

## Course descriptions

### TABLE OF CONTENTS

1. 1-UMA-124/15	Combinatorics.....	2
2. 2-pUMA-912/19	Didactics of Mathematics ( <b>state exam</b> ).....	3
3. 2-UMA-106/15	Didactics of Mathematics (2).....	4
4. 2-pUMA-901/19	Diploma Thesis Project.....	5
5. 1-UMA-116/15	Elementary Theory of Numbers.....	6
6. 1-UMA-107/15	Geometry (1).....	7
7. 1-UMA-220/15	Geometry (2).....	9
8. 1-UMA-301/15	Geometry (3).....	10
9. 2-UMA-104/15	Introduction to Didactics of Mathematics.....	11
10. 2-UMA-114/15	New Pedagogical Approaches in Teaching Not Only Mathematics.....	12
11. 2-UMA-211/15	Seminar in History of Mathematics (1).....	13
12. 2-UMA-212/15	Seminar in History of Mathematics (2).....	14
13. 2-pUMAx-211/19	Teaching Practice.....	15
14. 2-pUMA-911/19	Thesis Defence ( <b>state exam</b> ).....	16

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava					
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics					
<b>Course ID:</b> FMFL.KAG/1-UMA-124/15		<b>Course title:</b> Combinatorics			
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week:</b> 2 / 2 <b>per level/semester:</b> 28 / 28 <b>Form of the course:</b> on-site learning					
<b>Number of credits:</b> 4					
<b>Recommended semester:</b>					
<b>Educational level:</b> I., N					
<b>Prerequisites:</b>					
<b>Course requirements:</b>					
<b>Learning outcomes:</b>					
<b>Class syllabus:</b>					
<b>Recommended literature:</b>					
<b>Languages necessary to complete the course:</b>					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 182					
A	B	C	D	E	FX
36,26	14,84	9,34	16,48	18,68	4,4
<b>Lecturers:</b> RNDr. Jana Tomanová, CSc.					
<b>Last change:</b> 02.06.2015					
<b>Approved by:</b>					

## STATE EXAM DESCRIPTION

<b>University:</b> Comenius University in Bratislava	
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics	
<b>Course ID:</b> FMFL.KDMFI/2- pUMA-912/19	<b>Course title:</b> Didactics of Mathematics
<b>Number of credits:</b> 0	
<b>Educational level:</b> N	
<b>State exam syllabus:</b>	
<b>Last change:</b> 04.12.2019	
<b>Approved by:</b>	

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava					
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics					
<b>Course ID:</b> FMFI.KAG+KDMFI/2- UMA-106/15		<b>Course title:</b> Didactics of Mathematics (2)			
<b>Educational activities:</b> <b>Type of activities:</b> seminar <b>Number of hours:</b> <b>per week:</b> 3 <b>per level/semester:</b> 42 <b>Form of the course:</b> on-site learning					
<b>Number of credits:</b> 2					
<b>Recommended semester:</b> 3.					
<b>Educational level:</b> II., N					
<b>Prerequisites:</b>					
<b>Course requirements:</b>					
<b>Learning outcomes:</b>					
<b>Class syllabus:</b>					
<b>Recommended literature:</b>					
<b>Languages necessary to complete the course:</b>					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 98					
A	B	C	D	E	FX
76,53	15,31	6,12	2,04	0,0	0,0
<b>Lecturers:</b> prof. RNDr. Pavol Zlatoš, PhD., Mgr. Michaela Vargová, PhD.					
<b>Last change:</b> 02.06.2015					
<b>Approved by:</b>					

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava					
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics					
<b>Course ID:</b> FMFL.KMANM/2- pUMA-901/19		<b>Course title:</b> Diploma Thesis Project			
<b>Educational activities:</b> <b>Type of activities:</b> seminar <b>Number of hours:</b> <b>per week:</b> 2 <b>per level/semester:</b> 28 <b>Form of the course:</b> on-site learning					
<b>Number of credits:</b> 0					
<b>Recommended semester:</b> 4.					
<b>Educational level:</b> N					
<b>Prerequisites:</b>					
<b>Course requirements:</b>					
<b>Learning outcomes:</b>					
<b>Class syllabus:</b>					
<b>Recommended literature:</b>					
<b>Languages necessary to complete the course:</b>					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 9					
A	B	C	D	E	FX
88,89	11,11	0,0	0,0	0,0	0,0
<b>Lecturers:</b> doc. RNDr. Zbyněk Kubáček, CSc.					
<b>Last change:</b>					
<b>Approved by:</b>					

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava					
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics					
<b>Course ID:</b> FMFL.KAG/1-UMA-116/15		<b>Course title:</b> Elementary Theory of Numbers			
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week:</b> 2 / 1 <b>per level/semester:</b> 28 / 14 <b>Form of the course:</b> on-site learning					
<b>Number of credits:</b> 4					
<b>Recommended semester:</b>					
<b>Educational level:</b> I., N					
<b>Prerequisites:</b>					
<b>Course requirements:</b>					
<b>Learning outcomes:</b>					
<b>Class syllabus:</b>					
<b>Recommended literature:</b>					
<b>Languages necessary to complete the course:</b>					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 146					
A	B	C	D	E	FX
45,21	27,4	20,55	4,11	1,37	1,37
<b>Lecturers:</b> RNDr. Jana Chalmovianská, PhD.					
<b>Last change:</b> 15.01.2018					
<b>Approved by:</b>					

