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**COURSE DESCRIPTION** Academic year: 2022/2023 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KAG/2-Algebra (2) prUMAx-206/21 **Educational activities:** Type of activities: lecture / independent work **Number of hours:** per week: per level/semester: 12s / 4s Form of the course: on-site learning Number of credits: 0 **Recommended semester:** 4. **Educational level:** N **Prerequisites: Course requirements:** Oral exam Passing grade: 60% Scale of assessment (preliminary/final): Weight of the course work / exam: 0/100 **Learning outcomes:** Students will become familiar with the basic notions of abstract algebra and applications of elementary group theory. Class syllabus: 1. Elementary number theory 2. Groups and their basic properties 3. Group homomorphisms 4. Rings and their homomorphisms **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 24 **ABS NEABS** 91,67 8,33 Lecturers: Mgr. Tomáš Rusin, PhD.

Last change: 20.06.2022

Approved by:

Academic year: 2022/2023			
University: Comenius Universi	ty Bratislava		
Faculty: Faculty of Mathematic	s, Physics and Info	ormatics	
Course ID: FMFI.KDMFI/2- prUMAx-101/21	Course title: Combinatorics		
Educational activities: Type of activities: lecture / inc Number of hours: per week: per level/semeste Form of the course: on-site le	er: 20s / 8s		
Number of credits: 0			
<b>Recommended semester:</b> 1.			
<b>Educational level:</b> N			
Prerequisites:	Prerequisites:		
Course requirements:			
Learning outcomes:			
Class syllabus:			
Recommended literature:			
Languages necessary to comp	lete the course:		
Notes:			
Past grade distribution  Total number of evaluated students	ents: 51		
ABS	ABS NEABS		
100,0 0,0			
Lecturers: PaedDr. Peter Vankt	iš, PhD.		
<b>Last change:</b> 06.12.2022			
Annroyed by:			

#### STATE EXAM DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:
FMFI.KDMFI/2prUMAx-913/21

Number of credits: 0

Educational level: N

State exam syllabus:

Last change: 05.09.2023

Approved by:

<u>'</u>			
Academic year: 2022/2023			
University: Comenius University	ity Bratislava		
Faculty: Faculty of Mathematic	cs, Physics and In	formatics	
Course ID: FMFI.KDMFI/2- prUMAx-212/21	Course title: Didactics of Mathematics (1)		
Educational activities: Type of activities: lecture / inc Number of hours: per week: per level/semest Form of the course: on-site le	eer: 16s / 6s		
Number of credits: 0			
Recommended semester: 3.			
Educational level: N			
Prerequisites:			
Course requirements:			
Learning outcomes:			
Class syllabus:			
Recommended literature:			
Languages necessary to comp	lete the course:		
Notes:			
Past grade distribution Total number of evaluated stud	ents: 24		
ABS NEABS			
100,0 0,0			
Lecturers: doc. PaedDr. Mária Janeček Kubešová, PhD.	Slavíčková, PhD	, Mgr. Michaela Vargová, PhD., Mgr. Magdaléna	
<b>Last change:</b> 13.12.2022			
Approved by:			

Academic year: 2022/2023			
University: Comenius University Bratislava			
Faculty: Faculty of Mathematic	es, Physics and Informatics		
Course ID: FMFI.KDMFI/2- prUMAx-213/21	Course title: Didactics of Mathematics (2)		
Educational activities: Type of activities: lecture / independent work Number of hours: per week: per level/semester: 16s / 6s Form of the course: on-site learning			
Number of credits: 0			
Recommended semester: 4.			
<b>Educational level:</b> N			
Prerequisites:			
Course requirements:			
Learning outcomes:			
Class syllabus:			
Recommended literature:			
Languages necessary to complete the course:			
Notes:			
Past grade distribution Total number of evaluated students: 24			
ABS	ABS NEABS		
100,0 0,0			
Lecturers: Mgr. Michaela Vargová, PhD., Mgr. Monika Porkertová, PhD.			
Last change: 07.12.2022			
Annroyed by:			

Academic year: 2022/2023			
University: Comenius University Bratislava			
Faculty: Faculty of Mathematic	es, Physics and Informatics		
Course ID: FMFI.KDMFI/2- prUMAx-901/21	Course title: Diploma Thesis Project		
Educational activities: Type of activities: lecture Number of hours: per week: per level/semeste Form of the course: on-site le			
Number of credits: 0			
<b>Recommended semester:</b> 5.			
<b>Educational level:</b> N			
Prerequisites:			
Course requirements:			
Learning outcomes:			
Class syllabus:			
Recommended literature:			
Languages necessary to compl	lete the course:		
Notes:			
Past grade distribution  Total number of evaluated students	ents: 24		
ABS NEABS			
100,0 0,0			
Lecturers: RNDr. Monika Dillingerová, PhD.			
<b>Last change:</b> 12.12.2022			
Annroyed by:			

