Course descriptions

TABLE OF CONTENTS

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KGP/N-bUXX-004/15	Additional course in Geology

Educational activities:
Type of activities: lecture / seminar
Number of hours:
per week: 2 / 1 **per level/semester:** 28 / 14
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 2.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 97

A	B	C	D	E	FX
35,05	22,68	16,49	10,31	14,43	1,03

Lecturers: doc. RNDr. Daniel Pivko, PhD.

Last change:

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KAlCh/N-bUCH-037/16	Analytical Chemistry for Teachers

Educational activities:
Type of activities: practicals / lecture / seminar
Number of hours:
per week: 2 / 4 / 2 **per level/semester:** 28 / 56 / 28
Form of the course: on-site learning

Number of credits: 6

Recommended semester: 6.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 71

A	B	C	D	E	FX
18,31	32,39	29,58	15,49	4,23	0,0

Lecturers: doc. RNDr. Róbert Góra, PhD., doc. RNDr. Radoslav Halko, PhD., doc. RNDr. Marian Masár, PhD., doc. RNDr. Róbert Bodor, PhD., doc. RNDr. Andrea Vojs Staňová, PhD.

Last change: 09.01.2020

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
FMFI.KJFB/1-UFY-241/10	Atomic and Nuclear Physics

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 1 / 3 **per level/semester:** 14 / 42
Form of the course: on-site learning

Number of credits: 5

Recommended semester: 4.

Educational level: I.

Prerequisites:

Course requirements:
Continuous assessment: presentation of homework results (3x10 marks)
Exam: written (40 marks), oral (30 marks)
Indicative assessment scale: A 90%, B 80%, C 70%, D 60%, E 50%
Credits will be awarded if the student obtains at least 50% points.

Learning outcomes:
Graduates have a basic knowledge of Atomic and Nuclear Physics at the level of a core university course in general physics. They know how to use the concepts and methods of atomic and nuclear physics in solving problem situations. They have an idea of the boundaries between high school and university physics in the field of nuclear and nuclear in terms of work with high school youth with an increased interest in physics.

Class syllabus:
Photoelectric effect, Compton effect, Rutherford experiment, Bohr model, timeless Schrödinger equation, structure of atoms and molecules, basic properties of nuclei, structure of nuclei, transformation of nuclei, nuclear reactions, nuclear power plant, particle accelerators.

Recommended literature:
Fyzika část 5. Moderní fyzika : Vysokoškolská učebnice obecné fyziky / David Halliday, Robert Resnick, Jearl Walker ; přeložili Bohumila Lencová ... [et al.]. Brno : Vysoké učení technické VUTIUM, 2000
Všeobecná fyzika : 4 : atómová fyzika / Ján Vanovič. Bratislava : Alfa, 1980
Physics : principles with applications / Douglas C. Giancoli. Upper Saddle River, N.J. : Pearson/ Prentice Hall, 2005
Own electronic texts of the subject published through the course website.

Languages necessary to complete the course:
Slovak and English.

Notes:

Past grade distribution
Total number of evaluated students: 147

A	B	C	D	E	FX
22,45	15,65	19,73	15,65	22,45	4,08

Lecturers: RNDr. Radoslav Böhm, PhD., Ing. Jakub Kaizer, PhD.

Last change: 18.06.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KAn/N-bUXX-002/16	Auxology and school hygiene

Educational activities:
Type of activities: seminar
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 3.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 152

A	B	C	D	E	FX
98,68	0,0	0,0	0,0	0,0	1,32

Lecturers: Mgr. Silvia Bodoriková, PhD., RNDr. Eva Neščáková, CSc.

Last change: 20.01.2020

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
FMFI.KDMFI/1-UXX-937/17	BSc Thesis in Physics Seminar (1)

Educational activities:
Type of activities: seminar
Number of hours:
per week: 1 **per level/semester:** 14
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 5.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 33

A	B	C	D	E	FX
96,97	0,0	0,0	0,0	0,0	3,03

Lecturers: doc. PaedDr. Klára Velmovská, PhD.

Last change: 06.02.2021

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
FMFI.KDMFI/1-UXX-938/17	BSc Thesis in Physics Seminar (2)

Educational activities:
Type of activities: seminar
Number of hours:
per week: 1 **per level/semester:** 14
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 6.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 30

A	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0

Lecturers: doc. RNDr. Peter Demkanin, PhD., PaedDr. Tünde Kiss, PhD.

Last change: 06.02.2021

Approved by:

STATE EXAM DESCRIPTION

Academic year: 2021/2022	
University: Comenius University Bratislava	
Faculty: Faculty of Natural Sciences	
Course ID: PriF.KDPP/N-bOBH-100/15	**Course title:** Bachelor Thesis Defense
Number of credits: 8	
Educational level: I.	
State exam syllabus:	
Last change:	
Approved by:	

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KDPP/N-bUBI-002/16	Bachelor theses

Educational activities:
Type of activities: seminar
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 4

Recommended semester: 6.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 212

A	ABS	B	C	D	E	FX
69,34	0,0	13,21	10,38	2,36	4,25	0,47

Lecturers: doc. RNDr. Beáta Brestenská, CSc., Mgr. Štefan Zolcer, PhD., doc. PaedDr. Elena Čipková, PhD., PaedDr. Anna Drozdíková, PhD., doc. RNDr. PaedDr. Zuzana Haláková, PhD., doc. RNDr. Štefan Karolčík, PhD., RNDr. Peter Likavský, CSc., RNDr. Henrieta Mázorová, PhD., PaedDr. Tibor Nagy, PhD., RNDr. Soňa Nagyová, PhD., prof. RNDr. Miroslav Prokša, CSc., doc. RNDr. Zlatica Országhová, CSc., PhDr. ThLic. Peter Ikhardt, PhD., doc. RNDr. Daniel Gurňák, PhD., RNDr. Ivan Ružek, PhD., doc. Mgr. Marcel Horňák, PhD., RNDr. Jana Chrappová, PhD., doc. Ing. Mária Mečiarová, PhD., doc. RNDr. Andrea Ševčovičová, PhD., doc. RNDr. Katarína Pavličková, CSc., doc. RNDr. Daniel Pivko, PhD., doc. RNDr. Jozef Tatiersky, PhD., RNDr. Jana Ciceková, PhD., PhDr. Michael Fuchs, Mgr. Michal Hrabovský, PhD., RNDr. Silvia Kubalová, PhD., Ing. Mgr. Eva Zahradníková, PhD., doc. Mgr. Soňa Jančovičová, PhD., doc. RNDr. Jana Ščevková, PhD.

Last change:

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KAn/N-XXXX-005/21	Bioarchaeology

Educational activities:
Type of activities: seminar
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 1., 3., 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: 324

A	B	C	D	E	FX
90,43	3,09	2,78	0,0	0,0	3,7

Lecturers: doc. RNDr. Radoslav Beňuš, PhD., Mgr. Silvia Bodoriková, PhD., prof. Mgr. Viktor Černý, Dr.

Last change:

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KBCh/N-bUCH-002/16	Biochemistry for Teachers

Educational activities:
Type of activities: practicals / lecture / seminar
Number of hours:
per week: 5 / 4 / 2 **per level/semester:** 70 / 56 / 28
Form of the course: on-site learning

Number of credits: 9

Recommended semester: 5.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 74

A	B	C	D	E	FX
8,11	12,16	39,19	24,32	10,81	5,41

Lecturers: prof. RNDr. Marta Kollárová, DrSc., doc. Mgr. Peter Polčic, PhD., Mgr. Júlia Zemanová, PhD., Mgr. Petra Chovančíková, PhD., Mgr. Andrea Cillingová, PhD.

Last change:

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KJ/N-bXCJ-121/19	CLIL 1 – Content and language integrated learning

Educational activities:
Type of activities: seminar
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 5.

Educational level: I.

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	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0

Lecturers: Mgr. Barbara Kordíková, PhD.

Last change: 07.01.2020

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KJ/N-bXCJ-122/19	CLIL 2 – Content and language integrated learning

Educational activities:
Type of activities: seminar
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 6.

Educational level: I.

Prerequisites: PriF.KJ/N-bXCJ-121/19 - CLIL 1 – Content and language integrated learning

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 6

A	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0

Lecturers: Mgr. Barbara Kordíková, PhD.

Last change: 07.01.2020

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
FMFI.KDMFI/1-UFY-160/15	Calculus for Physics Teachers

Educational activities:
Type of activities: course
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 1.

Educational level: I.

Prerequisites:

Course requirements:
Continuous assessment: solving problems (3x10 marks), homeworks (3x10 marks), tests (2x20 marks)
Indicative rating scale: A 90%, B 80%, C 70%, D 60%, E 50%.
Credits will not be awarded if a student scores less than 50%.

Learning outcomes:
By completing the course, students will expand and supplement their knowledge of selected parts of mathematics and can use them in solving physics problems.

Class syllabus:
Matrices, determinants. linear combination of vectors. Trigonometric functions and their graphs, trigonometric equations. Equation of the tangent. Function limit. Indefinite integral, decomposition into partial fractions, improper integral. Complex numbers, properties and operations. Algebraic, trigonometric and exponential form of complex numbers.

Recommended literature:

Languages necessary to complete the course:
Slovak and English.

Notes:

Past grade distribution
Total number of evaluated students: 60

A	B	C	D	E	FX
56,67	15,0	8,33	8,33	5,0	6,67

Lecturers: doc. PaedDr. Klára Velmovská, PhD., Mgr. Anna Trúsiková, PhD.

Last change: 18.06.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KAgCh/N-bCXX-002/15	Chemical Calculation (1)

Educational activities:
Type of activities: seminar
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 1.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 794

A	B	C	D	E	FX
21,16	15,99	13,48	11,96	16,62	20,78

Lecturers: doc. RNDr. Jozef Tatiersky, PhD., Mgr. Olivier Monfort, PhD.

