Course descriptions

T/2	R	\mathbf{IF}	OF	CO	N	ΓEN	ZTI
	11		、				

1. 2-UDG-101/15	Algebraic Geometry	3
	Applications of Descriptive Geometry	
	CAD System-supported Technical Drawing	
	Cognitive Psychology	
5. 2-UDG-145/12 (Computer Geometry (1)	9
	Computer Geometry (2)	
	Computer-aided Science Laboratory	
	Descriptive Geometry and Didactics of Descriptive Geometry (state	
exam)		12
9. 2-UDG-111/15 I	Didactics of Descriptive Geometry (1)	
10. 2-UDG-113/15	Didactics of Descriptive Geometry (2)	14
11. 2-UMA-951/15	Didactics of Mathematics (state exam)	15
12. 2-UMA-105/15	Didactics of Mathematics (1)	18
13. 2-UMA-106/15	Didactics of Mathematics (2)	19
14. 2-UMA-259/15	Didactics of Mathematics in Praxis (1)	20
15. 2-UMA-260/15	Didactics of Mathematics in Praxis (2)	21
16. 2-UMA-151/15	Didactics of Teaching Mathematics in Digital Environment	23
	Differential Geometry	
18. 1-UXX-137/15	Digital Technologies (1)	25
19. 1-UXX-138/15	Digital Technologies (2)	26
	Digital Technologies (3)	
	Digital Technologies (4)	
	Digital Technologies (5)	
	Diploma Thesis Defense (state exam)	
	Diploma Thesis in Descriptive Geometry Seminar	
	Diploma Thesis in Mathematics Seminar	
	Elementary Theory of Quadratic Figures	
	Elements of AI	
28. 2-MXX-130/21	Elements of AI.	36
29. 1-MXX-233/13	English Conversation Course (1)	38
	English Conversation Course (2)	
	French Language (1)	
	French Language (2)	
	French Language (3)	
	French Language (4)	
	German Language (1)	
	German Language (2)	
	German Language (3)	
	German Language (4)	
	History of Informatics	
	History of Mathematics	
	Introduction to Didactics of Mathematics	
	Introduction to Graph Theory	
	Mathematical Background of Music	
	Mathematical Competitions and Seminars	
	Methods for Solving Mathematical Tasks (1)	
	Methods for Solving Mathematical Tasks (2).	

47.	1-UDG-112/15	Methods of Projections (1)	63
		Methods of Projections (2)	
49.	1-UDG-212/15	Methods of Projections (3)	65
50.	1-UDG-213/15	Methods of Projections (4)	66
51.	2-UMA-114/15	New Pedagogical Approaches in Teaching Not Only Mathematics	67
52.	2-UMA-162/15	Non-Euclidean Geometry	68
53.	1-UXX-231/18	Pedagogic Communication	69
		Pedagogic Diagnostics	
55.	2-UXX-123/15	Pedagogic Research Methodology (1)	71
56.	2-UXX-124/15	Pedagogic Research Methodology (2)	72
		Philosophical Anthropology and Axiology	
		Physical Education and Sport (1)	
		Physical Education and Sport (2)	
		Physical Education and Sport (3)	
61.	2-MXX-220/00	Physical Education and Sport (4)	77
62.	2-UMA-253/19	Problematic Topics of Elementary School Mathematics	78
63.	1-UXX-141/15	Psychology for Teachers (1)	79
64.	1-UXX-142/15	Psychology for Teachers (2)	80
		Russian Language (1)	
66.	1-MXX-162/00	Russian Language (2)	82
		Russian Language (3)	
		Russian Language (4)	
		School Management.	
		Selected Parts of Mathematical Analysis (1)	
		Selected Parts of Mathematical Analysis (2)	
		Selected Parts of Projective Geometry	
		Selected Topics in Algebra.	
		Selected Topics in Teaching of Mathematics (1)	
		Seminar in History of Mathematics (1)	
		Seminar in History of Mathematics (2)	
		Set Theory.	
		Slovak Language for Foreign Students (1)	
		Slovak Language for Foreign Students (2)	
		Slovak Language for Foreign Students (3)	
		Slovak Language for Foreign Students (4)	
		Social Aspects of Informatics	
		Sports in Natur (1)	
		Sports in Natur (2)	
		Surfaces in Technical Practice (1)	
		Surfaces in Technical Practice (2)	
		Teaching Practice in Descriptive Geometry (2)	
		Teaching Practice in Descriptive Geometry (3)	
		Teaching Practice in Mathematics (2)	
		Teaching Practice in Mathematics (3)	
		Theoretical Fundaments of Education.	
		Theory of Teaching.	
		Theory, Algorithms and Graphs Applications	
		Web Technologies in Teaching.	

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID: Course title:

FMFI.KAG/2-UDG-101/15 | Algebraic Geometry

Educational activities:

Type of activities: course

Number of hours:

per week: 3 per level/semester: 39 Form of the course: on-site learning

Number of credits: 4

Recommended semester: 2.

Educational level: II.

Prerequisites:

Recommended prerequisites:

none

Course requirements:

Preliminary assessment: continuous evaluation, tests.

Final assessment examination: oral A 90%; B 80%; C 70%; D 60%; E 50%

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

Learning outcomes:

The graduate gains a basic knowledge on algebraic varieties in n-dimensional affine and projective spaces over a field (mostly algebraically closed) and on algebraic tools needed to their study.

Class syllabus:

Basics of ideal theory in commutative rings. Algebraic (affine) variety. Hilbert basis theorem. Hilbert's "zero-locus-theorem" (Nullstellensatz), associated ideral of a variety. Primary decomposition of an ideal, irreducible decomposition of a variety. Krull-dimension of an ideal, dimension of a variety. Dimension of an intersection of varieties. Projective space of dimension n, algebraic (projective) variety. Degree of a homogeneous ideal, degree of a variety. Bézout 's theorem. Orderings in polynomial rings. Gröbner and standard basis of an ideal, multiplicity of an isolated point of intersection of varieties. Introduction to the theory of algebraic varieties intersection.

Recommended literature:

Ideals, varieties, and algorithms: An introduction to computational algebraic geometry and commutative algebra / David Cox, John Little, Donal O'Shea. New York: Springer, 2007 Using algebraic geometry / David A. Cox, John Little, Donal O'Shea. New York: Springer, 2005 Introduction to commutative algebra: Advanced book program / M. F. Atiyah, I. G. MacDonald. Oxford: Westview, 1969

Languages necessary to complete the course:

english

Notes:									
none	none								
Past grade distribution Total number of evaluated students: 10									
A	В	С	D	Е	FX				
20,0	40,0	20,0	10,0	10,0	0,0				
Lecturers: RN	Lecturers: RNDr. Jana Chalmovianská, PhD.								
Last change: 25.04.2017									
Approved by:	,								

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID: Course title:

FMFI.KAG/1-UDG-322/15 | Applications of Descriptive Geometry

Educational activities:

Type of activities: lecture / practicals

Number of hours:

per week: 2 / 2 per level/semester: 26 / 26

Form of the course: on-site learning

Number of credits: 4

Recommended semester: 5.

Educational level: I., II.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 12

A	В	С	D	Е	FX
66,67	25,0	8,33	0,0	0,0	0,0

Lecturers: RNDr. Martina Bátorová, PhD., doc. RNDr. Štefan Solčan, CSc.

Last change: 07.09.2015

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:

Course title:

FMFI.KAG/1-UDG-221/15

CAD System-supported Technical Drawing

Educational activities:

Type of activities: lecture / practicals

Number of hours:

per week: 2 / 2 per level/semester: 26 / 26

Form of the course: on-site learning

Number of credits: 4

Recommended semester: 4.

Educational level: I., II.

Prerequisites:

Course requirements:

For the semester, the student can get 50% for exercises and 50% for the final exam. To successfully pass the final exam, the student must obtain at least half of the points for the exercises. The final exam is only oral, continuous assessment is in the form of projects and homework.

Evaluation: A (100-91), B (90-81), C (80-71), D (70-61), E (60-51), Fx (50-0).

Learning outcomes:

Students will learn the basic rules of displaying and dimensioning objects according to applicable technical standards. They get acquainted with the applications of projection methods in technical practice, the reconstruction of technical objects from projections and also sections and cross-sections of objects in technical practice. They will learn the basic workflows in CAD systems QCAD, SketchUp, Sweet Home 3D and FreeCAD.

Class syllabus:

Technical drawing – a historical look at its development.

Technical standardization, STN and ISO standards, technical drawings, sizing rules.

Projection methods in technical practice for mechanical, electrical and construction drawings.

Sections and cross sections according to the STN standard.

Basic attributes of an automated construction system.

Drawing simple shapes in QCAD, dimensioning, hatching, creating blocks and manipulating blocks, working with layers.

Advanced QCAD functions – trimming, smooth arcs joining, working with text, editing dimension marks, etc.

Basics of working in SketchUp, description of the layout and application settings.

Use various tools to create simple objects in SketchUp.

An overview of interesting SketchUp extensions for creating more complex objects.

Basics of working in the Sweet Home 3D application when designing the interior of rooms.

Extensions of the Sweet Home 3D application, creation of sloping walls and roofs, multi-storey buildings, work with lights, materials setting, importing your own textures and objects.

Basics of working in FreeCAD. Layout description, creating simple objects.

Recommended literature:

Marie Kargerová: Deskriptivní geometrie pro technické školy vysoké, vyšší a střední. Ostrava, 1997

Ján Tarbajovský, Pavol Fedor: Technické kreslenie. Alfa, 1990

Štefan Glézl, Milan Srnánek: Strojnícke kreslenie (2.vydanie). Bratislava, ALFA 1978

Jiří Špaček, Michal Spielmann: AutoCAD – Názorný průvodce pro verze 2019 a 2020, Computer

Press, 2020

Róbert Bohdal: CAD systémy, https://flurry.dg.fmph.uniba.sk/webog/sk/bohdal-vyucba/52-bohdal/85-cad-systemy, 2020

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 13

A	В	С	D	Е	FX
23,08	30,77	30,77	7,69	0,0	7,69

Lecturers: RNDr. Róbert Bohdal, PhD., RNDr. Soňa Kudličková, CSc.

Last change: 24.06.2022

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course title: Course ID:** FMFI.KAI/2-UXX-102/15 Cognitive Psychology **Educational activities:** Type of activities: course **Number of hours:** per week: 2 per level/semester: 26 Form of the course: on-site learning Number of credits: 2 **Recommended semester: 3. Educational level:** II. **Prerequisites: Antirequisites:** FMFI.KAI/2-UXX-102/00 **Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 27 Α В C D Ε FX 55,56 33,33 0.0 3,7 0.0 7,41

Lecturers: doc. PhDr. Ján Rybár, PhD.

Last change: 02.06.2015

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KAG/2-UDG-145/12 Computer Geometry (1) **Educational activities:** Type of activities: course **Number of hours:** per week: 4 per level/semester: 52 Form of the course: on-site learning Number of credits: 5 **Recommended semester: 3. Educational level: II. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 9 В C Α D E FX 44,44 22,22 0,0 33,33 0,0 0,0Lecturers: RNDr. Soňa Kudličková, CSc. Last change: 02.06.2015 Approved by:

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KAG/2-UDG-146/12 Computer Geometry (2) **Educational activities:** Type of activities: lecture / practicals **Number of hours:** per week: 2 / 2 per level/semester: 26 / 26 Form of the course: on-site learning Number of credits: 5 **Recommended semester:** 4. **Educational level: II. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 9 C Α В D E FX 0,0 66,67 22,22 11,11 0,0 0,0Lecturers: RNDr. Soňa Kudličková, CSc. Last change: 02.06.2015

Strana: 10

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KDMFI/2-UXX-105/15 Computer-aided Science Laboratory **Educational activities:** Type of activities: course **Number of hours:** per week: 2 per level/semester: 26 Form of the course: on-site learning Number of credits: 2 **Recommended semester: 3.** Educational level: D, II. **Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 65 Α В \mathbf{C} D E FX 95,38 0,0 1,54 3,08 0,0 0,0Lecturers: doc. RNDr. Peter Demkanin, PhD., PaedDr. Tünde Kiss, PhD. Last change: 02.06.2015

Strana: 11

STATE EXAM DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID: Course title: Descriptive Geometry and Didactics of Descriptive Geometry

Number of credits: 3

Educational level: II.

