

| Courses in English |  |         |
|--------------------|--|---------|
| Winter semester    |  |         |
| Code               | Course   | Credits |
| UCH/769            | <u>Environmental Chemistry</u>   | 2       |
| UCH/768            | <u>Environmental Chemistry Laboratory</u>  | 3       |
| UCH/758            | <u>Biochemistry Laboratory 1</u>   | 3       |
| UCH/757            | <u>Biochemistry 1</u>  | 4       |
| UCH/061            | <u>Applications of Molecular Modelling</u>   | 2       |
| UCH/060            | <u>Computational Chemistry and Molecular Modelling of Biomolecules</u>                 | 4       |
| UCH/058            | <u>Developmental and Comparative Biochemistry</u>                                      | 3       |
| UCH/045            | <u>Glycobiology</u>  | 3       |
| UCH/037            | <u>Basic techniques in practical chemistry<sup>1</sup></u>                             | 3       |
| UCH/027            | <u>X-ray Crystallography</u>   | 4       |
| UCH/024            | <u>Biochemistry at the Service of Medicine</u>   | 3       |
| UCH/021            | <u>Enzymology</u>  | 3       |
| UCH/020            | <u>Genetic and Protein Engineering</u>   | 4       |
| UCH/010            | <u>Seminar in Advanced Biological Chemistry</u>  | 1       |
| UCH/ZBE            | <u>Principles of Experimental Methods in Biology</u>                                   | 4       |
| UCH/BCH            | <u>Introduction to biochemistry</u>  | 4       |
| KBE/760            | <u>Biology of Microorganisms</u>   | 5       |
| KBE/115            | <u>Strategic Planning in Forest and Nature Conservation</u>                            | 4       |
| KBE/546            | <u>Ecosystem Management Course</u>   | 3       |
| KBO/759            | <u>Biostatistics</u>   | 5       |
| KBO/184            | <u>Creative Publishing in Community Ecology</u>  | 4       |
| KBO/297            | <u>Functional Traits in Ecology</u>  | 5       |
| KEBR/631           | <u>Bioenergetics</u>   | 4       |
| KEBR/220           | <u>Plant Physiology</u>  | 8       |
| KMB/758            | <u>Molecular Biology and Genetics I</u>  | 3       |
| KMB/759            | <u>Molecular Biology and Genetics II</u>   | 3       |
| KMB/770            | <u>Methods in Molecular Biology</u>  | 4       |
| KME/772            | <u>Clinical Biochemistry</u>   | 3       |
| KPA/604            | <u>Molecular Phylogenetics</u>   | 4       |
| KZO/412I           | <u>Molecular Ecology</u>   | 6       |
| KZO/141            | <u>Tropical insects</u>  | 3       |
| OJZ/650            | <u>Technical Writing</u>   | 3       |
| UAI/735I           | <u>Python Basics</u>   | 4       |
| UAI/665            | <u>Data Mining in Bioinformatics</u>   | 4       |
| UAI/652            | <u>Programming of iPad/iPhone</u>  | 4       |
| UAI/650            | <u>Algorithms and Data Structures</u>  | 4       |
| UAI/756            | <u>CISCO Academy I</u>   | 3       |
| UAI/670            | <u>Ethics</u>  | 3       |
| UFY/PPI            | <u>Parallel Programming</u>  | 4       |
| UFY/ZVK            | <u>Technical English IV – Basics of Scientific Communication: Writing and Speaking</u> | 3       |
| UFY/EM1            | <u>Electron Microscopy I</u>   | 4       |
| UMB/564I           | <u>Calculus I</u>  | 6       |
| UMB/551I           | <u>Linear Algebra</u>  | 3       |
| Summer semester    |  |         |
| Code               | Course   | Credits |
| UCH/011            | <u>Seminar in Advanced Biological Chemistry II</u>                                     | 1       |
| UCH/773            | <u>WHO/EU Laboraroty and Regulatory Procedures</u>                                     | 3       |
| UCH/647            | <u>Biopharmacy</u>   | 3       |
| UCH/645            | <u>Principles of anticancer and antiviral drug development I.</u>                      | 3       |

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|-------------|---|---------|
| UCH/040     | <u>Biomolecular NMR Spectroscopy</u>  | 3       |
| UCH/033     | <u>Fluorescence Spectroscopy in Biological Systems</u>  | 3       |
| UCH/030     | <u>General Chemistry</u>  | 3       |
| UCH/643     | <u>Biochemistry 2</u>   | 4       |
| UCH/022     | <u>Protein Chemistry</u>  | 4       |
| UCH/642     | <u>Biochemistry Laboratory 2</u>  | 5       |
| UCH/052     | <u>Xenobiochemistry and Toxicology</u>  | 5       |
| UCH/BIT     | Biotechnology   | 5       |
| UCH/960     | Drug Design   | 3       |
| UCH/BII     | Bioinformatics  | 4       |
| UCH/254     | Crystallization Course  | 8       |
| KBE/019     | Social Ecology of Local Rural Systems   | 4       |
| KBE/322     | Plant Physiological Ecology ( <i>note:offered every other year</i> )  | 6       |
| KBE/128     | Introduction to Functional Ecology ( <i>note:offered every other year</i> )                                   | 6       |
| KBE/352     | Seminars in Wetland Ecology   | 3       |
| KBE/427     | Wetland Ecology ( <i>note:offered every other year</i> )  | 6       |
| KBO/767     | <u>Biology of Plants</u>  | 3       |
| KEBR/619    | Stable isotopes in biology and ecology <sup>2</sup>   | 6       |
| KMB/605     | <u>Introduction to Bioinformatics</u>   | 5       |
| KMB/358     | <u>Introduction to Genomics</u>   | 3       |
| KME/733     | <u>Immunology for Biological Chemistry - laboratory</u>   | 2       |
| KME/723     | <u>Immunology</u>   | 2       |
| KME/615     | <u>Cell Line Cultures in Vitro</u>  | 3       |
| KME/083     | <u>Virology for Biological Chemistry - laboratory</u>   | 2       |
| KME/082     | <u>Virology</u>   | 3       |
| KZO/768     | <u>Biology of Animals</u>   | 3       |
| KZO/068     | <u>Diversity of Life</u>  | 5       |
| KZO/055     | Evolution of the Brain and Intelligence   | 3       |
| UAI/729I    | <u>Project Management and its Economy</u>   | 6       |
| UAI/683I    | <u>Advanced Database Systems</u>  | 3       |
| UAI/655     | <u>Applied Programming</u>  | 3       |
| UAI/609     | <u>Computer Hardware</u>  | 6       |
| UAI/757     | CISCO Academy II  | 3       |
| UFY/EM2     | <u>Electron Microscopy II</u>   | 4       |
| UFY/KTS     | Quantum Theory and Spectroscopy   | 6       |
| UMB/565I    | <u>Calculus II</u>  | 5       |
| <b>Code</b> |   |         |
| Code        | Course  | Credits |
| KBE/785E    | <u>Modern Regression Methods (Winter semester 2017/18, 2019/20)</u>   | 6       |
| KZO/141     | <u>Tropical insects (Winter semester 2018/19, 2020/21)</u>  | 3       |
| KMB/710     | <u>Structural Bioinformatics and Computational Biology Workshop Series (Winter semester 2017/18, 2019/20)</u> | 6       |
| KBE/521E    | <u>Soil Ecology (Summer semester 2017/18, 2019/20)</u>  | 5       |

Notes:

1. UCH/037 - starts at the beginning of September, kindly contact the guarantor for details: [sklement@jcu.cz](mailto:sklement@jcu.cz)
2. KEBR/619 – this one week course is organised in cooperation with the University of Munich and is offered in spring.