

Course description

1. GENERAL INFORMATION			
1.1. Course teacher	Petar Tomev Mitrikeski		1.6. Year of the study
1.2. Name of the course	What is life?		1.7. ECTS credits
1.3. Associate teachers			1.8. Type of instruction (number of hours L + E + S + e-learning)
1.4. Study programme (undergraduate, graduate, integrated)	Undergraduate and graduate programme		1.9. Expected enrolment in the course
1.5. Status of the course	☒ mandatory	☒ elective	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)
2. COUSE DESCRIPTION			
2.1. Course objectives	The course is dedicated to a deeper understanding of <i>living matter</i>. Achieving this seemingly simple goal is hampered by the initial difficulty (for now even the impossibility) of the final philosophical definition of living matter. Namely, different scholars will, as a rule, resort to different definitions that will necessarily bear the characteristics of some of the existing <i>theories of life</i>. Currently, five basic approaches can be singled out in thinking about the problem of the final definition of living matter: (i) Aristotle's idea of the living as <i>animation</i>, i.e. a fundamental, irreducible feature of the natural world, (ii) Descartes' view of the living as a <i>mechanism</i>, (iii) Kant's thinking about the living as an <i>organization</i>, (iv) Darwin's revolutionary concept of the living as a <i>variation and evolutionary selection</i>, and (v) the idea that the living is an <i>emergence</i>, i.e. an emergent property of certain, specific complex systems. A closer goal of this course is for students to gain insight into the historical development of philosophical thought about living matter. In addition, students have the opportunity to engage in their own <i>in situ</i> reflection during the lectures.		
2.2. Enrolment requirements and/or entry competences required for the course	There are no prerequisites/competencies for enrolling in this course.		
2.3. Learning outcomes at the level of the programme to which the course contributes	Students who choose this course will be trained to: (i) Connect philosophical ideas with the philosophers to whom they belong, (ii) Develop a critical attitude towards various philosophical conceptions and directions and in that sense take their position, (iii) Develop the skill of arguing their own critical opinion, (iv) Formulate scientific hypotheses in this philosophical field.		
2.4. Expected learning outcomes at the level of the course (3 to 10 learning outcomes)	Students who choose this course will be able to: (i) Describe the historical periods in the development of philosophical thought about the living matter, (ii) Identify five relevant philosophical approaches to thinking about living matter.		
2.5. Course content (syllabus)	The purpose and goals of the course are achieved through several thematic (teaching) units that achieve conceptual comprehensiveness. Thus, the individual thematic units are grouped through five main subthemes: (i) <i>the historical discussion of mechanicians vs vitalists</i> , (ii) <i>the biochemical concept of the living matter</i> , (iii) <i>the scientific achievement of two fundamental</i>		

	<i>Schrödinger's questions about the living matter: a) how order emerges from order again during genetic (i.e. vertical) continuity of the living matter?, and b) how the living matter from disorder creates order through metabolism during the homeostatic (i.e. horizontal) continuity?, (iv) the problem of the initial appearance of the living matter, and (v) the problem of "artificial" life. Each of the five subtopics includes one or more teaching units.</i>									
2.6. Format of instruction:	☒ lectures ☒ seminars and workshops ☐ exercises ☐ online in entirety ☐ partial e-learning ☐ field work					☐ independent assignments ☐ multimedia and the internet ☐ laboratory ☐ work with mentor ☐ (other)			2.7. Comments:	
2.8. Student responsibilities	Students are expected to attend classes regularly and actively participate in them.									
2.9. Monitoring student work	Class attendance	YES		Research		NO	Oral exam		NO	
	Experimental work		NO	Report		NO	(other)			
	Essay		NO	Seminar paper	YES		(other)			
	Preliminary exam		NO	Practical work		NO	(other)			
	Project		NO	Written exam		NO	ECTS credits (total)	3		
2.10. Required literature (available in the library and/or via other media)	Title						Number of copies in the library	Availability via other media		
	Mayr, E. (1997). This Is Biology. Cambridge: Belknap Press of Harvard University Press. (ISBN 978-0-674-88469-4)							Possible		
2.11. Optional literature	• Harold, F.M., 2001. The Way of the Cell: Molecules, Organisms and the Order of Life, New York: Oxford University Press. • Margulis, L. and Sagan, D., 1995. What is Life?, New York: Simon & Schuster. • Maynard Smith, J. and Szathmary, E., 1999. The Origins of Life: From the Birth of Life to the Origin of Language, Oxford: Oxford University Press. • Morange, M., 2008. Life Explained, New Haven: Yale University Press.									
2.12. Other (as the proposer wishes to add)										