in mathematic writing and gen eation of constru- ve students' abili- ication.	the basics of wo s education. To t eralization algor actions in the envity to allow mean	rking with standa each students to ithms for constru rironment of dyna ningful integration	ard ICT, which use the basic cting geometric amic geometry. n of modern
environment. Edu and graphical rep	resentations of	cations and Inter data and modell	net in mathemat	tics education. Us	se of numerical nt.
Recommended li B. Brdička: The I S. Lukáč a kol.: I M. Černochová a Z. Šťastný: Mater	terature: Role of Internet KT vo vyučova kol.: Využití p matické a statis	u in Education, 2 ní matematiky, 2 očítače při vyučo tické výpočty v	2003, http://it.ped Asociácia projekt ování. Portál, 199 Microsoft Excelu	df.cuni.cz/~bobr/ tu Infovek 2002. 98. 1, Computer Press	role/econt.htm. s 2001.
Course language Slovak	:				
Course assessme Total number of a	nt ussessed studen	ts: 141			
Α	В	С	D	E	FX
54.61	26.24	9.93	7.09	2.13	0.0
Provides: doc. RI	NDr. Stanislav	Lukáč, PhD.			
Date of last mod	fication: 22.02	2.2017			

Approved: Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Eugen Andreanský, PhD.

University: P. J. S	Šafárik Universi	ty in Košice					
Faculty: Faculty of Science							
Course ID: ÚMV/ LTM/10Course name: Logic and set theory							
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 3 / 2 Per study period: 42 / 28 Course method: present							
Number of credi	ts: 6						
Recommended se	emester/trimes	ter of the course	e: 5.				
Course level: I.							
Prerequisities: Ú	MV/MANb/10						
Conditions for co Exam	ourse completio	on:					
Learning outcom To obtain a basic proof.	nes: knowledge on t	he mathematical	notion of an inf	inity. Analysis of	f the notion of a		
Brief outline of t Set as a mathema induction. Relation Finite and counta Sentential calcula predicate calcula Methods of proof	he course: atical formularizons and mapping ble sets. Cardin us, an axiomatic s, examples. A fs in predicate ca	zation of an infings. ality of continuu zation. Complete xiomatizations o alculus.	nity. Properties of m. Elementary c ness Theorem. N of predicate calc	of the set of reals ardinal arithmeti Methods of proof ulus and the not	s. Mathematical ics. fs. Language of tion of a proof.		
Recommended li E. Mendelson, In	terature: troduction to M	athematical Logi	ic, van Nostrand	1964.			
Course language Slovak	:						
Course assessment Total number of assessed students: 533							
А	В	С	D	Е	FX		
12.57	15.95	19.7	24.2	17.45	10.13		
Provides: RNDr.	Jaroslav Šupina	, PhD.					
Date of last mod	ification: 22.02	.2017					
Approved: Guara PhD.	anteedoc. RNDr	. Ondrej Hutník,	PhD.Guaranteep	orof. PhDr. Euger	n Andreanský,		

University: P. J.	Šafárik Univer	sity in Košice					
Faculty: Faculty	y of Science						
Course ID: ÚM MAE/10	e ID: ÚMV/ Course name: Macroeconomics						
Course type, sc Course type: I Recommended Per week: 2 / 1 Course method	ope and the me Lecture / Practic l course-load (l l Per study per d: present	thod: e nours): iod: 28 / 14					
Number of crea	lits: 4						
Recommended	semester/trime	ster of the cours	e: 5.				
Course level: I.							
Prerequisities:							
Conditions for Final mark is gi that evaluates th	ven based on the verbal argume	ion: e results of the tes ent about the stud	sts written during ied models.	g the semester and	d oral exam,		
Learning outco	mes:						
Brief outline of Basic macroeko godds markets. in open econom growth. High de	The course: onomic notions: Financial marke ny. Models of l epth.	Gross domestic ts. IS-LM model abour market. Pł	product, inflation in closed econon nillips curve, Ok	on, unemploymen ny. Open economy cun law. Inflation	nt Analysis of y. IS-LM model a and economic		
Recommended 1. Olivier Blanc EUROPEAN Pl 2. N.GREGOR Publishers 2009	literature: hard, Alessia A ERSPECTIVE, Y MANKIW, M	mighini, Franceso Pearson Educatio ACROECONOM	co Giavazzi:MA n, 2010 IICS, 7th Editior	CROECONOMIC	CS, A rsity,Worth		
Course languag Slovak and Eng	ge: lish						
Course assessment Total number of assessed students: 65							
А	В	C	D	E	FX		
20.0	13.85	21.54	23.08	13.85	7.69		
Provides: prof.	RNDr. Katarína	Cechlárová, DrS	с.				
Date of last mo	dification: 22.0	2.2017					
Approved: Gua PhD.	ranteedoc. RND	r. Ondrej Hutník,	, PhD.Guarantee	prof. PhDr. Euger	n Andreanský,		

University: P. J. Šafárik University in Košice						
Faculty: Faculty	y of Science					
Course ID: ÚM MAN2c/10	IV/ Course	name: Mathematic	cal analysis III			
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 2 Per study period: 28 / 28 Course method: present						
Number of crea	dits: 5					
Recommended	semester/trim	ester of the cours	e: 3.			
Course level: I.						
Prerequisities:	ÚMV/MANb/	10				
Conditions for Two written tes continuous asse	course completed t during semeted essment, written	e tion: er and activity stud n and oral part of th	ent to practice. F he exam.	inal evaluation is	s given by	
 Learning outcomes: 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 sylabus and develop the ability to use this theory. Brief outline of the course: Definite Riemann integral - definition, elementary properties, calculation methods, applications. 						
convergence, pr	roperties of the	e limit function an	d the sum. Powe	er series, Taylor	series and their	
 Recommended literature: 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. 						
Course language: Slovak						
Course assessment Total number of assessed students: 640						
А	В	С	D	Е	FX	
7.34	6.88	12.81	18.75	42.34	11.88	
Provides: doc. RNDr. Ondrej Hutník, PhD.						

Date of last modification: 22.02.2017

Approved: Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Eugen Andreanský, PhD.

University:	Р	J	Šafárik	Unive	rsitv	in	Košice
University.	т.	υ.	Suluin	0 m v c	ISICY	111	1205100

Faculty: Faculty of Science

Course ID: ÚMV/	Course name: Mathematical analysis IV
MAN2d/10	

Course type, scope and the method:

Course type: Lecture / Practice

Recommended course-load (hours):

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

Number of credits: 5

Recommended semester/trimester of the course: 4.

Course level: I.

Prerequisities: ÚMV/MANb/10

Conditions for course completion:

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%).

Learning outcomes:

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.

Brief outline of the course:

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.

Recommended literature:

1. L. Kluvánek, 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 Brne, 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).

Course language:

Slovak

Course assessment

Total number of assessed students: 288						
А	В	С	D	Е	FX	
9.38	9.72	17.36	19.44	34.72	9.38	
Provides: RNDr. Lenka Halčinová, PhD.						
Date of last modification: 22.02.2017						
Approved: Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Eugen Andreanský, PhD.						