State exam syllabus:

Last change: 22.01.2019

Approved by:

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KAG/2-UDG-111/15 Didactics of Descriptive Geometry (1) **Educational activities:** Type of activities: course **Number of hours:** per week: 2 per level/semester: 26 Form of the course: on-site learning Number of credits: 3 **Recommended semester: 3. Educational level: II. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 10 Α В \mathbf{C} D E FX 40,0 30,0 0,0 30,0 0,0 0,0Lecturers: RNDr. Soňa Kudličková, CSc. Last change: 02.06.2015 Approved by:

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KAG/2-UDG-113/15 Didactics of Descriptive Geometry (2) **Educational activities:** Type of activities: course **Number of hours:** per week: 2 per level/semester: 26 Form of the course: on-site learning Number of credits: 3 **Recommended semester:** 4. **Educational level: II. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 10 Α В \mathbf{C} D E FX 50,0 20,0 0,0 20,0 10,0 0,0Lecturers: RNDr. Soňa Kudličková, CSc. Last change: 02.06.2015 Approved by:

STATE EXAM DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID: Course title:

FMFI.KDMFI/2-UMA-951/15 | Didactics of Mathematics

Number of credits: 3

Educational level: II.

Learning outcomes:

The graduate will be ready to perform the tasks assigned to a beginning math teacher.

Class syllabus:

State final examination in the scope of master's study of mathematics didactics. The student should be able to include the task in the thematic unit, identify preconceptions and the necessary knowledge to solve it, determine the skills that the student will learn on it, respectively, concepts that allows you to discover. The student will demonstrate a model solution, point out problematic places in the solution with which students could have problems and how he would react to them as a teacher. After completing the task, the student should outline the activities that would follow and how he would close the lesson.

State exam syllabus:

1. Logic and sets

Logic (propositions, operations with propositions, logical conjunctions and quantifiers), sets (number of elements of unification of two and three sets, De Morgan's formulas for complement of unification and intersection), proofs and conclusions (direct and indirect proofs, proofs by dispute, mathematical induction, mode ponens, modus tollens).

2. Numbers, variables, numerical fields

Binomial theorem and Pascal's triangle, derivation of formulas a^n-b^n (including geometric interpretation for n = 2 and n = 3).

3. Number theory

Number of prime numbers, relation of largest common divisor and smallest common multiple of two numbers, prime decomposition number of number divisors, irrationality of the square root of a prime number, derivation of divisibility criteria 4, 5, 10, 100, 3, 6, 9.

4. Equations, inequalities and their system

Geometric interpretation of a system of two linear equations with two unknowns, conditions for the existence of solutions, equivalent and non-equivalent modifications and their relation to basic functions.

5. Function and its properties

Basic transformations of function graphs, definitions of basic properties of functions (domain of definition, domain of values, increasing and decreasing, extrema and local extrema - sharp and fuzzy, examples), inverse function and its graph.

6. Linear and quadratic function

Significance of coefficients k and q in the formula of the linear function y = kx + q, geometric meaning of the directive, quadratic function (derivation of the relation for calculating roots, coordinates of the vertex of the parabola.

7. Arithmetic and geometric sequence, infinite (geometric) series

Basic relationship management.

8. Polynomials, power functions and linear polynomials

Root factors and their relation to the roots of a polynomial equation, square roots as inverse functions to power functions, definition of a rational power of a positive number, linear polynomial function (derivation of asymptote equations and conditions why ad \neq bc).

9. Exponential and logarithmic functions

Exponential functions (definition of power for natural, integer and rational exponent, basic properties of exponential function and their justification, simple and compound interest, regular deposits and withdrawals, loan repayments), definition of logarithm, rules for calculating logarithms and their connection with creation of exponential function, relationships between logarithms with different bases.

10. Trigonometric functions

Definition of trigonometric functions in a right triangle and using a unit circle and their mutual relation, values of trigonometric functions for basic angles, accounting formulas, formulas for double and half angle, relations for sum and difference of trigonometric functions.

11. Triangle

Consistency and similarity of triangles, Pythagorean and Euclidean theorems, different relations for the content of a triangle (Heron's formula, using sinus of angle, radius of inscribed and described circle), derivation of statements about intersections of angles, axes of sides, lines, heights, sine and cosine theorem.

12. Parallelograms and trapezoid

Derivation of formulas for the content of parallelograms and trapezoids, derivation of some of their properties the diagonals of a quadrilateral with sides a, b, c, d are perpendicular to each other just when a2 + c2 = b2 + d2).

13. Circle

Formula for the content of a circle and a paragraph, size in degrees and radians, center and circumferential angle, Tales' theorem, estimation of the number π using written and described ngons, related to trigonometric functions.

14. Analytical geometry in the plane and in space

Vectors and operations with them, scalar product and its relation to the angle of two vectors, analytical expression of a line and a plane, various equations of a line, derivation of coordinates of the center of a line and a dividing line in a given ratio, center of a triangle, size of a line, derivation of a formula lines and from the plane, angle of two lines (using scalar product, using directives), angle of line and plane, normal vector.

15. Sets of points of given properties and their analytical expression

Derivation of "basic" sets of points of a given property (including a set of points from which a line can be seen at a given angle).

16. Conic sections

Definitions of conic sections (circle, ellipse, hyperbola and parabola) as sets of points of given properties and derivation of their equations.

17. Suitable and similar representations, construction tasks

Examples of design tasks solved by a combination of calculation and construction, the use of sets of points of given properties in design tasks, examples of design tasks solved using identical and similar representations.

18. Basic ways of displaying space in a plane

Basic properties of parallel projection, hint of their justification, linear perspective and its basic properties, layers and their basic properties.

19. Linear formations in space - positional problems

Use of basic statements about the intersections of a pair of parallel ones planes with another plane when constructing sections of bodies by a plane.

20. Solids

Cavalieri's principle and its application e.g. to calculate the volume of a sphere, a formula for calculating the volume of pyramids and cones, the idea of justifying the formula for the surface of a sphere.

21. Combinatorics

Combinatorial identities, basic combinatorial rules (sum, product), typical examples of their use, derivation of formulas for the number of variations, combinations, permutations (also with repetition), combinatorial derivation of basic relations in the Pascal triangle (symmetry, sum of minor elements).

22. Probability

Statistical and Laplace definition of probability, dependent and independent events, calculation of probability for independent events, geometric probability and an example of its use.

23. Statistics

Statistical set and position measures (modus, median, mean), basic properties of the arithmetic mean (sum of deviations from the mean is equal to 0), various possibilities of describing the "scatter" of the set, Chebyshev's inequality.

Languages necessary to complete the course:

slovak, english

Last change: 17.03.2022

Approved by:

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID:** Course title: FMFI.KAG+KDMFI/2-Didactics of Mathematics (1) UMA-105/15 **Educational activities:** Type of activities: course **Number of hours:** per week: 4 per level/semester: 52 Form of the course: on-site learning Number of credits: 4 **Recommended semester:** 4. Educational level: D, II. **Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 135 \mathbf{C} D Е FX 70,37 17,78 2,96 0,74 8.15 0.0 Lecturers: doc. PaedDr. Mária Slavíčková, PhD. Last change: 02.06.2015

Strana: 18

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID:** Course title: FMFI.KAG+KDMFI/2-Didactics of Mathematics (2) UMA-106/15 **Educational activities:** Type of activities: seminar **Number of hours:** per week: 3 per level/semester: 39 Form of the course: on-site learning Number of credits: 2 **Recommended semester: 5.** Educational level: D, II. **Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 115 \mathbf{C} D Е FX 72.17 16,52 7.83 3,48 0.0 0.0 Lecturers: Mgr. Michaela Vargová, PhD. Last change: 02.06.2015

Strana: 19

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID:** Course title: FMFI.KMANM/2-Didactics of Mathematics in Praxis (1) UMA-259/15 **Educational activities:** Type of activities: seminar **Number of hours:** per week: 3 per level/semester: 39 Form of the course: on-site learning Number of credits: 2 **Recommended semester:** 5. **Educational level: II. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 83 Α \mathbf{C} D FX Ε 100.0 0.0 0.0 0.0 0.0 0.0 Lecturers: Mgr. Jana Trúsiková, PhD., doc. RNDr. Zbyněk Kubáček, CSc. Last change: 30.01.2022 Approved by:

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:

Course title:

FMFI.KMANM/2-UMA-260/15 Didactics of Mathematics in Praxis (2)

Educational activities: Type of activities: seminar

Number of hours:

per week: 2 per level/semester: 26 Form of the course: on-site learning

Number of credits: 2

Recommended semester: 6.

Educational level: II.

Prerequisites:

Course requirements:

Ongoing evaluation: homeworks

Indicative rating scale: A 90%, B 80%, C 70%, D 60%, E 50%

Scale of assessment (preliminary/final): 100/0

Learning outcomes:

Students will be prepared for the situations they will experience in the school reality of teaching mathematics in secondary school. They will know various teaching techniques, methods of interpretation, working with the textbook as well as supplementary materials, various forms of written and oral examinations, as well as methods of correcting children's solutions. They will learn to distinguish which statements help students and which harms them.

Class syllabus:

Evaluation and classification. Preparations, analysis and corrections of written works and tests (topics will be documented in the secondary school curriculum).

Recommended literature:

Aj geometria naučila človeka myslieť / Milan Hejný. Bratislava : Slovenské pedagogické nakladateľstvo, 1990

Dítě, škola a matematika : Konstruktivistické přístupy k vyučování / Milan Hejný, František Kuřina. Praha : Portál, 2001

Stavba planimetrie / Ján Gatial, Milan Hejný. Bratislava : Slovenské pedagogické nakladateľstvo, 1973

Teória vyučovania matematiky 2 / Milan Hejný ... [et al.]. Bratislava : Slovenské pedagogické nakladateľstvo. 1990

Analýza řešení slovních úloh : Kapitoly z didaktiky matematiky. / Jarmila Novotná.. Praha : Univerzita Karlova, 2000.

Languages necessary to complete the course:

Slovak, English

Notes:								
Past grade distribution Total number of evaluated students: 65								
A	В	С	D	Е	FX			
100,0	0,0	0,0	0,0	0,0	0,0			
Lecturers: Mg	r. Jana Trúsiková,	PhD., doc. RND	r. Zbyněk Kubá	ček, CSc.				
Last change: 15.03.2022								
Approved by:								

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:

Course title:

FMFI.KDMFI/2-UMA-151/15 | Didactics of Teaching Mathematics in Digital Environment

Educational activities:

Type of activities: seminar

Number of hours:

per week: 2 per level/semester: 26 Form of the course: on-site learning

Number of credits: 2

Recommended semester: 3.

Educational level: II.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 85

A	В	С	D	Е	FX
55,29	15,29	17,65	4,71	4,71	2,35

Lecturers: RNDr. Monika Dillingerová, PhD., doc. PaedDr. Monika Tomcsányiová, PhD.

