# Course descriptions

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## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KBCh/N-bBCH-033/18 | Advanced Practical in Biochemistry |

**Educational activities:**
**Type of activities:** practicals
**Number of hours:**
**per week:** 8 **per level/semester:** 112
**Form of the course:** on-site learning

**Number of credits:** 8

**Recommended semester:** 6.

**Educational level:** I.

**Prerequisites:**

**Recommended prerequisites:**
Biochemistry

**Course requirements:**
At each exercise students write 10-point test. At the end of the semester students take final control test, from which they must attain at least 50%. Students, who achieved more then 50% of the total assessment, will be evaluated as follows: ≥90% A, ≥80% B, ≥70% C, ≥60% D, ≥50% E. Credits will not be awarded to a student who receives less than 50% of the total assessment (control test and activity during the semester).
Scale of assessment (preliminary/final): 60% ongoing/ 40% final exam

**Learning outcomes:**
Students acquire advanced laboratory skills in biochemical, molecular biological and microbiological techniques. After completing this course students should be able to apply in biochemical and biomedical research.

**Class syllabus:**
Advanced Practice in Biochemistry is a set of modern laboratory methods in biochemistry, molecular and cell biology. This course will enable students to acquire skills in following techniques:
1. Isolation and restriction analysis of yeast mitochondrial DNA.
2. Egg-white lysozyme purification using ion-exchange chromatography.
3. Yeast Saccharomyces cerevisiae use for transcription studies.
4. Yeast Saccharomyces cerevisiae lipid extraction and separation.
5. Specific antibody determination using ELISA.

**Recommended literature:**
Lodish, H. et al. (2016), Molecular Cell Biology, eight edition, W.H Freeman and Company
Berg, J.M. et al. (2015), Biochemistry, eight edition, W.H Freeman and Company
Sambrook, J., Fritsch, E.F. and Maniatis, T. (1989) Molecular cloning: A laboratory manual, Cold Spring Harbor Laboratory Press

**Languages necessary to complete the course:**
English

**Notes:**

**Past grade distribution**
Total number of evaluated students: 1

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

**Lecturers:** Ing. Martina Neboháčová, PhD.

**Last change:** 08.01.2019

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KAlCh/N-bBCH-013/15 | Analytická chémia |

**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:** 11

**Recommended semester:** 4.

**Educational level:** I.

**Prerequisites:**

**Course requirements:**
There will be two running written tests, each for 10 points, during the semester on seminars, in summary maximum 20 points. Only student obtaining from both tests minimum 50% will pass to final exam test. Experimental laboratory work will be graded as follows: continuous compounding will be evaluated by 20 points maximum involving theoretical preparation for laboratory work, activity and quality of results in the experimental work summarized in laboratory protocol. Final test from topics of laboratory will be enabled only to student who submitted protocols from all done laboratory experiments - student can get maximum 20 points, in summary max. 40 points for experimental laboratory work. Only those students will be admitted to final examination who achieve at least 50% of the points from seminar tests and laboratory work evaluation. Final exam related to lecture topics will consist of 40-point test. For clarification of boundary test results it is possible to require additional oral answer to the question for maximum 4 points included. Overall grade will consist of summary evaluation of final exam, seminar tests and experimental work according to formula (0.4 x % final exam) + (0.2 x % seminar tests) + (0.4 x % laboratory work) = resulting %. For grade A, it is necessary to obtain at least 92 %, for grade B at least 84 %, for grade C at least 76 %, for grade D at least 68 % and for grade E at least 60 % of all points. Credits will not be assigned to a student, who will not earn at least 60% from running tests, or who will not earn at least 60% from laboratory work and to student, who will not earn at least 60 % from final exam.

**Learning outcomes:**
Chemistry students will become familiar with the information about recent state of quantitative observation - measurement within the system of scientific cognition of material reality; about generation of analytical signal and classification of analytical principles and methods, about analytical process, principles, procedures and techniques; about approach to solution of identification problems, about characterization and quantification of chemical substances in science and technology. Students become familiar also with the possibility to reveal and search for solution of material based research, production and social practice with the aid of chemical analyses as tools of analytical chemistry. The objective involves also calculus in analytical chemistry and solution of model situation from social practice that are discussed in daily press and information media. Student will solve case tasks from biochemistry, biotechnology and the other natural sciences. Current use of analytical chemistry methods and their future potential and outline of their development trends will be discussed. The objective is taught in three forms. Theoretical aspects and calculus basics are

taught in lectures and seminars, respectively. Inevitable part of the objective is also instrumental experimental work in the laboratory.