Last change: 09.11.2017

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KAgCh/N-bCAG-005/15	Chemical Calculation (2)

Educational activities:
Type of activities: seminar
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 2.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 97

A	B	C	D	E	FX
50,52	8,25	10,31	5,15	4,12	21,65

Lecturers: doc. RNDr. Jozef Tatiersky, PhD., RNDr. Ján Šimunek, PhD.

Last change: 14.11.2017

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.ChÚ/N-bCEC-002/15	Chemistry and Environment

Educational activities:
Type of activities: lecture / seminar
Number of hours:
per week: 2 / 1 **per level/semester:** 28 / 14
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 4.

Educational level: I.

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

A	B	C	D	E	FX
15,0	35,0	25,0	15,0	10,0	0,0

Lecturers: RNDr. Renáta Górová, PhD., RNDr. Helena Jurdáková, PhD.

Last change: 29.01.2020

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
FMFI.KDMFI/1-UFY-181/15	Complementary Exercises in Mechanics

Educational activities:
Type of activities: practicals
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 1.

Educational level: I.

Prerequisites:

Course requirements:
A series of written exams during the semester (5x20 marks).
Credits will not be awarded if the student obtains less than 50% of marks even after repeated assignments.

Learning outcomes:
After completing the course, the student will be able to independently solve computational problems at a level slightly higher than the level of a secondary school graduate in physics.

Class syllabus:
The exercise is a support for the subject Mechanics, the syllabus is in accordance with the syllabus of the subject Mechanics.

Recommended literature:

Languages necessary to complete the course:
Slovak and English.

Notes:

Past grade distribution
Total number of evaluated students: 69

A	B	C	D	E	FX
91,3	2,9	1,45	2,9	0,0	1,45

Lecturers: PaedDr. Peter Horváth, PhD.

Last change: 18.06.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
FMFI.KDMFI/1-UFY-336/15	Constitution of Texts and Tasks for Education in Physics

Educational activities:
Type of activities: course
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 6.

Educational level: I.

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

A	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0

Lecturers: doc. RNDr. Peter Demkanin, PhD.

Last change: 02.06.2015

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KDPP/N-bUCH-039/16	Didactics of Chemistry

Educational activities:
Type of activities: lecture / seminar
Number of hours:
per week: 2 / 2 **per level/semester:** 28 / 28
Form of the course: on-site learning

Number of credits: 4

Recommended semester: 6.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 72

A	B	C	D	E	FX
79,17	19,44	1,39	0,0	0,0	0,0

Lecturers: PaedDr. Tibor Nagy, PhD., Mgr. Milica Križanová, PhD.

Last change:

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KDPP/N-bUCH-038/16	Didactics of School Experiments in Chemistry

Educational activities:
Type of activities: practicals
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 5.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 73

A	B	C	D	E	FX
9,59	39,73	41,1	8,22	0,0	1,37

Lecturers: PaedDr. Anna Drozdíková, PhD.

Last change:

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KDPP/N-bXDI-013/15	Digital Technologies 1

Educational activities:
Type of activities: seminar
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 3.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 347

A	B	C	D	E	FX
93,95	4,61	0,58	0,29	0,0	0,58

Lecturers: RNDr. Henrieta Mázorová, PhD., doc. RNDr. Beáta Brestenská, CSc., PaedDr. Tibor Nagy, PhD., Mgr. Milica Križanová, PhD.

Last change:

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KDPP/N-bXDI-016/16	Digital Technologies 2

Educational activities:
Type of activities: seminar
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 4.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 218

A	B	C	D	E	FX
97,71	1,38	0,46	0,46	0,0	0,0

Lecturers: RNDr. Henrieta Mázorová, PhD., PaedDr. Tibor Nagy, PhD.

Last change:

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KDPP/N-bXDI-017/16	Digital Technologies 3

Educational activities:
Type of activities: seminar
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 5.

Educational level: I.

Prerequisites: PriF.KDPP/N-bXDI-013/15 - 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: 62

A	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0

Lecturers: RNDr. Henrieta Mázorová, PhD., PaedDr. Tibor Nagy, PhD., Mgr. Milica Križanová, PhD.

Last change:

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KOrCh/N-bCOR-001/15	Elective Seminar in Organic Chemistry

Educational activities:
Type of activities: seminar
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 4.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 437

A	B	C	D	E	FX
33,87	19,45	16,93	10,3	9,38	10,07

Lecturers: doc. Ing. Mária Mečiarová, PhD., doc. RNDr. Peter Magdolen, PhD., RNDr. Viera Poláčková, PhD., Mgr. Andrea Martinická, PhD., Mgr. Henrieta Stankovičová, PhD., Mgr. Tibor Peňaška, PhD., Mgr. Dominika Krištofíková, PhD., Mgr. Viktória Némethová, PhD.

Last change: 15.11.2017

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KOrCh/N-bCOR-008/16	Elective Seminar in Organic Synthesis

Educational activities:
Type of activities: seminar
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 4.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 146

A	B	C	D	E	FX
26,03	20,55	23,29	14,38	4,79	10,96

Lecturers: doc. Ing. Mária Mečiarová, PhD.

Last change: 27.11.2019

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
FMFI.KTF+KDMFI/1-UFY-141/15	Electromagnetism

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 2 / 3 **per level/semester:** 28 / 42
Form of the course: on-site learning

Number of credits: 6

Recommended semester: 2.

Educational level: I.

Prerequisites:

Course requirements:
Continuous assessment: written tests, homework
Exam: oral, written
Indicative assessment scale: A 90%, B 80%, C 70%, D 60%, E 50%
Credits will be awarded if the student obtains at least 50% marks.

Learning outcomes:
Students have knowledge of electricity and magnetism at the level of the core course of university physics. They will master the basic calculation methods and procedures for solving physics problems in electromagnetism. They will understand the boundaries between secondary school physics and university physics in the field of electricity and magnetism in terms of working with high school youth with an increased interest in physics.

Class syllabus:
Electric charge. Coulomb's law. Electric field. Gauss's law. Electric potential. Capacity. Electric current and resistance. Circuits. Magnetic field. Magnetic field of electric current. Electromagnetic induction. Magnetic field in matter. Maxwell's equations. Electromagnetic oscillations. Alternating currents. Electromagnetic waves.

Recommended literature:

Languages necessary to complete the course:
Slovak and English.

Notes:

Past grade distribution
Total number of evaluated students: 69

A	B	C	D	E	FX
23,19	10,14	17,39	17,39	26,09	5,8

Lecturers: RNDr. Eduard Masár, PhD., doc. RNDr. Peter Demkanin, PhD.

Last change: 18.06.2022
Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KJ/N-bXCJ-070/10	English 1

Educational activities:
Type of activities: seminar
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 3., 5.

Educational level: I.

Prerequisites: PriF.KJ/N-bXCJ-120/19 - Foreign language placement test

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 4305

A	B	C	D	E	FX
45,09	25,32	15,82	7,55	4,6	1,63

Lecturers: PhDr. Jarmila Cihová, PhD., PhDr. Štefánia Dugovičová, PhD., PhDr. Oľga Pažitková, CSc., RNDr. Tatiana Slováková, PhD., Mgr. Barbara Kordíková, PhD., Mgr. Lenka Jeleňová, PaedDr. Stanislav Kováč, PhD.

Last change: 07.01.2020

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KJ/N-bXCJ-071/10	English 2

Educational activities:
Type of activities: seminar
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 4., 6.

Educational level: I.

Prerequisites: PriF.KJ/N-bXCJ-070/10 - English 1

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 4022

A	B	C	D	E	FX
54,08	23,05	13,6	5,02	3,28	0,97

Lecturers: PhDr. Jarmila Cihová, PhD., PhDr. Štefánia Dugovičová, PhD., PhDr. Oľga Pažitková, CSc., RNDr. Tatiana Slováková, PhD., Mgr. Barbara Kordíková, PhD., PaedDr. Stanislav Kováč, PhD., Mgr. Lenka Jeleňová

Last change: 07.01.2020

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KJ/N-bXCJ-086/10	English 3

Educational activities:
Type of activities: practicals
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 3., 5.

Educational level: I.

Prerequisites: PriF.KJ/N-bXCJ-070/10 - English 1 and PriF.KJ/N-bXCJ-071/10 - English 2 or PriF.KJ/N-bXCJ-114/16 - English language for Chemistry students (2) and PriF.KJ/N-bXCJ-113/16 - English language for Chemistry students (1)

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 611

A	B	C	D	E	FX
66,28	22,09	7,04	2,29	0,98	1,31

Lecturers: PhDr. Jarmila Cihová, PhD., PhDr. Štefánia Dugovičová, PhD., PhDr. Oľga Pažitková, CSc., RNDr. Tatiana Slováková, PhD., Mgr. Barbara Kordíková, PhD., Mgr. Aneta Barnes

Last change: 08.01.2020

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KJ/N-bXCJ-087/10	English 4

Educational activities:
Type of activities: practicals
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 4., 6.

Educational level: I.

Prerequisites: PriF.KJ/N-bXCJ-070/10 - English 1 and PriF.KJ/N-bXCJ-071/10 - English 2

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 362

A	B	C	D	E	FX
73,48	19,89	5,52	0,55	0,28	0,28

Lecturers: PhDr. Jarmila Cihová, PhD., PhDr. Štefánia Dugovičová, PhD., PhDr. Oľga Pažitková, CSc., RNDr. Tatiana Slováková, PhD., Mgr. Barbara Kordíková, PhD., Mgr. Aneta Barnes

Last change: 08.01.2020

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KJ/N-bXCJ-123/19	English Placement Test for Students of Chemistry

Educational activities:
Type of activities:
Number of hours:
per week: **per level/semester:**
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 1., 2..

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 222

A	B	C	D	E	FX
99,55	0,0	0,45	0,0	0,0	0,0

Lecturers: PhDr. Jarmila Cihová, PhD., PhDr. Štefánia Dugovičová, PhD., Mgr. Barbara Kordíková, PhD., PhDr. Oľga Pažitková, CSc., RNDr. Tatiana Slováková, PhD., Mgr. Karin Rózsová Wolfová

Last change: 08.01.2020

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KJ/N-bXCJ-113/16	English language for Chemistry students (1)

Educational activities:
Type of activities: seminar
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 3., 5.