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava	
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics	
<b>Course ID:</b> FMFL.KAG/1-UMA-107/15	<b>Course title:</b> Geometry (1)
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week:</b> 2 / 2 <b>per level/semester:</b> 28 / 28 <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 5	
<b>Recommended semester:</b>	
<b>Educational level:</b> I., N	
<b>Prerequisites:</b>	
<b>Recommended prerequisites:</b> none	
<b>Course requirements:</b> Preliminary assessment: continuous evaluation, tests. Final assessment: Exam in written and oral form Final assessment examination 70% (A 90%; B 80%; C 70%; D 60%; E 50%) Scale of assessment (preliminary/final): Weight of the course work / exam: 30/70	
<b>Learning outcomes:</b> The graduate gains the knowledge of analytic methods of study of properties of subspaces of n-dimensional affine (resp. euclidean) space.	
<b>Class syllabus:</b> Affine n-dimensional space $A(n)$ , linear varieties in $A(n)$ , affine coordinate system, parametric and general (implicit) equations of linear variety, the relative position of linear varieties. Euclidean space $E(n)$ of dimension $n$ . Cartesian coordinate system in $E(n)$ . Orthogonality in $E(n)$ , distance of linear varieties, angles of linear varieties. Affine mappings. Isometries and similarities and their canonical expression in $E(2)$ and $E(3)$ .	
<b>Recommended literature:</b> Linear Algebra and Geometry / A. I. Kostrikin, J. Manin, Taylor & Francis, 1989 Linear algebra (Undergraduate Texts in Mathematics) / Serge Lang. Springer; 3rd edition, 2004 Basic Algebra I, II / N. Jacobson. Dover Books on Mathematics, Dover Publications, 2009	
<b>Languages necessary to complete the course:</b> english	
<b>Notes:</b> none	

<b>Past grade distribution</b>					
Total number of evaluated students: 147					
A	B	C	D	E	FX
27,89	14,29	19,73	12,93	19,05	6,12
<b>Lecturers:</b> RNDr. Jana Chalmovianská, PhD.					
<b>Last change:</b> 26.04.2017					
<b>Approved by:</b>					



## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava					
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics					
<b>Course ID:</b> FMFL.KAG/1-UMA-220/15		<b>Course title:</b> Geometry (2)			
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week:</b> 2 / 2 <b>per level/semester:</b> 28 / 28 <b>Form of the course:</b> on-site learning					
<b>Number of credits:</b> 5					
<b>Recommended semester:</b>					
<b>Educational level:</b> I., N					
<b>Prerequisites:</b>					
<b>Course requirements:</b>					
<b>Learning outcomes:</b>					
<b>Class syllabus:</b>					
<b>Recommended literature:</b>					
<b>Languages necessary to complete the course:</b>					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 150					
A	B	C	D	E	FX
21,33	16,0	28,0	13,33	10,67	10,67
<b>Lecturers:</b> RNDr. Jana Chalmovianská, PhD.					
<b>Last change:</b> 02.06.2015					
<b>Approved by:</b>					

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava					
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics					
<b>Course ID:</b> FMFL.KAG/1-UMA-301/15		<b>Course title:</b> Geometry (3)			
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week:</b> 2 / 1 <b>per level/semester:</b> 28 / 14 <b>Form of the course:</b> on-site learning					
<b>Number of credits:</b> 4					
<b>Recommended semester:</b>					
<b>Educational level:</b> I., N					
<b>Prerequisites:</b>					
<b>Course requirements:</b>					
<b>Learning outcomes:</b>					
<b>Class syllabus:</b>					
<b>Recommended literature:</b>					
<b>Languages necessary to complete the course:</b>					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 140					
A	B	C	D	E	FX
30,71	22,14	17,86	14,29	7,86	7,14
<b>Lecturers:</b> RNDr. Jana Chalmovianská, PhD.					
<b>Last change:</b> 02.06.2015					
<b>Approved by:</b>					

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava					
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics					
<b>Course ID:</b> FMFI.KAG+KDMFI/2- UMA-104/15		<b>Course title:</b> Introduction to Didactics of Mathematics			
<b>Educational activities:</b> <b>Type of activities:</b> seminar <b>Number of hours:</b> <b>per week:</b> 3 <b>per level/semester:</b> 42 <b>Form of the course:</b> on-site learning					
<b>Number of credits:</b> 3					
<b>Recommended semester:</b> 3.					
<b>Educational level:</b> II., N					
<b>Prerequisites:</b>					
<b>Course requirements:</b>					
<b>Learning outcomes:</b>					
<b>Class syllabus:</b>					
<b>Recommended literature:</b>					
<b>Languages necessary to complete the course:</b>					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 121					
A	B	C	D	E	FX
90,91	5,79	0,83	0,83	0,0	1,65
<b>Lecturers:</b> prof. RNDr. Pavol Zlatoš, PhD., doc. PaedDr. Mária Slavíčková, PhD.					
<b>Last change:</b> 02.06.2015					
<b>Approved by:</b>					