**Class syllabus:**

1. Definition, matter of interest and resources of analytical chemistry. History of analytical chemistry in the context with society development. Relations of knowledge – signal – information dealing with fundamental aspects of material world around us. Method of scientific cognition; methodology of scientific work in analytical chemistry; observation, measurement, experiment, hypothesis, theory, correction functions in science. Relations of science and technology from the point-of-view of current possibilities of analytical chemistry. Trace analysis and microanalysis.
2. Measurement. Analytical signal and its properties. Generation of analytical signal. Classification of analytical signals and noise. Comprehensive principles of measurement and evaluation of quality and quantity of chemical substances. Potential and restrictions of measurement and detection analytical methods.
3. Classification of analytical principles according to selectivity, type and properties of analytical signal: qualitative tests and reactions, gravimetry, volumetry. Important chemical concepts, amount and concentration. Importance of quantity, units, measures and mass. International system of quantities (SI). Solutions and concentration. Chemical stoichiometry . Solution of chemical equilibrium. Volumetry - titration. Some general aspects of volumetry. Standard solutions. Calculus. Titration curves. Principles and analytical utilization of neutralization, precipitation, oxidation-reduction, complex forming titrations.
4. Classification of analytical principles according to selectivity, type and properties of analytical signal – electroanalytical methods. Electrogravimetry: weighing of electrochemically deposited substance. Coulometric analytical methods. Voltamperometry. Polarography. Potentiometry: determination of ions and molecules concentration. General principles. Electrodes. Direct potentiometry, pH-metry, ion-selective electrodes. Potentiometric titrations. Conductometry and conductometric detection.
5. Spectroscopic analytical methods, measurement of chemical substances by use of electromagnetic radiation (or light) properties. Interaction of radiation and mater. Atomic absorption spectroscopy. Instrumentation for measurement of light emission or absorption. Atomic emission spectrometers, spectrofluorimeters, UV-VIS photometers, spectrophotometers. Infra-red spectrometers. Analytical utilization of molecular and atomic spectroscopic methods. Analytical molecular fluorescence spectroscopy. Analytical methods based on light scattering by ions and molecules (ELSD, etc). Analytical applications of optical methods.
6. Introduction to analytical separation methods. Classification of separation principles and methods. Masking and demasking reactions. Precipitation and filtration. Separation of volatile substances by distillation. Isolation and separation of substances by extraction. Ion-exchange.
7. Chromatographic separation. Generalised outline of chromatography. Classification of chromatographic methods. Gas chromatography (GC) - principles. Instrumentation of gas chromatography. Carrier gas and auxiliary gas. GC columns and stationary phases. Application of GC for chemical analysis of substances. High-performance liquid chromatography (HPLC). HPLC instrumentation. Separation mechanism: distribution , adsorption, ion-exchange, affinity based LC. Normal phase vs. reversed phase systems. Gel chromatography. Supercritical fluid chromatography (SFC).
8. Electroseparation methods. Capillary electrophoresis vs planar techniques. Instrumentation. Basic principles of electrophoretic methods. Zone electrophoresis, isotachophoresis, isoelectric focusing. Application of capillary electrophoresis in chemical analysis.
9. Mass spectrometry (MS) basic principles. Basic scheme of mass spectrometer. Variables and conditions of measurement by MS. Output signal of MS. MS instrumentation. Basic ionization techniques in MS. Identification and confirmation of identity. Automation of analytical methods

in QC/QA laboratories. Application of combined techniques for solution of selected analytical problems.
10. Automation in analytical laboratories. The combined application of analytical methods to solve selected analytical problems.
11. Practical examples of analytical methods usage in procedures of chemical analysis for solution of actual practical problems I.
12. Practical examples of analytical methods usage in procedures of chemical analysis for solution of actual practical problems II.
13. Practical examples of analytical methods usage in procedures of chemical analysis for solution of actual practical problems III.
14. Final thinking about new trends in analytical chemistry.
Laboratory experiments
1. Volumetric analysis. Determination of ascorbic acid (vitamin C) in fruit juice. Determination of boric acid in eye disinfection instillation (eye drops). Determination of copper in water by kinetic methods (catalytic effect). Manganometric determination of chemical oxygen demand in aqueous samples (waste water).
2. Electrogravimetry. Determination of copper in natural sample. Potentiometric determination of soil acidity.
3. Electrophoretic separation methods. Removal of matrix component excess from sample. Determination of glutamate in food samples. Determination of nitrate and sulphate in tap water by capillary isotachophoresis with conductivity detection.
4. Chromatographic separation methods. Determination of methanol in alcoholic beverage by GC. HPLC-UV determination of aromatic hydroxyl compounds. Separation of water-soluble dyes by paper chromatography.
5. Spectrophotometry. Determination of calcium and sodium in mineral water by flame photometry. AAS determination of manganese in steel samples. Identity confirmation and determination of synthetic food colorant in food by UV spectrophotometry. Spectrophotometric determination of copper in real sample.

**Recommended literature:**
D. A. Skoog, F. J. West, F. J. Holler, S. R. Crouch: Analytical Chemistry. An Introduction. Saunders Coll. Publ.2000; G. Schwedt:The Essential Guide to Analytical Chemistry, Wiley, New York, 1997;R. Kellner, J-M. Mermet, M. Otto, Analytical Chemistry, John Wiley & Sons Australia, Ltd, 2013; Cvičenie: návody na stránke www.analytika.sk

**Languages necessary to complete the course:**
English

**Notes:**

**Past grade distribution**
Total number of evaluated students: 12

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 58,33 | 25,0 | 8,33 | 8,33 | 0,0 | 0,0 |

**Lecturers:** prof. RNDr. Milan Hutta, CSc., doc. RNDr. Marian Masár, PhD.

**Last change:** 19.11.2018

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KJ/N-bXCJ-118/18 | Anglický jazyk 3 - príprava na UNIcert |

**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:**

**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 |
|---|---|---|---|---|---|
| 60,0 | 33,33 | 0,0 | 6,67 | 0,0 | 0,0 |

**Lecturers:** Mgr. Barbara Kordíková, PhDr. Jarmila Cihová, PhD., PhDr. Štefánia Dugovičová, PhD., RNDr. Tatiana Slováková, PhD.