Educational level: I.

Prerequisites: PriF.KJ/N-bXCJ-123/19 - English Placement Test for Students of Chemistry

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 212

A	B	C	D	E	FX
56,6	28,77	8,02	3,3	2,36	0,94

Lecturers: Mgr. Barbara Kordíková, PhD., PaedDr. Stanislav Kováč, PhD.

Last change: 08.01.2020

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KJ/N-bXCJ-114/16	English language for Chemistry students (2)

Educational activities:
Type of activities: seminar
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 4., 6.

Educational level: I.

Prerequisites: PriF.KJ/N-bXCJ-113/16 - English language for Chemistry students (1)

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 232

A	B	C	D	E	FX
65,52	21,98	6,9	3,45	1,29	0,86

Lecturers: Mgr. Barbara Kordíková, PhD., PaedDr. Stanislav Kováč, PhD.

Last change: 08.01.2020

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
FMFI.KDMFI/1-UFY-351/15	Experimental Methods in Physics

Educational activities:
Type of activities: laboratory practicals
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 6.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 36

A	B	C	D	E	FX
94,44	2,78	0,0	0,0	0,0	2,78

Lecturers: PaedDr. Peter Horváth, PhD.

Last change: 02.06.2015

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KJ/N-bXCJ-120/19	Foreign language placement test

Educational activities:
Type of activities:
Number of hours:
per week: **per level/semester:**
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 1., 2..

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 1291

A	B	C	D	E	FX
99,77	0,0	0,0	0,0	0,15	0,08

Lecturers: PhDr. Jarmila Cihová, PhD., PhDr. Štefánia Dugovičová, PhD., Mgr. Barbara Kordíková, PhD., PhDr. Oľga Pažitková, CSc., Mgr. Karin Rózsová Wolfová, RNDr. Tatiana Slováková, PhD.

Last change: 08.01.2020

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF-FMFI.KDMFI/N-bCXX-014/15	Fundamentals of Mathematics

Educational activities:
Type of activities: practice
Number of hours:
per week: **per level/semester:** 5d
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 1.

Educational level: I.

Prerequisites:

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	B	C	D	E	FX
27,2	30,53	12,13	12,92	12,33	4,89

Lecturers: Mgr. Anna Trúsiková, PhD.

Last change: 09.11.2017

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KAgCh/N-bUCH-034/15	General Chemistry for Teachers

Educational activities:
Type of activities: lecture / seminar
Number of hours:
per week: 3 / 2 **per level/semester:** 42 / 28
Form of the course: on-site learning

Number of credits: 4

Recommended semester: 1.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 283

A	B	C	D	E	FX
3,18	7,77	13,78	16,25	15,55	43,46

Lecturers: doc. RNDr. Jozef Tatiersky, PhD.

Last change:

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KGe/N-XXXX-004/21	Genetika pre každého

Educational activities:
Type of activities: lecture
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 2., 4., 6.

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: 368

A	B	C	D	E	FX
95,38	0,0	0,0	0,0	0,0	4,62

Lecturers: RNDr. Regina Sepšiová, PhD., doc. Mgr. Miroslava Slaninová, Dr., Mgr. Filip Červenák, PhD., doc. RNDr. Andrea Ševčovičová, PhD., doc. RNDr. Eliška Gálová, PhD., Mgr. Stanislav Kyzek, PhD.

Last change: 15.05.2021

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KRGRR/N-XXXX-001/21	Geography of the World in the 21.st century

Educational activities:
Type of activities: lecture / seminar
Number of hours:
per week: 1 / 1 **per level/semester:** 14 / 14
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 2., 4., 6.

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: 16

A	B	C	D	E	FX
50,0	18,75	18,75	6,25	6,25	0,0

Lecturers: Mgr. Rastislav Cákoci, PhD., RNDr. Katarína Danielová, PhD., doc. RNDr. Daniel Gurňák, PhD., doc. RNDr. František Križan, PhD., doc. RNDr. Eva Rajčáková, CSc., Mgr. Michala Sládeková Madajová, PhD., RNDr. Angelika Švecová, PhD., Mgr. Martin Šveda, PhD., prof. RNDr. Ladislav Tolmáči, PhD., RNDr. Mgr. Anna Tolmáči, PhD., Mgr. Gabriel Zubriczký, PhD.

Last change: 15.05.2021

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KMPLG/N-XXXX-007/21	Geology in Nutshell

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 1 / 2 **per level/semester:** 14 / 28
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 2., 4., 6.

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: 18

A	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0

Lecturers: prof. RNDr. Roman Aubrecht, Dr., doc. Mgr. Natália Hlavatá Hudáčková, PhD., doc. RNDr. Jozef Hók, CSc., prof. RNDr. Michal Kováč, DrSc., RNDr. Alexander Lačný, PhD., doc. RNDr. Jana Fridrichová, PhD., RNDr. Ondrej Nemec, PhD.

Last change: 20.01.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KJ/N-bXCJ-072/10	German 1

Educational activities:
Type of activities: seminar
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 3., 5.

Educational level: I.

Prerequisites: PriF.KJ/N-bXCJ-120/19 - Foreign language placement test

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 587

A	B	C	D	E	FX
22,15	19,76	25,72	17,21	11,58	3,58

Lecturers: Mgr. Karin Rózsová Wolfová

Last change: 21.01.2020

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KJ/N-bXCJ-073/10	German 2

Educational activities:
Type of activities: seminar
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 4., 6.

Educational level: I.

Prerequisites: PriF.KJ/N-bXCJ-072/10 - German 1

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 571

A	B	C	D	E	FX
25,92	21,19	25,92	16,29	7,18	3,5

Lecturers: Mgr. Karin Rózsová Wolfová

Last change: 21.01.2020

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KJ/N-bXCJ-096/10	German 3

Educational activities:
Type of activities: seminar
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 3., 5.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 94

A	B	C	D	E	FX
88,3	7,45	2,13	0,0	1,06	1,06

Lecturers: Mgr. Karin Rózsová Wolfová

Last change: 15.01.2020

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KJ/N-bXCJ-097/10	German 4

Educational activities:
Type of activities: seminar
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 4., 6.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 67

A	B	C	D	E	FX
88,06	10,45	1,49	0,0	0,0	0,0

Lecturers: Mgr. Karin Rózsová Wolfová

Last change: 21.01.2020

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KPl/N-XXXX-009/21	Globálne problémy životného prostredia

Educational activities:
Type of activities: lecture
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 2., 4., 6.

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: 153

A	B	C	D	E	FX
99,35	0,0	0,65	0,0	0,0	0,0

Lecturers: prof. RNDr. Pavel Dlapa, PhD., RNDr. Martina Zvaríková, PhD., doc. RNDr. Katarína Pavličková, CSc., doc. RNDr. Ľubomír Jurkovič, PhD.

Last change:

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KEM/N-bXXX-001/19	Green University 1

Educational activities:
Type of activities: practicals / seminar
Number of hours:
per week: 2 / 2 **per level/semester:** 28 / 28
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 1., 2.., 3., 4.., 5., 6..

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 40

A	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0

Lecturers: RNDr. Jaroslav Bella, doc. Mgr. Miroslava Slaninová, Dr., RNDr. Hubert Žarnovičan, PhD., Mgr. Martin Šebesta, PhD.

Last change: 11.02.2020

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KEM/N-bXXX-002/19	Green University 2

Educational activities:
Type of activities: practicals / seminar
Number of hours:
per week: 2 / 2 **per level/semester:** 28 / 28
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 1., 2.., 3., 4.., 5., 6..

Educational level: I.

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

A	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0

Lecturers: RNDr. Jaroslav Bella, doc. Mgr. Miroslava Slaninová, Dr., Mgr. Martin Šebesta, PhD., RNDr. Hubert Žarnovičan, PhD.

Last change: 11.02.2020

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KAgCh/N-bUCH-036/15	Inorganic Chemistry for Teachers

Educational activities:
Type of activities: practicals / lecture / seminar
Number of hours:
per week: 5 / 3 / 2 **per level/semester:** 70 / 42 / 28
Form of the course: on-site learning

Number of credits: 8

Recommended semester: 2.

Educational level: I.

Prerequisites: PriF.KAgCh/N-bUCH-034/15 - General Chemistry for Teachers

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 164

A	B	C	D	E	FX
4,27	18,9	14,02	20,73	10,37	31,71

Lecturers: RNDr. Jana Chrappová, PhD., doc. RNDr. Jozef Tatiersky, PhD., RNDr. Lukáš Krivosudský, PhD.

Last change:

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
FMFI.KDMFI/1-UFY-310/15	Introduction to Didactics of Physics

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 2 / 2 **per level/semester:** 28 / 28
Form of the course: on-site learning

Number of credits: 5

Recommended semester: 5.

Educational level: I.

Prerequisites: FMFI.KDMFI/1-UFY-232/22 - School Physics (1)

Course requirements:
Continuous assessment: presentation of the results of individual work (2x25 marks)
Exam: written (20 marks), oral (30 marks)
Indicative rating scale: A 90%, B 80%, C 70%, D 60%, E 50%.
Credits will not be awarded if a student scores less than 50%.

Learning outcomes:
The graduate will know the relationship between pedagogy, psychology and physics didactics. Graduates - future physics teachers will understand the basic goals, methods and means of physics education.

Class syllabus:
Didactics of physics as applied science. Current goals and problems of physical education. Teaching strategies. Cognition methods. Models and modelling in physics teaching. The empirical and theoretical approach to knowledge mediation. Means of teaching physics. Experiment. Mathematical procedures. Coordinate graph function. Solving physics problems. Microcomputer supported and multimedia lab. Possibilities of influencing students' motivation by teachers. Preparation for teaching. Evaluation of students' knowledge.

Recommended literature:

Languages necessary to complete the course:
Slovak and English.

