Course descriptions

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COURSE DESCRIPTION

Academic year: 2024/2025	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	

Course ID: FMFI.KDMFI/2- prUMAx-106/23	**Course title:** Algebra (1)

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., doc. RNDr. Zbyněk Kubáček, CSc.

COURSE DESCRIPTION

Academic year: 2024/2025	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	
Course ID: FMFI.KAG/2-prUMAx-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

Approved by: doc. PaedDr. Mária Slavíčková, PhD., doc. RNDr. Zbyněk Kubáček, CSc.

COURSE DESCRIPTION

Academic year: 2024/2025	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	

Course ID: FMFI.KAG/2-prUMAx-206/23	**Course title:** Algebra (3)

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

Approved by: doc. PaedDr. Mária Slavíčková, PhD., doc. RNDr. Zbyněk Kubáček, CSc.

COURSE DESCRIPTION

Academic year: 2024/2025	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	

Course ID: FMFI.KDMFI/2- prUMAx-101/21	**Course title:** Combinatorics

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: 51

ABS	NEABS
100,0	0,0

Lecturers: PaedDr. Peter Vankúš, PhD.
Last change: 06.12.2022
Approved by: doc. PaedDr. Mária Slavíčková, PhD., doc. RNDr. Zbyněk Kubáček, CSc.

STATE EXAM DESCRIPTION

Academic year: 2024/2025	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	
Course ID: FMFI.KDMFI/2-prUMAx-913/21	**Course title:** Didactics of Mathematics
Number of credits: 0	
Educational level: N	
State exam syllabus:	
Last change: 05.09.2023	
Approved by: doc. PaedDr. Mária Slavíčková, PhD., doc. RNDr. Zbyněk Kubáček, CSc.	

COURSE DESCRIPTION

Academic year: 2024/2025	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	
Course ID: FMFI.KDMFI/2- prUMAx-112/23	**Course title:** Didactics 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: 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

Approved by: doc. PaedDr. Mária Slavíčková, PhD., doc. RNDr. Zbyněk Kubáček, CSc.

COURSE DESCRIPTION

Academic year: 2024/2025	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	

Course ID: FMFI.KDMFI/2-prUMAx-212/23	**Course title:** Didactics 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: 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
Approved by: doc. PaedDr. Mária Slavíčková, PhD., doc. RNDr. Zbyněk Kubáček, CSc.

COURSE DESCRIPTION

Academic year: 2024/2025	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	

Course ID: FMFI.KDMFI/2-prUMAx-213/23	**Course title:** Didactics of Mathematics (3)

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
Approved by: doc. PaedDr. Mária Slavíčková, PhD., doc. RNDr. Zbyněk Kubáček, CSc.

COURSE DESCRIPTION

Academic year: 2024/2025	
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/semester: 4s
  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: RNDr. Monika Dillingerová, PhD.

Last change: 12.12.2022

Approved by: doc. PaedDr. Mária Slavíčková, PhD., doc. RNDr. Zbyněk Kubáček, CSc.

COURSE DESCRIPTION

Academic year: 2024/2025	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	

Course ID: FMFI.KDMFI/2-prUMAx-102/21	**Course title:** Geometry (1)

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: 47

ABS	NEABS
89,36	10,64

Lecturers: RNDr. Monika Dillingerová, PhD.
Last change: 14.09.2021
Approved by: doc. PaedDr. Mária Slavíčková, PhD., doc. RNDr. Zbyněk Kubáček, CSc.

COURSE DESCRIPTION

Academic year: 2024/2025	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	

Course ID: FMFI.KAG/2- prUMAx-103/21	**Course title:** Geometry (2)

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

Approved by: doc. PaedDr. Mária Slavíčková, PhD., doc. RNDr. Zbyněk Kubáček, CSc.

COURSE DESCRIPTION

Academic year: 2024/2025	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	

Course ID: FMFI.KAG/2-prUMAx-202/21	**Course title:** Geometry (3)

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
100,0	0,0

Lecturers: RNDr. Barbora Pokorná, PhD.