Last change: 02.06.2015

Approved by:

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KAG/2-UDG-115/00 **Differential Geometry Educational activities:** Type of activities: course **Number of hours:** per week: 3 per level/semester: 39 Form of the course: on-site learning Number of credits: 4 Recommended semester: 1. **Educational level: II. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 20 В C Α D E FX 45,0 25,0 15,0 5,0 5,0 5,0 Lecturers: doc. RNDr. Pavel Chalmovianský, PhD. Last change: 02.06.2015 Approved by:

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KDMFI/1-UXX-137/15 Digital Technologies (1) **Educational activities:** Type of activities: seminar **Number of hours:** per week: 2 per level/semester: 26 Form of the course: on-site learning Number of credits: 3 **Recommended semester:** 1. **Educational level:** I., II. **Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 164 Α В \mathbf{C} D E FX 70,73 7,32 14,02 2,44 0,61 4,88 Lecturers: Mgr. Mária Čujdíková, PhD., doc. PaedDr. Monika Tomcsányiová, PhD.

Strana: 25

Last change: 02.06.2015

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:

Course title:

FMFI.KDMFI/1-UXX-138/15

Digital Technologies (2)

Educational activities:

Type of activities: seminar

Number of hours:

per week: 2 per level/semester: 26 Form of the course: on-site learning

Number of credits: 3

Recommended semester: 2.

Educational level: I., II.

Prerequisites: FMFI.KDMFI/1-UXX-137/15 - Digital Technologies (1)

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 136

A	В	С	D	Е	FX
69,85	17,65	7,35	0,0	2,21	2,94

Lecturers: Mgr. Mária Čujdíková, PhD., doc. PaedDr. Monika Tomcsányiová, PhD.

Last change: 02.06.2015

Approved by:

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:

Course title:

FMFI.KDMFI/1-UXX-236/15

Digital Technologies (3)

Educational activities:

Type of activities: seminar

Number of hours:

per week: 2 per level/semester: 26 Form of the course: on-site learning

Number of credits: 3

Recommended semester: 4.

Educational level: I., II.

Prerequisites: FMFI.KDMFI/1-UXX-137/15 - Digital Technologies (1)

Course requirements:

Intermediate assessment: assignments (must get min. 50% points), essay (required, 25%)

Indicative evaluation scale: A 92%, B 84%, C 76%, D 68%, E 60%

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 115

A	В	С	D	Е	FX
73,04	13,04	5,22	3,48	0,87	4,35

Lecturers: PaedDr. Roman Hrušecký, PhD., PaedDr. Andrea Hrušecká, PhD.

Last change: 21.06.2022

Approved by:

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:

Course title:

FMFI.KDMFI+KAG/1-

UXX-237/15

Digital Technologies (4)

Educational activities:

Type of activities: seminar

Number of hours:

per week: 2 per level/semester: 26 Form of the course: on-site learning

Number of credits: 3

Recommended semester: 5.

Educational level: I., II.

Prerequisites: FMFI.KDMFI/1-UXX-137/15 - Digital Technologies (1)

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 86

A	В	С	D	Е	FX
76,74	13,95	5,81	2,33	1,16	0,0

Lecturers: doc. PaedDr. Monika Tomcsányiová, PhD., RNDr. Martina Bátorová, PhD., PaedDr. Lukáš Bartošovič, PhD.

Last change: 02.06.2015

Approved by:

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KDMFI/1-UXX-341/15 Digital Technologies (5) **Educational activities:** Type of activities: seminar **Number of hours:** per week: 2 per level/semester: 26 Form of the course: on-site learning Number of credits: 3 **Recommended semester:** 6. **Educational level:** I., II. **Prerequisites:** FMFI.KDMFI/1-UXX-137/15 - Digital Technologies (1) **Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 44 C Α В D Ε FX 65,91 11,36 11,36 6,82 2,27 2,27

Lecturers: RNDr. Monika Dillingerová, PhD.

Last change: 02.06.2015

Approved by:

STATE EXAM DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:
FMFI.KAG+KDMFI/2UXX-991/15

Number of credits: 14

Educational level: II.

State exam syllabus:

Last change: 02.06.2015

Approved by:

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KAG/2-UXX-931/10 Diploma Thesis in Descriptive Geometry Seminar **Educational activities:** Type of activities: seminar **Number of hours:** per week: 2 per level/semester: 26 Form of the course: on-site learning Number of credits: 2 **Recommended semester:** 5. **Educational level: II. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 15 Α В \mathbf{C} D E FX 93,33 0,0 0,0 6,67 0,0 0,0Lecturers: RNDr. Soňa Kudličková, CSc. Last change: 02.06.2015 Approved by:

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KDMFI/2-UXX-937/10 Diploma Thesis in Mathematics Seminar **Educational activities:** Type of activities: seminar **Number of hours:** per week: 2 per level/semester: 26 Form of the course: on-site learning Number of credits: 2 **Recommended semester:** 5. **Educational level: II. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 62 Α В \mathbf{C} D E FX 61,29 12,9 16,13 4,84 3,23 1,61 Lecturers: PaedDr. Peter Vankúš, PhD. Last change: 02.06.2015 Approved by:

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KAG/2-UMA-207/15 Elementary Theory of Quadratic Figures **Educational activities:** Type of activities: course **Number of hours:** per week: 3 per level/semester: 39 Form of the course: on-site learning Number of credits: 4 **Recommended semester: 3. Educational level: II. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 131 \mathbf{C} Α В D E FX 19,08 25,95 9,92 21,37 15,27 8,4 Lecturers: RNDr. Martina Bátorová, PhD. Last change: 02.06.2015

Strana: 33

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:

Course title:

FMFI.KAI/2-MXX-130/21

Elements of AI

Educational activities:

Type of activities: independent work

Number of hours:

per week: 25 per level/semester: 325 Form of the course: on-site learning

Number of credits: 2

Recommended semester: 1.

Educational level: II.

Prerequisites:

Course requirements:

Passing the online course https://course.elementsofai.com/ (in Enlish or Slovak version).

Learning outcomes:

The student will get acquainted with selected basic concepts of artificial intelligence and their use in solving various practical tasks.

Class syllabus:

- 1. What is artificial intelligence: related areas, AI philosophy.
- 2. Troubleshooting and UI: Browsing and troubleshooting, browsing and games
- 3. Probability and chance, Bayes' theorem, naive Bayesian classification.
- 4. Machine learning: nearest neighbor classifier, regression.
- 5. Neural networks: basics, creation, modern techniques.
- 6. Consequences: on predicting the future, the effects of AI on society, summary.

Recommended literature:

Russell S., Norwig P. (2010). Artificial Intelligence: A Modern Approach, (3rd ed.), Prentice Hall. Available in faculty library.

Marsland S. (2015). Machine Learning: An Algorithmic Perspective, (2nd ed.), CRC Press.

Languages necessary to complete the course:

Slovak or English

Notes:

The course consists of 20 numerical and 5 text-based tasks. Numerical tasks are checked automatically, text-based tasks are evaluated anonymously by students.

Past grade distribution

Total number of evaluated students: 37

A	В	С	D	Е	FX
100,0	0,0	0,0	0,0	0,0	0,0

Lecturers: doc. RNDr. Mária Markošová, PhD.

Last change: 22.08.2021	
Approved by:	

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:

Course title:

FMFI.KAI/2-MXX-130/21

Elements of AI

Educational activities:

Type of activities: independent work

Number of hours:

per week: 25 per level/semester: 325 Form of the course: on-site learning

Number of credits: 2

Recommended semester: 2.

Educational level: II.

Prerequisites:

Course requirements:

Passing the online course https://course.elementsofai.com/ (in Enlish or Slovak version).

Learning outcomes:

The student will get acquainted with selected basic concepts of artificial intelligence and their use in solving various practical tasks.

Class syllabus:

- 1. What is artificial intelligence: related areas, AI philosophy.
- 2. Troubleshooting and UI: Browsing and troubleshooting, browsing and games
- 3. Probability and chance, Bayes' theorem, naive Bayesian classification.
- 4. Machine learning: nearest neighbor classifier, regression.
- 5. Neural networks: basics, creation, modern techniques.
- 6. Consequences: on predicting the future, the effects of AI on society, summary.

Recommended literature:

Russell S., Norwig P. (2010). Artificial Intelligence: A Modern Approach, (3rd ed.), Prentice Hall. Available in faculty library.

Marsland S. (2015). Machine Learning: An Algorithmic Perspective, (2nd ed.), CRC Press.

Languages necessary to complete the course:

Slovak or English

Notes:

The course consists of 20 numerical and 5 text-based tasks. Numerical tasks are checked automatically, text-based tasks are evaluated anonymously by students.

Past grade distribution

Total number of evaluated students: 37

A	A	В	C	D	E	FX
10	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: doc. RNDr. Mária Markošová, PhD.

Last change: 22.08.2021	
Approved by:	

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID: Course title:

FMFI.KJP/1-MXX-233/13 English Conversation Course (1)

Educational activities:

Type of activities: practicals

Number of hours:

per week: 2 per level/semester: 26 Form of the course: on-site learning

Number of credits: 2

Recommended semester: 1., 3.

Educational level: I., II.

Prerequisites:

Course requirements:

tests, presentations, essays

Course prerequisites:

https://fmph.uniba.sk/microsites/kjp/katedra-jazykovej-pripravy/poziadavky-na-udelenie-

priebezneho-hodnotenia-aj1aj2aj3-ostatne-kurzy/ Scale of assessment (preliminary/final): 100/0

Learning outcomes:

Continual improvement of all language skills focused on communication/speaking, listening comprehension and writing. The emphasis is on discourse, lexicology and morphology, word-bank broadening of communicational English as well as English for specific purposes appropriate for university students. This course is a follow up of the previously taught ESP course.

Class syllabus:

This course's focus is to broaden spoken/communicational English for students with B2/C1 level of English knowledge.

Recommended literature:

Appropriate study material is supplied based on the participants'level of English by the lecturer. (Sources- The Guardian, The Herald Morning Sun. The Nine News, The West Australian, BBC News and podcasts, CNN podcasts).

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 215

A	В	С	D	Е	FX
67,44	13,02	6,51	1,86	1,4	9,77

Lecturers: Mgr. Aneta Barnes

Last change: 21.06.2022	
Approved by:	

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:

Course title:

FMFI.KJP/1-MXX-234/13

English Conversation Course (2)

Educational activities:

Type of activities: practicals

Number of hours:

per week: 2 per level/semester: 26 Form of the course: on-site learning

Number of credits: 2

Recommended semester: 2., 4.

Educational level: I., II.

Prerequisites:

Course requirements:

tests, oral presentations, essays

Course prerequisites:

https://fmph.uniba.sk/microsites/kjp/katedra-jazykovej-pripravy/poziadavky-na-udelenie-priebezneho-hodnotenia-aj1aj2aj3-ostatne-kurzy/

Scale of assessment (preliminary/final): 100/0

Learning outcomes:

Continual improvement of all language skills focused on communication/speaking, listening comprehension and writing. The emphasis is on discourse, lexicology and morphology, word-bank broadening of communicational/spoken English as well as English for specific purpose appropriate for university students. This course is a follow up of the Conversational English course 1.

Class syllabus:

This course's focus is to broaden spoken/communicational English for students with B2/C1 level of English knowledge(Upper-Intermediate/Lower Advanced).

Recommended literature:

Appropriate study material is supplied based on the participants'level of English by the lecturer. (Sources- The Guardian, The Herald Morning Sun. The Nine News, The West Australian, BBC News and podcasts, CNN podcasts).

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 146

A	В	С	D	Е	FX
77,4	12,33	3,42	1,37	0,0	5,48

Lecturers: Mgr. Aneta Barnes

Last change: 21.06.2022	
Approved by:	

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID: Course title:

FMFI.KJP/1-MXX-141/00 French Language (1)

Educational activities:

Type of activities: practicals

Number of hours:

per week: 2 per level/semester: 26 Form of the course: on-site learning

Number of credits: 2

Recommended semester: 1.