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KJ/N-bXCJ-119/18 | Anglický jazyk 4 - príprava na UNIcert |

**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:**

**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 |
|---|---|---|---|---|---|
| 75,0 | 25,0 | 0,0 | 0,0 | 0,0 | 0,0 |

**Lecturers:** Michael Jerry Sabo

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

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|---|---|
| **University:** Comenius University in Bratislava | |
| **Faculty:** Faculty of Natural Sciences | |
| **Course ID:**<br>PriF.KŽFE/N-bBCH-012/15 | **Course title:**<br>Animal and Human Physiology |

**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:** 5

**Recommended semester:** 3.

**Educational level:** I.

**Prerequisites:**

**Course requirements:**
Grades will be based on the final exam discussion (contributing 100%). The course has a standardized grading system which is identified below:
A (91 – 100%): Outstanding, excellent work (exceptional performance with strong evidence of original thinking and obvious capacity to analyze, synthesize and evaluate. B (81 – 90 %): Good, competent work; laudable performance with evidence of some original thinking, good problem-solving ability, exhibiting a serious, responsible engagement with the course content.C (73 – 80): Adequate, reasonably satisfactory work; fair performance but infrequent evidence of original thinking or the capacity to analyze, satisfies the minimum requirements of the course. D (66 – 72%): Less acceptable work; relatively weak performance with little evidence of original thinking or ability to analyze or synthesize course material. E (60 – 65%): Minimally acceptable work; very weak performance with little evidence of original thinking, showing inadequate grasp of some basic elements of the course. Fx (under 60%): Inadequate work; poor performance that indicates a lack of understanding or misunderstanding of essential subject matter.

**Learning outcomes:**
This course brings the background and skills needed to understand and apply physiological mechanismscontrolin basic body functions. By the end of this course students should be able to:
• Understand general aspects of animal physiology and principles of cell physiology.
• Obtain the skills, knowledge, experience needed to work effectively in physiological labs
• To integrate concepts, skills and approaches from regulatory mechanisms at the level of animal cell and integrated organism.
• Understand control systems, such as cardiovascular, gastrointestinal, respiratory, immune, reproductive and nerve systems

**Class syllabus:**
1. Subject of animal physiology, general aspects and development in the field
2. Cell physiology, Interaction of cell as an open system with other compartments, transport systems
3. Cell membrane, distribution of positive and negative ions, membrane potential, action potential
4. Control mechanisms at the level of cell, intracellular transfer of signal, second messenger and post-receptor signal cascades.

5. Absorption of nutrients, gastrointestinal secretion, control of HCl production, exocrine and endocrine secretion
6. Resorption, intermediary metabolism of carbohydrates, lipids and protein, basal melatonin.
7. Blood and their components, transport of O2 and CO2, hemostasis, immune system
8. Cardiovascular system, systems controlling heart activity, physiology of peripheral vessels, blood pressure control
9. Respiration, phylogeny, transport of gasses effects of CO2 an acidobasic homeostasis, control of respiration adaptation to high latitudes
10. Excretion, phylogeny principles in vertebrates and mammals, transports in kidney, clearance, neural and humoral control
11. Reproduction, evolutionary principles, female and male reproductive systems neuroendocrine control
12. Neuroendocrine system, control of locomotion and sensory organs
13. Central nervous system

**Recommended literature:**
Berne and Levy Physiology, 6th edition, Mosby Elsevier, 2008.

**Languages necessary to complete the course:**
English

**Notes:**

**Past grade distribution**
Total number of evaluated students: 16

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 18,75 | 12,5 | 25,0 | 25,0 | 18,75 | 0,0 |

**Lecturers:** doc. Mgr. Monika Okuliarová, PhD., RNDr. Katarína Stebelová, PhD., prof. RNDr. Michal Zeman, DrSc., Mgr. Ľuboš Molčan, PhD., Mgr. Zuzana Dzirbíková, PhD.