Last change:

Approved by: doc. PaedDr. Mária Slavíčková, PhD., doc. RNDr. Zbyněk Kubáček, CSc.

COURSE DESCRIPTION

Academic year: 2024/2025	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	

Course ID: FMFI.KDMFI/2-prUMAx-104/21	**Course title:** Mathematical Analysis (1)

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
Approved by: doc. PaedDr. Mária Slavíčková, PhD., doc. RNDr. Zbyněk Kubáček, CSc.

COURSE DESCRIPTION

Academic year: 2024/2025	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	

Course ID: FMFI.KDMFI/2-prUMAx-105/21	**Course title:** Mathematical Analysis (2)

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: 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: Mgr. Michaela Vargová, PhD.
Last change: 15.02.2022
Approved by: doc. PaedDr. Mária Slavíčková, PhD., doc. RNDr. Zbyněk Kubáček, CSc.

COURSE DESCRIPTION

Academic year: 2024/2025	

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID: FMFI.KDMFI/2- prUMAx-204/21	**Course title:** Mathematical Analysis (3)

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

Approved by: doc. PaedDr. Mária Slavíčková, PhD., doc. RNDr. Zbyněk Kubáček, CSc.

STATE EXAM DESCRIPTION

Academic year: 2024/2025	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	
Course ID: FMFI.KDMFI/2-prUMAx-912/21	**Course title:** Mathematics
Number of credits: 0	
Educational level: N	
State exam syllabus:	
Last change: 12.09.2023	
Approved by: doc. PaedDr. Mária Slavíčková, PhD., doc. RNDr. Zbyněk Kubáček, CSc.	

COURSE DESCRIPTION

Academic year: 2024/2025	
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
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., doc. RNDr. Zbyněk Kubáček, CSc.

COURSE DESCRIPTION

Academic year: 2024/2025	

University: Comenius University Bratislava	

Faculty: Faculty of Mathematics, Physics and Informatics	

Course ID: FMFI.KDMFI/2-prUMAx-211/23	**Course title:** Probability Measure and Mathematical Statistics (1)

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

Approved by: doc. PaedDr. Mária Slavíčková, PhD., doc. RNDr. Zbyněk Kubáček, CSc.

COURSE DESCRIPTION

Academic year: 2024/2025	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	

Course ID: FMFI.KDMFI/2-prUMAx-301/23	**Course title:** Probability Measure and Mathematical Statistics (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: 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
Approved by: doc. PaedDr. Mária Slavíčková, PhD., doc. RNDr. Zbyněk Kubáček, CSc.

COURSE DESCRIPTION

Academic year: 2024/2025	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	
Course ID: FMFI.KMANM/2-prUMAx-111/23	**Course title:** Revision of Advanced Secondary-school Mathematics

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., doc. RNDr. Zbyněk Kubáček, CSc.

COURSE DESCRIPTION

Academic year: 2024/2025	
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: 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., doc. RNDr. Zbyněk Kubáček, CSc.

COURSE DESCRIPTION

Academic year: 2024/2025	

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 / 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., doc. RNDr. Zbyněk Kubáček, CSc.

COURSE DESCRIPTION

Academic year: 2024/2025	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, 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
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 students: 39

ABS	NEABS
100,0	0,0

Lecturers: Mgr. Michaela Vargová, PhD., Mgr. Emília Miťková, PhD.
Last change: 09.12.2022
Approved by: doc. PaedDr. Mária Slavíčková, PhD., doc. RNDr. Zbyněk Kubáček, CSc.

STATE EXAM DESCRIPTION

Academic year: 2024/2025	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	
Course ID: FMFI.KDMFI/2- prUMAx-911/21	**Course title:** Thesis Defence
Number of credits: 0	
Educational level: N	
State exam syllabus:	
Last change: 16.06.2023	
Approved by: doc. PaedDr. Mária Slavíčková, PhD., doc. RNDr. Zbyněk Kubáček, CSc.	