Educational level: I., II.

Prerequisites:

Course requirements:

Scale of assessment (preliminary/final): 100/0

Learning outcomes:

Class syllabus:

French language is taught at two levels: beginner and intermediate. Students opt for one of them depending on whether they wish to obtain the fundamentals of the language or wish to maintain and/or improve previous knowledge of French.

Recommended literature:

Capelle Guy, Menand Robert: Le Nouveau taxi 1, Hachette FLE Paris, France 2009, ISBN 978-2-01-155548 - 9

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 435

A	В	С	D	E	FX
45,75	20,0	18,85	8,74	2,3	4,37

Lecturers: Mgr. Ľubomíra Kožehubová

Last change: 20.06.2022

Approved by:

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID: Course title:

FMFI.KJP/1-MXX-142/00 French Language (2)

Educational activities:

Type of activities: practicals

Number of hours:

per week: 2 per level/semester: 26 Form of the course: on-site learning

Number of credits: 2

Recommended semester: 2.

Educational level: I., II.

Prerequisites:

Course requirements:

Scale of assessment (preliminary/final): 100/0

Learning outcomes:

Class syllabus:

The subject continues the program of French language (1) and provides courses of essential and intermediate French language.

Recommended literature:

Capelle Guy, Menand Robert: Le Nouveau taxi 1, Hachette FLE Paris, France 2009, ISBN 978-2-01-155548 - 9

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 265

A	В	С	D	Е	FX
38,87	25,28	19,62	10,19	2,64	3,4

Lecturers: Mgr. Ľubomíra Kožehubová

Last change: 20.06.2022

Approved by:

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID: Course title:

FMFI.KJP/1-MXX-241/00 French Language (3)

Educational activities:

Type of activities: practicals

Number of hours:

per week: 2 per level/semester: 26 Form of the course: on-site learning

Number of credits: 2

Recommended semester: 3.

Educational level: I., II.

Prerequisites:

Course requirements:

Scale of assessment (preliminary/final): 100/0

Learning outcomes:

Class syllabus:

The subject provides a course of intermediate French language, covering not only general, but also technical language.

Recommended literature:

Capelle Guy, Menand Robert: Le Nouveau taxi 1, Hachette FLE Paris, France 2009, ISBN 978-2-01-155548 - 9

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 104

A	В	С	D	Е	FX
39,42	27,88	21,15	6,73	0,96	3,85

Lecturers: Mgr. Ľubomíra Kožehubová

Last change: 20.06.2022

Approved by:

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID: Course title:

FMFI.KJP/1-MXX-242/00 French Language (4)

Educational activities:

Type of activities: practicals

Number of hours:

per week: 2 per level/semester: 26 Form of the course: on-site learning

Number of credits: 2

Recommended semester: 4.

Educational level: I., II.

Prerequisites:

Course requirements:

Scale of assessment (preliminary/final): 100/0

Learning outcomes:

Class syllabus:

The subject provides a course of intermediate French covering not only general, but also technical French language.

Recommended literature:

Menand Robert: Le Nouveau taxi 2, Hachette FLE, Paris, France 2009, ISBN 978-2-01-155551 -

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 74

A	В	С	D	Е	FX
41,89	32,43	17,57	2,7	1,35	4,05

Lecturers: Mgr. Ľubomíra Kožehubová

Last change: 20.06.2022

Approved by:

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID: Course title:

FMFI.KJP/1-MXX-151/00 German Language (1)

Educational activities:

Type of activities: practicals

Number of hours:

per week: 2 per level/semester: 26 Form of the course: on-site learning

Number of credits: 2

Recommended semester: 1.

Educational level: I., II.

Prerequisites:

Course requirements:

Scale of assessment (preliminary/final): 100/0

Learning outcomes:

To master the fundamentals of the common language and basic technical terms of particular fields of study (depending on the student's level of German proficiency)

Class syllabus:

German language is taught at three levels: beginner, intermediate and advanced. Students opt for one of them depending on whether they need to learn the fundamentals or maintain and/or improve their previous knowledge.

This course's focus is to master the fundamentals of the common language and basic technical terms of particular fields of study (depending on the student's level of German proficiency)

Recommended literature:

Appropriate study material is supplied by teacher based on the participants' level of German proficiency.

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 734

A	В	С	D	Е	FX
36,1	27,25	19,62	8,99	2,72	5,31

Lecturers: Mgr. Alexandra Maďarová, Mgr. Simona Tomášková, PhD.

Last change: 21.06.2022

Approved by:

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:

Course title:

FMFI.KJP/1-MXX-152/00

German Language (2)

Educational activities:

Type of activities: practicals

Number of hours:

per week: 2 per level/semester: 26 Form of the course: on-site learning

Number of credits: 2

Recommended semester: 2.

Educational level: I., II.

Prerequisites:

Course requirements:

Scale of assessment (preliminary/final): 100/0

Learning outcomes:

To master the fundamentals of the common language and basic technical terms of particular fields of study (depending on the student's level of German proficiency)

Class syllabus:

German language is taught at two levels: beginner and intermediate. Students opt for one of them depending on whether they wish to obtain the fundamentals of the language or wish to maintain and/or improve previous knowledge of German.

This course's focus is to to master the fundamentals of the common language and basic technical terms of particular fields of study (depending on the student's level of German proficiency)

Recommended literature:

Appropriate study material is supplied by teacher based on the participants' level of German proficiency

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 480

A	В	С	D	Е	FX
36,04	20,21	20,83	13,13	3,33	6,46

Lecturers: Mgr. Alexandra Maďarová, Mgr. Simona Tomášková, PhD.

Last change: 21.06.2022

Approved by:

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID: Course title:

FMFI.KJP/1-MXX-251/00 German Language (3)

Educational activities:

Type of activities: practicals

Number of hours:

per week: 2 per level/semester: 26 Form of the course: on-site learning

Number of credits: 2

Recommended semester: 3.

Educational level: I., II.

Prerequisites:

Course requirements:

Scale of assessment (preliminary/final): 100/0

Learning outcomes:

Master the basics of general language and basic professional terminology of individual fields of study (depending on the advanced level of students)

Class syllabus:

The course is a follow-up to the German language (1,2). The subject provides a course of intermediate or advanced German language.

This course's focus is to deepen the knowledge of the common language and basic technical terms of particular fields of study (depending on the student's level of German proficiency).

Recommended literature:

Appropriate study material is supplied by teacher based on the participants' level of German proficiency.

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 165

A	В	С	D	Е	FX
41,21	25,45	20,61	6,67	2,42	3,64

Lecturers: Mgr. Alexandra Maďarová, Mgr. Simona Tomášková, PhD.

Last change: 21.06.2022

Approved by:

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID: Course title:

FMFI.KJP/1-MXX-252/00 German Language (4)

Educational activities:

Type of activities: practicals

Number of hours:

per week: 2 per level/semester: 26 Form of the course: on-site learning

Number of credits: 2

Recommended semester: 4.

Educational level: I., II.

Prerequisites:

Course requirements:

Scale of assessment (preliminary/final): 100/0

Learning outcomes:

Master the basics of general language and basic professional terminology of individual fields of study (depending on the advanced level of students)

Class syllabus:

The course is a follow-up to the German language (1-3). It provides a course of intermediate and advanced German language.

This course's focus is to deepen the knowledge of the common language and basic technical terms of particular fields of study (depending on the student's level of German proficiency).

Recommended literature:

Appropriate study material is supplied by teacher based on the participants' level of German proficiency.

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 90

A	В	С	D	Е	FX
42,22	24,44	12,22	12,22	3,33	5,56

Lecturers: Mgr. Alexandra Maďarová, Mgr. Simona Tomášková, PhD.

Last change: 21.06.2022

Approved by:

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID:** Course title: FMFI.KDMFI/2-UXX-108/00 History of Informatics **Educational activities:** Type of activities: seminar **Number of hours:** per week: 2 per level/semester: 26 Form of the course: on-site learning Number of credits: 2 Recommended semester: 4. Educational level: II. **Prerequisites: Course requirements:** Continuous assessment: active participation in class, presentation Indicative assessment scale: A 90%, B 80%, C 70%, D 60%, E 50% Scale of assessment (preliminary/final): 100/0 **Learning outcomes:** Students will know the basic milestones in the history of storing, transmitting and processing information from antiquity to the present day, as well as a brief history of computer science. Class syllabus: • History of storage, transmission and processing of information (various storage media: stone, clay, papyrus, parchment, paper, magnetic record; • information transmission: messenger, sound and light signals, wire telegraph I wireless, radio, television, internet; • information processing: fonts, positional systems, analog aids, the first calculators, the idea of a universal computer, digital machines, the first electromechanical and electronic computers, a brief look at the development of computer technology after the Second World War). • History of informatics: algorithm, development in mathematics that influenced informatics: algebra, variables, mathematics mathematics, development of analysis, logic, decidability, computability, efficiency. • Brief overview of the history of computer technology and informatics in Slovakia (within Czechoslovakia) **Recommended literature:** - Teacher's own electronic study materials published on the course website or in the Moodle system - Gruska, Havel, Zelený, Wiedermann. Počítačová revolúcia, Sofsem 1984 Languages necessary to complete the course:

Strana: 50

Slovak

Notes:

Past grade distribution Total number of evaluated students: 89							
A B C D				Е	FX		
100,0	0,0	0,0	0,0	0,0	0,0		
Lecturers: RN	Dr. Michal Wincz	zer, PhD.					
Last change: 17.06.2022							
Approved by:	Approved by:						

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KAG/2-UXX-103/00 History of Mathematics **Educational activities:** Type of activities: seminar **Number of hours:** per week: 2 per level/semester: 26 Form of the course: on-site learning Number of credits: 2 **Recommended semester:** 4. **Educational level: II. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 43 C Α В D E FX 79,07 4,65 0,0 13,95 0,0 2,33 Lecturers: prof. RNDr. Ladislav Kvasz, Dr. Last change: 02.06.2015 Approved by:

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID:** Course title: FMFI.KAG+KDMFI/2-Introduction to Didactics of Mathematics UMA-104/15 **Educational activities:** Type of activities: seminar **Number of hours:** per week: 3 per level/semester: 39 Form of the course: on-site learning Number of credits: 3 **Recommended semester: 3.** Educational level: D, II. **Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 142 \mathbf{C} D Е FX 92.25 4.93 0.7 0.7 0.0 1,41 Lecturers: doc. PaedDr. Mária Slavíčková, PhD. Last change: 02.06.2015 Approved by:

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID: Course title:

FMFI.KAG+KI/2- Introduction to Graph Theory

UMA-164/15

Educational activities:

Type of activities: course

Number of hours:

per week: 3 per level/semester: 39 Form of the course: on-site learning

Number of credits: 3

Recommended semester: 4.

Educational level: II.

Prerequisites:

Antirequisites: FMFI.KAGDM/1-UMA-311/00

Course requirements:

Continuous evaluation: homework (20 p.)

Final exam: written (80 p.)

Grades: A 90%, B 80%, C 70%, D 60%, E 50% Scale of assessment (preliminary/final): 20/80

Learning outcomes:

Knowledge of basic concepts and results of graph theory, solutions of specific tasks which can be expressed in the language of graph theory.

Class syllabus:

Concept of graph, connectivity, metrics, finding shortest path, walks in graphs, trees, finding optimal tree, travelling salesman problem, matching in biparted graphs, perfect matching, planar graphs, Euler formula, coloring graphs and maps.