**Last change:** 19.11.2018

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KBCh/N-bBCH-021/15 | Bakalárska práca |

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

**Number of credits:** 2

**Recommended semester:** 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: 11

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 90,91 | 0,0 | 9,09 | 0,0 | 0,0 | 0,0 |

**Lecturers:** doc. RNDr. Anton Horváth, CSc., prof. RNDr. Vladimír Kováč, CSc.

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KBCh/N-bBCH-019/15 | Bakalársky seminár 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:** 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 |
|---|---|---|---|---|---|
| 66,67 | 16,67 | 16,67 | 0,0 | 0,0 | 0,0 |

**Lecturers:** doc. RNDr. Anton Horváth, CSc., prof. RNDr. Vladimír Kováč, CSc.

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KBCh/N-bBCH-020/15 | Bakalársky seminár 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:** 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: 11

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

**Lecturers:** doc. RNDr. Anton Horváth, CSc., prof. RNDr. Vladimír Kováč, CSc.

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KAn/N-bBCH-031/15 | Biochemická a genetická variabilita človeka |

**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:** 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: 0

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

**Lecturers:** prof. RNDr. Daniela Siváková, CSc., RNDr. Veronika Candráková Čerňanová, PhD., RNDr. Lenka Vorobeľová, PhD.

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KBCh/N-bBCH-009/15 | Biochémia |

**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:** 11

**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: 18

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 5,56 | 11,11 | 27,78 | 27,78 | 27,78 | 0,0 |

**Lecturers:** doc. RNDr. Katarína Mikušová, DrSc., doc. Mgr. Peter Polčic, PhD., RNDr. Marek Mentel, PhD.

**Last change:** 07.05.2017

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KMB/N-bBCH-024/15 | Bioinformatics |

**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:** 5

**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: 15

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 20,0 | 33,33 | 13,33 | 13,33 | 20,0 | 0,0 |

**Lecturers:** prof. RNDr. Ján Turňa, CSc., RNDr. Tomáš Szemes, PhD.

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KFR/N-bBCH-004/15 | Biológia bunky |

**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:** 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: 25

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 4,0 | 12,0 | 28,0 | 20,0 | 32,0 | 4,0 |

**Lecturers:** Mgr. Michal Martinka, PhD., prof. RNDr. Ľubomír Tomáška, DrSc., prof. RNDr. Helena Bujdáková, CSc., doc. Mgr. Iveta Herichová, PhD., RNDr. Martin Mrva, PhD.

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KBCh/N-bBCH-016/15 | Biotechnológie |

**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:** 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: 21

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 4,76 | 14,29 | 28,57 | 9,52 | 28,57 | 14,29 |

**Lecturers:** doc. RNDr. Anton Horváth, CSc., RNDr. Ján Krahulec, PhD.

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KBCh/N-bBCH-017/15 | Bioštatistika |

**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:** 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: 13

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 38,46 | 15,38 | 7,69 | 15,38 | 23,08 | 0,0 |

**Lecturers:** RNDr. Veronika Candráková Čerňanová, PhD.

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KFTCh/N-bBCH-038/15 | Computational Chemistry and Molecular Modelling |

**Educational activities:**
**Type of activities:** practicals / lecture
**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:** 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: 2

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

**Lecturers:** prof. RNDr. Ivan Černušák, DrSc., doc. Mgr. Michal Pitoňák, PhD.

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in 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 - Zaraďovací test z cudzieho jazyka

**Course requirements:**

**Learning outcomes:**

**Class syllabus:**

**Recommended literature:**

**Languages necessary to complete the course:**

**Notes:**

**Past grade distribution**
Total number of evaluated students: 3353

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 41,25 | 26,01 | 17,21 | 8,8 | 4,98 | 1,76 |

**Lecturers:** PhDr. Jarmila Cihová, PhD., PhDr. Štefánia Dugovičová, PhD., PhDr. Oľga Pažitková, CSc., RNDr. Tatiana Slováková, PhD., Mgr. Barbara Kordíková, Michael Jerry Sabo

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in 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:**

**Course requirements:**

**Learning outcomes:**

**Class syllabus:**

**Recommended literature:**

**Languages necessary to complete the course:**

**Notes:**

**Past grade distribution**
Total number of evaluated students: 3122

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 49,36 | 24,63 | 15,73 | 5,64 | 3,75 | 0,9 |

**Lecturers:** PhDr. Jarmila Cihová, PhD., PhDr. Štefánia Dugovičová, PhD., PhDr. Oľga Pažitková, CSc., RNDr. Tatiana Slováková, PhD., Mgr. Barbara Kordíková, Michael Jerry Sabo

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in 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

**Course requirements:**

**Learning outcomes:**

**Class syllabus:**

**Recommended literature:**

**Languages necessary to complete the course:**

**Notes:**

**Past grade distribution**
Total number of evaluated students: 489

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 60,53 | 25,56 | 8,79 | 2,86 | 1,23 | 1,02 |

**Lecturers:** PhDr. Jarmila Cihová, PhD., PhDr. Štefánia Dugovičová, PhD., PhDr. Oľga Pažitková, CSc., RNDr. Tatiana Slováková, PhD., Mgr. Barbara Kordíková, Michael Jerry Sabo

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in 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: 290

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 68,28 | 23,45 | 6,9 | 0,69 | 0,34 | 0,34 |

**Lecturers:** PhDr. Jarmila Cihová, PhD., PhDr. Štefánia Dugovičová, PhD., PhDr. Oľga Pažitková, CSc., RNDr. Tatiana Slováková, PhD., Mgr. Barbara Kordíková, Michael Jerry Sabo

