

Course code								
Type and description	CC - Core Course							
ECTS credits	2							
Course name	Methodology of research work							
Course name in Polish	Metodyka Pracy badawczej							
Language of instruction	English							
Course level	8 PRK							
Course coordinator	prof. dr hab. inż. Beata Kolesińska							
Course instructors	prof. dr hab. inż. Beata Kolesińska, dr. hab, inż Agnieszka Ruppert, prof PŁ							
Delivery methods and course duration		Lecture	Tutorials	Laboratory	Project	Seminar	Other	Total of teaching hours during semester
	Contact hours	15	0	0	0	0	0	15
	E-learning	No	No	No	No	No	No	
	Assessment criteria (weightage)	1.0	0.00	0.00	0.00	0.00	0.00	
Course objective	<p>The aim of the course is to gain practical knowledge on obtaining and applying for EU funds and management of research and development projects and gaining practical knowledge on patent protection of the project product.</p> <p>The aim of the course is also to enable students to acquire practical knowledge in the field of writing the scientific manuscripts and communicating their research to broader public.</p>							
Learning outcomes	<p>A PhD student after completing the course:</p> <p>1. can classify and describe various programs financed / co-financed by structural funds and Horizon Europe (2021-2027) W1</p> <p>2. can design and prepare selected fragments of the project application financed from the European Union structural funds W1</p> <p>3. can define the principles of project management, from preparing the application to completing the implementation of the research and development project W1</p> <p>4. knows how to present the scientific results to the broad public W2</p> <p>5. can evaluate the quality of the scientific results which could be chosen for the publication. U1</p> <p>6. can analyze the scientific results in respect of their novelty and scientific value U2</p> <p>7. can communicate the results the broader public U3</p>							
Assessment methods	<p>Verification methods of learning outcomes effects W1, W2, U1, U2, U3 – written project/essay</p> <p>The final grade consists of:</p> <p>Result from the project concerning the grant preparation -50%</p> <p>Result from the project concerning the preparation of the publication -50%</p>							
Prerequisites	Basics of patent law, basics of project management and literature search							
Course content with delivery methods	Presentation of basic assumptions about structural funds and operational programs. Discussion and preparation of a selected project to obtain funding from the European Union. Discussing the methods of managing research and development projects. Presentation, discussion, and preparation of a patent application for a selected invention for the European Patent Office.							

	Writing of the introduction of article: selection of literature, the methods of presentation of current state of knowledge and research motivation. Description of scientific experiment. Structure and requirements of result presentation and discussion. Preparation of the illustrations. Writing of conclusions, summary and abstract. Importance of the letter to editor (the form and the content). Selection of the proper journal. Style and syntax of chemical English. Editorial cycle, reviews of scientific articles, responses for review, correction of proofs.
Basic reference materials	<ol style="list-style-type: none"> 1. „Poradnik wynalazcy. Procedury zgłaszania w systemie krajowym, europejskim i międzynarodowym”. Praca zbiorowa pod redakcją A. Pyrża, Krajowa Izba Gospodarcza, Warszawa 2009, Urząd Patentowy Rzeczypospolitej Polskiej, Warszawa 2009, ISBN: 978-83-913279-1 2. „Fundusze Unijne i europejskie” Aneta Szymańska, Wydawnictwo Złote Myśli, ISBN: 978-83-7582-229-8 3. Competition documentation for open calls for research projects 4. current scientific articles, given by the lecturer
Other reference materials	current scientific articles, given by the lecturer
Average student workload outside classroom	20 hrs
Comments	-
Last update	2022-01-25