University: P. J. Šafárik University in Košice							
Faculty: Faculty	of Scie	ence					
Course ID: ÚM MANa/10	V/ C	Course na	me: Mathematic	al analysis I			
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 3 / 3 Per study period: 42 / 42 Course method: present							
Number of cred	lits: 7						
Recommended	semest	er/trimes	ter of the course	e : 1.			
Course level: I.							
Prerequisities:							
Conditions for of Two written test continuous asse	course during ssment,	completion semeter a written a	on: and activity stude nd oral part of th	ent to practice. F e exam.	inal evaluation is	s given by	
Learning outco The aim of the c of real numbers	mes: course is , and to	s to give i develop o	ntroductory know certain calculatio	wledge about rea n skills in the fie	ll numbers, seque eld.	ences and series	
Brief outline of Real numbers - a odd, inverse), tra monotonicity, co	the cou axioms ansform	irse: and propenations of ence. Infir	erties. Real functi graphs of functio nite series - opera	ons - basic prope ns. Infinite seque tions, convergen	erties (monotone, ences - operation lce, criteria of co	bounded, even/ s, boundedness, nvergence.	
Recommended 1. Brannan, D.: Cambridge 2000 2. Bruckner, A. ClassicalRealAn 3. Zorich, V. A.:	literatu A First 6. M., Bru nalysis.o Mathe	Ire: Course ir Ickner J. 1 com, 2008 matical A	n Mathematical A B., Thomson, B. 3. .nalysis I, Spring	analysis, Cambri S.: Real Analysi er-Verlag 2002.	dge University P s, Second Edition	ress, n,	
Course languag Slovak	je:						
Course assessm Total number of	ent assesse	ed student	ts: 1322				
А]	В	С	D	E	FX	
6.28	6.28 7.64 12.25 13.24 35.25 25.34						
Provides: doc. F	Provides: doc. RNDr. Ondrej Hutník, PhD., RNDr. Lenka Halčinová, PhD., RNDr. Viera Šottová						
Date of last modification: 22.02.2017							
Approved: Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Eugen Andreanský, PhD.							

University: P. J	. Šafárik Univers	ity in Košice					
Faculty: Facult	y of Science						
Course ID: ÚM MANb/10	Course ID: ÚMV/ Course name: Mathematical analysis II MANb/10						
Course type, so Course type: Recommended Per week: 4/2 Course metho	cope and the met Lecture / Practice d course-load (h 3 Per study peri d: present	thod: ours): od: 56 / 42					
Number of cree	dits: 8						
Recommended	semester/trimes	ster of the cours	se: 2.				
Course level: I.							
Prerequisities:	ÚMV/MANa/10						
Conditions for Two written tes continuous asse	course completi t during semeter essment, written a	on: and activity stuc and oral part of t	lent to practice. F he exam.	Final evaluation is	s given by		
Learning outco The purpose of calculus of real	omes: the course is to p functions of one	provide introduct real variable an	ory knowledge i d to develop com	n differential and putational skills	integral in the field.		
Brief outline of Limit and contri the first and of properties and functions. New	the course: nuity of real fund higher orders, t behavior of fund ton integral and i	ctions, elementa he basic theorer ctions. Indefinit ts basic properti	ry functions. Dif ns of differential e integral - basi es.	ferential calculus l calculus and th c methods for fi	- derivatives of eir use to study nding primitive		
Recommended 1. Brannan, D.: Cambridge 200 2. Bruckner, A. ClassicalRealA 3. Zorich, V. A.	literature: A First Course i 6. M., Bruckner J. nalysis.com, 200 : Mathematical A	n Mathematical B., Thomson, B 8. Analysis I, Sprin	Analysis, Cambr . S.: Real Analys ger-Verlag 2002.	idge University F is, Second Editio	ress, n,		
Course langua Slovak	ge:						
Course assessm Total number o	nent f assessed studen	ts: 844					
А	В	С	D	E	FX		
8.65	7.94	12.44	18.72	36.73	15.52		
Provides: doc. 1 Halčinová, PhD	RNDr. Ondrej Hu	ıtník, PhD., Mgı	. Katarína Lučivj	janská, PhD., RN	Dr. Lenka		
Date of last mo	dification: 22.02	2.2017					

Approved: Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Eugen Andreanský, PhD.

University: P. J	. Šafárik Unive	rsity in Košice						
Faculty: Facult	y of Science			_				
Course ID: ÚM MIE/13	: ÚMV/ Course name: Microeconomics							
Course type, so Course type: 1 Recommende Per week: 2 / Course metho	Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14 Course method: present							
Number of cre	dits: 4							
Recommended	semester/trim	ester of the cours	e: 5.					
Course level: I.								
Prerequisities:								
Conditions for The minimum rability of verba	course comple necessary numb l argumentation	tion: er of points from t in the final oral e	ests written duri xam.	ng semester is 50	%, plus the			
Learning outco Understanding situations.	omes: of basic princip	les of microecono	mics and ability	to apply them in	practical			
Brief outline of Economics and competition. M	f the course: d economy. Su onopoly. Labou	pply and demand r market. Market	d. Consumer T failure. Externali	heory. Theory o ties and Public go	f firm. Perfect oods.			
Recommended 1. http://umv.sc materiály z den 2. H.L. Varian, 3. J.M. Perloff, 4. J. Sloman, E	literature: ience.upjs.sk/co nej tlače Intermediate M Microeconomi conomics, 6th F	echlarova/MIE/MI ikroekonomics, W cs, 6th Edtion, Ade Edition, Prentice H	E.htm - podklad W Norton, 1993 dison Wesley, 20 all, 2006	y k prednáška, tes 3 12	sty na cvičenia,			
Course langua Slovak	ge:							
Course assessn Total number o	nent f assessed stude	ents: 69						
А	В	С	D	Е	FX			
24.64 20.29 18.84 21.74 13.04 1.45								
Provides: prof.	Provides: prof. RNDr. Katarína Cechlárová, DrSc., RNDr. Veronika Kopčová							
Date of last mo	dification: 22.	02.2017						
Approved: Gua PhD.	aranteedoc. RNI	Dr. Ondrej Hutník,	PhD.Guarantee	prof. PhDr. Euger	n Andreanský,			

University: P. J	. Šafárik Univers	ity in Košice						
Faculty: Facult	y of Science							
Course ID: KP MMKV/17	E/ Course na	Course name: Multiculturalism and Multicultural Education						
Course type, so Course type: 1 Recommended Per week: 2 P Course metho	cope and the met Practice d course-load (h er study period: d: present	thod: ours): 28						
Number of cree	dits: 2							
Recommended	semester/trimes	ster of the cours	se: 4.					
Course level: I.								
Prerequisities:								
Conditions for	course completi	on:						
Learning outco	omes:							
Brief outline of	the course:							
Recommended	literature:							
Course languag	ge:							
Course assessn Total number o	nent f assessed studen	ts: 22						
А	В	С	D	Е	FX			
36.36	45.45	9.09	4.55	4.55	0.0			
Provides: Mgr.	Lucia Diheneščíl	ková, PhD.		·				
Date of last mo	dification: 13.06	5.2017						
Approved: Gua PhD.	ranteedoc. RND	r. Ondrej Hutník	, PhD.Guaranteej	prof. PhDr. Euger	n Andreanský,			

