

COURSE CARD

1. Basic information

| Course name in English: | Reporting Seminar in Mathematics | |
|--|--|-------------|
| Course name in Polish: | Seminarium Sprawozdawcze z Matematyki | |
| Number of hours: | 15 | |
| Type of course: | Elective course | |
| Form of course: | seminar | |
| Code of course: | MAQ100277SS/ W13MTM-SD0161S | |
| Course leader: | dr hab. inż. <i>Tomasz Jakubowski</i> | |
| Faculty of the course leader: | W13 Faculty of Pure and Applied Mathematics | |
| Email address of the course leader: | tomasz.jakubowski@pwr.edu.pl | |
| Scientific discipline(s) assigned to the course (doctoral students representing the marked disciplines can participate in the course): | Architecture and urban planning | |
| | Automation, electronic, and electrical engineering | |
| | Information and communication technology | |
| | Biomedical engineering | |
| | Chemical engineering | |
| | Civil engineering and transport | |
| | Mechanical engineering | |
| | Environmental engineering, mining, and energy | |
| | Mathematics | \boxtimes |
| | Chemical sciences | |
| | Physical sciences | |
| | Management and quality studies | |

2. Objectives

- 1. Acquiring skills and improving the presentation of research results and conducting scientific discussions
- 2. Presentation of the most important results obtained in the last reporting year

3. Content

Detailed information about the course content, including topics and form of classes.

| No. | Topic | Number of | Form of classes |
|-----|--|-----------|-----------------|
| | | hours | |
| 1 | Introduction to seminar subject. Discussion of the methods of good preparation of the presentation and the form of its delivery. | 1 | seminar |
| 2 | PhD students' presentations | 14 | seminar |



4. Prerequisites

List of prerequisites relating to knowledge, skills and other competences for course participants.

- 1. PhD student at the Doctoral School in the discipline of Mathematics.
- 2. Pre-defined research topics.
- 3. English language in the upper intermediate level.

5. Learning outcomes

List of learning outcomes at level 8 of the Polish Qualifications Framework assigned to the course (mark the learning outcomes in the last column).

| Symbol | Learning outcome | |
|---------|---|-------------|
| | KNOWLEDGE. Doctoral student knows and understands: | |
| SzD_W3 | the main trends in the development of the scientific or artistic disciplines covered | |
| | in the curricula; | |
| SzD_W4 | research methodology; | |
| SzD_W5 | the rules for the dissemination of scientific results, including in open access | |
| | mode; | |
| SzD_W6 | the fundamental dilemmas of modern civilization; | |
| SzD_W7 | the legal and ethical conditions of scientific activity; | |
| SzD_W8 | the economic and other relevant conditions of scientific activity; | |
| SzD_W9 | basic principles of knowledge transfer to the economic and social spheres and | |
| | commercialisation of results of scientific activity and know-how related to these | |
| | results. | |
| | SKILLS. Doctoral student is able to: | |
| SzD_U2 | use knowledge from different fields of science or art to creatively identify, | |
| | formulate and innovatively solve complex problems or perform research tasks, in | |
| | particular: - define the purpose and subject of scientific research, formulate a research | |
| | hypothesis, | |
| | - develop research methods, techniques and tools, and use them creatively, | |
| | - draw conclusions on the basis of scientific research; | |
| | critically analyse and evaluate the results of scientific research, expertise and | |
| | other creative work and their contribution to knowledge development; | |
| C-D 113 | transfer the results of scientific activities to the economic and social spheres; | |
| SzD_U3 | communicate on specialised topics to the extent that they enable an active participation in the international scientific community; | |
| SzD_U4 | disseminate research results, including in popular forms; | \boxtimes |
| SzD_U5 | initiate debates and participate in a scientific discourse; | \boxtimes |
| SzD_U6 | be able to speak a foreign language at B2 level of the Common European | |
| | Framework of Reference for Languages to a level that enables them to participate | |
| | in the international scientific and professional environment; | |

| SzD_U7 | plan and implement an individual or collective research or creative activity, including in an international environment; | |
|--------|---|--|
| SzD_U8 | independently plan and act for one's own development and inspire and organize the development of others; | |
| SzD_U9 | plan classes or groups of classes and implement them using modern methods and tools. | |
| | SOCIAL COMPETENCES. Doctoral student is ready to: | |
| SzD_K3 | fulfilling the social obligations of researchers and creators, initiate public interest activities, thinking and acting in an entrepreneurial way; | |
| SzD_K4 | maintaining and developing the ethos of research and creative environments, including: - carrying out scientific activities in an independent manner, - respecting the principle of public ownership of research results, taking into | |
| | account the principles of intellectual property protection. | |

6. Evaluation

Short description of the method(s) used to evaluate the learning outcomes assigned to the course, e.g., exam, test, report, presentation, etc.

Oral presentation

7. Teaching methods

Short description of the teaching methods used during the course, e.g., multimedia presentation, discussion, literature studies, developing written documents, own work, etc.

- 1. Multimedia presentation
- 2. Software supporting remote work

8. Literature

List of primary and secondary literature used to prepare the course and including additional knowledge for participants, e.g., books, textbooks, research papers, standards, web pages, etc.

- 1. Current publications in scientific journals related to the research topic of the PhD student
- 2. Textbooks containing advanced knowledge related to the research topic of the PhD student

9. Other remarks

Additional remarks, comments, (e.g., language of the course)

Course in English