

COURSE OUTLINE "BEHAVIORAL BIOLOGY"

1. GENERAL

SCHOOL	HEALTH SCIENCES		
DEPARTMENT	MOLECULAR BIOLOGY AND GENETICS		
STUDY LEVEL	ISCED LEVEL 6		
COURSE CODE	MBG606	SEMESTER	6 th and 8 th
COURSE TITLE	BEHAVIORAL BIOLOGY		
TEACHING ACTIVITIES	HOURS/WEEK	ECTS CREDITS	
<i>In case credits are awarded to individual components of the course eg. Lectures, laboratory practicals, etc. If credit units are awarded for the whole course, indicate the weekly teaching hours and total credits</i>	2	3	
COURSE TYPE <i>General, Background, Scientific field course, Expertise Course, Skills Development etc</i>	SCIENTIFIC FIELD		
PREREQUISITE COURSES:	NO		
LANGUAGE OF TEACHING AND EXAMINATIONS:	GREEK		
THE COURSE IS OFFERED TO ERASMUS STUDENTS	NO		
COURSE WEBSITE (URL)	https://eclass.duth.gr/courses/ALEX01143/		

2. LEARNING OUTCOMES

<p>Learning outcomes</p> <p><i>Describe the learning outcomes of the course, the specific knowledge, skills and competencies that students will acquire after successfully completing the course. Refer to Appendix A.</i></p> <ul style="list-style-type: none"> • Description of learning outcomes for the course according to the level of study - refer to the European Higher Education Area Qualifications Framework • Descriptive Indicators of Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Annex B Curriculum Vitae Summary Guide 			
<p>The aim of the course is to familiarise the students with basic questions of Behavioral Biology. Particular emphasis is placed on the design and logic of the experiments described in order to cultivate critical-scientific thinking.</p> <p>Learning results</p> <p>Upon successful completion of the course, the student will be able to:</p> <ul style="list-style-type: none"> • know and understand the mechanisms involved in altruistic, aggressive and sexual behavior and their molecular basis • know and understand the basic points of game theory and its application to behavioral biology problems • know and understand the nature or nurture question and to understand its consequences in biology as well as in the organization of human societies. • be able to analyze and interpret behavioral phenomena in model organisms 			
<p>General Skills</p> <p><i>Which of the general competencies that the student will have acquired on the completion of the studies (see also the Diploma Supplement and below) are relevant to this course?</i></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;"> <ul style="list-style-type: none"> Research, analysis and synthesize of data and information, using the necessary technologies Adaptation to new situations Decision making Autonomous work Team work Work in an international environment </td> <td style="width: 50%; border: none;"> <ul style="list-style-type: none"> Work in an interdisciplinary environment Production of new research ideas Project design and management Respect for diversity and multiculturalism Respect for the natural environment Development of social, professional and moral responsibility and gender sensitivity Promotion of free, creative and inductive thinking </td> </tr> </table>		<ul style="list-style-type: none"> Research, analysis and synthesize of data and information, using the necessary technologies Adaptation to new situations Decision making Autonomous work Team work Work in an international environment 	<ul style="list-style-type: none"> Work in an interdisciplinary environment Production of new research ideas Project design and management Respect for diversity and multiculturalism Respect for the natural environment Development of social, professional and moral responsibility and gender sensitivity Promotion of free, creative and inductive thinking
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<ul style="list-style-type: none"> • Research, analysis and synthesize of data and information • Use of knowledge-based skills to solve practical problems • Autonomous work • Development of critical thinking • Production of new research ideas • Development of critical thinking • Promotion of free, creative and inductive reasoning • Adaptation to new situations • Development of data evaluation skills 			

3. COURSE CONTENT

1. Introduction to the biology of behavior
2. Love and sex at minicots
3. Sexual behavior of Drosophila
4. Altruistic behavior [Part A]
5. Altruistic behavior [Part B]
6. Altruistic behavior [Part C]
7. Nature versus parenting [Part A]
8. Nature versus nursing [Part B]
9. Nature versus upbringing [Part C]
10. Game Theory [Part A]
11. Game Theory [Part B]
12. Game Theory [Part C]
13. Aggressive behavior

4. TEACHING and LEARNING METHODS - EVALUATION

TYPE OF TRAINING <i>Face-to-face, Distance learning, etc..</i>	Face to face										
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY <i>Use of ICT in teaching, laboratory education, and in communication with the students</i>	Use of ICT in Teaching Use of ICT in Communication with students										
MODES OF DELIVERY <i>Describe the teaching methods in detail. Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, practicum, placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artistic creativity, etc. The student's study hours for each learning activity are given as well as the hours of non-directed study according to the principles of the ECTS</i>	<p>The lesson is based on active learning. In each module the basic concepts are presented by the instructor while the students, working in groups in the classroom, "follow" the research of a scientific group with a key-role in the specific field of science, through selected experiments and key scientific publications. Teaching involves the analysis and interpretation of real experimental data, the formulation of new hypotheses, and the design of the experiments needed to test them. In this way the student not only acquires knowledge but also understands, evaluates and processes primary experimental results, formulates assumptions, designs experiments to test them, while at the same time co-operates with his colleagues and the instructor in an environment which, to a large extent, simulates the way a scientific research group operates in the lab.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;"><i>Activity</i></th> <th style="text-align: center;"><i>Workload/semester</i></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Interactive teaching</td> <td style="text-align: center;">20</td> </tr> <tr> <td style="text-align: center;">Lectures</td> <td style="text-align: center;">6</td> </tr> <tr> <td style="text-align: center;">Study and analysis of bibliography</td> <td style="text-align: center;">64</td> </tr> <tr> <td style="text-align: center;">Course Total</td> <td style="text-align: center;">90</td> </tr> </tbody> </table>	<i>Activity</i>	<i>Workload/semester</i>	Interactive teaching	20	Lectures	6	Study and analysis of bibliography	64	Course Total	90
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STUDENT PERFORMANCE EVALUATION <i>Describe of the methods of evaluation language, methods of evaluation, types of exams, multiple choice questionnaires, short-answer questions, open-ended questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory work, clinical examination of patient, art interpretation, other Are evaluation criteria known to the students?</i>	<p>Student evaluation languages Greek</p> <p>Method (Formative or Concluding) Summative</p> <p>Student evaluation methods Written exam with multiple choice test (50%) Written Exam with Essay Development Questions (25%) Written Exam with Short Answer Questions (25%)</p> <p>The evaluation criteria are presented in the course guide available on the course's website.</p>										

5. SUGGESTED BIBLIOGRAPHY

There is no suitable book, matter is covered by notes distributed electronically.