University: P. J.	. Šafárik Univers	sity in Košice						
Faculty: Faculty	Faculty: Faculty of Science							
Course ID: ÚM MRUa/15	V/ Course n	ame: Mathematic	al problem solv	ing strategies I				
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present								
Number of cred	lits: 2							
Recommended	semester/trime	ster of the course	e: 4.					
Course level: I.								
Prerequisities:								
Conditions for Evaluation will	course complet be awarded on t	ion: he basis of contin	uous assessmen	t and final test.				
Learning outco To acquaint stud and secondary s secondary school	mes: dents with proble school, and with ol.	ems and strategies the specific probl	s for the solutior ems of teaching	ns of the problems mathematics at p	s at the primary primary and			
Brief outline of Basic knowledg mathematical co Financial Mathe	the course: ge of school ma ompetitions con ematics.	thematics, differe cerning Equation	nt strategy of p s and inequaliti	roblem solution, es and their syste	problems from ems, Functions,			
Recommended [1] Hejný, M. a [2] Kopka, J., H Labem 1999 (in [3] Učebnice a z Course languag	literature: kol., Teória vyu Irozny problémů Czech) zbierky úloh z m ge:	čovania matemati ve školské mater atematiky ZŠ a S	ky 2. SPN, Brat natice, Univerzi Š (in Slovak)	islava 1989 (in S ta J. E. Purkyně,	lovak) Ústí nad			
Slovak								
Course assessm Total number of	Course assessment Total number of assessed students: 144							
A	В	C	D	E	FX			
31.25 22.22 23.61 11.11 11.11 0.69								
Provides: doc. I	Provides: doc. RNDr. Stanislav Lukáč, PhD.							
Date of last mo	Date of last modification: 22.02.2017							
Approved: Gua PhD.	ranteedoc. RND	r. Ondrej Hutník,	PhD.Guarantee	prof. PhDr. Euger	n Andreanský,			

University: P. J.	. Šafárik Univer	sity in Košice						
Faculty: Faculty	Faculty: Faculty of Science							
Course ID: ÚM MRUb/15	V/ Course n	ame: Mathematic	al problem solvi	ng strategies II				
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present								
Number of crea	lits: 2							
Recommended	semester/trime	ster of the cours	e: 5.					
Course level: I.								
Prerequisities:	ÚMV/MRUa/15	;						
Conditions for The award is ba The resulting tr	course complet used on the resul ial is granted on	ion: ts of written check the basis of conti	ks carried out du nuous assessmen	ring the semester t and seminar wo	:. ork.			
Learning outco To acquaint stud and secondary s secondary school	mes: dents with probl school, and with ol.	ems and strategies the specific prob	s for the solution lems of teaching	s of the problems mathematics at p	s at the primary primary and			
Brief outline of Basic knowledg competitions fo	the course: ge of school ma r thematic units	thematics, variou Planimetry, stered	s methods for th ometry, goniomet	e task, the role c tery.	of mathematical			
Recommended [1] Hejný, M. a [2] Kopka, J., H Labem 1999 (in [3] Jonson-Wild [4] Učebnice a z	literature: kol., Teória vyu Irozny problémů (Czech) ler.S., Mason.J.: zbierky úloh z n	čovania matemat i ve školské mater Developing thinl natematiky ZŠ a S	iky 2. SPN, Brati natice, Univerzit king in Geometry Š	islava 1989 (in S a J. E. Purkyně, , Sage, 2009	lovak) Ústí nad			
Course languag Slovak	ge:							
Course assessment Total number of assessed students: 116								
А	A B C D E FX							
36.21 18.97 28.45 10.34 6.03 0.0								
Provides: doc. I	Provides: doc. RNDr. Dušan Šveda, CSc.							
Date of last mo	Date of last modification: 22.02.2017							
Approved: Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Eugen Andreanský, PhD.								

University: P. J. Šafárik University in Košice							
Faculty: Faculty	of Science						
Course ID: ÚM MRUc/15	V/ Course na	me: Mathematic	al problem solv	ving strategies III			
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present							
Number of cred	lits: 2						
Recommended	semester/trimes	ster of the course	e: 6.				
Course level: I.							
Prerequisities:	ÚMV/MRUb/15						
Conditions for of During the seme Evaluation A - a evaluation D at granted to a stud	course completi ester will be 3 wi at least 90% of the least 60%, evalu lent who receive	on: ritten exams. ne points, evaluat ation E rating of s less than 50% c	ion B - at least at least 50% of of the points.	80%, evaluation (the points. Credit	C at least 70%, ts shall not be		
Learning outco Students becom with specific pro- combinatorics, p Brief outline of	mes: e familiar with the bolems of teaching probability and s the course:	he tasks, methods ng mathematics a tatistics.	of problem so t primary and s	lving, solving stra secondary schools	tegies and to topics		
Basic knowledg	e of school math	ematics, from the	topics: combined	natorics, probabili	ity and statistics.		
Recommended Hecht, T., Sklen slovak) Hecht, T. a kol., Bratislava 1999 Krantz, S.G., Te Larson, L.C., M	literature: áriková, Z., Met Matematika pre -2002. (in slovak chniques of Prol etódy riešenia m	ódy riešenia mate 14. ročník gym x) olem Solving, AM natematických pro	ematických úlo názií a SOŠ, O ⁄IS, 1997. oblémov, Bratis	h, Bratislava, SPN PrbisPictusIstropol Slava, Alfa, 1990.	V, 1992. (in litana, (in slovak)		
Course languag Slovak	e:						
Course assessm Total number of	ent `assessed studen	ts: 120					
A	В	С	D	E	FX		
27.5	33.33	22.5	10.0	6.67	0.0		
Provides: RND	. Ingrid Semaniš	inová, PhD.					
Date of last mo	dification: 22.02	2.2017					
Approved: Guar PhD.	ranteedoc. RND	r. Ondrej Hutník,	PhD.Guarantee	eprof. PhDr. Euge	n Andreanský,		

University: P. J.	. Šafárik Univer	sity in Košice						
Faculty: Faculty	Faculty: Faculty of Science							
Course ID: ÚM MTM/14	V/ Course name: Mathematics							
Course type, sc Course type: Recommended Per week: Per Course metho	ope and the me l course-load (f r study period: d: present	thod: nours):						
Number of crea	lits: 1							
Recommended	semester/trime	ster of the cours	e:					
Course level: I.								
Prerequisities:	ÚMV/MAN2c/1	0 and ÚMV/AL	G2b/10 and ÚM	V/ATC/10				
Conditions for Acquiring the re	course complet equired number	ion: of credits in the s	tructure defined	by the study plan				
Learning outco Evaluation of st	mes: udent's compete	ences with respec	t to the profile o	f the graduate.				
Brief outline of	the course:							
Recommended	literature:							
Course languag Slovak	ge:							
Course assessm Total number of	ent f assessed studer	nts: 36						
А	В	C	D	E	FX			
25.0	16.67	33.33	22.22	2.78	0.0			
Provides:	Provides:							
Date of last mo	dification: 22.0	2.2017						
Approved: Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Eugen Andreanský, PhD.								

