

**John Paul II Catholic University of Lublin
Faculty of Philosophy**

academic year 2012/2013

field of study

philosophy (course in English)

first-cycle studies

full-time studies

Subject catalogue Philosophy of nature				
Type:	lecture			
Hours:*	winter semester	n/a	summer semester	30
*If a subject consists of e. g. lecture and classes, the proper hours to any classes should be given.				
ECTS:	winter semester	n/a	summer semester	3
Language of tuition:	English			
Method of assessment:*	winter semester		summer semester	oral exam
*If a subject consists of lecture and classes, the proper method of assessment to any classes should be given.				
SUBJECT SPECIFIC OBJECTIVES				
1.	Introduction to the main insight of philosophy of nature (its main conceptions, currents, etc.)			
2.	Presentation of the most prominent ideas concerning time, space, movement, space-time continuum			
3.	The characteristic of historical and modern approaches to the problem of the structure of matter			
4.	Systematic approach to the concept of life and its evolution			
5.	Forming the attitude of conscious participation in the discussions concerning philosophical problems in the big scientific questions (space and time, the structure of matter, cosmology, life and its evolution)			
PREREQUISITE (KNOWLEDGE, SKILLS, COMPETENCE, OTHERS)				
1.	The skill of critical thinking			
2.	Elementary knowledge of basic physics and biology			
LEARNING OUTCOMES				Correlation with programme learning outcomes
Knowledge				

1.	Student, using the proper terminology in English, is able to present and discuss different approaches to the subject of philosophy of nature	K_W01; K_W02; K_W03
2.	A student possesses basic knowledge on the concepts of space and time, their history and relation to philosophy.	K_W02
3.	A student knows the basic concept of life, its property and evolution.	K_W02; K_W03
Skills		
1.	A student uses philosophical and scientific terminology related to the philosophy of science.	K_U04; K_U09
2.	A student possesses the ability to formulate the arguments with use of the views of other authors.	K_U05, K_U06
3.	A student is able to employ in typical situations basic theoretical understandings and concepts characteristic for the philosophy of nature.	K_U04
Social Competence		
1.	A student is aware of the role of philosophy of science in the development of critical thinking and the scientific concepts present in the field of philosophy.	K_K05
2.	A student understands the need for lifelong learning and developing critical thinking skills.	K_K01
3.	A student is able to analyze basic problems in the field of philosophy of nature and formulate on his own propositions how to solve them	K_K04
TEACHING CONTENT (SUBJECT DESCRIPTION)		
<p>The lecture embraces following issues: concepts of philosophy of nature, the concept of time, movement and space in the historical perspective, space-time continuum, the structure of matter, Einstein's theory of relativity and its philosophical implications, the atrophic principle, philosophical implications of selected cosmological models. The goal of the lecture is also to present basic knowledge concerning the problem of life, its possible definitions and properties, different approaches to the origin of life and its evolution.</p>		
TEACHING METHODS*		
Lecture with elements of traditional multimedia presentations.		
*If a subject consists of lecture		

METHODS OF LEARNING ACHIEVEMENTS ASSESSMENT*				
1.	100 % oral exam			
GRADING SCALE*				
LEARNING OUTCOMES	2 unsatisfactory (fail)	3 satisfactory	4 good	5 very good
Knowledge	<p>The student does not understand the specificity of philosophy of nature. The student does not know the main sections of philosophy of nature, the main problems and currents. The student does not understand the role of philosophy of nature in philosophy and science, and world-view.</p>	<p>The student understands the specificity of philosophy of nature (its subject matter, method and goal) on an elementary level. The student has a general knowledge on sections of philosophy of nature, basic problems and philosophical currents. The student has a basic knowledge on the role of philosophy of nature in the philosophy and science and its connections with worldview.</p>	<p>The student has a systematic knowledge on the specificity of philosophy of nature (its subject matter, method, goal), sections of philosophy of nature, the main problems and currents. The student understands the role of philosophy of science in philosophy, science and culture. student understands connections between philosophy of nature and world-view.</p>	<p>The student has a systematic and profound knowledge on the specificity of philosophy of nature and on sections of philosophy on nature, problems and currents. The student profoundly understands the role of philosophy of nature in culture and the connection between philosophy of nature and world-view.</p>
Competence	<p>The student is not able to use philosophical and scientific terminology and basic instruments of philosophical analysis.</p>	<p>The student is able to use philosophical terminology and basic instruments of analysis proper for philosophy of nature.</p>	<p>The student is skilled in using philosophical and scientific terminology and basic instruments of philosophical analysis in typical situations.</p>	<p>The student independently uses philosophical and scientific terminology and basic instruments of philosophical analysis in difficult and non-standard situations.</p>

Social Competence	The student is not able to discuss topics concerning world-view and to back up the views by knowledge acquired during the lectures. While participating in public life the student is not able to identify problems related to the subject of philosophy of nature, views and argumentation.	The student is able to discuss elementary level topics concerning worldview and to back up the views by knowledge acquired during the lectures. While participating in public life the student is able to identify some problems related to the subject of philosophy of nature, views, arguments.	While discussing topics concerning world-view the student makes a good use of knowledge acquired during the lectures. While participating in public life the student identifies the basic problems related to the subject of philosophy of nature, views and arguments.	While discussing topics concerning world-view the student creatively makes use of the knowledge acquired during the lectures. While participating in public life the student is skilled in identifying many problems concerning philosophy of science, views and arguments.
STUDENT WORKLOAD				
Activity			Average time students typically need to complete proper learning activity*	
The teacher's contact hours			30	
Preparation for exam.			30	
Self-reading of recommended literature			20	
TOTAL HOURS:			80	

REQUIRED READING LIST				
1.	M. Heller, Philosophy in Science: An Historical Introduction, London: Springer 2011			
2.	A. Rosenberg, D. W. McShea, Philosophy of Biology: A Contemporary Introduction, New York: Routledge 2007.			
RECOMENDED READING LIST				
1.	F. Savater, The Questions of Life: An Invitation to Philosophy , Cambridge: Polity Press 2002.			
2.	Scientific Realism: Selected Essays of Mario Bunge, New York: Prometheus Books 2001.			
3.	M. Lange, An Introduction to the Philosophy of Physics: Locality, Fields, Energy, and Mass, Oxford: Wiley-Blackwell 2002.			
4.	M. Mahner, M. Bunge, Foundations of Biophilosophy, Berlin: Springer 1997.			

1. 10. 2012.

place, date

ks. dr Jacek Golbiak, dr Zuzanna Kieroń

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