Notes:

Past grade distribution
Total number of evaluated students: 41

A	B	C	D	E	FX
70,73	9,76	12,2	0,0	4,88	2,44

Lecturers: doc. PaedDr. Klára Velmovská, PhD., PaedDr. Simona Gorčáková

Last change: 18.06.2022
Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KDPP/N-bXDI-004/10	Introduction to Philosophy (1)

Educational activities:
Type of activities: lecture
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 5.

Educational level: I.

Prerequisites:

Course requirements:
participation, activity, homework or final essay

Learning outcomes:
Understanding of the basic concepts of systematic philosophy and the basic traditions of the history of philosophy.

Class syllabus:
Introduction of the basic concepts of philosophy. A review of the history of philosophy. The emergence of philosophy in antique Greece and its development. Plato and Aristotle. Chosen problems of systematic philosophy.

Recommended literature:
Tarnas, R.: The Passion of the Western Mind
Anzenbacher, A.: Introduction to Philosophy

Languages necessary to complete the course:
slovak

Notes:

Past grade distribution
Total number of evaluated students: 1687

A	B	C	D	E	FX
50,74	35,74	12,86	0,36	0,18	0,12

Lecturers: Mgr. Štefan Zolcer, PhD.

Last change: 19.09.2019

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KDPP/N-bXDI-005/10	Introduction to Philosophy (2)

Educational activities:
Type of activities: lecture
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 6.

Educational level: I.

Prerequisites:

Course requirements:
participation, activity, homework or final essay

Learning outcomes:
Understanding of the basic concepts of systematic philosophy and the basic traditions of the history of philosophy.

Class syllabus:
Introduction of the basic concepts of philosophy. A review of the history of philosophy. Reflections on the beginnings of modern scientific and philosophical thinking in early modern times and the development of modern philosophy. Chosen problems of systematic philosophy.

Recommended literature:
Tarnas, R.: The Passion of the Western Mind
Anzenbacher, A.: Introduction to Philosophy
Kuhn, T. S.: The Structure of Scientific Revolutions
Rosenberg, A.: Philosophy of Science. A contemporary introduction

Languages necessary to complete the course:
slovak

Notes:

Past grade distribution
Total number of evaluated students: 1368

A	B	C	D	E	FX
50,0	33,11	16,01	0,37	0,44	0,07

Lecturers: Mgr. Štefan Zolcer, PhD.

Last change: 19.09.2019

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
FMFI.KDMFI/1-UFY-220/15	Introduction to School Experiments

Educational activities:
Type of activities: laboratory practicals / lecture
Number of hours:
per week: 2 / 2 **per level/semester:** 28 / 28
Form of the course: on-site learning

Number of credits: 5

Recommended semester: 4.

Educational level: D, I.

Prerequisites:

Course requirements:
Continuous assessment: written test (10 marks), individual work projects (2x20 marks), practical test (10 marks)
Exam: oral (40 marks)
Indicative assessment scale: A 90%, B 80%, C 70%, D 60%, E 50%
Credits will be awarded if the student obtains at least 50% marks.

Learning outcomes:
Graduates have the knowledge, skills and abilities necessary for the methodology and technique of performing several types of school physical measurements and experiments in the physics curriculum of lower secondary and high schools.

Class syllabus:
Phases of a school experiment, types of school experiments, measurements and observations, possibilities of a computer-aided science laboratory, measurement with sensors, basics of video measurement, basics of preparation of interactive animations. Preparation of instruction for a student for an experiment planned by a teacher, preparation and assignment of a student planning experiment. Empirical cognition in school physics, basics of measuring results, student work in empirical cognition.

Recommended literature:
Evidence based teaching : A practical approach / Geoff Petty. Cheltenham : Nelson Thornes, 2006
Počítačom podporované prírodovedné laboratórium / Peter Demkanin a kol.. Bratislava : Knižničné a edičné centrum, 2006
Demkanin, P, Didaktika fyziky, UK 2018
Klentschy, Michael P.: Scaffolding Science Inquiry Through Lesson Design
Own electronic texts of the subject published through the subject's website.

Languages necessary to complete the course:
Slovak and English.

Notes:

Past grade distribution
Total number of evaluated students: 66

A	B	C	D	E	FX
60,61	21,21	13,64	0,0	1,52	3,03

Lecturers: doc. RNDr. Peter Demkanin, PhD., doc. PaedDr. Viera Haverlíková, PhD.

Last change: 18.06.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KAgCh/N-bUCH-035/15	Laboratory Technique for Teachers

Educational activities:
Type of activities: practicals
Number of hours:
per week: 4 **per level/semester:** 56
Form of the course: on-site learning

Number of credits: 4

Recommended semester: 1.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 256

A	B	C	D	E	FX
10,55	18,75	21,88	17,97	12,89	17,97

Lecturers: RNDr. Jana Chrappová, PhD., doc. Mgr. Peter Billik, PhD., RNDr. Zuzana Matkovičová, PhD.

Last change:

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KJ/N-bXCJ-094/10	Latin

Educational activities:
Type of activities: practicals
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 1.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 510

A	B	C	D	E	FX
41,76	21,18	13,33	4,71	6,08	12,94

Lecturers: RNDr. Tatiana Slováková, PhD., Mgr. Ivan Lábaj, PhD.

Last change: 16.01.2020

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KJ/N-bXCJ-095/10	Latin

Educational activities:
Type of activities: practicals
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 2.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 368

A	B	C	D	E	FX
48,37	20,11	11,41	4,35	2,99	12,77

Lecturers: RNDr. Tatiana Slováková, PhD., Mgr. Ivan Lábaj, PhD.

Last change: 16.01.2020

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KPl/N-XXXX-008/21	Man as a part of the nature

Educational activities:
Type of activities: lecture
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 1., 3., 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: 160

A	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0

Lecturers: RNDr. Malvína Čierniková, PhD., prof. RNDr. Pavel Dlapa, PhD., prof. RNDr. Elena Masarovičová, DrSc., prof. PaedDr. Pavol Prokop, DrSc., prof. RNDr. Peter Fedor, DrSc., prof. Ing. Eva Chmielewská, CSc., RNDr. Martina Zvaríková, PhD., RNDr. Martin Labuda, PhD., doc. RNDr. Eva Pauditšová, PhD., RNDr. Hubert Žarnovičan, PhD., doc. RNDr. Stanislav Rapant, DrSc., doc. RNDr. Ľubomír Jurkovič, PhD., Mgr. Tomáš Lánczos, PhD., doc. RNDr. Katarína Pavličková, CSc.

Last change:

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
FMFI.KDMFI/1-UFY-120/15	Mathematical Methods in Physics (1)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 1 / 2 **per level/semester:** 14 / 28
Form of the course: on-site learning

Number of credits: 4

Recommended semester: 1.

Educational level: I.

Prerequisites:

Course requirements:
Continuous assessment: written exams, problem solving
Exam: written
Indicative assessment scale: A 90%, B 80%, C 70%, D 60%, E 50%
Credits will be awarded if the student obtains min. 50% marks.

Learning outcomes:
Students know the basic mathematical concepts and methods used in the physics course. These can be used in solving basic physics course tasks.

Class syllabus:
Vector and basic vector operations. Scalar and vector product. Function and its properties. Derivation of a function. The course of the function. Differential. Taylor polynomial. Application of differential calculus. Indefinite integral. Integration methods. Definite integral. Applications of a definite integral. Improper integral. 1st and 2nd order linear differential equations. 1st order and 2nd order differential equations. Differential equations in physics.

Recommended literature:

Languages necessary to complete the course:
Slovak and English.

Notes:

Past grade distribution
Total number of evaluated students: 73

A	B	C	D	E	FX
46,58	21,92	9,59	4,11	6,85	10,96

Lecturers: doc. PaedDr. Klára Velmovská, PhD.

Last change: 18.06.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
FMFI.KDMFI/1-UFY-121/15	Mathematical Methods in Physics (2)

Educational activities:
Type of activities: course
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 2.

Educational level: I.

Prerequisites:

Course requirements:
Continuous assessment: tests (3x20 marks), problem solving (4x10 marks)
Indicative rating scale: A 90%, B 80%, C 70%, D 60%, E 50%.
Credits will be awarded if the student obtains min. 50% marks.

Learning outcomes:
Graduates master selected mathematical concepts and methods used in physics and know how to use them in solving core physics courses.

Class syllabus:
Real function of several variables. Points and sets in n-dimensional space. Limit functions of several variables. Continuity of a function of several variables. Partial derivatives of functions of several variables. Complete differential of a function of several variables. Taylor polynomial functions of several variables. Extremes of functions of several variables. Local extremes of functions of several variables. Bound local extremes. Global (absolute) extremes. Integral of functions of several variables. Calculation of a certain integral on an interval. Integral calculation on the elementary domain. Substitution method for integrals of several variables (polar, cylindrical and spherical coordinates). Geometric applications of integral of several variables. Applications of plural integrals in physics. Scalar and vector fields. Gradient, divergence, rotation. Curve integrals of the 1st and 2nd kind.

Recommended literature:

Languages necessary to complete the course:
Slovak and English.

Notes:

Past grade distribution
Total number of evaluated students: 61

A	B	C	D	E	FX
59,02	16,39	9,84	9,84	0,0	4,92

Lecturers: doc. PaedDr. Klára Velmovská, PhD.
Last change: 18.06.2022
Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
FMFI.KDMFI/1-UFY-343/15	Mathematical Methods of Theoretical Physics

Educational activities:
Type of activities: seminar
Number of hours:
per week: 1 **per level/semester:** 14
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 6.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 38

A	B	C	D	E	FX
60,53	26,32	5,26	5,26	0,0	2,63

Lecturers: PaedDr. Lukáš Bartošovič, PhD.

Last change: 29.11.2017

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
FMFI.KDMFI/1-UFY-111/15	Mechanics

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 2 / 3 **per level/semester:** 28 / 42
Form of the course: on-site learning

Number of credits: 6

Recommended semester: 1.

Educational level: I.

Prerequisites:

Course requirements:
Continuous assessment: papers. homeworks
Exam: written
Indicative rating scale: A 90%, B 80%, C 70%, D 60%, E 50%.
Credits will not be awarded if a student scores less than 50%.