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KJ/N-bXCJ-117/16 | English 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:** 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: 1173

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 92,24 | 0,26 | 0,43 | 0,85 | 0,6 | 5,63 |

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

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KAEG/N-bBCH-003/15 | Fyzika |

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

**Number of credits:** 7

**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: 23

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 39,13 | 34,78 | 17,39 | 4,35 | 0,0 | 4,35 |

**Lecturers:** doc. RNDr. Roman Pašteka, PhD.

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KFTCh/N-bBCH-042/15 | Fyzikálna chémia |

**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:** 11

**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 |
|---|---|---|---|---|---|
| 16,67 | 8,33 | 41,67 | 16,67 | 16,67 | 0,0 |

**Lecturers:** prof. RNDr. Juraj Bujdák, DrSc., doc. Ing. Marián Janek, PhD., RNDr. Erik Szabó, PhD.

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KGe/N-bBCH-010/15 | Genetika |

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

**Number of credits:** 7

**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: 14

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 7,14 | 14,29 | 21,43 | 42,86 | 14,29 | 0,0 |

**Lecturers:** doc. RNDr. Andrea Ševčovičová, PhD., doc. Mgr. Miroslava Slaninová, Dr., prof. RNDr. Ľubomír Tomáška, DrSc., doc. RNDr. Eliška Gálová, PhD., RNDr. Regina Sepšiová, PhD., Mgr. Ján Frankovský, prof. RNDr. Jozef Nosek, DrSc., Mgr. Katarína Gaplovská, PhD., Mgr. Lucia Mentelová, PhD.

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in 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 - Zaraďovací test z cudzieho jazyka

**Course requirements:**

**Learning outcomes:**

**Class syllabus:**

**Recommended literature:**

**Languages necessary to complete the course:**

**Notes:**

**Past grade distribution**
Total number of evaluated students: 550

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 20,0 | 19,45 | 26,73 | 18,18 | 12,18 | 3,45 |

**Lecturers:** Mgr. Stella Rizmanová, Mgr. Karin Rózsová Wolfová

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in 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:**

**Course requirements:**

**Learning outcomes:**

**Class syllabus:**

**Recommended literature:**

**Languages necessary to complete the course:**

**Notes:**

**Past grade distribution**
Total number of evaluated students: 534

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 23,78 | 21,35 | 27,34 | 17,04 | 7,12 | 3,37 |

**Lecturers:** Mgr. Stella Rizmanová, Mgr. Karin Rózsová Wolfová

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in 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:** PriF.KJ/N-bXCJ-072/10 - German 1 and PriF.KJ/N-bXCJ-073/10 - German 2

**Course requirements:**

**Learning outcomes:**

**Class syllabus:**

**Recommended literature:**

**Languages necessary to complete the course:**

**Notes:**

**Past grade distribution**
Total number of evaluated students: 79

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 86,08 | 8,86 | 2,53 | 0,0 | 1,27 | 1,27 |

**Lecturers:** Mgr. Stella Rizmanová, Mgr. Karin Rózsová Wolfová

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in 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:** PriF.KJ/N-bXCJ-072/10 - German 1 and PriF.KJ/N-bXCJ-073/10 - German 2

**Course requirements:**

**Learning outcomes:**

**Class syllabus:**

**Recommended literature:**

**Languages necessary to complete the course:**

**Notes:**

**Past grade distribution**
Total number of evaluated students: 58

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 86,21 | 12,07 | 1,72 | 0,0 | 0,0 | 0,0 |

**Lecturers:** Mgr. Stella Rizmanová, Mgr. Karin Rózsová Wolfová

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KJ/N-bXCJ-116/16 | German 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:** 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: 80

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 88,75 | 0,0 | 0,0 | 0,0 | 2,5 | 8,75 |

**Lecturers:** Mgr. Stella Rizmanová, Mgr. Karin Rózsová Wolfová

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KMB/N-bBCH-028/15 | Human Genetics |

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

**Number of credits:** 6

**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: 9

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 33,33 | 0,0 | 44,44 | 0,0 | 0,0 | 22,22 |

**Lecturers:** Mgr. Marián Baldovič, PhD., Mgr. Andrej Ficek, PhD., prof. RNDr. Ľudevít Kádaši, DrSc.

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KMV/N-bBCH-015/15 | Imunológia |

**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:** 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: 15

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 0,0 | 20,0 | 20,0 | 20,0 | 40,0 | 0,0 |

**Lecturers:** doc. RNDr. Miroslava Šupolíková, PhD., RNDr. Tatiana Betáková, DrSc.

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KAlCh/N-bBCH-036/15 | Introduction to Bioanalysis |

**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:** doc. RNDr. Marian Masár, PhD., prof. RNDr. Milan Hutta, CSc.

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KJCh/N-bBCH-039/15 | Introduction to Nuclear Analyses |

**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:** 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: 6

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

**Lecturers:** RNDr. Dušan Galanda, PhD., RNDr. Jana Slimáková, PhD.

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in 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 / 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:** 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: 1607

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 49,78 | 36,65 | 13,13 | 0,31 | 0,12 | 0,0 |

