Course descriptionsTABLE OF CONTENTS

1. 2-prUMAx-106/23	Algebra (1)	2
	Algebra (2)	
_	Algebra (3)	
4. 2-prUMAx-101/21	Combinatorics	5
5. 2-prUMAx-913/21	Didactics of Mathematics (state exam)	6
6. 2-prUMAx-112/23	Didactics of Mathematics (1)	7
7. 2-prUMAx-212/23	Didactics of Mathematics (1)	8
8. 2-prUMAx-213/23	Didactics of Mathematics (3)	9
9. 2-prUMAx-901/21	Diploma Thesis Project	10
10. 2-prUMAx-102/21	Geometry (1)	11
11. 2-prUMAx-103/21	Geometry (2)	12
12. 2-prUMAx-202/21	Geometry (3)	13
13. 2-prUMAx-104/21	Mathematical Analysis (1)	14
14. 2-prUMAx-105/21	Mathematical Analysis (2)	15
15. 2-prUMAx-204/21	Mathematical Analysis (3)	16
16. 2-prUMAx-912/21	Mathematics (state exam)	17
17. 2-prUMAx-311/21	Methods for Solving Mathematical Tasks	18
18. 2-prUMAx-211/23	Probability Measure and Mathematical Statistics (1)	19
19. 2-prUMAx-301/23	Probability Measure and Mathematical Statistics (2)	20
20. 2-prUMAx-111/23	Revision of Advanced Secondary-school Mathematics	21
21. 2-prUMAx-214/21	Seminar in History of Mathematics (1)	22
22. 2-prUMAx-314/21	Seminar in History of Mathematics (2)	23
23. 2-prUMAx-221/21	Teaching Practice	24
24. 2-prUMAx-911/21	Thesis Defence (state exam)	25

Academic year: 2025/2026 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KDMFI/2-Algebra (1) prUMAx-106/23 **Educational activities:** Type of activities: lecture / independent work **Number of hours:** per week: per level/semester: 20s / 8s 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: 41 **ABS NEABS** 97.56 2.44 Lecturers: Mgr. Emília Miťková, PhD. Last change: 15.05.2023 Approved by: doc. PaedDr. Mária Slavíčková, PhD.

Academic year: 2025/2026

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:
FMFI.KAG/2prUMAx-205/23

Course title:
Algebra (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: 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:

Systems of linear equations, Euclidean vector spaces, linear combinations, linear subspaces, linear span, linear independence, basis, dimension, linear maps and their matrix representations, matrix multiplication.

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: 40

ABS	NEABS
97,5	2,5

Lecturers: Mgr. Tomáš Rusin, PhD.

Last change: 28.08.2024

Academic year: 2025/2026

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID: Course title: Algebra (3)

prUMAx-206/23

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:

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 several topics in linear algebra and elementary number theory.

Class syllabus:

Elementary matrices, inverse matrix, determinant, dot product, lengths and angles, Cauchy-Schwarz inequality, elementary number theory, Euclidean algorithm, primes and prime decomposition.

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 41

ABS	NEABS
95,12	4,88

Lecturers: Mgr. Tomáš Rusin, PhD.

Last change: 10.09.2024

Academic year: 2025/2026			
University: Comenius Univers	ity Bratislava		
Faculty: Faculty of Mathemati	cs, Physics and Inforr	matics	
Course ID: FMFI.KDMFI/2- prUMAx-101/21	Course title: Combinatorics		
Educational activities: Type of activities: lecture / in Number of hours: per week: per level/semest Form of the course: on-site le	ter: 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	olete the course:		
Notes:			
Past grade distribution Total number of evaluated stud	lents: 51		
ABS		NEABS	
100,0		0,0	
Lecturers: PaedDr. Peter Vank	úš, PhD.		
Last change: 06.12.2022			
Approved by: doc. PaedDr. M.	ária Slavíčková, PhD.		

STATE EXAM DESCRIPTION

Academic year: 2025/2026

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

Academic year: 2025/2026 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KDMFI/2-Didactics of Mathematics (1) prUMAx-112/23 **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: 42 **ABS NEABS** 95.24 4,76 Lecturers: doc. PaedDr. Mária Slavíčková, PhD. **Last change:** 15.05.2023

Academic year: 2025/2026 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KDMFI/2-Didactics of Mathematics (1) prUMAx-212/23 **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: 39 **ABS NEABS** 100.0 0.0 Lecturers: doc. PaedDr. Mária Slavíčková, PhD. **Last change:** 15.05.2023

Academic year: 2025/2026 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KDMFI/2-Didactics of Mathematics (3) prUMAx-213/23 **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 students: 0 **ABS NEABS** 0.0 0.0 Lecturers: Mgr. Michaela Vargová, PhD., Mgr. Monika Porkertová, PhD. **Last change:** 15.05.2023

Academic year: 2025/2026		
University: Comenius University Bratislava		
Faculty: Faculty of Mathematics, 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/semest Form of the course: on-site le		
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	
100,0 0,0		
Lecturers: RNDr. Monika Dilli	ngerová, PhD.	
Last change: 12.12.2022		
Approved by: doc. PaedDr. Má	ria Slavíčková, PhD.	