Learning outcomes:
Students will understand the basic concepts and laws of mechanics and will be able to use them in solving problems.

Class syllabus:
Basic physical quantities. Gradual movement, movement in a circle. Newton's laws of dynamics, force, momentum. Inertial and non-inertial reference frames. Gravitational field. Work, kinetic and potential energy, moment of force, moment of momentum. Conservation laws in mechanics. Rigid body mechanics, center of gravity, moment of inertia, Steiner's theorem, rotational motion. Fluid mechanics. Oscillations - free, damped and forced, resonance.

Recommended literature:

Languages necessary to complete the course:
Slovak and English.

Notes:

Past grade distribution
Total number of evaluated students: 82

A	B	C	D	E	FX
29,27	14,63	18,29	18,29	4,88	14,63

Lecturers: PaedDr. Peter Horváth, PhD., doc. RNDr. Peter Demkanin, PhD.

Last change: 18.06.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
FMFI.KDMFI/1-UFY-342/15	Molecular Physics and Thermodynamics

Educational activities:
Type of activities: lecture
Number of hours:
per week: 3 **per level/semester:** 42
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 6.

Educational level: I.

Prerequisites:

Course requirements:
Continuous assessment: tests (2x10 marks), presentation of individual project work (10 marks), homeworks (3x10 marks)
Exam: written (40 marks)
Indicative assessment scale: A 90%, B 80%, C 70%, D 60%, E 50%
Credits will not be awarded if a student scores less than 50%.

Learning outcomes:
Graduates will have basic knowledge of molecular physics and thermodynamics - basic concepts, methods, laws and selected applications in this field. They will have an idea of the boundaries between graduation and university physics in this area in terms of working with high school youth with an increased interest in physics. They will have developed skills and knowledge to work with energy transformations and the law of conservation of energy within classical physics.

Class syllabus:
History of molecular discovery, Mol, Avogadro's constant, typical dimensions of the microworld. Phenomenology of gas processes, equation of state, Kelvin scale. Kinetic theory of gas pressure, the relationship between temperature, heat and energy. Macroscopic work of gas, heat as microscopic work, the first thermodynamic theorem. Mayer's relationship, Adiabatic story. Continuous random variables. Maxwell's velocity distribution. Boltzmann distribution and barometric formula. A synthesizing view of the law of conservation of energy in classical physics.

Recommended literature:

Languages necessary to complete the course:
Slovak and English.

Notes:

Past grade distribution
Total number of evaluated students: 38

A	B	C	D	E	FX
71,05	23,68	2,63	0,0	0,0	2,63

Lecturers: PaedDr. Lukáš Bartošovič, PhD.

Last change: 18.06.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KOrCh/N-bUCH-041/16	Natural Compounds

Educational activities:
Type of activities: lecture / seminar
Number of hours:
per week: 1 / 1 **per level/semester:** 14 / 14
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 5.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 16

A	B	C	D	E	FX
37,5	12,5	31,25	12,5	0,0	6,25

Lecturers: Mgr. Ambroz Almássy, PhD., doc. RNDr. Peter Magdolen, PhD.

Last change: 14.11.2017

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KOrCh/N-bUCH-003/15	Organic Chemistry for Teachers

Educational activities:
Type of activities: practicals / lecture / seminar
Number of hours:
per week: 5 / 4 / 2 **per level/semester:** 70 / 56 / 28
Form of the course: on-site learning

Number of credits: 9

Recommended semester: 4.

Educational level: I.

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

A	B	C	D	E	FX
6,48	10,19	16,67	28,7	12,04	25,93

Lecturers: Mgr. Andrea Martinická, PhD., doc. Ing. Mária Mečiarová, PhD., Mgr. Peter Šramel, PhD.

Last change: 27.11.2019

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KDPP/N-bXDI-014/15	Pedagogic Communication

Educational activities:
Type of activities: lecture / seminar
Number of hours:
per week: 1 / 1 **per level/semester:** 14 / 14
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 3.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 354

A	B	C	D	E	FX
26,84	22,03	23,45	13,56	9,04	5,08

Lecturers: doc. RNDr. PaedDr. Zuzana Haláková, PhD.

Last change: 03.12.2019

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KOrCh/N-bCXX-012/15	Perspectives in Chemistry

Educational activities:
Type of activities: lecture
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 1.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 101

A	B	C	D	E	FX
8,91	40,59	24,75	19,8	5,94	0,0

Lecturers: doc. RNDr. Martin Putala, CSc., doc. RNDr. Oľga Rosskopfová, PhD., prof. Ing. Dušan Velič, DrSc., prof. RNDr. Ivan Černušák, DrSc., RNDr. Milan Sýkora, PhD., Mgr. Peter Hrobárik, PhD., doc. RNDr. Erik Rakovský, PhD., RNDr. Marek Cigáň, PhD., doc. RNDr. Marian Masár, PhD., doc. Mgr. Peter Polčic, PhD., doc. RNDr. Jana Korduláková, PhD.

Last change: 14.11.2017

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KGe/N-bUXX-001/15	Perspectives of current biology

Educational activities:
Type of activities: lecture
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 1.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 109

A	B	C	D	E	FX
64,22	9,17	14,68	1,83	3,67	6,42

Lecturers: prof. RNDr. Ľubomír Tomáška, DrSc., doc. RNDr. Radoslav Beňuš, PhD., prof. RNDr. Karol Mičieta, PhD., doc. Mgr. Michal Martinka, PhD., prof. RNDr. Ján Turňa, CSc., doc. RNDr. Stanislav Stuchlík, CSc., doc. Mgr. Peter Vďačný, PhD., prof. RNDr. Michal Zeman, DrSc., prof. RNDr. Yvetta Gbelská, CSc., prof. RNDr. Jela Mistríková, DrSc., doc. RNDr. Tomáš Derka, PhD.

Last change:

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KBCh/N-XXXX-010/21	Perspektívy biochémie

Educational activities:
Type of activities: seminar
Number of hours:
per week: 1 **per level/semester:** 14
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 2., 4., 6.

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: 8

A	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0

Lecturers: doc. RNDr. Marek Mentel, PhD.

Last change:

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KOrCh/N-XXXX-011/21	Perspektívy chémie

Educational activities:
Type of activities: lecture
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 1., 3., 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: 3

A	B	C	D	E	FX
33,33	33,33	0,0	33,33	0,0	0,0

Lecturers: RNDr. Marek Cigáň, PhD., doc. RNDr. Martin Putala, CSc., prof. Ing. Dušan Velič, DrSc., prof. RNDr. Ivan Černušák, DrSc., doc. RNDr. Erik Rakovský, PhD., Mgr. Peter Hrobárik, PhD., doc. RNDr. Oľga Rosskopfová, PhD.

Last change:

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KFTCh/N-bUCH-001/15	Physical Chemistry for Teachers

Educational activities:
Type of activities: practicals / lecture / seminar
Number of hours:
per week: 2 / 4 / 2 **per level/semester:** 28 / 56 / 28
Form of the course: on-site learning

Number of credits: 6

Recommended semester: 3.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 110

A	B	C	D	E	FX
15,45	19,09	15,45	22,73	12,73	14,55

Lecturers: doc. Mgr. Pavel Neogrády, DrSc., doc. RNDr. Ivan Valent, CSc., prof. Ing. Dušan Velič, DrSc., doc. Ing. Marián Janek, PhD., RNDr. Lukáš Félix Pašteka, PhD., RNDr. Eva Noskovičová, PhD.

Last change:

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KTV/N-bXTV-104/18	Physical Education

Educational activities:
Type of activities: practicals
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 4.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 437

A	B	C	D	E	FX
99,08	0,0	0,46	0,0	0,46	0,0

Lecturers: Mgr. Kristína Vanýsková, PaedDr. Vladimír Hubka, Mgr. Miriam Kirchmayerová, PhD., Mgr. Ján Krošlák, Mgr. Martin Mokošák, PhD., Mgr. Igor Remák, PhD., PaedDr. Mgr. Lenka Vandáková, PaedDr. Vladimír Pajkoš, Mgr. Dana Széllová

Last change:

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KTV/N-bXTV-101/18	Physical Education 1

Educational activities:
Type of activities: practicals
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 1.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 1138

A	B	C	D	E	FX
99,12	0,7	0,0	0,0	0,0	0,18

Lecturers: Mgr. Kristína Vanýsková, PaedDr. Vladimír Hubka, Mgr. Miriam Kirchmayerová, PhD., Mgr. Ján Krošlák, Mgr. Martin Mokošák, PhD., Mgr. Igor Remák, PhD., PaedDr. Mgr. Lenka Vandáková, PaedDr. Vladimír Pajkoš, Mgr. Dana Széllová

Last change:

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KTV/N-bXTV-102/18	Physical Education 2

Educational activities:
Type of activities: practicals
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 2.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 772

A	B	C	D	E	FX
99,87	0,0	0,0	0,0	0,0	0,13

Lecturers: Mgr. Kristína Vanýsková, PaedDr. Vladimír Hubka, Mgr. Miriam Kirchmayerová, PhD., Mgr. Ján Krošlák, Mgr. Martin Mokošák, PhD., Mgr. Igor Remák, PhD., PaedDr. Mgr. Lenka Vandáková, PaedDr. Vladimír Pajkoš, Mgr. Dana Széllová

Last change:

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KTV/N-bXTV-103/18	Physical Education 3

Educational activities:
Type of activities: practicals
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 3.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 500

A	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0

Lecturers: Mgr. Kristína Vanýsková, PaedDr. Vladimír Hubka, Mgr. Miriam Kirchmayerová, PhD., Mgr. Ján Krošlák, Mgr. Martin Mokošák, PhD., Mgr. Igor Remák, PhD., PaedDr. Mgr. Lenka Vandáková, PaedDr. Vladimír Pajkoš, Mgr. Dana Széllová

Last change:

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KTV/N-bXTV-105/18	Physical Education 5

Educational activities:
Type of activities: practicals
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 5.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 286

A	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0

Lecturers: Mgr. Kristína Vanýsková, PaedDr. Vladimír Hubka, Mgr. Miriam Kirchmayerová, PhD., Mgr. Ján Krošlák, Mgr. Martin Mokošák, PhD., Mgr. Igor Remák, PhD., PaedDr. Mgr. Lenka Vandáková, PaedDr. Vladimír Pajkoš, Mgr. Dana Széllová

Last change:

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KTV/N-bXTV-106/18	Physical Education 6

Educational activities:
Type of activities: practicals
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 6.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 229

A	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0

Lecturers: Mgr. Kristína Vanýsková, PaedDr. Vladimír Hubka, Mgr. Miriam Kirchmayerová, PhD., Mgr. Ján Krošlák, Mgr. Martin Mokošák, PhD., Mgr. Igor Remák, PhD., PaedDr. Mgr. Lenka Vandáková, PaedDr. Vladimír Pajkoš, Mgr. Dana Széllová

Last change:

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
FMFI.KDMFI/1-UFY-335/15	Physics Around Us

Educational activities:
Type of activities: lecture
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 5.