University: P. J	. Šafárik Univers	sity in Košice						
Faculty: Facult	y of Science							
Course ID: KP OLŠ/15	E/ Course n	Course name: School Administration and Legislation						
Course type, so Course type: Recommende Per week: 2 P Course metho	cope and the me Practice d course-load (h er study period: od: present	thod: ours): 28						
Number of cre	dits: 2							
Recommended	semester/trimes	ster of the cours	e: 3., 5.					
Course level: I	-							
Prerequisities:								
Conditions for	course completi	ion:						
Learning outco	omes:							
Brief outline o	f the course:							
Recommended	literature:							
Course langua	ge:							
Course assessm Total number of	nent f assessed studen	its: 132						
А	В	С	D	E	FX			
28.03	33.33	26.52	8.33	3.03	0.76			
Provides: Mgr.	Lucia Diheneščí	ková, PhD., Paed	Dr. Renáta Oros	ová, PhD.				
Date of last mo	odification: 07.02	2.2017						
Approved: Gua PhD.	aranteedoc. RND	r. Ondrej Hutník,	PhD.Guarantee	prof. PhDr. Euger	n Andreanský,			

University: P. J	. Šafárik Univers	ity in Košice						
Faculty: Faculty	y of Science							
Course ID: KPPaPZ/PKŽ/1	Ž/15 Course name: Psychology of Everyday Life							
Course type, sc Course type: I Recommended Per week: 2 Pe Course metho	ope and the met Practice d course-load (h er study period: d: present	thod: ours): 28						
Number of crea	dits: 2							
Recommended	semester/trimes	ster of the cours	e: 3.					
Course level: I.								
Prerequisities:								
Conditions for	course completi	on:						
Learning outco	omes:							
Brief outline of	the course:							
Recommended	literature:							
Course languag	ge:							
Course assessm Total number of	ent f assessed studen	ts: 87						
А	В	С	D	Е	FX			
29.89	16.09	37.93	11.49	3.45	1.15			
Provides: Mgr.	Ondrej Kalina, P	hD.						
Date of last mo	dification: 16.02	2.2017						
Approved: Gua PhD.	ranteedoc. RND	r. Ondrej Hutník,	PhD.Guaranteep	orof. PhDr. Euger	n Andreanský,			

University: P. J.	. Šafárik Univers	ity in Košice						
Faculty: Faculty	y of Science							
Course ID: KPPaPZ/PP/15	5 Course name: Positive Psychology							
Course type, sc Course type: H Recommended Per week: 2 Pe Course metho	ope and the met Practice I course-load (h er study period: d: present	thod: ours): 28						
Number of crea	lits: 2							
Recommended	semester/trimes	ster of the cours	se: 4., 6.					
Course level: I.								
Prerequisities:								
Conditions for	course completi	on:						
Learning outco	mes:							
Brief outline of	the course:							
Recommended	literature:							
Course languag	ge:							
Course assessm Total number of	ent f assessed studen	ts: 120						
А	В	С	D	E	FX			
97.5	1.67	0.0	0.0	0.83	0.0			
Provides: Mgr.	Jozef Benka, Phl	D. et PhD.						
Date of last mo	dification: 16.02	2.2017						
Approved: Gua PhD.	ranteedoc. RND	r. Ondrej Hutník	, PhD.Guarantee	prof. PhDr. Euger	n Andreanský,			