**Lecturers:** Mgr. Štefan Zolcer, PhD.

**Last change:** 02.06.2015

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in 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 / 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: 1314

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 49,16 | 33,79 | 16,36 | 0,3 | 0,38 | 0,0 |

**Lecturers:** Mgr. Štefan Zolcer, PhD.

**Last change:** 02.06.2015

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in 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: 371

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 44,74 | 20,75 | 14,02 | 4,85 | 5,39 | 10,24 |

**Lecturers:** PhDr. Štefánia Dugovičová, PhD., Mgr. Ivan Lábaj, PhD.

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in 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: 254

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 53,94 | 16,14 | 12,6 | 4,72 | 3,94 | 8,66 |

**Lecturers:** PhDr. Štefánia Dugovičová, PhD., Mgr. Ivan Lábaj, PhD.

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KJCh/N-bBCH-040/15 | Legislatíva a etika |

**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:**

**Learning outcomes:**

**Class syllabus:**

**Recommended literature:**

**Languages necessary to complete the course:**

**Notes:**

**Past grade distribution**
Total number of evaluated students: 13

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 30,77 | 69,23 | 0,0 | 0,0 | 0,0 | 0,0 |

**Lecturers:** RNDr. Oľga Rosskopfová, PhD., doc. RNDr. Stanislav Stuchlík, CSc., doc. RNDr. Anton Horváth, CSc., doc. Mgr. Miroslava Slaninová, Dr.

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KAEG/N-bBCH-002/15 | Matematika |

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

**Number of credits:** 8

**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: 26

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 19,23 | 23,08 | 19,23 | 23,08 | 3,85 | 11,54 |

**Lecturers:** doc. RNDr. Roman Pašteka, PhD.

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KMB/N-bBCH-026/15 | Methods in Molecular 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:** 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: 8

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 12,5 | 12,5 | 50,0 | 12,5 | 12,5 | 0,0 |

**Lecturers:** Mgr. Andrea Šoltýsová, PhD., doc. RNDr. Hana Drahovská, PhD., doc. RNDr. Stanislav Stuchlík, CSc.

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KMV/N-bBCH-007/15 | Mikrobiológia |

**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:** 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: 24

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 8,33 | 16,67 | 25,0 | 20,83 | 12,5 | 16,67 |

**Lecturers:** prof. RNDr. Helena Bujdáková, CSc., prof. RNDr. Yvetta Gbelská, CSc., RNDr. Jaroslava Dekkerová, PhD., Mgr. Hana Dibalová, PhD.

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KMB/N-bBCH-011/15 | Molecular Biology |

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

**Number of credits:** 7

**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: 14

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 21,43 | 14,29 | 7,14 | 35,71 | 7,14 | 14,29 |

**Lecturers:** prof. RNDr. Ján Turňa, CSc., RNDr. Ján Krahulec, PhD., doc. RNDr. Stanislav Stuchlík, CSc., doc. RNDr. Hana Drahovská, PhD.

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KOrCh/N-bBCH-034/15 | Molecular Spectroscopy |

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

**Number of credits:** 6

**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: 3

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

**Lecturers:** prof. Mgr. Radovan Šebesta, DrSc., Mgr. Ambroz Almássy, PhD., Mgr. Juraj Filo, PhD., RNDr. Marek Cigáň, PhD.

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

**STATE EXAM DESCRIPTION**

| | |
|---|---|
| **University:** Comenius University in Bratislava | |
| **Faculty:** Faculty of Natural Sciences | |
| **Course ID:**<br>PriF.KBCh/N-bOBH-101/17 | **Course title:**<br>Obhajoba bakalárskej práce |
| **Number of credits:** 8 | |
| **Educational level:** I. | |
| **State exam syllabus:** | |
| **Last change:** | |
| **Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc. | |

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KJ/N-bXCJ-110/15 | Odborná angličtina 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: 38

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 47,37 | 28,95 | 18,42 | 0,0 | 0,0 | 5,26 |

**Lecturers:** PhDr. Jarmila Cihová, PhD., RNDr. Tatiana Slováková, PhD.

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KJ/N-bXCJ-111/15 | Odborná angličtina 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: 30

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 50,0 | 40,0 | 10,0 | 0,0 | 0,0 | 0,0 |

**Lecturers:** PhDr. Jarmila Cihová, PhD., Mgr. Barbara Kordíková, RNDr. Tatiana Slováková, PhD.

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KBCh/N-bBCH-018/15 | Odborná prax |

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

**Number of credits:** 6

**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: 12

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

**Lecturers:** doc. RNDr. Anton Horváth, CSc., prof. RNDr. Vladimír Kováč, CSc.

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KOrCh/N-bBCH-035/15 | Organic Synthesis |

**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:** 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: 2

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 0,0 | 50,0 | 50,0 | 0,0 | 0,0 | 0,0 |

**Lecturers:** doc. RNDr. Peter Magdolen, PhD.

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KOrCh/N-bBCH-005/15 | Organická chémia |

**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:** 11

**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: 21

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 19,05 | 4,76 | 23,81 | 19,05 | 19,05 | 14,29 |