Educational level: I.

Prerequisites: FMFI.KDMFI+KEF/1-UFY-132/15 - School Physics (1)

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 28

A	B	C	D	E	FX
96,43	0,0	0,0	0,0	3,57	0,0

Lecturers: PaedDr. Peter Horváth, PhD.

Last change: 02.06.2015

Approved by:

STATE EXAM DESCRIPTION

Academic year: 2021/2022	
University: Comenius University Bratislava	
Faculty: Faculty of Natural Sciences	
Course ID: FMFI.KDMFI/1-UFY-951/15	**Course title:** Physics and Didactics of Physics
Number of credits: 2	
Educational level: I.	

Course requirements:

The final examination is realized by the student's discussion with the members of the commission on two topics from the content of the examination. Assessed: illustration of concepts on suitable examples / contexts / situations 0-3 points; correctness of physics terminology 0-3 points; intelligibility of discussion 0-3 points; responding to commission questions regarding selected topics 0-3 points; responding to other commission questions / broader context 0-3 points. Indicative assessment scale: A 90%, B 80%, C 70%, D 60%, E 50%

The exam is successfully passed if the student obtains at least 50% of points.

Learning outcomes:

Passing the exam represents fulfilling the profile of the graduate.

Class syllabus:

Physics:

Movement in two dimensions. Even movement in a circle. Movements in a homogeneous gravitational field, oblique litter. Newton's laws of motion. Relationship between free fall and motion of bodies in the radial field of the Earth.

Mechanical work, kinetic energy, work of gravitational force (in homogeneous gravitational field), work of elastic force, power, potential gravitational energy, potential energy of elasticity, law of conservation of mechanical energy, conservative and non-conservative forces, work of friction force.

Fluid mechanics, pressure, compressive force, pressure induced by fluid gravity, Archimedes' law, Pascal's law, continuity equation, Bernoulli's equation.

Elastic and inelastic collisions, momentum, impulse of force, law of conservation of system momentum, elastic and inelastic direct collisions, oblique collisions, explosion (in two parts).

Moment of force with respect to the axis of rotation, momentum of the moment for rotation around a fixed axis (second impulse theorem), rolling, rotation of bodies around a fixed axis, rolling on an inclined plane. Momentum, momentum of a particle system, momentum of a rigid body with respect to a fixed axis, the law of conservation of momentum.

Coulomb's law. Electric field. Scalar and vector fields. Electric fields, lines of force. Point charge field. Superposition of electric fields. Electric dipole field. Application of Gauss' s law.

Electric potential. Electric potential energy. Potential, voltage, equipotential surfaces. Electron volt. Work performed by an external force when moving the charge in the el. field. Point charge potential. Potential energy and potential of a system of point charges. Faraday's cage. Capacity. Capacitor and capacity. Capacitor charging process.

Circuits with unidirectional el. current. Electromotive voltage. Internal battery resistance, terminal voltage. Battery power, power dissipation, battery charging and discharging. Loop rule, node rule, current calculation in resistor circuits by voltage method. Serial and parallel connection of resistors. Connection of ammeters and voltmeters, ideal ammeter and ideal voltmeter.

Magnetic field. The essence of magnetism and the magnetic field, the absence of a magnetic monopole. Magnetic induction, Lorentz force. Induction lines. Bar magnet. The trajectory of a charged particle in mag. field. Earth's magnetic field, aurora borealis. Cyclotron and synchrotron. Charged particle separator according to velocities, mass spectrometer. Hall map. Force acting on a current conductor in a magnetic field (Ampere's force).
Electromagnetic induction. Induced current, induced electromotive voltage. Experiments demonstrating electromagnetic induction. Faraday's law of electromagnetic induction. Lenz's law. Induction energy transfer. Alternator. Faraday's law of electromagnetic induction in integral form. Eddy currents.
Electromagnetic oscillations and alternating current circuits. LC oscillations, energy transfer, energy conservation, mechanical analogy. Damped oscillations in a serial RLC circuit. Circular frequency of undamped and damped oscillations. Power in RLC circuit with AC source. Effective voltage, power factor, resonant frequency of the source.
Mechanical vibration, kinematics - instantaneous deflection, speed and acceleration of oscillating motion, equation of motion for harmonic motion, energy of harmonic oscillator. Torsional oscillations, mathematical and physical pendulum, damped and forced oscillations, resonance.
Waves, superposition principle, wave speed propagating on a rope, reflection and transmission of a wave at an interface, standing waves, sound, resonance in tubes, Doppler effect, sound shock waves. Doppler phenomenon in connection with sound and in connection with light. Body velocity measurement. Infrared shift when exploring distant stars.
Electromagnetic waves, light, spectral regions of light and electromagnetic waves, Interference in space, basic assumptions of two-beam interference, Young's two-slit experiment, intensity profile in interference, interference on thin films. Sound wave interference. Bending (diffraction) of light at the aperture, Rayleigh criterion, diffraction grating.
Rutherford scattering, Bohr model of the atom, electron transitions between energy levels, emission and absorption spectra of gases. Franck-Hertz experiment. X-rays.
Interaction and radiation detection. Photoelectric effect, Compton scattering, pair formation and annihilation.
The nucleus of an atom and its properties. Weight loss and binding energy. nuclear fusion and fission. Isotopes.
Radioactive transformation. Alpha, beta and gamma radiation. Law of radioactive transformation, activity. Absorption characteristics of alpha, beta and gamma rays.
Ideas about the microworld. Basic substance characteristics (molar quantities). Equation of state of an ideal gas. Heat and temperature, Kelvin temperature scale. Thermal processes with an ideal gas - state changes and energy aspects. Ideal gas pressure, barometric equation. Kinetic theory of substance structure. Maxwell-Boltzmann distribution. The law of conservation of energy in terms of thermodynamics.
Didactics:
Science literacy, scientific work skills. Examples of the development of scientific skills in teaching physics.
Objectives and content of science and physical education.
Bloom's taxonomy of goals and its application in the creation of physical problems.
Basic pedagogical documents and teaching aids, their structure and function.
The model of ontogenesis of thinking according to J. Piaget and its importance for the creation of the physics curriculum.
Empirical and theoretical cognition in school physics. Selected methods of access to methods and ways of cognition.
Graphic method of communication between two quantities. Examples of the use of graphs in the introduction of some physical concepts.

Classification of physical tasks. The importance of the physical role in the cognitive process.
Complex physical problems, function of complex tasks in introducing ideas about natural phenomena.
Complete scheme of the school physics experiment planned by the teacher - the teacher's activity.
Pupil's activity in various phases of planning, implementation and data processing of a school physics experiment. Pupil-planned experiment.
Classification of school physics experiments (cognitive functions, organization, means used, data obtained).
Assessment and classification of students in physics teaching. Assessment of the degree of development of students' scientific abilities.
Key experiments on the topic of "fluid statics".
Key experiments on the topic of "calorimetry".
Key experiments on the topic of "molecular physics".
Key experiments on the topic of "movement and force".

State exam syllabus:

Recommended literature:
Recommended literature on the subjects of the study program.

Languages necessary to complete the course:
Slovak and English.

Last change: 10.03.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
FMFI.KDMFI/1-UFY-360/15	Physics as the Component of Science Education

Educational activities:
Type of activities: course
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 5.

Educational level: I.

Prerequisites:

Course requirements:
Continuous assessment: seminar work (30 marks), defence of seminar work (40 marks), discussion of the work of peers (30 marks)
Indicative rating scale: A 90%, B 80%, C 70%, D 60%, E 50%.
Credits will not be awarded if a student scores less than 50%.

Learning outcomes:
They will know the ways of integration of science subjects into didactic programs and the position of physics in them, common methods, procedures, strategies and concepts in science subjects.

Class syllabus:
New approaches to the transformation of natural sciences into didactic models of education. Physics as a basis of conceptual structure and methods of work in the didactic model of science education. Graphical method of imaging as a way of mathematical modeling of phenomena. Application of historical aspects in the content of education.
Investigation of the properties of liquids and gases - a starting point for mastering the methods of measuring weight, length, volume. Procedures and strategies for experimental activities, as well as processing of measured data. Application of selected methods of work in physics to the study of living organisms.

Recommended literature:

Languages necessary to complete the course:
Slovak and English.

Notes:

Past grade distribution
Total number of evaluated students: 46

A	B	C	D	E	FX
78,26	10,87	6,52	0,0	0,0	4,35

Lecturers: doc. PaedDr. Viera Haverlíková, PhD.

Last change: 18.06.2022
Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
FMFI.KDMFI/1-UFY-170/20	Physics by Experience

Educational activities:
Type of activities: training session
Number of hours:
per week: **per level/semester:** 5d
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 1., 3., 5.

Educational level: I.

Prerequisites:

Course requirements:
During the camp, students will solve short practical tasks (3x10 marks) and one project task (40 marks). Reflection of the camp activities is for max. 30 marks.
Rating A = (90, 100]%, B = (80, 90]%, C = (70, 80]%, D: (60, 70]%, E: (50, 60]%).
Credits will not be awarded if a student scores less than 50%.

