Cracow University of Technology

Course syllabus

binding for the doctoral students of the CUT Doctoral School commencing their studies in the academic year 2022/2023

Information on the course

| Name of the course in Polish | Seminarium doktoranckie II |
|--|---|
| Name of the course in English | Doctoral seminar II |
| Number of the ECTS points | 2 |
| Language of instruction | Polish |
| Category of the course | Mandatory |
| Field of education | Engineering and Technology |
| Discipline of education | Chemical Engineering |
| Person responsible for the course Contact | Prof. Zbigniew Wzorek, doctus hab., DSc zbigniew.wzorek@pk.edu.pl |

Type of course, number of hours in the study programme curriculum

| Semester | Credit type (G / NG)* | Lecture | Practical class | Laboratory | Computer laboratory | Project class | Seminar |
|----------|--------------------------|---------|-----------------|------------|---------------------|------------------|---------|
| 4 | NG | 0 | 0 | 0 | 0 | 0 | 15 |

^{*}G – graded credit, NG – non-graded credit

Course objectives

| Code | Objective description |
|-------------|---|
| Objective 1 | To master the ability to compile research results. |
| Objective 2 | To master the ability to collect and present literature data. |

Learning outcomes

| Code | Description of the learning outcome adjusted to the specific characteristics of the discipline | Learning outcome symbol in the CUT SD | Methods of verification |
|------|---|---|--|
| | OUTCOMES RELATED TO KNO | | |
| EUW1 | The graduate knows and understands – to the extent that they are able to revise the existing paradigms – the world achievements, including theoretical foundations as well as general and selected specific issues appropriate for a given scientific discipline. | E_W01, | Involvement in class activities; delivering a presentation |
| EUW2 | The graduate knows and understands the main development trends of the scientific disciplines concerned. | E_W02 | Involvement in class activities; delivering a presentation |

| EUW3 | scientific activity, including an open access mode. E_W03 activities; delipresentation | | Involvement in class activities; delivering a presentation |
|--|--|-------|--|
| EUW6 | The graduate knows and understands the economic, legal, ethical and other crucial determinants of scientific activity. | E_W06 | |
| | OUTCOMES RELATED TO S | KILLS | |
| EUU1 | The graduate is able to make use of knowledge from different fields of science or arts to creatively identify and innovatively solve complex problems or perform research tasks, in particular: - to identify the aim and object of scientific research, - to formulate a research hypothesis, - to develop research methods, techniques and tools and use them creatively, - to draw conclusions on the basis of scientific research. | E_U01 | Giving a paper; a presentation |
| EUU2 | The graduate is able to critically analyse and evaluate the results of scientific research, expert activity and other creative works as well as their contribution to knowledge development. | E_U02 | Delivering a paper; a presentation |
| EUU7 | The graduate is able to participate in a scientific discourse. | E_U07 | Discussion |
| OUTCOMES RELATED TO SOCIAL COMPETENCES | | | |
| EUK1 | The graduate is prepared to critically evaluate the achievements within a given scientific discipline. | E_K01 | Delivering a presentation; discussion |
| EUK2 | The graduate is prepared to critically evaluate their own contribution to the development of a given scientific discipline. | E_K02 | Discussion |
| | The graduate is prepared to maintain and develop the ethos of scientific and creative communities, among others: - to conduct scientific activities in an independent manner, - to respect the principle of public ownership of the results of scientific activity, including the principles of intellectual property protection. | | |

Course outline

| No. | Contents | Learning outcomes for the course | No. of hours |
|-----|--|----------------------------------|--------------------|
| | Seminar | | |
| S1 | Presentation of the effect of the literature review on the conducted research work. Critical evaluation of own research plan in the context of scientific achievements | EUU1, EUU2, EUW3 | 10 |
| S2 | Discussion about the presented contents. | EUK1, EUK2 | 5 |

The ECTS points statement

| The Loto points t | | |
|---|---|--|
| WORKING HOURS SETTLEMENT | | |
| Type of activity | Average number of hours (45 min.) dedicated to the completion of an activity type | |
| SCHEDULED CONTACT HOURS WITH | H THE ACADEMIC TEACHER | |
| Hours allotted in the syllabus | 15 | |
| Consultations | 1 | |
| Examination / course credit assignment | | |
| HOURS WITHOUT THE PARTICIPATION | OF THE ACADEMIC TEACHER | |
| Independent study of the course contents | 10 | |
| Preparation of a paper, report, project, presentation, discussion | 4 | |
| ECTS POINTS STATEMENT | | |
| Total number of hours | 30 | |
| The ECTS points number | 2 | |

Preliminary requirements

| No. | Requirements |
|-----|--------------|
| 1 | |

Course credit assignment conditions / method of the final grade calculation

| No. | Description |
|-----|---|
| | COURSE CREDIT ASSIGNMENT CONDITIONS |
| 1 | 80% attendance in class. Delivering at least two presentations. |
| | METHOD OF THE FINAL GRADE CALCULATION |
| | Weighted average of the test and presentation grades. |

Additional information

None

The course reading list

| 1 | |
|---|--|
| 2 | |