

Phi DOCTORAL STUDIES COURSE UNIT DESCRIPTION

Name of subject	Field of science, code	Faculty / Center	Institute / Department
Philosophy of Science	H 001	Faculty of Philosophy	Institute of Philosophy

Student's workload	Credits	Student's workload	Credits
Lectures		Consultations	1
Independent study	4	Seminars	

Course annotation

Programmes of philosophical inquiry into nature. Evolutionary programme. Creationistic programme, Plato. Physical programme, Aristotle. Natural philosophy in the Middle Ages, Parisian Ockhamists. Natural philosophy of Descartes, Galileo and Newton. Science of nature and metaphysics. Philosophical aspects of modern physics: relativity theory and quantum mechanics.

Normative philosophy of science. Probabilistic epistemology of logical empiricism. Logical language. Quine and Carnap debate. Inference to the best explanation. Logical probability. Carnap's first inductive logic. Continuum of logical methods. J. Hintikka's inductive logic. Problem of accepted hypotheses. Problems of the foundations of inductive logic. Deductive philosophy of science. Problems with inductivism. Problems of demarcation and meaning in K.R. Popper's "Logic of Scientific Discovery". Falsifiability. Generative knowledge. Choice of hypotheses. Truth-likeness. Meeting points of deductivism and inductivism. Rational reconstruction of the history of science. I. Lakatos' methodology of the research programmes.

Descriptive philosophy of science. M. Polanyi and the notion of tacit knowledge. Personal knowledge. Kuhn's model of scientific revolutions. Paradigms. Normal science and scientific revolutions. Feyerabend's pluralistic model. Proliferation. The problem of value of theoretic knowledge. Problem of scientific rationality in L. Laudan's philosophy. Van Fraassen's constructive empiricism.

Live meetings are arranged on a personal requirement basis.

Examination requirements are relative to the particular doctoral thesis and are set individually.

Reading list

1. Carnap R. The logical Foundations of probability. London, 1951
2. Chalmers A. F. Kas yra mokslas? Vilnius: Apostrofa 2005.
3. Fraassen van B. C. The Scientific Image. Oxford: Clarendon press, 1980
4. Grant E. The Foundations of Modern Science in the Middle ages. Cambridge Un. Press. 1996.
5. Nekrašas E. Loginis empirizmas ir mokslo metodologija. Vilnius: Mintis, 1979
6. Kunas T. Mokslo revoliucijų struktūra. Vilnius: Aidai, 2002
7. Plėšnys A. Metafizikos reikšmė gamtos mokslų plėtrai. Vilnius: Via recta, 1999.
8. Popper K.R. Objektive Knowledge. N.Y.-London: Oxford Un. Press, 1972
9. Kyburg H. E. Probability and Inductive logic. London: Collier-MacMillan limited, 1970
10. Popper K.R. The Logic of Scientific Discovery. N.Y., 1991
11. Feyerabend P. Against Method. London: McGraw Hill, 1978
12. Hintikka J. Logic, Language-Games and Information. Kantian Themes in the Philosophy of Logic. Oxford: Clarendon Press, 1973.
13. Lakatos J. Falsification and the Methodology of Scientific Research Programmes. Criticism and the Growth of Knowledge. Cambridge: Cambridge Un.press, 1970
14. Laudan L. Science and Values. Berkeley: Los Angeles, 1984

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The names of consulting teachers	Science degree	Main scientific works published in a scientific field in last 5 year period
Albinas Plėšnys	Dr.	Stoka ir jos vertybiniai aspektai. – Stokos reiškinys: būtis, žmogus ir bendruomenė/ sud. Leontjeva E. Vainė A. Vyšniauskaitė M. Vilnius: Lietuvos laisvosios rinkos institutas - 2016, p. 39 -- 53.
		Analogijos sampratos kaita – nuo supratimo analizės iki psichologinės sprendimo interpretacijos. -- Soter, 59 (87), 2016, p. 23 – 36.
		Rašant Vilniaus universiteto Filosofijos katedros istoriją. – Problemos. 2018 m. priedas, p. 106 –108.
		Two Theories of Names: How Mill’s Semantics Superseded Teachings of Schoolmen. – Filosofija. Sociologija. 2017. T. 28. Nr. 3. p. 172 – 181.
		Virtues and values as behaviour determinants. / Filosofija. Sociologija. 2016. T. 27. Nr. 3. p. 222–230.

Certified during Doctoral Committee session on 2019-10-22. Protocol No. 250000-KI-41

Committee Chairman prof. Marius Povilas Šaulauskas