Learning outcomes:
By completing the course, the student will gain basic knowledge about the specifics of teaching physics in the outdoor environment. At a level appropriate to the future beginning physics teacher, will know the main characteristics of non-formal education and will be able to use selected methods of non-formal education in teaching physics at secondary schools.

Class syllabus:
The outdoor environment as a part of the environment for elementary school students' learning. Formal, non - formal and informal learning. Edutainment. Situation analysis - condition analysis, environment analysis and needs analysis. Objectives of non-formal education - knowledge, skills, attitudes, relationships. Methods and techniques in non-formal education. Creative-discovery workshops. Educational games. Group dynamics.

Recommended literature:

Languages necessary to complete the course:
Slovak and English.

Notes:

Past grade distribution
Total number of evaluated students: 0

A	B	C	D	E	FX
0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: doc. PaedDr. Viera Haverlíková, PhD., doc. PaedDr. Klára Velmovská, PhD.

Last change: 18.06.2022
Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KRGRR/N-XXXX-002/21	Practical Geography for Natural Scientists

Educational activities:
Type of activities: lecture / seminar
Number of hours:
per week: 1 / 1 **per level/semester:** 14 / 14
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 1., 3., 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: 4

A	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0

Lecturers: Mgr. Rastislav Cákoci, PhD., RNDr. Katarína Danielová, PhD., doc. RNDr. Daniel Gurňák, PhD., doc. RNDr. František Križan, PhD., doc. RNDr. Eva Rajčáková, CSc., Mgr. Michala Sládeková Madajová, PhD., RNDr. Angelika Švecová, PhD., Mgr. Martin Šveda, PhD., prof. RNDr. Ladislav Tolmáči, PhD., RNDr. Mgr. Anna Tolmáči, PhD., Mgr. Gabriel Zubriczký, PhD.

Last change: 15.05.2021

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KIHG/N-XXXX-012/21	Praktická geológia pre všetkých

Educational activities:
Type of activities: lecture
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 1., 3., 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: 4

A	B	C	D	E	FX
75,0	0,0	25,0	0,0	0,0	0,0

Lecturers: doc. RNDr. Renáta Adamcová, PhD., prof. RNDr. Martin Bednarik, PhD., Mgr. Rudolf Tornyai, PhD., doc. RNDr. Dávid Krčmář, PhD., Mgr. Martin Zatlakovič, PhD., RNDr. Tatiana Durmeková, PhD., doc. RNDr. Renáta Fľaková, PhD., RNDr. Ivana Ondrejková, PhD., prof. RNDr. Roman Pašteka, PhD., doc. Mgr. Vladimír Greif, PhD., doc. RNDr. Milan Seman, CSc.

Last change:

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KDPP/N-bUXX-038/19	Psychology for Teachers (1)

Educational activities:
Type of activities: lecture / seminar
Number of hours:
per week: 2 / 2 **per level/semester:** 28 / 28
Form of the course: on-site learning

Number of credits: 4

Recommended semester: 1.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 174

A	B	C	D	E	FX
29,31	29,89	18,39	12,07	8,05	2,3

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

Last change:

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KDPP/N-bUXX-039/19	Psychology for Teachers (2)

Educational activities:
Type of activities: lecture / seminar
Number of hours:
per week: 2 / 2 **per level/semester:** 28 / 28
Form of the course: on-site learning

Number of credits: 4

Recommended semester: 2.

Educational level: I.

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

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 222

A	B	C	D	E	FX
48,65	20,72	18,92	5,86	4,5	1,35

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

Last change:

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KBo/N-XXXX-003/21	Rastliny známe neznáme

Educational activities:
Type of activities: seminar
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 1., 3., 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: 110

A	B	C	D	E	FX
53,64	35,45	2,73	0,0	0,0	8,18

Lecturers: Ing. Mgr. Eva Zahradníková, PhD., doc. Mgr. Katarína Mišíková, PhD., doc. RNDr. Jana Ščevková, PhD.

Last change: 15.05.2021

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KDPP/N-bXDI-021/21	Rhetoric SS

Educational activities:
Type of activities: seminar
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 2., 4., 6.

Educational level: I.

Prerequisites:

Course requirements:
participation, activity, eventually final essay

Learning outcomes:
The aim of the course is to teach students to adequately articulate their ideas, to express their attitudes and opinions, to use argumentation, think critically, to communicate adequately, and to listen or read with understanding.

Class syllabus:
Except the introductory lectures, the course is conceived as seminars with discussions on chosen topics.

Recommended literature:
Aristoteles: Rétorika. Bratislava: Thetis, 2009.
Recommended sources are given to each topic separately.

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 35

A	B	C	D	E	FX
28,57	40,0	20,0	2,86	5,71	2,86

Lecturers: Mgr. Štefan Zolcer, PhD.

Last change: 02.09.2021

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KDPP/N-bXDI-020/21	Rhetoric WS

Educational activities:
Type of activities: seminar
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 1., 3., 5.

Educational level: I.

Prerequisites:

Course requirements:
participation, activity, eventually final essay

Learning outcomes:
The aim of the course is to teach students to adequately articulate their ideas, to express their attitudes and opinions, to use argumentation, think critically, to communicate adequately, and to listen or read with understanding.

Class syllabus:
Except the introductory lectures, the course is conceived as seminars with discussions on chosen topics.

Recommended literature:
Aristoteles: Rétorika. Bratislava: Thetis, 2009.
Recommended sources are given to each topic separately.

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 50

A	B	C	D	E	FX
30,0	30,0	14,0	2,0	2,0	22,0

Lecturers: Mgr. Štefan Zolcer, PhD.

Last change: 02.09.2021

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
FMFI.KDMFI/1-UFY-320/15	School Experiments in Physics

Educational activities:
Type of activities: laboratory practicals
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 5.

Educational level: D, I.

Prerequisites:

Course requirements:
Continuous assessment: tests (2x15 marks), assessment of individual work (2x15 marks)
Exam: practical (20 marks), written (20 marks)
Indicative rating scale: A 90%, B 80%, C 70%, D 60%, E 50%.
Credits will not be awarded if a student scores less than 50%.

Learning outcomes:
Students will gain an overview of selected experiments conducted at secondary school. They will be able to carry out the experiments independently, explain them from a physics point of view and include them appropriately in the process of physics and science education.

Class syllabus:
Safety in the school laboratory. Demonstration experiments, frontal, work of students in a group. Experiments on the properties of substances, fluid statics, calorimetry, molecular physics, fluid dynamics, statics and dynamics of a rigid body, work, power, energy, kinematics, motion and force.

Recommended literature:

Languages necessary to complete the course:
Slovak and English.

Notes:

Past grade distribution
Total number of evaluated students: 47

A	B	C	D	E	FX
51,06	19,15	21,28	4,26	2,13	2,13

Lecturers: doc. PaedDr. Klára Velmovská, PhD., PaedDr. Simona Gorčáková

Last change: 18.06.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KDPP/N-bUXX-026/16	School Management

Educational activities:
Type of activities: lecture / seminar
Number of hours:
per week: 1 / 2 **per level/semester:** 14 / 28
Form of the course: on-site learning

Number of credits: 4

Recommended semester: 6.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 218

A	B	C	D	E	FX
33,49	36,24	18,35	9,17	1,83	0,92

Lecturers: doc. RNDr. PaedDr. Zuzana Haláková, PhD.

Last change: 03.12.2019

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
FMFI.KDMFI+KEF/1-UFY-132/15	School Physics (1)

Educational activities:
Type of activities: course / lecture
Number of hours:
per week: 2 / 1 **per level/semester:** 28 / 14
Form of the course: on-site learning

Number of credits: 4

Recommended semester: 2.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 70

A	B	C	D	E	FX
84,29	4,29	4,29	1,43	0,0	5,71

Lecturers: PaedDr. Peter Horváth, PhD., doc. RNDr. František Kundracik, CSc.

Last change: 02.06.2015

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
FMFI.KDMFI/1-UFY-232/15	School Physics (2)

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 2 / 2 **per level/semester:** 28 / 28
Form of the course: on-site learning

Number of credits: 5

Recommended semester: 3.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 56

A	B	C	D	E	FX
33,93	26,79	16,07	12,5	0,0	10,71

Lecturers: PaedDr. Lukáš Bartošovič, PhD., doc. PaedDr. Viera Haverlíková, PhD.

Last change: 02.06.2015

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KAgCh/N-bUCH-040/16	Scientific and professional literature

Educational activities:
Type of activities: lecture / seminar
Number of hours:
per week: 1 / 1 **per level/semester:** 14 / 14
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 5.

Educational level: I.

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

A	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0

Lecturers: prof. Ing. Karol Jesenák, PhD.

Last change:

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KDPP/N-bUXX-025/16	Seminar to the bachelor thesis

Educational activities:
Type of activities: seminar
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 6.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 206

A	ABS	B	C	D	E	FX
73,79	0,0	14,56	5,34	3,4	2,43	0,49

Lecturers: RNDr. Soňa Nagyová, PhD., RNDr. Ivan Ružek, PhD., RNDr. Jana Chrappová, PhD., doc. RNDr. Katarína Pavličková, CSc., doc. RNDr. Tomáš Derka, PhD., doc. RNDr. Beáta Brestenská, CSc., doc. PaedDr. Elena Čipková, PhD., doc. RNDr. Štefan Karolčík, PhD., doc. RNDr. PaedDr. Zuzana Haláková, PhD., RNDr. Peter Likavský, CSc., RNDr. Henrieta Mázorová, PhD., PaedDr. Tibor Nagy, PhD., doc. Mgr. Soňa Jančovičová, PhD., doc. RNDr. Eliška Gálová, PhD., doc. Ing. Margita Obernauerová, CSc., doc. Ing. Mária Mečiarová, PhD., doc. Mgr. Marcel Horňák, PhD., doc. RNDr. Daniel Gurňák, PhD., RNDr. Katarína Danielová, PhD., PhDr. ThLic. Peter Ikhardt, PhD., RNDr. Jana Ciceková, PhD., PaedDr. Anna Drozdíková, PhD., PhDr. Michael Fuchs, Mgr. Štefan Zolcer, PhD.