Academic year: 2022/2023			
University: Comenius Universi	ty Bratislava		
Faculty: Faculty of Mathematic	es, Physics and Information	cs	
Course ID: FMFI.KDMFI/2- prUMAx-102/21	Course title: Geometry (1)		
Educational activities: Type of activities: lecture / inc Number of hours: per week: per level/semeste Form of the course: on-site le	er: 20s / 8s		
Number of credits: 0			
Recommended semester: 1.			
<b>Educational level:</b> N			
Prerequisites:			
Course requirements:			
Learning outcomes:			
Class syllabus:			
Recommended literature:			
Languages necessary to comp	lete the course:		
Notes:			
Past grade distribution  Total number of evaluated students	ents: 47		
ABS NEABS			
89,36 10,64			
Lecturers: RNDr. Monika Dilli	ngerová, PhD.		
<b>Last change:</b> 14.09.2021			
Annroyed by:			

Academic year: 2022/2023			
University: Comenius Universi	ty Bratislava		
Faculty: Faculty of Mathematic	s, Physics and Inform	natics	
Course ID: FMFI.KAG/2- prUMAx-103/21	Course title: Geometry (2)		
Educational activities: Type of activities: lecture / inc Number of hours: per week: per level/semeste Form of the course: on-site le	er: 20s / 8s		
Number of credits: 0			
<b>Recommended semester:</b> 2.			
<b>Educational level:</b> N			
Prerequisites:	Prerequisites:		
Course requirements:			
Learning outcomes:			
Class syllabus:			
Recommended literature:			
Languages necessary to compl	lete the course:		
Notes:			
Past grade distribution  Total number of evaluated students	ents: 26		
ABS	ABS NEABS		
96,15 3,85			
Lecturers: RNDr. Kristína Rost	tás, PhD.		
<b>Last change:</b> 17.10.2023			
Annroyed by:			

Academic year: 2022/2023		
University: Comenius University	ty Bratislava	
Faculty: Faculty of Mathematic	s, Physics and Informatics	
Course ID: FMFI.KAG/2- prUMAx-202/21	Course title: Geometry (3)	
Educational activities: Type of activities: lecture / inc Number of hours: per week: per level/semest Form of the course: on-site le	er: 16s / 6s	
Number of credits: 0		
Recommended semester: 3.		
Educational level: N		
Prerequisites:		
Course requirements:		
Learning outcomes:		
Class syllabus:		
Recommended literature:		
Languages necessary to comp	ete the course:	
Notes:		
Past grade distribution Total number of evaluated stud	ents: 24	
ABS NEABS		
100,0 0,0		
Lecturers: RNDr. Kristína Ros	tás, PhD., RNDr. Barbora Pokorná, PhD.	
Last change:		
Approved by:		

Academic year: 2022/2023 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KDMFI/2-Introduction to Didactics of Mathematics prUMAx-112/21 **Educational activities:** Type of activities: lecture / independent work **Number of hours:** per week: per level/semester: 16s / 6s Form of the course: on-site learning Number of credits: 0 **Recommended semester: 2. Educational level:** N **Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 27 **ABS NEABS** 92.59 7,41 Lecturers: doc. PaedDr. Mária Slavíčková, PhD. Last change: 07.12.2022 Approved by:

Academic year: 2022/2023			
University: Comenius University Bratislava			
Faculty: Faculty of Mathematic	es, Physics and Informa	tics	
Course ID: FMFI.KDMFI/2- prUMAx-106/21	Course title: Linear Algebra		
Educational activities: Type of activities: lecture / inc Number of hours: per week: per level/semest Form of the course: on-site le	er: 20s / 8s		
Number of credits: 0			
Recommended semester: 2.			
Educational level: N			
Prerequisites:			
Course requirements:			
Learning outcomes:			
Class syllabus:			
Recommended literature:			
Languages necessary to comp	lete the course:		
Notes:			
Past grade distribution Total number of evaluated stud	ents: 26		
ABS NEABS			
96,15	96,15 3,85		
Lecturers: Mgr. Emília Miťkov	vá, PhD.		
<b>Last change:</b> 14.12.2022		,	
Approved by:			

Academic year: 2022/2023			
University: Comenius University Bratislava			
Faculty: Faculty of Mathematic	es, Physics and Informatics		
Course ID: FMFI.KDMFI/2- prUMAx-104/21	Course title: Mathematical Analysis (1)		
Educational activities: Type of activities: lecture / inc Number of hours: per week: per level/semest Form of the course: on-site le	rer: 20s / 8s		
Number of credits: 0			
Recommended semester: 1.			
Educational level: N			
Prerequisites:			
Course requirements:			
Learning outcomes:			
Class syllabus:			
Recommended literature:			
Languages necessary to comp	lete the course:		
Notes:			
Past grade distribution Total number of evaluated stud	ents: 40		
ABS NEABS			
85,0 15,0			
Lecturers: doc. PaedDr. Mária	Slavíčková, PhD., Mgr. Michaela Vargová, PhD.		
<b>Last change:</b> 30.05.2022			
Approved by:			