University: F. J. Safarik University in Köšice Faculty: Faculty of Science Course ID: ÚMV/ PSTa/10 Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 2 Per study period: 28 / 28 Course method: present Number of credits: 5 Recommended semester/trimester of the course: 4. Course level: 1. Prerequisities: ÚMV/MAN1c/10 or ÚMV/MAN2c/10 or ÚMV/MAN3c/10 Conditions for course completion: To obtain at least 50% in two written tests during the semester. Total evaluation based on written tests and oral exam. Learning outcomes: To obtain knowledge of the axiomatic theory of probability, random variables and their characteristics, special types of distributions and their applications. Brief outline of the course: Probability gace, 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. With applications (binomial, poisson, geometric, uniform, exponential, normal, chi-square, Student, Fisher). Central limit thcorem. Recommended literature: 1. Skfivánková V: Pravdepodobnosť v prikladoch, UPJŠ, Košice, 2006 (in Slovak) 2. DeGroot, M. H., Schervish, M. J.: Probability and Statistics, 4th cd., Pearson, Boston, 2012 3. Evans, M. J., Rosenthal, J. S.: Probability and Statistics, 4th cd., Pearson, Boston, 2012 3. Evans, M. J., Rosenthal, J. S.: Probability and Statistics, 4th cd., Pearson, Boston, 2012 3. Evans, M. J., Rosenthal, J. S.: Probability and Statistics, 4th cd., Pearson, Boston, 2012 3. Evans, M. J., Rosenthal, J. S.: Probability and Statistics, 4th cd., Pearson, Boston, 2012 3. Evans, M. J., Rosenthal, J. S.: Probability and Statistics, 4th cd., Pearson, Boston, 2012 3. Evans, M. J., Rosenthal, J. S.: Probability and Statistics, 4th cd., Pearson, Boston, 2012 3. Evans, M. J., Rosenthal, J. S.: Probability and Statistics, 4th cd., Pearson, Boston, 2012 3. Evans, M. J., Rosenthal, J. S.:		<u>×</u>							
Faculty of Science Course ID: ÚMV/ PSTa/10 Course ID: ÚMV/ PSTa/10 Course ID: ÚMV/ PSTa/10 Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 2 Per study period: 28 / 28 Course method: present Number of credits: 5 Recommended semester/trimester of the course: 4. Course level: 1. Prerequisities: ÚMV/MAN1c/10 or ÚMV/MAN2c/10 or ÚMV/MAN3c/10 Conste completion: To obtain at least 50% in two written tests during the semester. To abtain knowledge of the axiomatic theory of probability, random variables and their characteristics, special types of distributions and their applications. Brief outline of the course: 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 functions with applications (binomial, Poisson, geometric, uniform, exponential, normal, chi-square, Student, Fisher). Central limit theorem. Recommended literature: 1. Skřívánková V: Pravdepodobnosť v príkladoch, UPJŠ, Košice, 2006 (in Slovak) 2. DeGroot, M. H., Schervish, M. J. Probability and Statistics. The Science of Uncertainty, 2nd Ed., W. H. Freeman, 2009 4. Riečan et al.: Pravdepodobnosť v príkladoch, UPJŠ, Košice, 2006 (in Slovak) <th col<="" td=""><td>University: P. J.</td><td>Safárik Univers</td><td>ity in Košice</td><td></td><td></td><td></td></th>	<td>University: P. J.</td> <td>Safárik Univers</td> <td>ity in Košice</td> <td></td> <td></td> <td></td>	University: P. J.	Safárik Univers	ity in Košice					
Course ID: ÚMV/ Course name: Probability and statistics I PSTa/10 Course type, scope and the method: Course type: Lecture/ Practice Recommended course-load (hours): Per week: 2 / 2 Per study period: 28 / 28 Course method: Course method: present Number of credits: 5 Recommended semester/trimester of the course: 4. Course level: 1. Prerequisities: ÚMV/MAN1c/10 or ÚMV/MAN2c/10 or ÚMV/MAN3c/10 Conditions for course completion: To a btain at least 50% in two written tests during the semester. Total evaluation based on written tests and oral exam. Learning outcomes: To obtain knowledge of the axiomatic theory of probability, random variables and their characteristics, special types of distributions and their applications. Brief outline of the course: 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 (binomial, poisson, geometric, uniform, exponential, normal, chi-square, Student, Fisher). Central limit theorem. Recommended literature: 1. Skrivánková V: Pravdepodobnosť v prikladoch, UPJŠ, Košice, 2006 (in Slovak) 2. DeGroot, M. H., Schervish, M. J. : Probability and Statistics. The Science of Uncertainty, 2nd Ed., W. H. Freeman, 2009 4. Ricčan et al.: Pravdepodobnosť v prikladoch, UPJŠ, Koš	Faculty: Faculty	of Science							
Course type: Lecture / Practice Recommended course-load (hours): Per weck: 2/2 Per study period: 28 / 28 Course method: present Number of credits: 5 Recommended semester/trimester of the course: 4. Course level: I. Prerequisities: ÚMV/MAN1c/10 or ÚMV/MAN2c/10 or ÚMV/MAN3c/10 Conditions for course completion: To a obtain at least 50% in two written tests during the semester. Total evaluation based on written tests and oral exam. Learning outcomes: To obtain knowledge of the axiomatic theory of probability, random variables and their characteristics, special types of distributions and their applications. Brief outline of the course: 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 functions. Quantile and characteristic functions, their properties. Relation between characteristic functions with applications (binomial, Poisson, geometric, uniform, exponential, normal, chi-square, Student, Fisher). Central limit theorem. Recommended literature: 1. Skiváňková V: Pravdepodobnosť v prikladoch, UPJŠ, Košicc, 2006 (in Slovak) 2. DeGroot, M. H., Schervish, M. J.: Probability and Statistics. The Science of Uncertainty, 2nd Ed., W. H. Freeman, 2009 </td <td>Course ID: ÚMV PSTa/10</td> <td>V/ Course na</td> <td>me: Probability</td> <td>and statistics I</td> <td></td> <td></td>	Course ID: ÚMV PSTa/10	V/ Course na	me: Probability	and statistics I					
Number of credits: 5 Recommended semester/trimester of the course: 4. Course level: I. Prerequisities: ÚMV/MAN1c/10 or ÚMV/MAN2c/10 or ÚMV/MAN3c/10 Conditions for course completion: To obtain at least 50% in two written tests during the semester. Total evaluation based on written tests and oral exam. Learning outcomes: To obtain knowledge of the axiomatic theory of probability, random variables and their characteristics, special types of distributions and their applications. Brief outline of the course: Probability space, definitions and properties of probability. Conditional probability and independence. Random variables, their distribution function and characteristic functions, their properties. Relation between characteristic function, and moments. Median and mode. Transformation of random variables. Special types of distributions (binomial, Poisson, geometric, uniform, exponential, normal, chi-square, Student, Fisher). Central limit theorem. Recommended literature: 1. Skřivánková V: Pravdepodobnosť v príkladoch, UPJŠ, Košice, 2006 (in Slovak) 2. DeGroot, M. H., Schervish, M. J.: Probability and Statistics: The Science of Uncertainty, 2nd Ed., W. H. Freeman, 2009 4. Ricéan et al.: Pravdepodobnosť a matematická štatistika, Alfa, Bratislava, 1984 (in Slovak) Course language: Slovak Course assessment Total number of assessed students: 315	Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 2 Per study period: 28 / 28 Course method: present								
Recommended semester/trimester of the course: 4. Course level: I. Prerequisities: ÚMV/MAN1c/10 or ÚMV/MAN3c/10 Conditions for course completion: To obtain at least 50% in two written tests during the semester. Total evaluation based on written tests and oral exam. Learning outcomes: To obtain knowledge of the axiomatic theory of probability, random variables and their characteristics, special types of distributions and their applications. Brief outline of the course: Probability Space, definitions and properties of probability. Conditional probability and independence. Random variables, their distribution function and characteristic functions, their properties. Relation between characteristic function and moments. Median and mode. Transformation of random variables. Special types of distributions (binomial, Poisson, geometric, uniform, exponential, normal, chi-square, Student, Fisher). Central limit theorem. Recommended literature: 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 Evans, M. J., Rosenthal, J. S.: Probability and Statistics, 4th ed., Pearson, Boston, 2012 Stevans, M. J., Rosenthal, J. S.: Probability and Statistika, Alfa, Bratislava, 1984 (in Slovak)	Number of credi	its: 5							
Course level: I. Prerequisities: ÚMV/MAN1c/10 or ÚMV/MAN3c/10 Conditions for course completion: To obtain at least 50% in two written tests during the semester. Total evaluation based on written tests and oral exam. Learning outcomes: To obtain knowledge of the axiomatic theory of probability, random variables and their characteristics, special types of distributions and their applications. Brief outline of the course: 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. Recommended literature: 1. Skřivánková V: Pravdepodobnosť v prikladoch, 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) Course assessment Total number of assessed students: 315 A B C </td <td>Recommended s</td> <td>emester/trimes</td> <td>ster of the cours</td> <td>e: 4.</td> <td></td> <td></td>	Recommended s	emester/trimes	ster of the cours	e: 4.					
Prerequisities: ÚMV/MAN1c/10 or ÚMV/MAN2c/10 or ÚMV/MAN3c/10 Conditions for course completion: To obtain at least 50% in two written tests during the semester. Total evaluation based on written tests and oral exam. Learning outcomes: To obtain knowledge of the axiomatic theory of probability, random variables and their characteristics, special types of distributions and their applications. Brief outline of the course: 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. Recommended literature: 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, Atha, Bratislava, 1984 (in Slovak) Course assessment Total number of assessed students: 315 A B C D E FX 7.62 14.29 16.83 25.71 <t< td=""><td>Course level: I.</td><td></td><td></td><td></td><td></td><td></td></t<>	Course level: I.								
Conditions for course completion: To obtain at least 50% in two written tests during the semester. Total evaluation based on written tests and oral exam. Learning outcomes: To obtain knowledge of the axiomatic theory of probability, random variables and their characteristics, special types of distributions and their applications. Brief outline of the course: 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. Recommended literature: 1. Skřivánková V.: Pravdepodobnosť v príkladoch, UPJŠ, Košice, 2006 (in Slovak) 2. DeGroot, M. H., Schervish, M. J.: 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) Course language: Slovak Course assessment Total number of assessed students: 315 A B C D E FX 7.62 14.29	Prerequisities: Ú	JMV/MAN1c/1	0 or ÚMV/MAN	2c/10 or ÚMV/N	/IAN3c/10				
Learning outcomes: To obtain knowledge of the axiomatic theory of probability, random variables and their characteristics, special types of distributions and their applications. Brief outline of the course: 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, chi-square, Student, Fisher). Central limit theorem. Recommended literature: 1. Skřívánková V.: Pravdepodobnosť v príkladoch, UPJŠ, Košice, 2006 (in Slovak) 2. DeGroot, M. H., Schervish, M. J.: 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) Course language: Slovak Course assessment Total number of assessed students: 315 A B C A B C A B C A B C A B C A B	Conditions for c To obtain at lease Total evaluation	ourse completi t 50% in two wr based on writter	on: itten tests during n tests and oral e:	the semester. xam.					
Brief outline of the course: 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. Recommended literature: 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) Course assessment Total number of assessed students: 315 A B C D E FX 7.62 14.29 16.83 25.71 24.76 10.79 Provides: RNDr. Martina Hančová, PhD., RNDr. Daniel Klein, PhD. Date of last modification: 22.02.2017	Learning outcom To obtain knowle characteristics, s	nes: edge of the axio pecial types of c	matic theory of p listributions and	probability, rando their applications	om variables and S.	their			
Recommended literature: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, 20123. Evans, M. J., Rosenthal, J. S.: Probability and Statistics: The Science of Uncertainty, 2nd Ed., W. H. Freeman, 20094. Riečan et al.: Pravdepodobnosť a matematická štatistika, Alfa, Bratislava, 1984 (in Slovak)Course language: SlovakSlovakCourse assessment Total number of assessed students: 315ABCDEFX7.6214.2916.8325.7124.7610.79Provides: RNDr. Martina Hančová, PhD., RNDr. Daniel Klein, PhD.Date of last modification: 22.02 2017	Brief outline of t Probability space independence. Raskewness Discr their properties. Transformation Poisson, geomet theorem.	the course: ce, definitions andom variables rete and absolute Relation betw of random varia tric, uniform, e	and properties s, their distribution ely continuous dis een characterist ables. Special type exponential, norm	of probability. n function and ch stributions. Quan ic function and pes of distribution nal, chí-square,	Conditional p aracteristics. Mea atile and characte moments. Med ons with applicat Student, Fisher)	probability and an, variance and ristic functions, ian and mode. tions (binomial,). Central limit			
Course language: Slovak Course assessment Total number of assessed students: 315 A B C D E FX 7.62 14.29 16.83 25.71 24.76 10.79 Provides: RNDr. Martina Hančová, PhD., RNDr. Daniel Klein, PhD. Date of last modification: 22.02.2017	Recommended I 1. Skřivánková V 2. DeGroot, M. H 3. Evans, M. J., I W. H. Freeman, 2 4. Riečan et al.: I	 Recommended literature: 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) 							
Course assessment Total number of assessed students: 315ABCDEFX7.6214.2916.8325.7124.7610.79Provides: RNDr. Martina Hančová, PhD., RNDr. Daniel Klein, PhD.Date of last modification: 22.02.2017	Course language Slovak	Course language: Slovak							
ABCDEFX7.6214.2916.8325.7124.7610.79Provides: RNDr. Martina Hančová, PhD., RNDr. Daniel Klein, PhD.Date of last modification: 22.02.2017	Course assessme Total number of	ent assessed studen	ts: 315						
7.62 14.29 16.83 25.71 24.76 10.79 Provides: RNDr. Martina Hančová, PhD., RNDr. Daniel Klein, PhD. Date of last modification: 22.02.2017	A B C D E FX								
Provides: RNDr. Martina Hančová, PhD., RNDr. Daniel Klein, PhD.	7.62	14.29	16.83	25.71	24.76	10.79			
Date of last modification: 22 02 2017	Provides: RNDr. Martina Hančová, PhD., RNDr. Daniel Klein, PhD.								
Dure of high mountation, 22.02.2017	Date of last modification: 22.02.2017								

