

Zajęcia fakultatywne dedykowane (filozofia): 3 ECTS, konwersatorium, 30 h

1	Nazwa zajęć po polsku i angielsku	An Introduction to the Philosophy of Biology
2	Imię i nazwisko wykładowcy, tytuł/stopień naukowy	dr Marcin Rządeczka
3	Język wykładowy	English
4	Strona WWW	
5	Semestr studiów (akceptuje Zespół programowy kierunku filozofia)	
6	Godzinowe ekwiwalenty punktów ECTS	Godziny kontaktowe (z udziałem nauczyciela akademickiego) Konwersatorium 30 h, 1 ECTS Konsultacje i zaliczenie Łączna liczba godzin z udziałem nauczyciela akademickiego Liczba punktów ECTS z udziałem nauczyciela akademickiego Godziny niekontaktowe (praca własna studenta) Studiowanie literatury Przygotowanie się do zaliczenia Łączna liczba godzin niekontaktowych Liczba punktów ECTS za godziny niekontaktowe Sumaryczna liczba punktów ECTS 3
7	Wymagania wstępne	Introductory course. No prior expertise in biology is assumed
8	Opis zajęć	The course addresses several philosophical issues that arise within biological and biomedical sciences. The literature on the philosophy of biology is more than enormous and the list of debates that follows only scratches the surface. The choice of topics is mainly restricted to evolutionary and molecular biology, although there are also notable mentions about evolutionary epistemology and psychology, evolutionary and environmental ethics, evolutionary medicine, and astrobiology. A considerable effort was made to include a handful of the best-researched, the most engaging, and the most often cited books and articles about every topic. These selections are intended as starting points for the student seeking to gain some understanding of the field. Within the course, a number of conceptual and methodological debates within evolutionary theory will be the main point of focus. Biologists and philosophers alike have been engaged in heated debates over questions such as: what is a species? Are natural and sexual selection the main driving forces of evolution or maybe neutral evolution being of equal importance? At what level (maybe more than one) – gene, genome, individual or species – does natural selection act? Students will have a unique opportunity to read essays by both biologists and philosophers' side by side who attempt to shed some light on beforementioned questions.

9	Zakres tematów	1) Beyond armchair philosophy. Why some expertise in biology may enrich many philosophical debates? 2) What are the units of selection? 3) Biological categories. What are the natural kinds of biology? 4) Does biology have real laws of nature? 5) Genetics, Genomics, Epigenetics, and other OMICS. How to define biological information 6) Teleology and teleonomy. The meaning of life revisited 7) Artificial life and biological computers. Bioinformatics enters the stage 8) When the context matters the most. Complex system biology 9) The enigma of origin. The debate about the first forms of life and what constitutes the minimal life 10) Life under the microscope. The philosophy of microbiology 11) Possible forms of life. Astrobiology and the question about the uniqueness of life on the Earth 12) Is Darwinian medicine a paradigm to unify biological and medical sciences? 13) What does it really mean to 'protect the environment'? An introduction to the environmental philosophy 14) Evolution and human nature. What is an evolutionary psychology? 15) Biological foundations of epistemology and ethics
10	Literatura (z podziałem na obowiązkową i uzupełniającą)	Sarkar S., Plutynski A., A Companion to the Philosophy of Biology Garvey, B., Philosophy of Biology Godfrey-Smith, P., Philosophy of Biology How Biology Shapes Philosophy. New Foundations for Naturalism, ed. D. Livingstone Smith Malley, M.A. - Philosophy of Microbiology Okasha S., Evolutions and the Levels of Selections Graham, G., Genes. A Philosophical Inquiry Burley, J., A Companion to Genetics Evolution 2.0. Implications of Darwinism in the Philosophy and the Social and Natural Sciences, eds. M. Brinkworth, F. Weinert
11	Efekty uczenia się z przyporządkowaniem do efektów uczenia się kierunkowych	Wiedza: W1, W2, W3, Umiejętności: U1, U2, U3, Kompetencje społeczne: K1, K2,
12	Sposób weryfikacji efektów uczenia się (oddzielnie dla każdego efektu)	W1, W2, W3, U1, U2, U3,

		K1, K2,
13	Metody dydaktyczne	problem-based methods (brainstorming, case studies, panel discussion), exposing methods (demonstration of the chosen topic), project-based approach
14	(1) Metody oceniania (2) Kryteria oceniania	1) 2)