Academic year: 2022/2023				
University: Comenius University Bratislava				
Faculty: Faculty of Mathematic	es, Physics and Informatics			
Course ID: FMFI.KDMFI/2- prUMAx-105/21	Course title: Mathematical Analysis (2)			
Educational activities: Type of activities: lecture / inc Number of hours: per week: per level/semest Form of the course: on-site le	er: 20s / 8s			
Number of credits: 0				
Recommended semester: 2.				
Educational level: N	Educational level: N			
Prerequisites:	Prerequisites:			
Course requirements:				
Learning outcomes:				
Class syllabus:				
Recommended literature:				
Languages necessary to comp	lete the course:			
Notes:				
Past grade distribution Total number of evaluated stud	ents: 25			
ABS NEABS				
100,0 0,0				
Lecturers: Mgr. Michaela Varg	ová, PhD.			
<b>Last change:</b> 15.02.2022				
Approved by:				

Academic year: 2022/2023		
University: Comenius University Bratislava		
Faculty: Faculty of Mathematic	es, Physics and Int	formatics
Course ID: FMFI.KDMFI/2- prUMAx-204/21	Course title: Mathematical Analysis (3)	
Educational activities: Type of activities: lecture / inc Number of hours: per week: per level/semeste Form of the course: on-site le Number of credits: 0	er: 16s / 6s	
Recommended semester: 3.		
Educational level: N		
Prerequisites:		
Course requirements:		
Learning outcomes:		
Class syllabus:		
Recommended literature:		
Languages necessary to comp	lete the course:	
Notes:		
Past grade distribution Total number of evaluated students: 25		
ABS NEABS		
100,0 0,0		
Lecturers: Mgr. Michaela Vargová, PhD.		
Last change: 09.12.2022		
Approved by:		

#### STATE EXAM DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:
FMFI.KDMFI/2prUMAx-912/21

Number of credits: 0

Educational level: N

State exam syllabus:

Last change: 12.09.2023

Approved by:

Academic year: 2022/2023				
University: Comenius University Bratislava				
Faculty: Faculty of Mathematics, Physics and Informatics				
Course ID: FMFI.KDMFI/2- prUMAx-311/21	Course title: Methods for Solving Mathematical Tasks			
Educational activities: Type of activities: lecture / independent work Number of hours: per week: per level/semester: 16s / 6s Form of the course: on-site learning				
Number of credits: 0				
<b>Recommended semester:</b> 5.				
Educational level: N				
Prerequisites:				
Course requirements:				
Learning outcomes:				
Class syllabus:				
Recommended literature:				
Languages necessary to complete the course:				
Notes:				
Past grade distribution Total number of evaluated stud	ents: 24			
ABS	NEABS			
100,0	0,0			
Lecturers: Mgr. Emília Miťková, PhD.				
<b>Last change:</b> 14.12.2022				
Approved by:				

Academic year: 2022/2023				
University: Comenius University Bratislava				
Faculty: Faculty of Mathematic	es, Physics and Informatics			
Course ID: FMFI.KDMFI/2- prUMAx-301/21	Course title: Probability Measure and Mathematical Statistics			
Educational activities: Type of activities: lecture / independent work Number of hours: per week: per level/semester: 16s / 6s Form of the course: on-site learning				
Number of credits: 0				
Recommended semester: 5.				
Educational level: N				
Prerequisites:				
Course requirements:				
Learning outcomes:				
Class syllabus:				
Recommended literature:				
Languages necessary to complete the course:				
Notes:				
Past grade distribution Total number of evaluated stud	ents: 24			
ABS	NEABS			
95,83	4,17			
Lecturers: doc. Mgr. Lenka Filová, PhD.				
Last change: 06.12.2022				
Approved by:				

Academic year: 2022/2023				
University: Comenius University Bratislava				
Faculty: Faculty of Mathematics, Physics and Informatics				
Course ID: FMFI.KMANM/2- prUMAx-111/21	Course title: Revision of Advanced Secondary-school Mathematics (1)			
Educational activities: Type of activities: lecture / independent work Number of hours: per week: per level/semester: 16s / 6s Form of the course: on-site learning				
Number of credits: 0				
Recommended semester: 1.				
Educational level: N				
Prerequisites:				
Course requirements:				
Learning outcomes:				
Class syllabus:				
Recommended literature:				
Languages necessary to complete the course:				
Notes:				
Past grade distribution Total number of evaluated students	ents: 37			
ABS	NEABS			
97,3	2,7			
Lecturers: doc. RNDr. Zbyněk Kubáček, CSc.				
Last change:				
Approved by:				

