



UNIWERSYTET  
IM. ADAMA MICKIEWICZA  
W POZNANIU

## Internet

### Educational subject description sheet

#### Basic information

|   |   |  |
|---|---|--|
| <b>Study programme</b><br>Chemia (General Chemistry)<br><b>Speciality</b><br>-<br><b>Organizational unit</b><br>Faculty of Chemistry<br><b>Study level</b><br>First-cycle programme<br><b>Study form</b><br>Full-time<br><b>Education profile</b><br>General academic |   | <b>Didactic cycle</b><br>2024/25<br><b>Subject code</b><br>02CENS.14KU.01825.24<br><b>Lecture languages</b><br>English<br><b>Course type</b><br>Elective<br><b>Block</b><br>Complementary major subjects |
| <b>Subject coordinator</b>  | Marcin Hoffmann   |  |
| <b>Lecturer</b>   | Marcin Hoffmann   |  |
| <b>Period</b><br>Semester 3   | <b>Activities and hours</b><br>• Lecture: 15, Graded credit | <b>Number of ECTS points</b><br>1  |

#### Goals

| Code | Goal   |
|------|--|
| C1   | Presentation of the possibility of using the Internet as a source of professional information. |
| C2   | Developing the habit of critically evaluating information.                                     |
| C3   | Introduction of web-based tools to support group work.   |

## Entry requirements

No prerequisites required.

## Subject learning outcomes

| Code                     | Outcomes in terms of   | Learning outcomes                                       | Examination methods |
|--------------------------|--|---|---------------------|
| <b>Skills - Student:</b> |  |   |                     |
| U1                       | is able to prepare documents in the cloud using google documents as an example.                            | CEN_K1_U11,<br>CEN_K1_U12,<br>CEN_K1_U20,<br>CEN_K1_U21 | Project             |
| U2                       | is able to undertake group work on a study report on literature databases, i.e. SCOPUS and Web of Science. | CEN_K1_U11,<br>CEN_K1_U13,<br>CEN_K1_U20                | Project             |
| U3                       | is able to use basic html tags.  | CEN_K1_U12,<br>CEN_K1_U19,<br>CEN_K1_U20                | Project             |
| U4                       | is able to prepare css style sheets.   | CEN_K1_U13,<br>CEN_K1_U19,<br>CEN_K1_U20                | Project             |
| U5                       | is able to compose a selected web page and publish it on a server.   | CEN_K1_U19,<br>CEN_K1_U20                               | Project             |

## Study content

| No. | Course content   | Subject learning outcomes | Activities |
|-----|--|---------------------------|------------|
| 1.  | The Internet, what it is, how it is developing, how to use it.   | U1, U3                    | Lecture    |
| 2.  | Structural and presentational layer in web development.  | U1, U3, U5                | Lecture    |
| 3.  | Scripting languages and their use in web projects.   | U3, U4                    | Lecture    |
| 4.  | Creation of models and their description by computational methods implemented using scripting languages. | U4                        | Lecture    |
| 5.  | Operations on information stored in databases using simple scripts.                                      | U3, U4, U5                | Lecture    |
| 6.  | Use and improvement of ready-made scripts for the introduction of interactive elements.                  | U1, U2, U3, U5            | Lecture    |
| 7.  | Developing a package of web pages presenting a selected scientific discovery.                            | U1, U2, U3, U5            | Lecture    |

## Additional information

| Activities | Teaching and learning methods and activities |
|------------|--|
| Lecture    | Laboratory method, Workshop method           |

| Activities | Credit conditions   |
|------------|---|
| Lecture    | <p><u>The classification requirement is a minimum attendance of 80% of the classes.</u></p> <p>Components of the final grade:</p> <ul style="list-style-type: none"> <li>• Grade for class participation</li> <li>• Practical assignment completion</li> </ul> <p>Grading scale with applied percentage distribution:</p> <ul style="list-style-type: none"> <li>• excellent (5.0): achievement of the student's expected learning outcomes at a minimum of 92.0%</li> <li>• very good (4.5): achievement by the student of the desired learning outcomes ranging from 84.0% - 91.9%</li> <li>• good (4.0): achievement of student learning outcomes 76.0% - 83.9%</li> <li>• average (3.5): achievement of student learning outcomes 68.0% - 75.9%</li> <li>• satisfactory (3.0): attainment of the student learning outcomes within 60.0% - 67.9%</li> <li>• unsatisfactory (2.0): failure of the student to achieve the expected learning outcomes below 60.0%.</li> </ul> |

## Literature

### Obligatory

1. Literature is selected by the tutor depending on the sophistication of the tasks

### Calculation of ECTS points

| Activities                   | Activity hours*    |
|------------------------------|--------------------|
| Lecture                      | 15                 |
| Preparation for classes      | 15                 |
|                              |                    |
| <b>Student workload</b>      | <b>Hours</b><br>30 |
| <b>Number of ECTS points</b> | <b>ECTS</b><br>1   |

\* academic hour = 45 minutes

## Efekty uczenia się dla kierunku

| Kod        | Treść   |
|------------|---|
| CEN_K1_U11 | The graduate can use specialised computer software to visualise and describe chemical processes   |
| CEN_K1_U12 | The graduate can perform basic model calculations for chemical molecules or processes   |
| CEN_K1_U13 | The graduate can apply basic principles of symmetry to the interpretation of crystallographic structures                                      |
| CEN_K1_U19 | The graduate can analyse and develop test results and prepare a final report on the chemical and physico-chemical experiments carried out     |
| CEN_K1_U20 | The graduate can use databases to retrieve information needed in the chemist's work   |
| CEN_K1_U21 | The graduate can independently obtain information from both Polish and foreign literature, physicochemical tables and other available sources |