

**Philosophy of Science**  
**- COURSE SYLLABUS**

1.	<b>Course title:</b> <i>Philosophy of Science</i>
2.	<b>Lecturer:</b> <i>Dr Łukasz Lamża</i>
3.	<b>Field, type and level of studies, year of study:</b> <i>all years of study</i>
4.	<b>Course character:</b> <i>GeoPlanet interdisciplinary lecture</i>
5.	<b>Teaching method:</b> <i>on-line via Zoom</i>
6.	<b>Language:</b> English
7.	<b>Course type and number of hours:</b> <i>lecture, 30h</i>
8.	<b>Estimated load of student's independent work:</b> 10h
9.	<b>Total workload and number of ECTS points:</b> 40 h, 3 ECTS
10.	<b>Short description and main focus of the course:</b> <i>The course discusses the basic problems of philosophy of science: what is science, observation, experiment, theory, model, confirmation, falsification, reduction, emergence, scientific law, scientific discovery etc. The focus is on relevant, contemporary examples, so that alongside traditional definitions the students are shown the real face of science, that doesn't necessarily correspond to classical philosophy of science.</i>
11.	<b>References:</b> <ul style="list-style-type: none"> <li>• Peter, Godfrey-Smith (2003), <i>Theory and Reality: An Introduction the Philosophy of Science</i>, University of Chicago Press</li> <li>• <i>Stanford Encyclopedia of Philosophy</i> (<a href="https://plato.stanford.edu/contents.html">https://plato.stanford.edu/contents.html</a>), relevant entries, e.g.: <i>Science and pseudo-science, Models in science, Science: theory and observation in, Scientific method, Scientific explanation, Scientific discovery, Scientific revolutions etc.</i></li> </ul>
12.	<b>Prerequisites:</b> <i>none</i>

13.	<b>Educational outcomes:</b>  <i><b>Knowledge:</b> The student knows and understands the theoretical and philosophical foundations of science, the methodology of scientific research, concepts such as truth, theory, method, observation, experiment etc. (P8S_WG)</i>  <i><b>Practical Skills:</b> The student is able to critically analyze and evaluate scientific discoveries and theories, identify the observational basis of a discovery (P8S_UW), plan their own work in a way that is congruent with the modern understanding of scientific methodology (P8S_UO)</i>  <i><b>Social Skills:</b> The student is ready to conduct their own research in a critical, philosophically sound manner, understanding its foundation, logic and limitations (P8S_KK), be a responsible member of the scientific community, neither overstating, nor understating the importance and consequences of their research, especially in contact with media and lay people (P8S_KR)</i>	<u>PQF level 8 codes:</u>  P8S_WG  P8S_UW, P8S_UO  P8S_KK, P8S_KR
14.	<b>Evaluation of the educational outcomes:</b>  essay	
15.	<b>Criteria to complete the course:</b>  <i>timely submitted essay, positively graded</i>	
16.	<b>Contact with the lecturer:</b>  email: <a href="mailto:lukasz.lamza@uj.edu.pl">lukasz.lamza@uj.edu.pl</a>	