Academic year: 2022/2023 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KDMFI/2-Revision of Advanced Secondary-school Mathematics (2) prUMAx-211/21 **Educational activities:** Type of activities: lecture / independent work **Number of hours:** per week: per level/semester: 12s / 4s Form of the course: on-site learning Number of credits: 0 **Recommended semester:** 4. **Educational level:** N **Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 24 ABS **NEABS** 100.0 0.0 Lecturers: PaedDr. Peter Vankúš, PhD. Last change: 06.12.2022 Approved by:

Academic year: 2022/2023			
University: Comenius University Bratislava			
Faculty: Faculty of Mathematics, Physics and Informatics			
Course ID: FMFI.KMANM/2- prUMAx-214/21	Course title: Seminar in History of Mathematics (1)		
Educational activities: Type of activities: lecture / independent work Number of hours: per week: per level/semester: 16s / 6s Form of the course: on-site learning			
Number of credits: 0			
Recommended semester: 4.			
Educational level: N			
Prerequisites:			
Course requirements:			
Learning outcomes:			
Class syllabus:			
Recommended literature:			
Languages necessary to complete the course:			
Notes:			
Past grade distribution Total number of evaluated students	ents: 24		
ABS	NEABS		
100,0	0,0		
Lecturers: doc. RNDr. Zbyněk Kubáček, CSc.			
Last change:			
Approved by:			

Academic year: 2022/2023			
University: Comenius University Bratislava			
Faculty: Faculty of Mathematics, Physics and Informatics			
Course ID: FMFI.KMANM/2- prUMAx-314/21	Course title: Seminar in History of Mathematics (2)		
Educational activities: Type of activities: lecture / inc Number of hours: per week: per level/semest Form of the course: on-site le Number of credits: 0	er: 12s / 4s		
Recommended semester: 5.			
Educational level: N			
Prerequisites:			
Course requirements:			
Learning outcomes:			
Class syllabus:			
Recommended literature:			
Languages necessary to comp	Languages necessary to complete the course:		
Notes:			
Past grade distribution Total number of evaluated stud	ents: 24		
ABS		NEABS	
100,0		0,0	
Lecturers: doc. RNDr. Zbyněk Kubáček, CSc.			
Last change:			
Approved by:			

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID: Course title:

FMFI.KAG/2- Set and Number Theory (Algebra 1)

prUMAx-205/21

**Educational activities:** 

Type of activities: lecture / independent work

**Number of hours:** 

per week: per level/semester: 16s / 6s Form of the course: on-site learning

Number of credits: 0

**Recommended semester: 3.** 

**Educational level:** N

#### **Prerequisites:**

#### **Course requirements:**

Final assessment: written exam

Passing grade: 60%

Scale of assessment (preliminary/final): Weight of the course work / exam: 0/100

#### **Learning outcomes:**

Students will become familiar with the basic notions and methods of linear algebra.

#### Class syllabus:

1. Systems of linear equations 2. Euclidean vector space 3. Linear subspaces 4. Standard inner product 5. Linear maps and their matrix representations 6. Matrix algebra 7. Regular matrices and determinant

#### **Recommended literature:**

Linear Algebra / Jim Hefferon, http://joshua.smcvt.edu/linearalgebra, 2020

#### Languages necessary to complete the course:

#### **Notes:**

#### Past grade distribution

Total number of evaluated students: 24

ABS	NEABS
95,83	4,17

Lecturers: Mgr. Emília Miťková, PhD., Mgr. Tomáš Rusin, PhD.

Last change: 06.12.2022

Approved by:

Academic year: 2022/2023				
University: Comenius University Bratislava				
Faculty: Faculty of Mathematic	es, Physics and Informatics			
Course ID: FMFI.KDMFI/2- prUMAx-221/21	Course title: Teaching Practice			
Educational activities: Type of activities: practice Number of hours: per week: per level/semester: 20s Form of the course: on-site learning				
Number of credits: 0				
<b>Recommended semester:</b> 3., 4				
Educational level: N				
Prerequisites:				
Course requirements:				
Learning outcomes:				
Class syllabus:				
Recommended literature:				
Languages necessary to complete the course:				
Notes:				
Past grade distribution Total number of evaluated stud	ents: 24			
ABS	NEABS			
100,0	0,0			
Lecturers: Mgr. Michaela Vargová, PhD.				
Last change: 09.12.2022				
Approved by:				

#### STATE EXAM DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:
FMFI.KDMFI/2prUMAx-911/21

Number of credits: 0

Educational level: N

State exam syllabus:

Last change: 16.06.2023

Approved by: