Jan Kochanowski University of Kielce

Academic year: 2024/2025

Faculty of Natural Sciences

Field of study: Chemistry

Detailed description of the courses below is available at: <https://ichem.ujk.edu.pl/index.php/studenci/erasmus/>

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| CHEMISTRY |
| Course unit | Przedmiot | Type | ECTS | Completion requirements  | Academic hours per semester |
| WINTER SEMESTER (1) |
| Physics | Fizyka | lecture | 5 | examination | 30 |
| Physics | Fizyka | classes | graded credit | 30 |
| Fundamentals of chemistry | Podstawy chemii | lecture | 10 | examination | 30 |
| Fundamentals of chemistry | Podstawy chemii | classes | graded credit | 45 |
| Fundamentals of chemistry | Podstawy chemii | laboratory | graded credit | 45 |
| \*Inorganic Chemistry | Chemia nieorganiczna | lecture | 4 | examination | 30 |
| \*Inorganic Chemistry | Chemia nieorganiczna | laboratory | graded credit | 30 |
| Physical Chemistry | Chemia fizyczna | lecture | 12 | examination | 60 |
| Physical Chemistry | Chemia fizyczna | classes | graded credit | 45 |
| Physical Chemistry | Chemia fizyczna | laboratory | graded credit | 60 |
| Organic Chemistry | Chemia organiczna | lecture | 4 | examination | 30 |
| Organic Chemistry | Chemia organiczna | classes | graded credit | 30 |
| Fundamentals of Crystallography | Podstawy krystalografii | lecture | 2 | examination | 15 |
| Fundamentals of Crystallography | Podstawy krystalografii | classes | graded credit | 10 |
| Biochemistry | Biochemia | lecture | 3 | examination | 15 |
| Biochemistry | Biochemia | laboratory | graded credit | 35 |
| Chemistry of Materials | Chemia materiałów | lecture | 4 | examination | 30 |
| Chemistry of Materials | Chemia materiałów | laboratory | graded credit | 30 |
| Introduction to quantum chemistry | Podstawy chemii kwantowej | lecture | 4 | examination | 20 |
| Introduction to quantum chemistry | Podstawy chemii kwantowej | classes | graded credit | 25 |
| \*Theoretical chemistry | Chemia teoretyczna | lecture | 5 | examination | 30 |
| \*Theoretical chemistry | Chemia teoretyczna | classes | graded credit | 15 |
| \*Theoretical chemistry | Chemia teoretyczna | laboratory | graded credit | 30 |
| \*Instrumental Analysis | Analiza instrumentalna | lecture | 7 | examination | 30 |
| \*Instrumental Analysis | Analiza instrumentalna | classes | graded credit | 15 |
| \*Instrumental Analysis | Analiza instrumentalna | laboratory | graded credit | 45 |
| \*Organic Chemistry II | Chemia organiczna II | lecture | 5 | examination | 15 |
| \*Organic Chemistry II | Chemia organiczna II | classes | graded credit | 15 |
| \*Organic Chemistry II | Chemia organiczna II | laboratory | graded credit | 40 |
| The technics of separation | Techniki separacyjne | lecture | 3 | examination | 15 |
| The technics of separation | Techniki separacyjne | laboratory | graded credit | 35 |
| Validation of analytical procedures | Walidacja procedur analitycznych | lecture | 4 | examination | 30 |
| Validation of analytical procedures | Walidacja procedur analitycznych | classes | graded credit | 30 |
| Application of group theory in chemistry | Zastosowanie teorii grup w chemii | lecture | 2 | examination | 15 |
| Application of group theory in chemistry | Zastosowanie teorii grup w chemii | classes | graded credit | 15 |
| Statistical thermodynamics | Termodynamika statystyczna | lecture | 2 | examination | 15 |
| Statistical thermodynamics | Termodynamika statystyczna | classes | graded credit | 15 |
| \*Methods of identifying organic compounds | Metody identyfikacji związków organicznych | lecture | 4 | examination | 30 |
| \*Methods of identifying organic compounds | Metody identyfikacji związków organicznych | classes | graded credit | 30 |
| SUMMER SEMESTER (2) |
| Analytical chemistry | Chemia analityczna | lecture | 10 | examination | 30 |
| Analytical chemistry | Chemia analityczna | classes | graded credit | 20 |
| Analytical chemistry | Chemia analityczna | laboratory | graded credit | 75 |
| Environmental geochemistry and biogeochemistry | Geochemia i biogeochemia środowiska | lecture | 2 | examination | 45 |
| Environmental geochemistry and biogeochemistry | Geochemia i biogeochemia środowiska | classes | graded credit | 30 |
| Sustainable development and green chemistry | Zrównoważony rozwój i zielona chemia | lecture | 2 | examination | 15 |
| Sustainable development and green chemistry | Zrównoważony rozwój i zielona chemia | classes | graded credit | 15 |
| Fundamentals of statistics in chemical laboratory | Podstawy statystyki w laboratorium chemicznym | lecture | 2 | examination | 15 |
| Fundamentals of statistics in chemical laboratory | Podstawy statystyki w laboratorium chemicznym | laboratory | graded credit | 15 |
| Applied Chemistry and Chemicals Management | Chemia stosowana i zarządzanie chemikaliami | lecture | 2 | examination | 30 |
| Inorganic Chemistry | Chemia nieorganiczna | lecture | 6 | examination | 30 |
| Inorganic Chemistry | Chemia nieorganiczna | classes | graded credit | 15 |
| Inorganic Chemistry | Chemia nieorganiczna | laboratory | graded credit | 30 |
| Organic Chemistry | Chemia organiczna | lecture | 8 | examination | 30 |
| Organic Chemistry | Chemia organiczna | classes | graded credit | 30 |
| Organic Chemistry | Chemia organiczna | laboratory | graded credit | 105 |
| Chemical Technology | Technologia chemiczna | lecture | 6 | examination | 30 |
| Chemical Technology | Technologia chemiczna | laboratory | graded credit | 60 |
| Basics of Spectral Methods | Podstawy metod spektralnych | lecture | 2 | examination | 15 |
| Basics of Spectral Methods | Podstawy metod spektralnych | laboratory | graded credit | 15 |
| Methods of scientific text writing and presentation | Metodyka pisania i prezentowania prac naukowych | classes | 1 | graded credit | 15 |
| \*Coordination and bionieorganic chemistry | Chemia koordynacyjna i bionieorganiczna | lecture | 6 | examination | 30 |
| \*Coordination and bionieorganic chemistry | Chemia koordynacyjna i bionieorganiczna | laboratory | graded credit | 45 |
| \*Physical Chemistry II | Chemia fizyczna II | lecture | 6 | examination | 30 |
| \*Physical Chemistry II | Chemia fizyczna II | classes | graded credit | 15 |
| \*Physical Chemistry II | Chemia fizyczna II | laboratory | graded credit | 30 |
| Molecular spectroscopy | Spektroskopia molekularna | lecture | 8 | examination | 45 |
| Molecular spectroscopy | Spektroskopia molekularna | classes | graded credit | 30 |
| Molecular spectroscopy | Spektroskopia molekularna | laboratory | graded credit | 30 |
| \*Crystallography | Krystalografia | lecture | 5 | examination | 15 |
| \*Crystallography | Krystalografia | classes | graded credit | 20 |
| \*Crystallography | Krystalografia | laboratory | graded credit | 30 |

**\* see prerequisites in the course card**