Recommended literature:

Kapitoly z diskrétní matematiky / Jiří Matoušek, Jaroslav Nešetřil. Praha : Karolinum, 2000 Applied and algorithmic graph theory / Gary Chartrand, Ortrud R. Oellermann. New York : McGraw Hill. 1993

Graph theory and its applications / Jonathan L. Gross, Jay Yellen. Boca Raton, Fla. : Chapman & Hall, 2006

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 101

A	В	С	D	Е	FX
95,05	3,96	0,0	0,0	0,99	0,0

Lecturers: RNDr. Jana Tomanová, CSc.
Last change: 19.06.2022
Approved by:

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:

Course title:

FMFI.KDMFI/2-UMA-218/11 | Mathematical Background of Music

Educational activities:

Type of activities: seminar

Number of hours:

per week: 2 per level/semester: 26 Form of the course: on-site learning

Number of credits: 2

Recommended semester: 5.

Educational level: II.

Prerequisites:

Course requirements:

Continuous assessment: individual work of students, project

Indicative assessment scale: A 90%, B 80%, C 70%, D 60%, E 50%

Scale of assessment (preliminary/final): 100/0

Learning outcomes:

By completing the course, the student will deepen and combine knowledge of basic mathematics courses in bachelor's studies in the study program mathematics teacher preparation in combination, build on knowledge of mathematics didactics and broaden horizons in the context of creating lessons using interdisciplinary relationships.

Class syllabus:

Selected parts of music theory from the point of view of mathematics, connection to mathematics from lower secondary school to university, related to the teaching of mathematics, preparation of interdisciplinary projects and activities for direct inclusion in teaching and leisure activities.

Recommended literature:

Mathematics and Art / Bruter (Ed.), Springer

Hudba ako zdroj námetov vo vyučovaní matematiky / M. Slavíčková, In. Matematika, informatika, fyzika. Roč. 21, č. 38 (2012), s. 3-8. ISSN 1335-7794

Chladniho obrazce / E. Dubajová, (časť diplomovej práce), dostupné na https://wilma.sk/dokumenty/ef0ed9b0f05bd757ddcf91b96794b0cf/show

The Science of Sound / T. D. Rossing, R. F. Moore, P. A. Wheeler, 3. vyd., Pearson, 2014 Music: A Mathematical Offering / D. Benson, Department of Mathematics, Meston Building, University of Aberdeen, UK. 2008

Languages necessary to complete the course:

slovak, english

Notes:

To complete the course, it is recommended to have at least a basic knowledge of music theory (min. of 2 years music school)

Past grade distribution Total number of evaluated students: 13							
A B C D E					FX		
100,0	0,0	0,0	0,0	0,0	0,0		
Lecturers: doc.	PaedDr. Mária S	slavíčková, PhD.					
Last change: 17.03.2022							
Approved by:	Approved by:						

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KDMFI/2-UMA-231/10 Mathematical Competitions and Seminars **Educational activities:** Type of activities: seminar **Number of hours:** per week: 2 per level/semester: 26 Form of the course: on-site learning Number of credits: 2 **Recommended semester:** 3., 5. **Educational level: II. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 64 Α В \mathbf{C} D E FX 100,0 0,0 0,0 0,0 0,0 0,0Lecturers: PaedDr. Peter Vankúš, PhD. Last change: 24.04.2017 Approved by:

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:

Course title:

FMFI.KAG+KDMFI/2-

UMA-257/15

Methods for Solving Mathematical Tasks (1)

Educational activities:

Type of activities: seminar

Number of hours:

per week: 2 per level/semester: 26 Form of the course: on-site learning

Number of credits: 2

Recommended semester: 3.

Educational level: II.

Prerequisites:

Course requirements:

Continuous assessment: Homework - individual work of students Indicative assessment scale: A 90%, B 80%, C 70%, D 60%, E 50%

Scale of assessment (preliminary/final): 100/0

Learning outcomes:

After completing the course, students will master methods of solving various mathematical tasks from the curriculum of lower and upper secondary school and will be able to apply these methods in the teaching of mathematics.

Class syllabus:

Generally about solving mathematical tasks, basic methods of solving mathematical tasks—patterns identification and conclusion making, figural approaches to solving, formulating equivalent problems, modifying the problem, choosing effective marking, using symmetry, dividing the problem into several special cases, reverse procedure, indirect procedure, use of parity, mathematical induction, Dirichlet (Pigeon) principle.

Recommended literature:

Metódy riešenia matematických problémov / L. C. Larson ; from the American original translated by Jaroslav Smítal. Bratislava : Alfa, 1990

Metódy riešenia matematických úloh / Tomáš Hecht, Zita Sklenáriková. Bratislava : Slovenské pedagogické nakladateľstvo, 1992

Tasks from Mathematical Olympiad and Mathematical correspondence seminars

Languages necessary to complete the course:

Slovak, English

Notes:

Past grade distribution Total number of evaluated students: 120							
A	В	С	D	Е	FX		
87,5	5,0	1,67	0,0	0,83	5,0		
Lecturers: Mgr	: Emília Miťková	i, PhD.		_			
Last change: 17.03.2022							
Approved by:							

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KAG+KDMFI/2-Methods for Solving Mathematical Tasks (2) UMA-258/15 **Educational activities:** Type of activities: seminar **Number of hours:** per week: 3 per level/semester: 39 Form of the course: on-site learning Number of credits: 2 Recommended semester: 4. **Educational level: II. Prerequisites: Course requirements:** Continuous assessment: Homework - individual work of students Indicative assessment scale: A 90%, B 80%, C 70%, D 60%, E 50% Scale of assessment (preliminary/final): 100/0 **Learning outcomes:** After completing the course, students will master methods of solving various mathematical tasks from the curriculum of lower and upper secondary school and will be able to apply these methods in the teaching of mathematics. Class syllabus: Equations, inequalities, systems of equations and inequalities, sets of points of given properties, analytical geometry, construction tasks, planimetric tasks, stereometric tasks, inequalities in geometry, number theory, diophantic equations, combinatorial geometry, sequences, recurrent relationships, trigonometry and complex numbers, probability. **Recommended literature:** Metódy riešenia matematických problémov / L. C. Larson; from the American original translated by Jaroslav Smítal. Bratislava: Alfa, 1990 Metódy riešenia matematických úloh / Tomáš Hecht, Zita Sklenáriková. Bratislava : Slovenské pedagogické nakladateľstvo, 1992 Tasks from Mathematical Olympiad and Mathematical correspondence seminars

Languages necessary to complete the course:

Slovak, English

Notes:

Past grade distribution Total number of evaluated students: 78							
A B C D E FX							
92,31	3,85	1,28	0,0	0,0	2,56		
Lecturers: Mgr. Emília Miťková, PhD.							
Last change: 17.03.2022							
Approved by:							

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KAG/1-UDG-112/15 Methods of Projections (1) **Educational activities:** Type of activities: lecture / practicals **Number of hours:** per week: 3 / 2 per level/semester: 39 / 26 Form of the course: on-site learning Number of credits: 6 **Recommended semester:** 1. **Educational level:** I., II. **Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 11

Α	В	С	D	Е	FX
36,36	0,0	45,45	18,18	0,0	0,0

Lecturers: RNDr. Martina Bátorová, PhD., RNDr. Soňa Kudličková, CSc.

Last change: 02.06.2015

Approved by:

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:**

FMFI.KAG/1-UDG-113/15

Methods of Projections (2)

Educational activities:

Type of activities: lecture / practicals

Number of hours:

per week: 2 / 2 per level/semester: 26 / 26

Form of the course: on-site learning

Number of credits: 5

Recommended semester: 2.

Educational level: I., II.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 12

A	В	С	D	Е	FX
25,0	16,67	25,0	16,67	8,33	8,33

Lecturers: RNDr. Martina Bátorová, PhD., RNDr. Soňa Kudličková, CSc.

Last change: 02.06.2015

Approved by:

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KMANM+KAG/1-Methods of Projections (3) UDG-212/15 **Educational activities:** Type of activities: lecture / practicals **Number of hours:** per week: 2 / 2 per level/semester: 26 / 26 Form of the course: on-site learning Number of credits: 5 **Recommended semester: 3. Educational level:** I., II. **Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 14 \mathbf{C} D FX Ε 21.43 28,57 7.14 14,29 14,29 14,29

Lecturers: RNDr. Kristína Rostás, PhD.

Last change: 02.06.2015

Approved by:

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KMANM+KAG/1-Methods of Projections (4) UDG-213/15 **Educational activities:** Type of activities: lecture / practicals **Number of hours:** per week: 2 / 2 per level/semester: 26 / 26 Form of the course: on-site learning **Number of credits: 5** Recommended semester: 4. **Educational level:** I., II. **Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 13

A	В	С	D	Е	FX
38,46	7,69	23,08	15,38	7,69	7,69

Lecturers: RNDr. Kristína Rostás, PhD., Mgr. Alžbeta Mackovová

Last change: 02.06.2015

Approved by:

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:

Course title:

FMFI.KDMFI/2-UMA-114/15

New Pedagogical Approaches in Teaching Not Only Mathematics

Educational activities:

Type of activities: seminar

Number of hours:

per week: 3 per level/semester: 39 Form of the course: on-site learning

Number of credits: 2

Recommended semester: 5.

Educational level: D, II.

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

A	В	С	D	Е	FX
85,71	7,14	4,76	0,0	0,0	2,38

Lecturers: RNDr. Monika Dillingerová, PhD.

Last change: 22.05.2019

Approved by:

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KAG/2-UMA-162/15 Non-Euclidean Geometry **Educational activities:** Type of activities: course **Number of hours:** per week: 3 per level/semester: 39 Form of the course: on-site learning Number of credits: 3 **Recommended semester:** 5. **Educational level: II. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 34 C Α В D E FX 61,76 20,59 2,94 8,82 5,88 0,0Lecturers: doc. RNDr. Pavel Chalmovianský, PhD. Last change: 02.06.2015 Approved by:

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KAI/1-UXX-231/18 Pedagogic Communication **Educational activities:** Type of activities: course **Number of hours:** per week: 2 per level/semester: 26 Form of the course: on-site learning Number of credits: 3 **Recommended semester:** 4. Educational level: D, I., II. **Prerequisites:** Antirequisites: FMFI-Prif.KDPP/1-UXX-231/10 **Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:**

Past grade distribution

Total number of evaluated students: 213

A	В	C	D	Е	FX
48,83	19,72	13,62	9,86	2,82	5,16

Lecturers: doc. RNDr. Martin Takáč, PhD.

Last change: 07.05.2018

Approved by:

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KDMFI/2-UXX-121/18 Pedagogic Diagnostics **Educational activities:** Type of activities: lecture **Number of hours:** per week: 2 per level/semester: 26 Form of the course: on-site learning Number of credits: 2 **Recommended semester:** 4. **Educational level:** II. **Prerequisites: Antirequisites:** FMFI-Prif.KDPP/2-UXX-121/15 **Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 297

A	В	С	D	Е	FX
44,78	27,95	18,18	5,39	2,36	1,35

Lecturers: Mgr. Lucia Budinská, PhD., Mgr. Karolína Miková, PhD.

Last change: 14.02.2021

Approved by:

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KDMFI/2-UXX-123/15 Pedagogic Research Methodology (1) **Educational activities:** Type of activities: course **Number of hours:** per week: 2 per level/semester: 26 Form of the course: on-site learning Number of credits: 2 **Recommended semester: 3. Educational level:** II. **Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 136 Α В \mathbf{C} D E FX 69,12 19,12 5,88 1,47 2,21 2,21 Lecturers: Mgr. Karolína Miková, PhD., PaedDr. Peter Vankúš, PhD. Last change: 08.06.2017

Strana: 71

Approved by:

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KDMFI/2-UXX-124/15 Pedagogic Research Methodology (2) **Educational activities:** Type of activities: course **Number of hours:** per week: 2 per level/semester: 26 Form of the course: on-site learning Number of credits: 2 **Recommended semester:** 4. **Educational level:** II. **Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 43 Α В \mathbf{C} D E FX 65,12 16,28 2,33 2,33 2,33 11,63

Lecturers: PaedDr. Peter Vankúš, PhD., Mgr. Karolína Miková, PhD.

