

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|---|-----------|------------|---------|---------|-------|---|--|---------|-----------|------------|---------|---------|-------|---|---------------|---|----|---|---|---|---|----|------------|----|-----|----|----|----|----|--|-------------------------------|------|--|--|--|--|------|--|
| Course code | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Type and description | Background Course | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ECTS credit | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Course name | Methodology of scientific research | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Course name in Polish | Metodyka pracy badawczej | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Language of instruction | English | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Course level | 8 PRK | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Course coordinator | Marcin Kamiński | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Course instructors | Marcin Kamiński | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Delivery methods and course duration | <table><tr><td></td><td>Lecture</td><td>Tutorials</td><td>Laboratory</td><td>Project</td><td>Seminar</td><td>Other</td><td>Total of teaching hours during semester</td></tr><tr><td>Contact hours</td><td>0</td><td>15</td><td>0</td><td>0</td><td>0</td><td>0</td><td>15</td></tr><tr><td>E-learning</td><td>No</td><td>Yes</td><td>No</td><td>No</td><td>No</td><td>No</td><td></td></tr><tr><td>Assessment criteria (weights)</td><td>0,00</td><td></td><td></td><td></td><td></td><td>0,00</td><td></td></tr></table> | | | | | | | | Lecture | Tutorials | Laboratory | Project | Seminar | Other | Total of teaching hours during semester | Contact hours | 0 | 15 | 0 | 0 | 0 | 0 | 15 | E-learning | No | Yes | No | No | No | No | | Assessment criteria (weights) | 0,00 | | | | | 0,00 | |
| | Lecture | Tutorials | Laboratory | Project | Seminar | Other | Total of teaching hours during semester | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Contact hours | 0 | 15 | 0 | 0 | 0 | 0 | 15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| E-learning | No | Yes | No | No | No | No | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Assessment criteria (weights) | 0,00 | | | | | 0,00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Course objectives | The main objective of this course is to introduce the PhD Candidate to scientific work in general, to instruct this Candidate how to find a literature of the problem, how to properly define and to describe research problem, and also how to efficiently solve such a problem. This course is devoted to introduction of the PhD students into complexity of the scientific methods and research evidence. One of the objectives is to prepare PhD students to efficiently present their research findings, to carry out some scientific discussion and also to continue research career according to scientific ethical demands. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Learning outcomes | After this course a PhD candidate would be able to: [1] make efficient research plans, foreseen their possible results, analyze the research results, [2] identify and solve research problems related to innovative activity, [3] search, analyze and synthesize research records and publications allocated in scientific databases (Scopus, Google Scholar and Research Gate), [4] communicate using various information channels with professionals and colleagues representing the same research area in Polish and English, [5] edit and write scientific reports and publications, [6] prepare and deliver research presentations, and also participate and conduct scientific discussion. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Assessment methods | Participation in discussion - U2, K1, Project presentation - W4, U1, K1. The final evaluation: project: 70% and presentation: 30%. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Prerequisites | Fundamental knowledge of English, Computer Science as well as the research plan of his (her) own PhD thesis is required. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Course content with delivery methods | Tutorial would consist of the following topics: 1. various research methodologies: empirical, theoretical, computer simulation, statistical, heuristic, diagnostic, tests, questionnaires, hybrid (technological foresight) and literature studies; 2. composition, writing and editing of research papers; 3. scientific databases and their usage in the research practice, an overview of modern research metrics and their importance; 4. composition, writing and editing of PhD dissertations; | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| | |
|---|--|
| | <p>5. fundamental ethical demands in scientific research;</p> <p>6. composition, editing and delivering of research presentations.</p> |
| Basic reference materials | <p>[1] Patton M.Q., Quality evaluation and research methods, third edition, Newbury Park, USA, 2002.</p> <p>[2] Kotarbiński T., Elements of cognition, formal logic and methodology of science (in Polish), Ossolineum, Wrocław, 2004.</p> |
| Other reference materials | [1] Kotarbiński T., A treatise about a good job (in Polish). Warsaw, Ossolineum, 1981. |
| Average student workload outside classroom | 35 h |
| Comments | |
| Last update | 05.01.2022 |