Approved: Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Eugen Andreanský, PhD.

University: P. J	. Šafárik Univers	ity in Košice					
Faculty: Facult	y of Science						
Course ID: KPPaPZ/PUDB	/15 Course na	Course name: Drug Addiction Prevention in University Students					
Course type, so Course type: Recommended Per week: 2 P Course metho	cope and the met Practice d course-load (h er study period: d: present	thod: ours): 28					
Number of cree	dits: 2						
Recommended	semester/trimes	ster of the cours	e: 3., 5.				
Course level: I.							
Prerequisities:							
Conditions for	course completi	on:					
Learning outco	omes:						
Brief outline of	the course:						
Recommended	literature:						
Course languag	ge:						
Course assessn Total number o	nent f assessed studen	ts: 172					
А	В	С	D	E	FX		
68.6	28.49	2.91	0.0	0.0	0.0		
Provides: prof. Štefaňáková, M	PhDr. Ol'ga Oros gr. Bohuš Hajduc	sová, CSc., Mgr. ch	Marta Kulanová	, PhD., Mgr. Mar	cela		
Date of last modification: 16.02.2017							
Approved: Gua PhD.	tranteedoc. RND	r. Ondrej Hutník,	PhD.Guarantee	prof. PhDr. Euger	n Andreanský,		

University: P. J.	Šafárik Univers	ity in Košice					
Faculty: Faculty	y of Science						
Course ID: KPI Pg/15	e ID: KPE/ Course name: Pedagogy						
Course type, sc Course type: I Recommended Per week: 2 Po Course metho	ope and the met Lecture l course-load (h er study period: d: present	thod: ours): 28					
Number of crea	lits: 2						
Recommended	semester/trimes	ster of the cours	se: 3., 5.				
Course level: I.							
Prerequisities:							
Conditions for	course completi	on:					
Learning outco	mes:						
Brief outline of	the course:						
Recommended	literature:						
Course languag	ge:						
Course assessm Total number of	ent f assessed studen	ts: 298					
А	В	С	D	Е	FX		
23.49	19.13	23.83	18.46	13.76	1.34		
Provides: Mgr.	Provides: Mgr. Katarína Petríková, PhD.						
Date of last modification: 07.02.2017							
Approved: Gua PhD.	ranteedoc. RND	r. Ondrej Hutník	, PhD.Guaranteep	orof. PhDr. Eugen	Andreanský,		

University: P. J. Šafárik University in Košice								
Faculty: Faculty	Faculty: Faculty of Science							
Course ID: KPPaPZ/Ps/15	Course na	Course name: Psychology						
Course type, scope and the method: Course type: Lecture Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present								
Number of credi	its: 2							
Recommended s	emester/trimes	ster of the cours	e: 3., 5.					
Course level: I.								
Prerequisities:								
Conditions for co	ourse completi	on:						
Learning outcon	nes:							
Brief outline of t	the course:							
Recommended li	iterature:							
Course language	2:							
Course assessme Total number of	ent assessed studen	ts: 236						
А	В	С	D	Е	FX			
15.25	11.02	25.42	23.73	20.76	3.81			
Provides: prof. PhDr. Oľga Orosová, CSc., PhDr. Anna Janovská, PhD., Mgr. Jozef Benka, PhD. et PhD.								
Date of last modification: 16.02.2017								
Approved: Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Eugen Andreanský, PhD.								

University: D I	Šofárik Univor	situ in Kočico				
En aultau En ault						
Faculty: Facult	y of Science	~ ·	1			
Course ID: UM SHM/10	IV/ Course n	ame: Seminar on	history of mathe	ematics		
Course type, sc Course type: I Recommended Per week: 2 Pe Course metho	ope and the me Practice d course-load (I er study period d: present	thod: nours): : 28				
Number of crea	lits: 2					
Recommended	semester/trime	ster of the cours	e: 6.			
Course level: I.	, II.					
Prerequisities:						
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.						
Learning outco Students get an and selected ter thinking.	omes: overview of the ms and about pa	history of the de rallel between ph	velopment of cert ylogenesis and o	tain mathematica ntogenesis of ma	ll disciplines athematical	
Brief outline of Mathematics in (Arabia, China, Beginning of M	the course: Early Civilizat India). Mediev Iodern Mathema	ions. Greek Matl al European Mat tics.	nematics. Mather hematics. The Re	natics in the Ne enaissance of Ma	ar and Far East athematics. The	
Recommended Burton, D. M.: Devlin, K.: Jazy Kolman, A.: De Juškevič, A. P.: Znám,Š. a kol.: Konforovič, A.	literature: The History of M yk matematiky. I ejiny matematiky Dejiny matema Pohl'ad do dejín G.: Významné n	Mathematics: An Dokořán, 2002 (ir v ve starověku. A tiky ve středověk n matematiky. Alf natematické úlohy	Introduction. Mc 1 czech) cademia, Praha, 1 u. Academia, Pra a, Bratislava, 198 7, SPN Praha, 198	Graw–Hill, 2007 1968 (in slovak) ha 1977 (in slova 36 (in slovak) 39 (in slovak)	'. ak)	
Course languag Slovak	ge:					
Course assessm	ient	. 120				
	t assessed studer	1138	D	Б	EV	
A 70.71	D 7 25	7.25	2.0	20		
/9./1	1.23	1.23	2.9	2.9	0.0	

Provides: RNDr. Ingrid Semanišinová, PhD.