Last change: 08.06.2017

Approved by:

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI-PriF.KDPP/2-Philosophical Anthropology and Axiology UXX-122/15 **Educational activities:** Type of activities: lecture **Number of hours:** per week: 2 per level/semester: 26 Form of the course: on-site learning Number of credits: 2 **Recommended semester: 3. Educational level:** II. **Prerequisites:** Antirequisites: FMFI-PriF.KDPP/2-UXX-122/10 **Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 155 В \mathbf{C} Α D Е FX 76.77 18,06 3.23 1.29 0.65 0.0 Lecturers: Mgr. Štefan Zolcer, PhD.

Last change: 02.06.2015

Approved by:

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:

Course title:

FMFI.KTV/2-MXX-110/00

Physical Education and Sport (1)

Educational activities:

Type of activities: practicals

Number of hours:

per week: 2 per level/semester: 26 Form of the course: on-site learning

Number of credits: 2

Recommended semester: 1.

Educational level: II.

Prerequisites:

Course requirements:

Scale of assessment (preliminary/final): 100/0

Learning outcomes:

Class syllabus:

Practicing of the students' game skills in collective sports: basketball, volleyball, football, floorball and hockey. Mastering of the basic technique of a particular sport discipline in other sports. In paddling, basic training on still and slightly flowing water. Development of coordination skills, improvement of articular mobility and cardiovascular system.

Recommended literature:

Languages necessary to complete the course:

Slovak, English

Notes:

Past grade distribution

Total number of evaluated students: 1657

A	В	С	D	E	FX
98,37	0,6	0,06	0,0	0,0	0,97

Lecturers: PaedDr. Dana Mašlejová, Mgr. Ladislav Mókus, Mgr. Jana Leginusová, Mgr. Tomáš Kuchár, PhD., PaedDr. Mikuláš Ortutay, Mgr. Martin Dovičák, PhD., Mgr. Júlia Raábová, PhD., Mgr. Branislav Nedbálek, Mgr. Tomáš Lovecký

Last change: 15.03.2022

Approved by:

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:

Course title:

FMFI.KTV/2-MXX-120/00

Physical Education and Sport (2)

Educational activities:

Type of activities: practicals

Number of hours:

per week: 2 per level/semester: 26 Form of the course: on-site learning

Number of credits: 2

Recommended semester: 2.

Educational level: II.

Prerequisites:

Course requirements:

Scale of assessment (preliminary/final): 100/0

Learning outcomes:

Class syllabus:

Practicing of offensive and defensive game combinations and playing with modified rules in collective sports such as basketball, volleyball, football, floorball, hockey. Command of elements of higher difficulty in locomotion skills (swimming - crawl stroke, breast stroke, butterfly stroke, trampoline jumping and aerobics – practicing of areobics compositions, bodybuilding – development of the main muscle groups, paddling on running water. Testing of the level of physical fitness and coordination skills.

Recommended literature:

Languages necessary to complete the course:

Slovak, English

Notes:

Past grade distribution

Total number of evaluated students: 1557

A	В	С	D	Е	FX
98,52	0,39	0,06	0,06	0,06	0,9

Lecturers: Mgr. Martin Dovičák, PhD., Mgr. Tomáš Kuchár, PhD., Mgr. Jana Leginusová, PaedDr. Dana Mašlejová, Mgr. Ladislav Mókus, Mgr. Branislav Nedbálek, PaedDr. Mikuláš Ortutay, Mgr. Júlia Raábová, PhD., Mgr. Tomáš Lovecký

Last change: 15.03.2022

Approved by:

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:

Course title:

FMFI.KTV/2-MXX-210/00

Physical Education and Sport (3)

Educational activities:

Type of activities: practicals

Number of hours:

per week: 2 per level/semester: 26 Form of the course: on-site learning

Number of credits: 2

Recommended semester: 3.

Educational level: II.

Prerequisites:

Course requirements:

Scale of assessment (preliminary/final): 100/0

Learning outcomes:

Class syllabus:

To improve offensive and defensive game combinations in collective sports. Practicing of tactical and technical elements in individual sports. Compensatory exercises to correct wrong body posture. Stretching. Competition rules in sport disciplines.

Recommended literature:

Languages necessary to complete the course:

Slovak, English

Notes:

Past grade distribution

Total number of evaluated students: 1281

A	В	С	D	Е	FX
98,75	0,47	0,08	0,0	0,0	0,7

Lecturers: PaedDr. Dana Mašlejová, Mgr. Ladislav Mókus, Mgr. Jana Leginusová, Mgr. Tomáš Kuchár, PhD., PaedDr. Mikuláš Ortutay, Mgr. Martin Dovičák, PhD., Mgr. Júlia Raábová, PhD., Mgr. Branislav Nedbálek, Mgr. Tomáš Lovecký

Last change: 15.03.2022

Approved by:

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:

Course title:

FMFI.KTV/2-MXX-220/00

Physical Education and Sport (4)

Educational activities:

Type of activities: practicals

Number of hours:

per week: 2 per level/semester: 26 Form of the course: on-site learning

Number of credits: 2

Recommended semester: 4.

Educational level: II.

Prerequisites:

Course requirements:

Scale of assessment (preliminary/final): 100/0

Learning outcomes:

Class syllabus:

Sport training for Faculty Championships in a selected sport with modified rules. Selection of sport-talented students into teams of the Faculty Sport League, University League of Bratislava Faculties, and participation in sport events of the Faculty and University.

Recommended literature:

Languages necessary to complete the course:

Slovak, English

Notes:

Past grade distribution

Total number of evaluated students: 1110

A	В	С	D	Е	FX
98,47	0,45	0,09	0,09	0,09	0,81

Lecturers: PaedDr. Dana Mašlejová, Mgr. Ladislav Mókus, Mgr. Jana Leginusová, Mgr. Tomáš Kuchár, PhD., PaedDr. Mikuláš Ortutay, Mgr. Martin Dovičák, PhD., Mgr. Branislav Nedbálek, Mgr. Júlia Raábová, PhD., Mgr. Tomáš Lovecký

Last change: 15.03.2022

Approved by:

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KDMFI/2-UMA-253/19 Problematic Topics of Elementary School Mathematics **Educational activities:** Type of activities: seminar **Number of hours:** per week: 2 per level/semester: 26 Form of the course: on-site learning Number of credits: 2 **Recommended semester: 4. Educational level: II. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 3 C Α В D E FX 100,0 0,0 0,0 0,0 0,0 0,0Lecturers: doc. PaedDr. Mária Slavíčková, PhD. Last change: Approved by:

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:

Course title:

FMFI-PriF.KDPP/1-

Psychology for Teachers (1)

UXX-141/15

Educational activities:

Type of activities: lecture / seminar

Number of hours:

per week: 2/2 per level/semester: 26/26

Form of the course: on-site learning

Number of credits: 4

Recommended semester: 1.

Educational level: D, I., II.

Prerequisites:

Antirequisites: FMFI-PriF.KDPP/1-UXX-131/10

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 576

A	В	С	D	Е	FX
19,97	14,93	24,31	19,1	17,19	4,51

Lecturers: RNDr. Jana Ciceková, PhD., PhDr. ThLic. Peter Ikhardt, PhD.

Last change: 09.09.2019

Approved by:

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:

Course title:

FMFI.KDMFI/1-UXX-142/15

Psychology for Teachers (2)

Educational activities:

Type of activities: lecture / seminar

Number of hours:

per week: 2 / 2 per level/semester: 26 / 26

Form of the course: on-site learning

Number of credits: 4

Recommended semester: 2.

Educational level: D, I., II.

Prerequisites: FMFI-PriF.KDPP/1-UXX-141/15 - Psychology for Teachers (1)

Antirequisites: FMFI-PriF.KDPP/1-UXX-135/10

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 511

A	В	С	D	Е	FX
24,66	16,44	19,57	22,7	13,89	2,74

Lecturers: RNDr. Jana Ciceková, PhD.

Last change: 02.06.2015

Approved by:

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID: Course title:

FMFI.KJP/1-MXX-161/00 Russian Language (1)

Educational activities:

Type of activities: practicals

Number of hours:

per week: 2 per level/semester: 26 Form of the course: on-site learning

Number of credits: 2

Recommended semester: 1.

Educational level: I., II.

Prerequisites:

Course requirements:

Scale of assessment (preliminary/final): 100/0

Learning outcomes:

Basic communication in Russian, developing other Russian language skills - listening comprehension, reading and writing.

Class syllabus:

To master the fundamentals of general Russian. The language level is A1.

Learning the Cyrillic (Russian) alphabet, gaining basic language competence, building up skills and confidence in dealing with unfamiliar authentic and semi-authentic texts.

The subject provides a course in Russian language for beginners.

Recommended literature:

The textbook: : Точка Ру А1 (Ольга Долматова, Екатерина Новачац), pracovné karty Падежи 1 (Л.С. Безкоровайная, В.Е. Штыленко).

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 707

A	В	С	D	Е	FX
58,56	16,55	11,03	4,38	1,84	7,64

Lecturers: Viktoria Mirsalova

Last change: 20.06.2022

Approved by:

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID: Course title:

FMFI.KJP/1-MXX-162/00 Russian Language (2)

Educational activities:

Type of activities: practicals

Number of hours:

per week: 2 per level/semester: 26 Form of the course: on-site learning

Number of credits: 2

Recommended semester: 2.

Educational level: I., II.

Prerequisites:

Course requirements:

Scale of assessment (preliminary/final): 100/0

Learning outcomes:

Basic communication in Russian, developing other Russian language skills - listening comprehension, reading and writing.

Class syllabus:

To master the fundamentals of general Russian.

Learning the Cyrillic (Russian) alphabet, gaining basic language competence, building up skills and confidence in dealing with unfamiliar authentic and semi-authentic texts.

The subject continues the program of Russian language (1) and provides a course of Russian for beginners.

Recommended literature:

Textbook: Точка Ру А1 (Ольга Долматова, Екатерина Новачац), pracovné karty Падежи 1 (Л.С. Безкоровайная, В.Е. Штыленко).

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 421

L	A	В	С	D	Е	FX
	65,08	15,68	8,79	3,8	0,95	5,7

Lecturers: Viktoria Mirsalova

Last change: 20.06.2022

Approved by:

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID: Course title:

FMFI.KJP/1-MXX-261/00 Russian Language (3)

Educational activities:

Type of activities: practicals

Number of hours:

per week: 2 per level/semester: 26 Form of the course: on-site learning

Number of credits: 2

Recommended semester: 3.

Educational level: I., II.

Prerequisites:

Course requirements:

Scale of assessment (preliminary/final): 100/0

Learning outcomes:

Basic communication in Russian, developing other Russian language skills - listening comprehension, reading and writing.

Class syllabus:

Learning the handwritten Russian (Russian Cursive Cyrillic), developing further language skills, gaining knowledge of Russian culture, history and way of life, pre-intermediate to intermediate grammar and vocabulary.

The course "Russian for Intermediate Students" is a follow-up to "Russian for Beginners". The subject of the course is general Russian in the range appropriate to the given level.

Recommended literature:

Точка Ру A2 (Ольга Долматова, Екатерина Новачац) a Short Stories in Russian (Olly Richards, Alex Rowlings)

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 200

A	В	С	D	Е	FX
70,5	17,5	8,5	2,5	0,0	1,0

Lecturers: Viktoria Mirsalova

Last change: 20.06.2022

Approved by:

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID: Course title:

FMFI.KJP/1-MXX-262/00 Russian Language (4)

Educational activities:

Type of activities: practicals

Number of hours:

per week: 2 per level/semester: 26 Form of the course: on-site learning

Number of credits: 2

Recommended semester: 4.

