

John Paul II Catholic University of Lublin  
Faculty of Philosophy  
academic year 2015/2016

field of study

Philosophy

BA course  
full-time studies

Philosophy of Inanimate Nature				
<b>Type:</b>	classes			
<b>Hours:*</b>	winter semester	-	summer semester	30
*If a subject consists of e. g. lecture and classes, the proper hours to any classes should be given.				
<b>ECTS:</b>	winter semester	-	summer semester	4 (with lecture)
<b>Language of tuition:</b>	English			
<b>Method of assessment:*</b>	winter semester	-	summer semester	grade
*If a subject consists of lecture and classes, the proper method of assessment to any classes should be given.				
SUBJECT SPECIFIC OBJECTIVES				
1.	Introducing basic problems, approaches and methods of philosophy of nature			
2.	Providing a historical introduction to the philosophy of nature			
3.	Understanding of the interrelation of philosophy and science through a detailed examination of several key controversies and philosophical debates			
4.	Analyzing and evaluating philosophical and scientific ideas in their historical context.			
5.	Highlighting cultural significance of some of these philosophical ideas			
PREREQUISITE (KNOWLEDGE, SKILLS, COMPETENCE, OTHERS)				
1.	Elementary skills in reasoning, text analysis and problem solving			
LEARNING OUTCOMES				Correlation with programme learning outcomes
Knowledge				
1.	Student knows the characteristic features of the main approaches in the philosophy of inanimate nature.			K_W02, K_W03, K_W05
2.	Student knows the historical unfolding of scientific ideas.			K_W02, K_W03, K_W05
3.	Student knows basic aspects of physics that bear on philosophy of space, time and matter.			K_W02, K_W03, K_W05
Skills (knowing how to act)				
1.	Student is able to discuss basic problems in philosophy of inanimate nature.			K_U04; K_U06
2.	Student is able to reconstruct scientific development.			K_U04; K_U06
3.	Student is able to interpret and discuss various research paradigms and their limits.			K_U04; K_U06
4.	Student is able to analyse philosophical texts			K_U04; K_U06

Social Competence (values - knowing how to be)				
1.	Student realizes the need for continuous updating of his knowledge and skills.	K_K04		
2.	Student can work in a group, take part in discussions and justify different viewpoints.	K_K04		
3.	Student is aware of the cultural significance of philosophical ideas.	K_K04		
4.	Student is aware of the role of philosophy in the development of critical thinking and understands the axiological foundations and cultural sources of science.	K_K04		
TEACHING CONTENT (SUBJECT DESCRIPTION)				
Main approaches in philosophy of nature: space and time: Aristotle, absolutism vs. relationalism (Newton, Leibniz, Clarke, Mach, Einstein), Galilean Relativity (invariance), Special and General Relativity; development of geometry; matter: Aristotle, modern times, quantum mechanics (determinism vs. indeterminism); cultural significance of philosophical ideas;				
TEACHING METHODS*				
working with text, problem method, discussion				
*If a subject consists of lecture and classes, the proper teaching methods to any classes should be given.				
METHODS OF LEARNING ACHIEVEMENTS ASSESSMENT*				
1.	written assignment – 40%			
2.	oral assignment (presentation) – 40%			
3.	participation in the classes – 20%			
GRADING SCALE*				
LEARNING OUTCOMES	2 unsatisfactory (fail)	3 satisfactory	4 good	5 very good
<b>Knowledge</b>	Student doesn't know the characteristic features of the main approaches in philosophy of inanimate nature, the historical unfolding of scientific ideas; doesn't know basic aspects of physics that bear on philosophy of space, time and matter.	Student has a minimal ability to analyse and understand the course content. Student reconstructs the content of the source texts, and makes an analysis with the help of a teacher.	Student can demonstrate his knowledge, as well as apply it in problem situations; Student reads with understanding philosophical texts, and can solve the problems posed with the help of a teacher.	Student has mastered the tools of analysis and synthesis of knowledge (with reference to the current literature on the subject), and can apply them correctly and independently in problem situations. Student knows the characteristic features of the main approaches in the philosophy of inanimate nature, describes historical unfolding of scientific ideas; knows basic aspects of physics that bear on philosophy of space, time and matter.

<b>Competence</b>	Student is not able to discuss basic problems in philosophy of inanimate nature, to reconstruct scientific development, to interpret and discuss various research paradigms and their limits, is not able to analyse philosophical texts.	Student has a minimal ability to analyse, understand and discuss the course content; with the help of a teacher is able to analyse philosophical texts and reconstruct their content.	Student satisfactorily analyses, understands and discusses the course content; with the minimal help of a teacher is able to analyse philosophical texts and reconstruct their content.	Student has mastered the tools of analysing and discussing the course content; is able to use his knowledge to justify his opinions; is able to analyse philosophical texts and reconstruct their content on his own.
<b>Social Competence</b>	Student is not committed to his own learning process, is not involved in discussions; does not realize the need for continuous updating of his knowledge and skills, isn't aware of the cultural significance of basic research and of the role of philosophy in the development of critical thinking and the scientific concept of axiological foundations and cultural sources.	Student participates in class, but his attitude is passive, devoid of creativity and commitment; Student partly realizes the need for continuous updating of his knowledge and skills, as well as is aware of the cultural significance of basic research and of the role of philosophy in the development of critical thinking and the scientific concept of axiological foundations and cultural sources.	Student actively participates in classes, realizes the need for continuous updating of his knowledge and skills, is aware of the cultural significance of basic research and of the role of philosophy in the development of critical thinking and the scientific concept of axiological foundations and cultural sources ( in a satisfactory way).	Student actively participates in class, broadens his knowledge and develops his skills on his own initiative; is aware of the cultural significance of basic research and of the role of philosophy in the development of critical thinking and the scientific concept of axiological foundations and cultural sources.

Sometimes the plus symbol or decimal is used to modify the numerical grades.

#### STUDENT WORKLOAD

Activity	Average time students typically need to complete proper learning activity*
sessions with the lecturer	30
preparing to classes	15
Self-study and self-reading of recommended literature	15
<b>TOTAL HOURS:</b>	<b>60</b>

\* Workload indicates the time students typically need to complete all learning activities required to achieve the expected learning outcomes. In most cases, student workload ranges from 1,500 to 1,800 hours for an academic year, whereby **one credit corresponds to 25 to 30 hours of work.**

**TOTAL ECTS:**

4 (with lecture)

#### REQUIRED READING LIST

1.	N. Huggett, Space from Zeno to Einstein: Classic Readings with a Contemporary Commentary, Cambridge: MIT Press 1999.
2.	L. Sklar, Space, Time, and Spacetime, Berkeley - Los Angeles - London: University of California Press 1974.
3.	B. Dainton, Time and Space, Durham: Acumen Publishing 2010.
4.	A Collection of Polish Works on Philosophical Problems of Time and Spacetime, ed. H. Elstein, Dordrecht: Springer Netherlands 2002.
5.	Filozofia przyrody, ed. S. Janeczek, A. Starościc, D. Dąbek, J. Herda, Lublin: Wydawnictwo KUL 2013 (selected articles).
6.	The Stanford Encyclopedia of Philosophy, red. E. Zalta, plato.stanford.edu (selected entries).

RECOMMENDED READING LIST	
1.	R. DiSalle, Understanding space-time. The philosophical development of physics from Newton to Einstein, Cambridge: Cambridge University Press 2006.
2.	A Companion to the Philosophy of Science, W. H. Newton-Smith, Malden: Wiley-Blackwell 2001 (selected entries).
3.	Ch. Ray, Time, space and philosophy, London: Routledge 1991.
4.	J. Losee, A Historical Introduction to the Philosophy of Science, Oxford: Oxford University Press 2001.
5.	A. Chalmers, What is this thing called science?, Queensland 1976.
6.	Texts recommended by the lecturer.

Lublin, 14.02.2016

place, date

*Anna Starościc*

signature