Academic year: 2025/2026			
University: Comenius University	ty Bratislava		
Faculty: Faculty of Mathematic	es, Physics and Inforr	natics	
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/semest Form of the course: on-site le	er: 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: 47		
ABS		NEABS	
89,36 10,64			
Lecturers: RNDr. Monika Dill	ingerová, PhD.		
Last change: 14.09.2021			
Approved by: doc. PaedDr. Ma	ária Slavíčková, PhD.		

Academic year: 2025/2026 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KAG/2-Geometry (2) prUMAx-103/21 **Educational activities:** Type of activities: lecture / independent work **Number of hours:** per week: per level/semester: 20s / 8s 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: 41 **ABS NEABS** 97,56 2.44 Lecturers: RNDr. Kristína Rostás, PhD. **Last change:** 17.10.2023

Strana: 12

Academic year: 2025/2026	
University: Comenius University	ty Bratislava
Faculty: Faculty of Mathematic	es, 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: 4.	
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: 39
ABS	NEABS
100,0	0,0
Lecturers: RNDr. Barbora Pok	orná, PhD.
Last change:	
Approved by: doc. PaedDr. Ma	uria Slavíčková, PhD.

Academic year: 2025/2026 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID:** Course title: FMFI.KDMFI/2-Mathematical Analysis (1) prUMAx-104/21 **Educational activities:** Type of activities: lecture / independent work **Number of hours:** per week: per level/semester: 20s / 8s 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: 47 **ABS NEABS** 89.36 10.64 Lecturers: Mgr. Michaela Vargová, PhD. Last change: 30.05.2022

Strana: 14

Academic year: 2025/2026		
University: Comenius Univers	ity 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 / in Number of hours: per week: per level/semest Form of the course: on-site le	er: 20s / 8s	
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: 39	
ABS		NEABS
100,0		0,0
Lecturers: Mgr. Michaela Varg	gová, PhD.	
Last change: 15.02.2022		
Approved by: doc. PaedDr. Ma	ária Slavíčková, PhD.	

Academic year: 2025/2026 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID:** Course title: FMFI.KDMFI/2-Mathematical Analysis (3) prUMAx-204/21 **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: 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: 39 **ABS NEABS** 97.44 2,56 Lecturers: Mgr. Michaela Vargová, PhD. Last change: 09.12.2022

Strana: 16

STATE EXAM DESCRIPTION

Academic year: 2025/2026

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: doc. PaedDr. Mária Slavíčková, PhD.

Academic year: 2025/2026 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID:** Course title: Methods for Solving Mathematical Tasks FMFI.KDMFI/2prUMAx-311/21 **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:** 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 students: 24 ABS **NEABS** 100.0 0.0 Lecturers: Mgr. Emília Miťková, PhD. Last change: 14.12.2022 Approved by: doc. PaedDr. Mária Slavíčková, PhD.

Academic year: 2025/2026 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KDMFI/2-Probability Measure and Mathematical Statistics (1) prUMAx-211/23 **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: 3. 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: 39 **ABS NEABS** 100.0 0.0 Lecturers: PaedDr. Peter Vankúš, PhD. **Last change:** 15.05.2023

Strana: 19

Academic year: 2025/2026 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KDMFI/2-Probability Measure and Mathematical Statistics (2) prUMAx-301/23 **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 students: 27 **ABS NEABS** 96.3 3,7 Lecturers: doc. Mgr. Lenka Filová, PhD. **Last change:** 15.05.2023

Strana: 20

Academic year: 2025/2026 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KMANM/2-Revision of Advanced Secondary-school Mathematics prUMAx-111/23 **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: 16 **ABS NEABS** 100.0 0.0 Lecturers: doc. RNDr. Zbyněk Kubáček, CSc. Last change: Approved by: doc. PaedDr. Mária Slavíčková, PhD.

Academic year: 2025/2026 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID:** Course title: FMFI.KMANM/2-Seminar in History of Mathematics (1) prUMAx-214/21 **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: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 39 **ABS NEABS** 100.0 0.0 Lecturers: doc. RNDr. Zbyněk Kubáček, CSc. Last change: Approved by: doc. PaedDr. Mária Slavíčková, PhD.

Academic year: 2025/2026 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID:** Course title: FMFI.KMANM/2-Seminar in History of Mathematics (2) prUMAx-314/21 **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: 39 **ABS NEABS** 100.0 0.0 Lecturers: doc. RNDr. Zbyněk Kubáček, CSc. Last change: Approved by: doc. PaedDr. Mária Slavíčková, PhD.

Academic year: 2025/2026		
University: Comenius University	ty 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/semest Form of the course: on-site le		
Number of credits: 0		
Recommended semester: 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: 39	
ABS	NEABS	
100,0 0,0		
Lecturers: Mgr. Michaela Varg	ová, PhD., Mgr. Emília Miťková, PhD.	
Last change: 09.12.2022		
Approved by: doc. PaedDr. Ma	uria Slavíčková, PhD.	

STATE EXAM DESCRIPTION

Academic year: 2025/2026

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: doc. PaedDr. Mária Slavíčková, PhD.