**Lecturers:** prof. Mgr. Radovan Šebesta, DrSc., Mgr. Iveta Kmentová, PhD.

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KOrCh/N-bBCH-033/15 | Organická chémia 2 |

**Educational activities:**
**Type of activities:** practicals / lecture / seminar
**Number of hours:**
**per week:** 3 / 2 / 1 **per level/semester:** 42 / 28 / 14
**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: 1

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

**Lecturers:** doc. RNDr. Martin Putala, CSc.

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in 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: 76

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 97,37 | 0,0 | 2,63 | 0,0 | 0,0 | 0,0 |

**Lecturers:** Mgr. Kristína Füzéková, PaedDr. Vladimír Hubka, Mgr. Ján Krošlák, Mgr. Martin Mokošák, PhD., Mgr. Mária Patschová, Mgr. Igor Remák, PhD., Mgr. Miriam Kirchmayerová, PhD., PaedDr. Mgr. Lenka Vandáková

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in 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: 257

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 99,22 | 0,78 | 0,0 | 0,0 | 0,0 | 0,0 |

**Lecturers:** Mgr. Kristína Füzéková, PaedDr. Vladimír Hubka, Mgr. Ján Krošlák, Mgr. Martin Mokošák, PhD., Mgr. Mária Patschová, Mgr. Igor Remák, PhD., Mgr. Miriam Kirchmayerová, PhD., PaedDr. Mgr. Lenka Vandáková

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in 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: 160

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

**Lecturers:** Mgr. Kristína Füzéková, PaedDr. Vladimír Hubka, Mgr. Ján Krošlák, Mgr. Martin Mokošák, PhD., Mgr. Mária Patschová, Mgr. Igor Remák, PhD., Mgr. Miriam Kirchmayerová, PhD., PaedDr. Mgr. Lenka Vandáková

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in 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: 112

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

**Lecturers:** Mgr. Kristína Füzéková, PaedDr. Vladimír Hubka, Mgr. Ján Krošlák, Mgr. Martin Mokošák, PhD., Mgr. Mária Patschová, Mgr. Igor Remák, PhD., Mgr. Miriam Kirchmayerová, PhD., PaedDr. Mgr. Lenka Vandáková

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in 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: 91

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

**Lecturers:** Mgr. Kristína Füzéková, PaedDr. Vladimír Hubka, Mgr. Ján Krošlák, Mgr. Martin Mokošák, PhD., Mgr. Mária Patschová, Mgr. Igor Remák, PhD., Mgr. Miriam Kirchmayerová, PhD., PaedDr. Mgr. Lenka Vandáková

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in 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: 62

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

**Lecturers:** Mgr. Kristína Füzéková, PaedDr. Vladimír Hubka, Mgr. Ján Krošlák, Mgr. Martin Mokošák, PhD., Mgr. Mária Patschová, Mgr. Igor Remák, PhD., Mgr. Miriam Kirchmayerová, PhD., PaedDr. Mgr. Lenka Vandáková

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KJCh/N-bBCH-037/15 | Radiation Hygiene and Safety |

**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: 0

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

**Lecturers:** doc. RNDr. Silvia Dulanská, PhD., RNDr. Dušan Galanda, PhD.

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KMB/N-bBCH-025/15 | Regulation of Gene Expression |

**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:**

**Learning outcomes:**

**Class syllabus:**

**Recommended literature:**

**Languages necessary to complete the course:**

**Notes:**

**Past grade distribution**
Total number of evaluated students: 10

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 80,0 | 20,0 | 0,0 | 0,0 | 0,0 | 0,0 |

**Lecturers:** prof. RNDr. Ján Turňa, CSc., doc. RNDr. Hana Drahovská, PhD., doc. RNDr. Stanislav Stuchlík, CSc.

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KDPP/N-bXDI-006/10 | Rhetoric |

**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.

**Prerequisites:**

**Course requirements:**

**Learning outcomes:**

**Class syllabus:**

**Recommended literature:**

**Languages necessary to complete the course:**

**Notes:**

**Past grade distribution**
Total number of evaluated students: 1227

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 53,46 | 36,67 | 8,48 | 0,73 | 0,33 | 0,33 |

**Lecturers:** Mgr. Štefan Zolcer, PhD.

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KDPP/N-bXDI-007/10 | Rhetoric |

**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.

**Prerequisites:**

**Antirequisites:** PriF.KDPP/N-bXDI-006/10

**Course requirements:**

**Learning outcomes:**

**Class syllabus:**

**Recommended literature:**

**Languages necessary to complete the course:**

**Notes:**

**Past grade distribution**
Total number of evaluated students: 949

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 53,42 | 32,67 | 13,17 | 0,32 | 0,21 | 0,21 |

**Lecturers:** Mgr. Štefan Zolcer, PhD.

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KMB/N-bBCH-027/15 | Seminar on Methods in Molecular Biology |

**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: 5

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 40,0 | 20,0 | 0,0 | 20,0 | 20,0 | 0,0 |

