The field of the study	Biology
The title of the course	Methodology of the social and life sciences
The lecture language	English
Type of the course (obligatory/optional)	Obligatory
The study level	II (masters)
The year of the studies	I
semester	1
Number of ECTS credit points with division into contact / non-contact points	3 (1,52/1,48)
Name and surname of a person who is responsible for this course	Prof. dr hab. Aneta Strachecka
Department that offers the module	Dept. of Invertebrates Ecophysiology of and the Experimental Biology
The objective of the course	Developing a creative and critical approach to scientific truths and research methodology, based on the principles of epistemology and natural philosophy.
Education outcomes: the total number of the outcomes cannot exceed 4-8 for a module. One should present the description of the education outcomes; the student should reach after completing the module. One should describe the outcomes for all the applied forms of classes altogether.	Knowledge: a student knows
	W1. in an in-depth way the principles of epistemology, the essence of methodological disputes and the basic methodological conceptual apparatus concerning scientific research, and in particular inference and knowledge-forming activities.
	Skills: a student is able to
	U1. apply knowledge of methodology when interpreting research results, formulating and evaluating hypotheses, theorems and theories, looking critically at scientific achievements.
	The social values and attitudes: a student
	K1. has a critical but creative attitude towards the knowledge-creating processes and cognitive activities being aware of the responsibility that facing the researcher of society and nature.
Ways of verifying and documenting of the achieved outcomes of educating.	METHODS OF VERIFICATION AND RATING: W1, U1, K1 – assessment of the written final tasks Archiving in the paper form.
Elements and weights affecting the final rating	Final grade = 40% average of the grades for partial works, 60% grade for the final task. These conditions are presented in the first lesson of the course. Attendance at lectures - according to Study Regulations.
Preliminary and additional requirements	Not required
Contents of the module – 100 words.	We will discuss the main aspects of epistemology and specificity of the cognitive process and main methodological disputes in this context. An attention will be paid to the historical aspects, philosophical perspective and social conditions. We will consider various ways of verifying the truth and legitimacy of the scientific ideas, hypothesis and theories. We will include an analysis of subsequent stages of acquiring knowledge and formulating scientific laws, in particular we will compare formal and natural sciences as well as natural and social sciences. Theoretical analysis of the laws of science and nature will be applied. We will pay the particular attention to the critical approach to all sorts of theories and the processes of the scientific knowledge development, as well as to cognitive acts.

Recommended books or obligatory books	1. I. Niiniluoto, Matti Sintonen, Jan Wolenski; Handbook of Epistemology. Springer Science & Business Media, 31 mar 2004 – 1052p 2. R.L. Kirkham; Theories of truth: a critical introduction. MIT Press, Cambridge, MA, 1992.
The planned forms /activities/ didactic methods	Auditoria and discussion lectures, discussing of the self-written tasks.
The balance of ECTS points	**The workload that require direct participation of lecturers** (the non-contact hours): – Auditoria lectures (30 hours -1.2 ECTS) – partial tasks (3 hours./0.12 ECTS) – the final task (2 hours./0.08 ECTS) – Consultations (3 hours /0.12 ECTS) **Total- the contact hours 38 – 1.52 ECTS** **The workload that does not require direct participation of lecturers** (the non-contact hours): Preparing and writing partial tasks (10 hours./0,4 ECTS) Individual learning (20 hours – 0.8 ECTS) Preparing of the final task (7 hours – 0.28 ECTS) **Total; non-contact hours – 37 hours – 1.48 ECTS**
Levels of achieving of the educating outcomes for the study field:	W1-BI2_W01 U1-BI2_U05 K1- BI2_K03