



Uniwersytet im. Adama Mickiewicza w Poznaniu

wykład ogólnouniwersytecki

Introduction to the Philosophy of Science

dr Marek Woszczek

Dziedzina/ dyscyplina	Philosophy
Rodzaj zajęć	lecture
Język	English
Punkty ETCS	2
Liczba godzin	30
Cel zajęć	<p>An objective of the course is a concise presentation of the general and fundamental problems concerning the philosophy of science, in particular those connected with methodology, epistemology and sociology in a context of the development of the modern natural sciences. The fundamental issues in philosophy, such as the scientific realism and naturalism, shall be also discussed at the introductory level.</p>
Treści kształcenia	<ul style="list-style-type: none">• Naturalism as a methodological stance. Naturalistic explanations.• Science in relation to other kinds of human knowledge. Classification of the sciences. Aims of science. Internal and external determinants of the development of science.• Science and the scientific methods: deduction, abduction, induction, idealization, concretization, modelling and simulation, thought experiments, reasoning by analogy. Reasoning with probability: Bayesianism, frequentism.• Ancient and medieval origins of the Western science: genesis of the modern scientific methodology. Early modern scientific revolution as a transformation of the scientific practices. Insights from the sociology of science.• Classification of the scientific propositions and conjectures. Explanation, inference and confirmation: basic problems. Falsification versus verification.• Logical empiricism, inductivism and hypothetic-deductivism.• Experiment and observation.• Scientific realism and its problems. Action, representation and truth.• What are laws of nature? Determinism and reductionism.• Ethics of science: values and the scientific practice.
Wymagania wstępne	---

Efekty kształcenia	
Po zakończeniu zajęć doktorant potrafi:	
Po zakończeniu zajęć doktorant potrafi:	Metody weryfikacji
defines elementary concepts and problems of the philosophy of science as a branch of the general philosophy	final oral exam
correctly uses terminology relating to the philosophy of science	final oral exam
knows a basic method of philosophical analysis	final oral exam
has practical skills in a conversation on the general philosophy of science and is able to explore how the scientific study of nature is inevitably shaped by values and social relations	final oral exam (discussion)
Literatura	<p>S. Okasha (2002). <i>Philosophy of Science: A Very Short Introduction</i>. Oxford.</p> <p>P. Godfrey-Smith (2003). <i>An Introduction to the Philosophy of Science: Theory & Reality</i>. Chicago – London.</p> <p>K.W. Staley (2014). <i>An Introduction to the Philosophy of Science</i>. Cambridge.</p> <p>G. Couvalis (1997). <i>Philosophy of Science: Science and Objectivity</i>. London.</p> <p>P. Machamer, M. Silberstein, ed. (2002). <i>The Blackwell Guide to the Philosophy of Science</i>. Oxford.</p> <p><i>Stanford Encyclopedia of Philosophy</i> (https://plato.stanford.edu) – many useful entries on the philosophy of science, both introductory and more advanced.</p>
Szczegółowe informacje	