Date of last modification: 22.02.2017

Approved: Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Eugen Andreanský, PhD.

University: P. J. Šafá	rik University in Košice
Faculty: Faculty of S	cience
Course ID: ÚMV/ SMK/17	Course name: Seminar to mathematical clubs
Course type, scope a Course type: Practic Recommended cour Per week: 2 Per stu Course method: pre	nd the method: ce rse-load (hours): dy period: 28 esent
Number of credits: 2	
Recommended seme	ster/trimester of the course: 6.
Course level: I.	
Prerequisities:	
Conditions for cours Individual problem so More than 91 points - 81-90 points - evalua 71-80 points - rating 61-70 points - evalua 51-60 points - evalua Less than 50 points -	e completion: olving during seminars and homework. - evaluation of A. tion of B. C. tion of D. tion of E. FX evaluation.
Learning outcomes: Students become fam competitions. They a children.	iliar with solving problems from mathematical olympiads and mathematical cquire theoretical basics necessary to lead mathematical group of talented
Brief outline of the c Number theory. Equations, inequation Word problems. Planimetry. Stereometry. Combinatorics. Pigeo Math games. Interest	ourse: ns, inequalities. onhole principle. Combinatorial geometry. Probability. ing problems.
Recommended litera Brožúry z edície Ško Séria brožúr: XY. roč Ziegler, G.M.: Maten Zhouf, J. a kol.: Mate (in czech)	ature: la mladých matematikov. (in slovak) ník matematickej olympiády. (in slovak) natika Vám to spočítá, Universum, Praha, 2011. (in czech) ematické příběhy z korespondenčních seminářu, Prometheus, Praha, 2006.
Course language: Slovak	
Course assessment Total number of asses	ssed students: 77

А	В	С	D	Е	FX		
57.14	16.88	11.69	11.69	2.6	0.0		
Provides: RNDr. Ingrid Semanišinová, PhD.							
Date of last modification: 17.03.2017							
Approved: Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Eugen Andreanský, PhD.							

University: P. J	. Šafárik Univer	sity in Košice					
Faculty: Facult	Faculty: Faculty of Science						
Course ID: KP SPKVV/15	O/ Course n	Course name: Social and Political Context of Education					
Course type, sc Course type: 1 Recommended Per week: 2 Pe Course metho	cope and the me Lecture d course-load (l er study period d: present	ethod: hours): : 28					
Number of cree	dits: 2						
Recommended	semester/trime	ester of the cours	se: 4., 6.				
Course level: I.							
Prerequisities:							
Conditions for	course complet	ion:					
Learning outco	omes:						
Brief outline of	the course:						
Recommended	literature:						
Course languag	ge:						
Course assessm Total number of	nent f assessed stude	nts: 11					
А	В	C	D	Е	FX		
9.09	0.0	45.45	36.36	9.09	0.0		
Provides: Mgr.	Alexander Onut	frák, PhD.	•	·			
Date of last mo	dification: 17.0	2.2017					
Approved: Gua PhD.	ranteedoc. RNI	Dr. Ondrej Hutník	, PhD.Guaranteej	prof. PhDr. Euger	n Andreanský,		

University: P. J.	University: P. J. Šafárik University in Košice						
Faculty: Faculty	of Science						
Course ID: ÚM SVK/10	V/ Course na	me: Students sci	ientific conferer	nce			
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present							
Recommended	semester/trimes	ster of the cours	٥.				
Course level: I.,	II.						
Prerequisities:							
Conditions for o	course completi	on:					
Learning outcome Individual scien public presentat	mes: tific work of stu ion.	dents. Publishing	of obtained res	ults in a written fo	orm and as a		
Brief outline of	the course:						
Recommended With respect to	literature: the research prol	plematics (article	in journals, boo	oks).			
Course languag Slovak or Englis	e: sh						
Course assessm Total number of	ent `assessed studen	ts: 79					
A	В	С	D	Е	FX		
98.73	1.27	0.0	0.0	0.0	0.0		
Provides:				<u>.</u>			
Date of last modification: 22.02.2017							
Approved: Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Eugen Andreanský, PhD.							

University: P. J.	University: P. J. Šafárik University in Košice							
Faculty: Faculty	Faculty: Faculty of Science							
Course ID: ÚM TCS/10	V/ Course na	Course name: Number theory						
Course type, sco Course type: L Recommended Per week: 2 Pe Course method	ope and the met ecture course-load (h r study period: l: present	thod: ours): 28						
Number of cred	its: 3							
Recommended s	semester/trimes	ster of the cours	e: 5.					
Course level: I.								
Prerequisities: U	ÚMV/ATC/10							
Conditions for c According to tes	sts and exam.	on:						
Learning outcour To obtain knowl	mes: edge on quadrat	ic congruences.						
Brief outline of Chinese remained	the course: ler theorem, Eul	er function, quad	lratic congruence	es, Pythagorean e	equation.			
Recommended I M. B. Nathanson H. E. Rose: A C	literature: n: Elementary M ourse in Numbe e:	lethods in Numb r Theory. Claren	er Theory. Sprin don Press, Oxfor	ger, 2000. rd, 1994.				
Slovak								
Course assessme Total number of	ent assessed studen	ts: 547						
A	В	С	D	E	FX			
27.06	27.06	29.62	11.33	2.56	2.38			
Provides: doc. R	NDr. Matúš Ha	rminc, CSc.		<u>.</u>				
Date of last mod	Date of last modification: 22.02.2017							
Approved: Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Eugen Andreanský, PhD.								

University: P. J	. Šafárik Univers	ity in Košice					
Faculty: Facult	y of Science			c			
Course ID: KP TVE/08	Irse ID: KPE/ Course name: Theory of Education						
Course type, so Course type: 1 Recommende Per week: 2 P Course metho	cope and the met Practice d course-load (h er study period: d: present	thod: ours): 28					
Number of cre	dits: 2						
Recommended	semester/trimes	ster of the cours	se: 4., 6.				
Course level: I.							
Prerequisities:							
Conditions for	course completi	on:					
Learning outco	omes:						
Brief outline of	the course:						
Recommended	literature:						
Course langua	ge:						
Course assessn Total number o	nent f assessed studen	ts: 318					
А	В	С	D	Е	FX		
25.16	35.85	26.1	7.55	2.2	3.14		
Provides: Mgr.	Katarína Petríko	vá, PhD., PaedD	r. Renáta Orosova	á, PhD.	•		
Date of last mo	dification: 07.02	2.2017					
Approved: Gua PhD.	aranteedoc. RND	r. Ondrej Hutník	, PhD.Guaranteer	orof. PhDr. Euge	n Andreanský,		