Last change:

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KTV/N-bUXX-205/15	Summer physic-educational meeting 2

Educational activities:
Type of activities: other
Number of hours:
per week: **per level/semester:** 7d
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 2., 4.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 371

A	B	C	D	E	FX
99,46	0,0	0,0	0,0	0,0	0,54

Lecturers: Mgr. Kristína Vanýsková, PaedDr. Vladimír Pajkoš

Last change:

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KJCh/N-bUXX-002/15	Supporting Science Subjects - Chemistry 1

Educational activities:
Type of activities: lecture / seminar
Number of hours:
per week: 2 / 1 **per level/semester:** 28 / 14
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 1.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 130

A	B	C	D	E	FX
31,54	14,62	28,46	13,08	12,31	0,0

Lecturers: doc. RNDr. Dušan Galanda, PhD.

Last change:

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KOrCh/N-bUXX-003/15	Supporting Science Subjects - Chemistry 2

Educational activities:
Type of activities: lecture / seminar
Number of hours:
per week: 2 / 1 **per level/semester:** 28 / 14
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 2.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 74

A	B	C	D	E	FX
14,86	43,24	12,16	18,92	6,76	4,05

Lecturers: doc. Ing. Mária Mečiarová, PhD., Mgr. Iveta Kmentová, PhD.

Last change: 27.11.2019

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KDPP/N-bXDI-015/15	Supportive Science - Physics

Educational activities:
Type of activities: lecture / seminar
Number of hours:
per week: 2 / 1 **per level/semester:** 28 / 14
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 2.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 268

A	B	C	D	E	FX
31,34	29,1	19,4	9,33	3,36	7,46

Lecturers: PaedDr. Lukáš Bartošovič, PhD., doc. PaedDr. Viera Haverlíková, PhD.

Last change:

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KDPP/N-bXDI-011/15	Supportive science - Mathematics

Educational activities:
Type of activities: lecture / seminar
Number of hours:
per week: 2 / 1 **per level/semester:** 28 / 14
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 1.

Educational level: I.

Prerequisites:

Course requirements:
Scale of assessment (preliminary/final): 40/60

Learning outcomes:
Knowledge from higher mathematics.

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 310

A	B	C	D	E	FX
62,9	19,03	6,77	3,23	2,9	5,16

Lecturers: PaedDr. Peter Vankúš, PhD.

Last change: 24.04.2017

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KDPP/N-bUXX-023/16	Teaching Practice 1 (A)

Educational activities:
Type of activities: practice
Number of hours:
per week: 40 **per level/semester:** 560
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 6.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 233

A	B	C	D	E	FX
69,1	20,17	3,86	4,29	2,58	0,0

Lecturers: doc. PaedDr. Elena Čipková, PhD., doc. RNDr. Štefan Karolčík, PhD., RNDr. Peter Likavský, CSc., RNDr. Henrieta Mázorová, PhD., prof. RNDr. Miroslav Prokša, CSc., doc. RNDr. Katarína Pavličková, CSc., RNDr. Hubert Žarnovičan, PhD., PhDr. Michael Fuchs, Mgr. Milica Križanová, PhD.

Last change:

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KDPP/N-bUXX-024/16	Teaching Practice 1 (B)

Educational activities:
Type of activities: practice
Number of hours:
per week: 40 **per level/semester:** 560
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 6.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 281

A	ABS	B	C	D	E	FX
72,6	0,0	18,86	4,27	2,14	1,78	0,36

Lecturers: doc. PaedDr. Elena Čipková, PhD., doc. RNDr. Štefan Karolčík, PhD., RNDr. Peter Likavský, CSc., RNDr. Henrieta Mázorová, PhD., prof. RNDr. Miroslav Prokša, CSc., doc. RNDr. Katarína Pavličková, CSc., RNDr. Hubert Žarnovičan, PhD., PhDr. Michael Fuchs, Mgr. Milica Križanová, PhD.

Last change:

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
FMFI.KDMFI/1-UXX-821/15	Teaching Practice in Physics (1)

Educational activities:
Type of activities: practice
Number of hours:
per week: **per level/semester:** 30s
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 6.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 35

A	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0

Lecturers: PaedDr. Peter Horváth, PhD.

Last change:

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KZ/N-XXXX-006/21	Teória druhu

Educational activities:
Type of activities: seminar
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 2., 4., 6.

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: 9

A	B	C	D	E	FX
77,78	11,11	11,11	0,0	0,0	0,0

Lecturers: doc. Mgr. Peter Vďačný, PhD.

Last change:

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KDPP/N-bXDI-012/15	Theoretical Fundaments of Education

Educational activities:
Type of activities: lecture / seminar
Number of hours:
per week: 1 / 1 **per level/semester:** 14 / 14
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 3.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 355

A	B	C	D	E	FX
26,76	41,13	19,72	7,89	2,54	1,97

Lecturers: PhDr. ThLic. Peter Ikhardt, PhD.

Last change: 05.12.2019

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KDPP/N-bUXX-037/15	Theory of Teaching

Educational activities:
Type of activities: lecture / seminar
Number of hours:
per week: 2 / 1 **per level/semester:** 28 / 14
Form of the course: on-site learning

Number of credits: 4

Recommended semester: 4.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 333

A	B	C	D	E	FX
27,63	23,12	18,92	12,61	10,51	7,21

Lecturers: doc. RNDr. PaedDr. Zuzana Haláková, PhD.

Last change: 03.12.2019

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KOrCh/N-bCXX-046/16	Toxicology

Educational activities:
Type of activities: lecture / seminar
Number of hours:
per week: 1 / 1 **per level/semester:** 14 / 14
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 6.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 113

A	B	C	D	E	FX
61,06	21,24	10,62	4,42	1,77	0,88

Lecturers: Mgr. Henrieta Stankovičová, PhD.

Last change: 14.11.2017

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
FMFI.KDMFI/1-UFY-265/15	Unconventional Physics

Educational activities:
Type of activities: seminar
Number of hours:
per week: 2 **per level/semester:** 28
Form of the course: on-site learning

Number of credits: 2

Recommended semester: 6.

Educational level: I.

Prerequisites:

Course requirements:
Continuous assessment: active seminar work (40 marks), assessment of teaching-learning sequences (3x20 marks)
Indicative rating scale: A 90%, B 80%, C 70%, D 60%, E 50%.
Credits will not be awarded if a student scores less than 50%.

Learning outcomes:
The student will be able to apply physics in non-traditional, practical tasks and interesting life situations. He will get inspiration to lead a physics afternoon class at school.

Class syllabus:
Students will get acquainted with non-traditional approaches to the introduction and practice of selected physical concepts and laws from the curriculum of primary and secondary school through simple experiments, non-traditional tasks, home laboratory tasks, projects. They will get acquainted with the possibilities of using these approaches in non-formal and informal science education.

Recommended literature:

Languages necessary to complete the course:
Slovenský a anglický.

Notes:

Past grade distribution
Total number of evaluated students: 43

A	B	C	D	E	FX
97,67	0,0	0,0	0,0	0,0	2,33

Lecturers: doc. PaedDr. Klára Velmovská, PhD.

Last change: 18.06.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
FMFI.KEF/1-UFY-210/00	Waves and Optics

Educational activities:
Type of activities: practicals / lecture
Number of hours:
per week: 3 **per level/semester:** 13s / 42
Form of the course: on-site learning

Number of credits: 5

Recommended semester: 3.

Educational level: I.

Prerequisites:

Course requirements:
Continuous assessment: written tests, lab reports
Exam: oral, written
Indicative assessment scale: A 90%, B 80%, C 70%, D 60%, E 50%
Credits will be awarded if the student obtains at least 50% marks.

Learning outcomes:
Graduates have a systematic knowledge of mechanical waves (including sound) and wave optics at the level of a core university physics course. They have an idea of the boundaries between graduation and university physics in the field of wave optics from the point of view of work with high school youth with an increased interest in physics.

Class syllabus:
Oscillations and oscillating systems (modes, resonators, oscillations and waves, Fourier analysis of oscillations). Waves (harmonic waves, complex notation, wave superposition, wave polarization, Doppler effect, wave diffraction, waves in physics, and waves at boundaries). Wave optics (light interference, light diffraction, holography, light dispersion in dielectrics, dispersion, polarization by reflection and refraction, spreading of light in anisotropic conditions). Geometrical optics and basics of optical projection. Photo metrics. Contemporary problems in optics.

Recommended literature:
Main I. G.: Kmity a vlny ve fyzice, Academia Praha 1990
Feynman R. P., Leighton R. B., Sands M.: Feynmanove prednášky z fyziky 2, Alfa Bratislava 1982
Z. Chorvátová: Kmity a vlny, skriptum MFF UK, Bratislava 1994
Štrba A., Mesaroš V., Senderáková D.: Optika s príkladmi I, skriptum MFF UK, Bratislava 1996
Hecht E.: Optics, Addison-Wenslez Publishing Company, Inc. 1987

Languages necessary to complete the course:
Slovak ad English.

Notes:

Past grade distribution Total number of evaluated students: 103					
A	B	C	D	E	FX
27,18	21,36	30,1	12,62	7,77	0,97
Lecturers: prof. RNDr. Pavel Veis, CSc.					
Last change: 11.11.2021					
Approved by:					

COURSE DESCRIPTION

Academic year: 2021/2022

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KTV/N-bUXX-201/00	Winter physic-educational meeting

Educational activities:
Type of activities: other
Number of hours:
per week: **per level/semester:** 7d
Form of the course: on-site learning

Number of credits: 1

Recommended semester: 1., 3., 5.

Educational level: I.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 556

A	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0

Lecturers: Mgr. Martin Mokošák, PhD.

Last change: 02.06.2015

Approved by: