

Course code																																	
Type and description	Core Curriculum in Physics																																
ECTS credit	2																																
Course name	Methods of Scientific Research																																
Course name in Polish	Metodyka badań naukowych																																
Language of instruction	English																																
Course level	8 PRK																																
Course coordinator	prof. dr hab. Katarzyna Pernal																																
Course instructors	prof. dr hab. inż. Jolanta Prywer, dr hab. inż. Jaromir Tosiek, prof. dr hab. Katarzyna Pernal, dr hab. inż. Mariola Buczkowska, prof. dr hab. inż. Tomasz Czyszanowski, dr hab. inż. Michał Wasiak, dr hab. inż. Maciej Dems																																
Delivery methods and course duration	<table><tr><th></th><th>Lecture</th><th>Tutorials</th><th>Laboratory</th><th>Project</th><th>Seminar</th><th>Other</th><th>Total of teaching hours during semester</th></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>No</td><td>No</td><td>No</td><td>No</td><td>No</td><td></td></tr><tr><td>Assessment criteria (weightage)</td><td></td><td>1,00</td><td></td><td></td><td></td><td></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	No	No	No	No	No		Assessment criteria (weightage)		1,00					
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Course objective	<div>1. Acquiring knowledge about techniques of writing scientific papers in physics.</div> <div>2. Acquiring knowledge about presenting his/her results.</div> <div>3. Acquiring knowledge about methods of critical scientific discussions.</div> <div>4. Acquiring knowledge about techniques of conducting research in physics.</div>																																
Learning outcomes	<div>Having completed the course student can:</div> <div>1. Apply elementary research techniques to prepare different papers</div> <div>2. Write a proper review of scientific paper</div> <div>3. Present results of his/her research to different types of audience</div> <div>4. Prepare a research plan, for example for a grant proposal</div>																																
Assessment methods	<div>Participation in discussions</div> <div>Project presentation</div>																																
Prerequisites	none																																
Course content with delivery methods	<div>1. Writing different types of papers - thesis, research papers, cross-sectional papers, survey papers.</div> <div>2. Preparing a review of a paper and a thesis and writing a detailed answer to a review.</div> <div>3. Techniques of presentations and participating in a scientific discussions.</div>																																

	4. Using databases SCOPUS and WoS.
Basic reference materials	Books and articles depending on candidates profile, to be decided upon entering the course in cooperation with scientific advisor.
Other reference materials	
Average student workload outside classroom	35h
Comments	
Last update	