University: P. J. Šafárik University in Košice							
Faculty: Faculty	y of Science						
Course ID: ÚM UAD/10	V/ Course na	me: Introduction	n to data analysis	5			
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 1 / 1 Per study period: 14 / 14 Course method: present							
Number of crea	lits: 2						
Recommended	semester/trimes	ster of the cours	e: 3.				
Course level: I.							
Prerequisities:							
Conditions for Test and individ Oral presentation	course completi lual project work on of the individu	on: .al project work.					
Learning outcomes: 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							
 Brief outline of 1. Introduction statistics) 2. Collecting Data 3. Handling D relationships in 4. Statistical inf 	the course: (the basic philoso ata (types of data ata (visualization data – introducti erence (elementa	ophy and aim of a , random sample n, summarizing on to regression ary view into esti	statistical data an , randomized ex – measures of and correlation) mation and testin	nalysis, descriptiv periment) center, measures ng hypothesis)	ve and inductive s of variability,		
 Recommended literature: 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) 							
Course language: Slovak							
Course assessm Total number of	ent f assessed studen	ts: 252					
A	В	С	D	E	FX		
28.57	26.59	31.75	11.9	0.79	0.4		

Provides: doc. RNDr. Ivan Žežula, CSc., RNDr. Martina Hančová, PhD.

Date of last modification: 22.02.2017

Approved: Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Eugen Andreanský, PhD.

University: P. J.	Šafárik Univer	sity in Košice					
Faculty: Faculty	Faculty: Faculty of Science						
Course ID: ÚM UDM/10	V/ Course n	ame: Introduction	n to mathematics				
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 1 / 2 Per study period: 14 / 28 Course method: present							
Number of cred	lits: 3						
Recommended	semester/trime	ester of the cours	e: 1.				
Course level: I.							
Prerequisities:							
Conditions for Two tests during	course comple g the semester.	ion:					
Learning outco Repetition of pr	mes: oblematic section	ons of the seconda	ary mathematics l	by interesting tas	ks.		
Simplification of and inequalities function; equat inequalities. Go	of algebraic exp of algebraic exp . Irrational equ tions and ineq niometric funct	pressions. Real nu ations and inequa ualities. Exponer ions; equations an	mber, absolute v lities. Concept of ncial and logarit id inequalities. Co	alue of real num f function. Linea thmic function; omplex numbers	abers; equations ar and quadratic equations and		
 Recommended literature: 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 							
Course language: Slovak							
Course assessm Total number of	ent f assessed stude	nts: 426					
А	В	С	D	Е	FX		
23.24	14.32	16.67	15.96	17.14	12.68		

Provides: doc. RNDr. Matúš Harminc, CSc., RNDr. Timea Gábová, Mgr. Zuzana Gönciová

Date of last modification: 22.02.2017

Approved: Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Eugen Andreanský, PhD.

University: P. J.	University: P. J. Šafárik University in Košice				
Faculty: Faculty	Faculty: Faculty of Science				
Course ID: ÚM VEM/10	V/ Course na	Course name: Selected topics in elementary mathematics			
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 1 / 1 Per study period: 14 / 14 Course method: present					
Number of cred	lits: 3				
Recommended	semester/trime	ster of the cours	e: 5.		
Course level: I.					
Prerequisities:	ÚMV/MAN2c/1	0			
Conditions for exam	course complet	ion:			
Learning outcomes: Obtain knowledge about the structure of elementary mathematics with respect to advanced mathematics; the development of mathematical skills of prospective teachers.					
Brief outline of the course: Language of Mathematics; syntax and semantics; sets, relations, rational and irrational numbers, equations and inequations in reals; elementary functions					
Recommended literature: W.W. Esty: The Language of Mathematics, Montana State University, 2007. F. Klein: Elementary mathematics from an advanced standpoint, Dower Publications, 1945.					
Course language: Slovak					
Course assessment Total number of assessed students: 178					
А	В	C	D	Е	FX
20.22	16.85	19.66	17.98	23.03	2.25
Provides: prof. RNDr. Jozef Doboš, CSc.					
Date of last modification: 22.02.2017					
Approved: Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Eugen Andreanský, PhD.					

University: P. J	University: P. J. Šafárik University in Košice				
Faculty: Facult	y of Science				
Course ID: ÚM VKA/10	IV/ Course n	Course name: Selected topics in algebra			
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14 Course method: present					
Number of cre	dits: 4				
Recommended	semester/trime	ester of the cours	e: 6.		
Course level: I.	Course level: I.				
Prerequisities:					
Conditions for According to te	Conditions for course completion: According to tests and to the exam.				
Learning outcomes: To obtain basic knowledge on universal algebra; to be able to apply the theory in concrete situations.					
Brief outline of the course: Relations, operations, algebraic structures. Substructures. Congruences, homomorphism theorems. Automorphism groups and endomorphism monoids. Terms, term operations, identities, varieties.					
Recommended literature: B. Jónsson: Topics in Universal Algebra, Springer-Verlag 1972 M. Kolibiar a kol.: Algebra a príbuzné disciplíny, Bratislava 1992					
Course language: Slovak					
Course assessment Total number of assessed students: 95					
А	В	C	D	Е	FX
5.26	18.95	25.26	26.32	22.11	2.11
Provides: prof. RNDr. Danica Studenovská, CSc.					
Date of last modification: 22.02.2017					
Approved: Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Eugen Andreanský, PhD.					

University: P. J.	University: P. J. Šafárik University in Košice				
Faculty: Faculty	Faculty: Faculty of Science				
Course ID: KFa VKFV/07	DF/ Course na Introduction	Course name: Selected Topics in Philosophy of Education (General Introduction)			
Course type, sco Course type: Recommended Per week: Per Course method	ope and the me course-load (h study period: l: present	thod: ours):			
Number of credits: 2					
Recommended s	Recommended semester/trimester of the course: 3., 5.				
Course level: I.					
Prerequisities: F	KFaDF/DF1/05				
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Course assessment Total number of assessed students: 0					
A	В	С	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0
Provides: doc. PhDr. Pavol Tholt, PhD., mim. prof.					
Date of last modification: 24.02.2017					
Approved: Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Eugen Andreanský, PhD.					

University: P. J. Šafárik University in Košice					
Faculty: Faculty of Science					
Course ID: ÚMV/ ZBR/14	Course name: Bridge Fundamentals				
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present					
Number of credits: 2					
Recommended seme	ster/trimester of the cours	e: 5.			
Course level: I.					
Prerequisities:					
Conditions for cours Active participation of	Conditions for course completion: Active participation on exercises.				
Learning outcomes: A student gets acquainted with fundamentals of the contract bridge, develops his/her logical thinking and consolidates his/her habits of positive social behaviour.					
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.					
Recommended literature: T. Menyhért: Kurz bridžu 2013, http://new.bridgekosice.sk/kurz-bridzu-2013/ R. Pavlicek: Learn To Play Bridge!, http://www.rpbridge.net/1a00.htm ACBL SAYC System Booklet, http://ebookbrowsee.net/acbl-sayc-pdf-d201415187					
Course language: Slovak or English					
Notes: Minimum number of participants is 4.					
Course assessment Total number of assessed students: 17					
	abs n				
	94.12 5.88				
Provides: doc. RNDr. Miroslav Ploščica, CSc., prof. RNDr. Mirko Horňák, CSc.					

Date of last modification: 22.02.2017

Approved: Guaranteedoc. RNDr. Ondrej Hutník, PhD.Guaranteeprof. PhDr. Eugen Andreanský, PhD.