Course title in English	**Scientific project management**
Course title in Polish	Zarządzanie projektem naukowym
Course code	
Type of course	Seminar
Level of course	PhD
Year of study	1-4
Semester/trimester	2/4/6/8
Number of hours/credits allocated	30/2
Name of lecturer	Tomasz Puzyn
Objective of the course (expected learning outcomes and competences to be acquired)	***Knowledge*:** After completing the course each PhD student: ▪ knows what the management of the scientific project is about; ▪ knows and understands the roles and responsibilities of the project manager; ▪ knows the principles of planning and implementation of the project. ***Skills*:** After completing the course, each PhD student: ▪ is able to use the basic tools for project management; ▪ can plan the implementation of the project based on the resources possessed; ▪ is able to indicate the sources of project financing matched to the nature of the project. ***Social competence*:** After completing the course each PhD student: ▪ recognizes the need to proceed in accordance with ethical principles in the preparation and implementation of a scientific project and the consequences of non-compliance with these principles.
Prerequisites	None

Course contents	▪ What is a project? The specificity of scientific projects. ▪ What is the management of a scientific project? Role of the leader. ▪ Preparatory phase: work on the concept of the project, implementation decision, project and grant application, the first structural plan of the project, milestones and work packages, estimation of time and expenditure, project planning, opportunities and risks, project card and internal structures of UG. ▪ Detailed planning: detailed schedule, resource planning, cost planning, risk analysis and risk management, quality management, planning tools (Gantt chart and Pert chart), critical path method, IT tools: MS Project, OpenProj. ▪ Project team: managerial roles, recruitment of team members, mentoring and coaching in the project, development of the project team, resolving conflicts in the team. ▪ Preparation of the grant application: institutions financing research in Poland and in Europe, the specificity of individual competitions, What to consider when preparing a grant application? ▪ Conducting meetings: the role of project meetings, kick off meeting, planning the course of the meeting, the role of the leader, summary of the meeting. ▪ Supervision over project implementation: sources of information, indicators (outputs) and results (deliverables) of the project, milestones, tracking progress based on the Gantt chart, making decisions regarding the modification of the project plan, project controlling risk. ▪ Intellectual property management in the project: intellectual property, rules for establishing the authorship of scientific papers, rules for sharing results, publication plan, principles of commercialization of results. ▪ Project completion and evaluation: internal evaluation, external evaluation of the project by the financing institution.
Recommended reading	**List of literature** **A. Literature required for the final passing of the course (passing the exam):** A.1. used during classes

	• W. Lessel: Zarządzanie projektem: Jak precyzyjnie zaplanować i wdrożyć projekt? BC Edukacja sp. z o. o. Warszawa, 2008. ISBN: 978-83-61655-27-5. • J. Rzempała, M. Pieńkos, T. Leśniowski (red.): Zarządzanie projektem badawczym. Uniwersytet Ekonomiczny w Krakowie. Kraków, 2015. ISBN: 978-83-64509-16-2. • M. Barszcz: Komercjalizacja B+R dla praktyków 2016. Narodowe Centrum Badań i Rozwoju. Warszawa, 2016. ISBN: 978-83-936422-5-0. • Making the Right Moves: A practical Guide to Scientific Management for Postdocs and New Faculty. Burroughs Wellcome Fund Howard Huges Medical Institute. Research Triangle Park, NC, 2006. A.2. studied individually by the student **B. Supplementary literature.**
Teaching methods	A workshop method with the use of activating techniques (group work, individual work, role play).
Assessment methods	**A. Way of passing,** according to Regulations of Studies at UG • Exam **B. Forms of passing** • Oral examination **C. Basic criteria of grade or examination requirements** • Active participation in classes • Realization of tasks given by the teacher. **D. The way of verification of the planned results of the taught course** • Observation of the skills of class participants during the course • Oral exam.
Language of instruction	Polish