Educational level: I., II.

Prerequisites:

Course requirements:

Scale of assessment (preliminary/final): 100/0

Learning outcomes:

Learning the handwritten Russian (Russian Cursive Cyrillic), developing further language skills, gaining knowledge of Russian culture, history and way of life, pre-intermediate to intermediate grammar and vocabulary.

Class syllabus:

Learning the handwritten Russian (Russian Cursive Cyrillic), developing further language skills, gaining knowledge of Russian culture, history and way of life, pre-intermediate to intermediate grammar and vocabulary.

The course "Russian for Intermediate Students" is a follow-up to "Russian for Beginners". The subject of the course is general Russian in the range appropriate to the given level.

Recommended literature:

Точка Ру А2 (Ольга Долматова, Екатерина Новачац) a Short Stories in Russian (Olly Richards, Alex Rowlings)

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 144

A	В	С	D	Е	FX
75,69	13,19	6,94	2,78	0,69	0,69

Lecturers: Viktoria Mirsalova

Last change: 20.06.2022

Approved by:

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:

Course title:

FMFI.KDMFI/1-UXX-331/18

School Management

Educational activities:

Type of activities: lecture / seminar

Number of hours:

per week: 1/2 per level/semester: 13/26

Form of the course: on-site learning

Number of credits: 4

Recommended semester: 4.

Educational level: D, I., II.

Prerequisites:

Antirequisites: FMFI-Prif.KDPP/1-UXX-331/15

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 112

A	В	С	D	Е	FX
53,57	13,39	25,0	3,57	0,0	4,46

Lecturers: Mgr. Karolína Miková, PhD., PaedDr. Tünde Kiss, PhD.

Last change: 10.01.2020

Approved by:

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KMANM/2-Selected Parts of Mathematical Analysis (1) UMA-111/15 **Educational activities:** Type of activities: course **Number of hours:** per week: 4 per level/semester: 52 Form of the course: on-site learning Number of credits: 4 **Recommended semester:** 4. **Educational level:** II. **Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 120 \mathbf{C} D FX Ε 47,5 16.67 7,5 15.83 12,5 0.0 Lecturers: doc. RNDr. Ivan Kupka, CSc. Last change: 15.06.2022 Approved by:

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KMANM/2-Selected Parts of Mathematical Analysis (2) UMA-112/15 **Educational activities:** Type of activities: course **Number of hours:** per week: 3 per level/semester: 39 Form of the course: on-site learning Number of credits: 3 **Recommended semester: 5. Educational level:** II. **Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 63 \mathbf{C} D FX Ε 90.48 7,94 1,59 0.0 0.0 0.0 Lecturers: doc. RNDr. Ivan Kupka, CSc. Last change: 15.06.2022 Approved by:

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KAG/2-UDG-261/15 Selected Parts of Projective Geometry **Educational activities:** Type of activities: lecture **Number of hours:** per week: 3 per level/semester: 39 Form of the course: on-site learning Number of credits: 4 **Recommended semester:** 5. **Educational level: II. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 8 C Α В D E FX 100,0 0,0 0,0 0,0 0,0 0,0Lecturers: RNDr. Barbora Pokorná, PhD. Last change: 02.06.2015 Approved by:

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KAG/2-UMA-263/15 Selected Topics in Algebra **Educational activities:** Type of activities: course **Number of hours:** per week: 2 per level/semester: 26 Form of the course: on-site learning Number of credits: 3 **Recommended semester:** 6. **Educational level: II. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 2 Α В \mathbf{C} D E FX 50,0 0,0 0,0 0,0 50,0 0,0Lecturers: Mgr. Martin Niepel, PhD. Last change: 02.06.2015 Approved by:

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KAG+KDMFI/2-Selected Topics in Teaching of Mathematics (1) UMA-283/15 **Educational activities:** Type of activities: seminar **Number of hours:** per week: 3 per level/semester: 39 Form of the course: on-site learning Number of credits: 2 Recommended semester: 4. **Educational level:** II. **Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 89 \mathbf{C} D FX Ε 56.18 23.6 8.99 4.49 2,25 4.49 Lecturers: RNDr. Monika Dillingerová, PhD. Last change: 02.06.2015

Strana: 90

Approved by:

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID:** Course title: FMFI.KMANM/2-Seminar in History of Mathematics (1) UMA-211/15 **Educational activities:** Type of activities: seminar **Number of hours:** per week: 3 per level/semester: 39 Form of the course: on-site learning Number of credits: 2 **Recommended semester:** 5. Educational level: D, II. **Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 118 \mathbf{C} D Е FX 55.08 36,44 7.63 0.85 0.0 0.0 Lecturers: doc. RNDr. Zbyněk Kubáček, CSc. Last change: 02.06.2015

Strana: 91

Approved by:

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:

Course title:

FMFI.KMANM/2-UMA-212/15 Seminar in History of Mathematics (2)

Educational activities:

Type of activities: seminar

Number of hours:

per week: 2 per level/semester: 26 Form of the course: on-site learning

Number of credits: 2

Recommended semester: 6.

Educational level: D, II.

Prerequisites:

Course requirements:

Ongoing evaluation: presentation of the prepared lesson (20 points), preparation of the written exam for other participants (10 points), active participation in the evaluation of presentations and written exams of other participants (30 points).

Grading: A (56-60 points), B (51-55 points), C (46-50 points), D (41-45 points), E (36-40 points), Fx (0-35 points).

Weight of the ongoing / final assessment: 100/0 Scale of assessment (preliminary/final): 100/0

Learning outcomes:

The student will gain an overview of the various periods of mathematics development, including examples of problems solved in individual basic works.

Class syllabus:

Students will choose from the following topics: Ptolemy. Apollonius. Chinese and Arabic mathematics. Fibonacci. Alcuin's problems. Cardano's Ars Magna. Pascal's Arithmetic Triangle. Huygens's De Ratiociniis in Ludo Aleae. Bernoulli's Ars Conjectandi. Cavalieri's Geometry of indivisibles. Euler's Introductio and Letters to a German Princess. Venn's Symbolic Logic.

Recommended literature:

Matematika v proměnách věků III / Editori Jindřich Bečvář, Eduard Fuchs. Praha : Výzkumné centrum pro dějiny vědy, 2004

Dějiny matematiky / Dirk J. Struik ; přeložili Jaroslav Folta, Luboš Nový. Praha : Orbis, 1963

Dějiny matematiky ve starověku / Arnošt Kolman. Praha : Academia, 1968

Dějiny matematiky ve středověku / Adolf P. Juškevič. Praha : Academia, 1977

Dejiny matematiky / Ján Čižmár. Bratislava : Perfekt, 2020

The history of mathematics / Roger L. Cooke. Hoboke, NJ: John Wiley, 2003 The history of mathematics / David M. Burton, New York: McGraw-Hill, 2011

Languages necessary to complete the course:

Slovak, English

Notes:								
Past grade distribution Total number of evaluated students: 116								
A B C D E FX								
90,52	8,62	0,0	0,86	0,0	0,0			
Lecturers: doc.	RNDr. Zbyněk I	Kubáček, CSc.						
Last change: 24.06.2022								
Approved by:								

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID: Course title: FMFI.KAG/2-UMA-115/15 Set Theory

Educational activities: Type of activities: course

Number of hours:

per week: 3 per level/semester: 39 Form of the course: on-site learning

Number of credits: 4

Recommended semester: 6.

Educational level: II.

Prerequisites:

Course requirements:

Scale of assessment (preliminary/final): Semester 100% (homework assignments)

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 102

A	В	С	D	Е	FX
63,73	14,71	13,73	3,92	3,92	0,0

Lecturers: RNDr. Martin Sleziak, PhD.

Last change: 18.06.2022

Approved by:

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID: Course title:

FMFI.KJP/1-MXX-171/20 | Slovak Language for Foreign Students (1)

Educational activities:

Type of activities: practicals

Number of hours:

per week: 2 per level/semester: 26 Form of the course: on-site learning

Number of credits: 2

Recommended semester: 1.

Educational level: I., II.

Prerequisites:

Course requirements:

tests

Course prerequisites:

https://fmph.uniba.sk/microsites/kjp/katedra-jazykovej-pripravy/poziadavky-na-udelenie-priebezneho-hodnotenia-aj1aj2aj3-ostatne-kurzy/

Scale of assessment (preliminary/final): 100/0

Learning outcomes:

This course is aimed for foreign students to learn the fundamentals of the Slovak language with the focus on basic communication as well as all other language skills- listening comprehension, reading and writing.

Class syllabus:

The sylabus is targeted at the comprehension of the basics of the Slovak language for the absolute beginners (A1).

Recommended literature:

Krížom- Krážom Slovenčina 1, additional material to further support the covered topics.

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 23

A	В	С	D	Е	FX
47,83	0,0	0,0	0,0	0,0	52,17

Lecturers: Mgr. Aneta Barnes

Last change: 21.06.2022

Approved by:

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:

Course title:

FMFI.KJP/1-MXX-172/20 Slovak I

Slovak Language for Foreign Students (2)

Educational activities:

Type of activities: practicals

Number of hours:

per week: 2 per level/semester: 26 Form of the course: on-site learning

Number of credits: 2

Recommended semester: 2.

Educational level: I., II.

Prerequisites:

Course requirements:

tests

Course prerequisites:

https://fmph.uniba.sk/microsites/kjp/katedra-jazykovej-pripravy/poziadavky-na-udelenie-priebezneho-hodnotenia-aj1aj2aj3-ostatne-kurzy/

Scale of assessment (preliminary/final): 100/0

Learning outcomes:

This course is aimed for foreign students to learn the fundamentals of the Slovak language with the focus on basic communication as well as all other language skills- listening comprehension, reading and writing.

Class syllabus:

The sylabus is targeted at the comprehension of the basics of the Slovak language for the absolute beginners (A1) and this course is a follow up course to the Slovak language course 1.

Recommended literature:

Krížom- Krážom Slovenčina 1, additional material to further support the covered topics

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 22

A	В	С	D	Е	FX
81,82	0,0	4,55	0,0	0,0	13,64

Lecturers: Mgr. Aneta Barnes

Last change: 21.06.2022

Approved by:

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:

Course title: FMFI.KJP/1-MXX-271/20

Slovak Language for Foreign Students (3)

Educational activities:

Type of activities: practicals

Number of hours:

per week: 2 per level/semester: 26 Form of the course: on-site learning

Number of credits: 2

Recommended semester: 3.

Educational level: I., II.

Prerequisites:

Course requirements:

tests

Course prerequisites:

https://fmph.uniba.sk/microsites/kjp/katedra-jazykovej-pripravy/poziadavky-na-udeleniepriebezneho-hodnotenia-aj1aj2aj3-ostatne-kurzy/

Scale of assessment (preliminary/final): 100/0

Learning outcomes:

This course is aimed for foreign students to better comprehend all the language skills important to enable correct usage of the Slovak language - listening comprehension, reading, writing and speaking.

Class syllabus:

The sylabus is targeted at the comprehension of all the language skills of the Slovak language, and it is a follow up course to the Slovak language course 2.

Recommended literature:

Krížom-Krážom Slovenčina 2, additional material to further support the covered topics.

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 8

A	В	C	D	Е	FX
100,0	0,0	0,0	0,0	0,0	0,0

Lecturers: Mgr. Aneta Barnes

Last change: 21.06.2022

Approved by:

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID: Course title:

FMFI.KJP/1-MXX-272/20 Slovak Language for Foreign Students (4)

Educational activities:

Type of activities: practicals

Number of hours:

per week: 2 per level/semester: 26 Form of the course: on-site learning

Number of credits: 2

Recommended semester: 4.