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava					
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics					
<b>Course ID:</b> FMFL.KDMFI/2-UMA-114/15		<b>Course title:</b> New Pedagogical Approaches in Teaching Not Only Mathematics			
<b>Educational activities:</b> <b>Type of activities:</b> seminar <b>Number of hours:</b> <b>per week:</b> 3 <b>per level/semester:</b> 42 <b>Form of the course:</b> on-site learning					
<b>Number of credits:</b> 2					
<b>Recommended semester:</b> 3.					
<b>Educational level:</b> II., N					
<b>Prerequisites:</b>					
<b>Course requirements:</b>					
<b>Learning outcomes:</b>					
<b>Class syllabus:</b>					
<b>Recommended literature:</b>					
<b>Languages necessary to complete the course:</b>					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 41					
A	B	C	D	E	FX
85,37	7,32	4,88	0,0	0,0	2,44
<b>Lecturers:</b> RNDr. Monika Dillingerová, PhD.					
<b>Last change:</b> 22.05.2019					
<b>Approved by:</b>					

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava					
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics					
<b>Course ID:</b> FMFL.KMANM/2- UMA-211/15		<b>Course title:</b> Seminar in History of Mathematics (1)			
<b>Educational activities:</b> <b>Type of activities:</b> seminar <b>Number of hours:</b> <b>per week:</b> 3 <b>per level/semester:</b> 42 <b>Form of the course:</b> on-site learning					
<b>Number of credits:</b> 2					
<b>Recommended semester:</b> 3.					
<b>Educational level:</b> II., N					
<b>Prerequisites:</b>					
<b>Course requirements:</b>					
<b>Learning outcomes:</b>					
<b>Class syllabus:</b>					
<b>Recommended literature:</b>					
<b>Languages necessary to complete the course:</b>					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 101					
A	B	C	D	E	FX
49,5	40,59	8,91	0,99	0,0	0,0
<b>Lecturers:</b> doc. RNDr. Zbyněk Kubáček, CSc.					
<b>Last change:</b> 02.06.2015					
<b>Approved by:</b>					

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava					
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics					
<b>Course ID:</b> FMFL.KMANM/2- UMA-212/15		<b>Course title:</b> Seminar in History of Mathematics (2)			
<b>Educational activities:</b> <b>Type of activities:</b> seminar <b>Number of hours:</b> <b>per week:</b> 2 <b>per level/semester:</b> 28 <b>Form of the course:</b> on-site learning					
<b>Number of credits:</b> 2					
<b>Recommended semester:</b> 4.					
<b>Educational level:</b> II., N					
<b>Prerequisites:</b>					
<b>Course requirements:</b>					
<b>Learning outcomes:</b>					
<b>Class syllabus:</b>					
<b>Recommended literature:</b>					
<b>Languages necessary to complete the course:</b>					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 101					
A	B	C	D	E	FX
89,11	9,9	0,0	0,99	0,0	0,0
<b>Lecturers:</b> doc. RNDr. Zbyněk Kubáček, CSc.					
<b>Last change:</b> 02.06.2015					
<b>Approved by:</b>					

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava							
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics							
<b>Course ID:</b> FMFL.KDMFI/2- pUMAx-211/19				<b>Course title:</b> Teaching Practice			
<b>Educational activities:</b> <b>Type of activities:</b> practice <b>Number of hours:</b> <b>per week:</b> <b>per level/semester:</b> 20s <b>Form of the course:</b> on-site learning, combined							
<b>Number of credits:</b> 0							
<b>Recommended semester:</b> 3.							
<b>Educational level:</b> N							
<b>Prerequisites:</b>							
<b>Course requirements:</b>							
<b>Learning outcomes:</b>							
<b>Class syllabus:</b>							
<b>Recommended literature:</b>							
<b>Languages necessary to complete the course:</b>							
<b>Notes:</b>							
<b>Past grade distribution</b> Total number of evaluated students: 20							
A	ABS	B	C	D	E	FX	NEABS
20,0	80,0	0,0	0,0	0,0	0,0	0,0	0,0
<b>Lecturers:</b> Mgr. Michaela Vargová, PhD.							
<b>Last change:</b>							
<b>Approved by:</b>							

## STATE EXAM DESCRIPTION

<b>University:</b> Comenius University in Bratislava	
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics	
<b>Course ID:</b> FMFL.KDMFI/2- pUMA-911/19	<b>Course title:</b> Thesis Defence
<b>Number of credits:</b> 0	
<b>Educational level:</b> N	
<b>State exam syllabus:</b>	
<b>Last change:</b>	
<b>Approved by:</b>	