**Lecturers:** Mgr. Andrea Šoltýsová, PhD., doc. RNDr. Hana Drahovská, PhD.

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KMB/N-bBCH-030/15 | Seminar on Topics in DNA Analysis Methods |

**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: 3

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 0,0 | 66,67 | 33,33 | 0,0 | 0,0 | 0,0 |

**Lecturers:** Mgr. Andrea Šoltýsová, PhD., doc. RNDr. Hana Drahovská, PhD.

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

| | |
|---|---|
| **University:** Comenius University in Bratislava | |
| **Faculty:** Faculty of Natural Sciences | |
| **Course ID:**<br>PriF.KOrCh/N-bBCH-006/15 | **Course title:**<br>Seminár z organickej chémie |
| **Educational activities:**<br>**Type of activities:** seminar<br>**Number of hours:**<br>**per week:** 2 **per level/semester:** 28<br>**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: 12

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 41,67 | 16,67 | 25,0 | 8,33 | 8,33 | 0,0 |

| | |
|---|---|
| **Lecturers:** Mgr. Ambroz Almássy, PhD. | |
| **Last change:** | |
| **Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc. | |

## COURSE DESCRIPTION

| | |
|---|---|
| **University:** Comenius University in Bratislava | |
| **Faculty:** Faculty of Natural Sciences | |
| **Course ID:**<br>PriF.KAlCh/N-bBCH-014/15 | **Course title:**<br>Separation Methods |
| **Educational activities:**<br>**Type of activities:** lecture / seminar<br>**Number of hours:**<br>**per week:** 2 / 1 **per level/semester:** 28 / 14<br>**Form of the course:** on-site learning | |
| **Number of credits:** 4 | |
| **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: 5

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

| | |
|---|---|
| **Lecturers:** prof. RNDr. Milan Hutta, CSc., doc. RNDr. Marian Masár, PhD. | |
| **Last change:** | |
| **Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc. | |

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KTV/N-bUXX-204/15 | Summer physic-educational meeting 1 |

**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: 13

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

**Lecturers:** Mgr. Miriam Kirchmayerová, PhD.

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in 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: 146

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 98,63 | 0,0 | 0,0 | 0,0 | 0,0 | 1,37 |

**Lecturers:** Mgr. Miriam Kirchmayerová, PhD.

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

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|---|---|
| **University:** Comenius University in Bratislava | |
| **Faculty:** Faculty of Natural Sciences | |
| **Course ID:**<br>PriF.KMB/N-bBCH-041/15 | **Course title:**<br>Theoretical and experimental medicine |
| **Educational activities:**<br>**Type of activities:** lecture<br>**Number of hours:**<br>**per week:** 2 **per level/semester:** 28<br>**Form of the course:** on-site learning | |
| **Number of credits:** 3 | |
| **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 |
|---|---|---|---|---|---|
| 6,25 | 25,0 | 25,0 | 31,25 | 0,0 | 12,5 |

| |
|---|
| **Lecturers:** doc. RNDr. Ing. Peter Celec, DrSc. |
| **Last change:** |
| **Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc. |

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KMB/N-bBCH-029/15 | Topics in DNA Analysis Methods |

**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:**

**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 |
|---|---|---|---|---|---|
| 0,0 | 66,67 | 33,33 | 0,0 | 0,0 | 0,0 |

**Lecturers:** Mgr. Andrea Šoltýsová, PhD., doc. RNDr. Hana Drahovská, PhD., doc. RNDr. Stanislav Stuchlík, CSc.

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KMV/N-bBCH-008/15 | Virológia |

**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:** 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: 16

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 12,5 | 37,5 | 43,75 | 0,0 | 6,25 | 0,0 |

**Lecturers:** doc. RNDr. František Golais, CSc., doc. RNDr. Peter Kabát, CSc., RNDr. Tatiana Betáková, DrSc., PhDr. Eva Nováková

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KAgCh/N-bBCH-001/15 | Všeobecná a anorganická chémia |

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

**Number of credits:** 14

**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: 26

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 11,54 | 42,31 | 23,08 | 11,54 | 7,69 | 3,85 |

**Lecturers:** prof. RNDr. Jozef Noga, DrSc.

**Last change:**

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in 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: 386

| 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:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.

## COURSE DESCRIPTION

**University:** Comenius University in Bratislava

**Faculty:** Faculty of Natural Sciences

| **Course ID:** | **Course title:** |
|---|---|
| PriF.KBCh/N-bBCH-023/15 | Štruktúra a funkcia biomolekúl |

**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:** 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: 15

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 20,0 | 46,67 | 6,67 | 20,0 | 6,67 | 0,0 |

**Lecturers:** doc. RNDr. Anton Horváth, CSc., doc. RNDr. Jana Korduláková, PhD., RNDr. Marek Mentel, PhD., doc. RNDr. Katarína Mikušová, DrSc., Ing. Martina Neboháčová, PhD., RNDr. Ingrid Sveráková, PhD., Mgr. Stanislav Huszár, PhD.

**Last change:** 08.03.2018

**Approved by:** prof. RNDr. Vladimír Kováč, CSc., doc. RNDr. Anton Horváth, CSc.