Educational level: I., II.

Prerequisites:

Course requirements:

tests

Course prerequisites:

https://fmph.uniba.sk/microsites/kjp/katedra-jazykovej-pripravy/poziadavky-na-udelenie-priebezneho-hodnotenia-aj1aj2aj3-ostatne-kurzy/

Scale of assessment (preliminary/final): 100/0

Learning outcomes:

This course is aimed for foreign students to better comprehend all the language skills important to enable correct usage of the Slovak language – listening comprehension, reading, writing and speaking.

Class syllabus:

The sylabus is targeted at the comprehension of all the language skills of the Slovak language, and it is a follow up course to the Slovak language course 3.

Recommended literature:

Krížom-Krážom Slovenčina 2, additional material to further support the covered topics.

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 7

A	В	С	D	Е	FX
100,0	0,0	0,0	0,0	0,0	0,0

Lecturers: Mgr. Aneta Barnes

Last change: 21.06.2022

Approved by:

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:

Course title:

FMFI.KDMFI/1-UXX-332/10

Social Aspects of Informatics

Educational activities:

Type of activities: seminar

Number of hours:

per week: 2 per level/semester: 26 Form of the course: on-site learning

Number of credits: 3

Recommended semester: 3.

Educational level: I., II.

Prerequisites:

Antirequisites: FMFI.KDMFI/1-INF-175/00

Course requirements:

Continuous assessment: seminar work

Indicative assessment scale: A 90%, B 80%, C 70%, D 60%, E 50%

Learning outcomes:

Class syllabus:

New ICT technologies are evolving very fast. But they are constantly entering our daily lives. We note what changes, what positive, but also what risks ICT brings in various areas: education, health, arts, business and finance, industry and others. We will pay special attention to the issue of copyright and its infringement and cybercrime.

Also what risks they bring.

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 115

A	В	С	D	Е	FX
95,65	2,61	0,0	0,87	0,87	0,0

Lecturers: RNDr. Michal Winczer, PhD.

Last change: 14.03.2022

Approved by:

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:

Course title:

FMFI.KTV/2-MXX-115/17

Sports in Natur (1)

Educational activities:

Type of activities:

Number of hours:

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

Number of credits: 2

Recommended semester: 1.

Educational level: II.

Prerequisites:

Course requirements:

Grades: A 90%, B 80%, C 70%, D 60%, E 50%

The condition for the award of 1 or 2 credits is the completion of a multi-day course in its full scope, or the completion of one-day courses in the scope of 4 days. Candidates can apply to the leaders of individual courses. From the presented offer of courses, you can choose the one that suits your interests, abilities and deadlines.

Learning outcomes:

Acquisition and development of basic motor skills and abilities in selected sports: skiing and snowboarding. Mastering the correct technique of performing individual movements, which are necessary for skiing and snowboarding.

Class syllabus:

The student can sign up for the outdoor sports courses offered by the department: skiing, snowboarding. The lessons in the courses are focused on the development of basic and special movement skills and mastering the techniques needed for the sports.

Recommended literature:

Languages necessary to complete the course:

Slovak

Notes:

KTVŠ does not rent ski equipment.

Past grade distribution

Total number of evaluated students: 83

A	В	С	D	Е	FX
100,0	0,0	0,0	0,0	0,0	0,0

Lecturers: Mgr. Martin Dovičák, PhD., Mgr. Tomáš Kuchár, PhD., Mgr. Jana Leginusová, PaedDr. Dana Mašlejová, Mgr. Ladislav Mókus, PaedDr. Mikuláš Ortutay, Mgr. Júlia Raábová, PhD.

Last change: 16.06.2022	
Approved by:	

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID: Course title:

FMFI.KTV/2-MXX-116/18 | Sports in Natur (2)

Educational activities:

Type of activities: Number of hours:

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

Number of credits: 2

Recommended semester: 2.

Educational level: II.

Prerequisites:

Course requirements:

Grades: A 90%, B 80%, C 70%, D 60%, E 50%.

The condition for the award of 1 or 2 credits is the completion of a multi-day course in its full scope, or the completion of one-day courses in the scope of 4 days. Candidates can apply to the leaders of individual courses. From the presented offer of courses, you can choose the one that suits your interests, abilities and deadlines.

Learning outcomes:

Creating a positive and lasting relationship with physical activity. Acquisition and mastery of basic motor skills and abilities in outdoor sports: windsurfing, beach volleyball, water tourism - river rafting, hiking and other sports according to interest. Training and improving the technique needed for the sports.

Class syllabus:

The student can sign up for the outdoor sports courses offered by the department: water tourism - river rafting, windsurfing, beach volleyball, hiking and other hobby sports. The lessons in the courses are focused on the development of basic and special movement skills and, mastering the techniques needed for the sports.

Recommended literature:

Languages necessary to complete the course:

Slovak

Notes:

KTVŠ will provide sports equipment.

Past grade distribution

Total number of evaluated students: 50

A	В	С	D	Е	FX
94,0	0,0	0,0	0,0	0,0	6,0

Lecturers: Mgr. Martin Dovičák, PhD., Mgr. Tomáš Kuchár, PhD., Mgr. Jana Leginusová, PaedDr. Dana Mašlejová, Mgr. Ladislav Mókus, PaedDr. Mikuláš Ortutay, Mgr. Júlia Raábová, PhD., Mgr. Tomáš Lovecký

Last change: 16.06.2022

Approved by:

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KAG/2-UDG-104/15 Surfaces in Technical Practice (1) **Educational activities:** Type of activities: course **Number of hours:** per week: 3 per level/semester: 39 Form of the course: on-site learning Number of credits: 3 **Recommended semester:** 5. **Educational level: II. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 9 \mathbf{C} Α В D E FX 44,44 0,0 33,33 11,11 11,11 0,0Lecturers: RNDr. Martina Bátorová, PhD., doc. RNDr. Štefan Solčan, CSc. Last change: 02.06.2015 Approved by:

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KAG/2-UDG-106/15 Surfaces in Technical Practice (2) **Educational activities:** Type of activities: course **Number of hours:** per week: 4 per level/semester: 52 Form of the course: on-site learning Number of credits: 3 **Recommended semester:** 6. **Educational level: II. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 9 \mathbf{C} Α В D E FX 22,22 0,0 66,67 11,11 0,0 0,0Lecturers: RNDr. Martina Bátorová, PhD., doc. RNDr. Štefan Solčan, CSc. Last change: 02.06.2015 Approved by:

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KAG/2-UXX-811/15 Teaching Practice in Descriptive Geometry (2) **Educational activities:** Type of activities: practice **Number of hours:** per week: per level/semester: 60s Form of the course: on-site learning Number of credits: 2 **Recommended semester: 4. Educational level: II. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 10 В Α \mathbf{C} D E FX 90,0 10,0 0,0 0,0 0,0 0,0Lecturers: RNDr. Soňa Kudličková, CSc. Last change: 02.06.2015 Approved by:

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KAG/2-UXX-812/15 Teaching Practice in Descriptive Geometry (3) **Educational activities:** Type of activities: practice **Number of hours:** per week: per level/semester: 90s Form of the course: on-site learning Number of credits: 3 **Recommended semester:** 5. **Educational level: II. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 9 C Α В D E FX 88,89 0,0 11,11 0,0 0,0 0,0Lecturers: RNDr. Soňa Kudličková, CSc. Last change: 02.06.2015 Approved by:

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KDMFI/2-UXX-841/15 Teaching Practice in Mathematics (2) **Educational activities:** Type of activities: practice **Number of hours:** per week: per level/semester: 60s Form of the course: on-site learning Number of credits: 2 **Recommended semester:** 4. **Educational level: II. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 129 Α В \mathbf{C} D E FX 98,45 0,78 0,78 0,0 0,0 0,0Lecturers: Mgr. Michaela Vargová, PhD. Last change: Approved by:

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KDMFI/2-UXX-842/15 Teaching Practice in Mathematics (3) **Educational activities:** Type of activities: practice **Number of hours:** per week: per level/semester: 90s Form of the course: on-site learning Number of credits: 3 **Recommended semester:** 5. **Educational level: II. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 108 Α В \mathbf{C} D E FX 94,44 1,85 0,0 3,7 0,0 0,0Lecturers: Mgr. Michaela Vargová, PhD. Last change: Approved by:

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:

Course title:

FMFI.KDMFI/1-UXX-132/18

Theoretical Fundaments of Education

Educational activities:

Type of activities: lecture / seminar

Number of hours:

per week: 1 / 1 per level/semester: 13 / 13

Form of the course: on-site learning

Number of credits: 3

Recommended semester: 1.

Educational level: I., II.

Prerequisites:

Antirequisites: FMFI-Prif.KDPP/1-UXX-132/10

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 216

A	В	С	D	Е	FX
34,72	34,26	18,98	8,33	1,39	2,31

Lecturers: Mgr. Lucia Budinská, PhD.

Last change: 15.09.2021

Approved by:

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KDMFI/1-UXX-134/19 Theory of Teaching **Educational activities:** Type of activities: course **Number of hours:** per week: 3 per level/semester: 39 Form of the course: on-site learning Number of credits: 4 **Recommended semester: 3.** Educational level: D, I., II. **Prerequisites: Antirequisites:** FMFI.KDMFI/1-UXX-134/18 **Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 115 Α В C D Ε FX 46,09 25,22 11,3 7,83 5,22 4,35 Lecturers: Mgr. Karolína Miková, PhD. Last change: 01.09.2019

Strana: 111

Approved by:

Academic year: 2021/2022 University: Comenius University Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KAG/2-UMA-265/15 Theory, Algorithms and Graphs Applications **Educational activities:** Type of activities: course **Number of hours:** per week: 2 per level/semester: 26 Form of the course: on-site learning Number of credits: 3 **Recommended semester:** 6. **Educational level: II. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 6 C A В D E FX 0,0 0,0 0,0 66,67 33,33 0,0Lecturers: doc. RNDr. Martin Mačaj, PhD. Last change: 02.06.2015 Approved by:

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:

Course title:

FMFI.KDMFI+KAI/2-

UIN-247/15

Web Technologies in Teaching

Educational activities:

Type of activities: course

Number of hours:

per week: 2 per level/semester: 26 Form of the course: on-site learning

Number of credits: 2

Recommended semester: 5.

Educational level: II.

Prerequisites:

Course requirements:

Continuous assessment: active participation in class (15%), homework (25%), papers (25%),

project (35%)

Indicative grading scale: A 90%, B 80%, C 70%, D 60%, E 50%

Scale of assessment (preliminary/final): 100/0

Learning outcomes:

Students will be familiar with different tools based on the latest web technologies, will be able to decide which of these tools are suitable for which learning activities and will be able to suggest different ways of using them in school practice.

Class syllabus:

- new interactive web tools overview, technological and pedagogical background, relation to learning theories
- blog, vlog, microblog
- collaborative editors and other tools, wikis
- podcasting, social bookmarking and tagging
- social networks
- tools for evaluating activities on the interactive web, peer-review, peer-assessment, self-assessment

Recommended literature:

- The teacher's own electronic study materials published on the course website or in the Moodle system
- Selection of recent publications in the field

Languages necessary to complete the course:

SLovak, English

Notes:

Past grade distribution							
Total number of evaluated students: 8							
Α	В	С	D	Е	FX		
87,5	0,0	12,5	0,0	0,0	0,0		

Lecturers: doc. RNDr. Zuzana Kubincová, PhD., doc. RNDr. Martin Homola, PhD.

Last change: 22.06.2022

Approved by: