

## COURSE OUTLINE

### (1) GENERAL

<b>SCHOOL</b>	NATURAL SCIENCES		
<b>ACADEMIC UNIT</b>	BIOLOGY		
<b>LEVEL OF STUDIES</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	BIO_HE12	<b>SEMESTER</b>	5/7
<b>COURSE TITLE</b>	ETHOLOGY		
<b>INDEPENDENT TEACHING ACTIVITIES</b> <i>if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, give the weekly teaching hours and the total credits</i>		<b>WEEKLY TEACHING HOURS</b>	<b>CREDITS</b>
Lectures		2	3
<i>Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).</i>			
<b>COURSE TYPE</b> <i>general background, special background, specialised general knowledge, skills development</i>	Field of Science Skills Development		
<b>PREREQUISITE COURSES:</b>	NO Formally, there are no prerequisite courses. Nevertheless, a good knowledge of evolutionary biology, zoology, ecology and animal physiology is highly recommended.		
<b>LANGUAGE OF INSTRUCTION and EXAMINATIONS:</b>	Geek		
<b>IS THE COURSE OFFERED TO ERASMUS STUDENTS</b>	Yes (in English)		
<b>COURSE WEBSITE (URL)</b>	<a href="https://eclass.upatras.gr/courses/BIO238/">https://eclass.upatras.gr/courses/BIO238/</a>		

### (2) LEARNING OUTCOMES

<p><b>Learning outcomes</b></p> <p><i>The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described.</i></p> <p><i>Consult Appendix A</i></p> <ul style="list-style-type: none"> <li>• <i>Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area</i></li> <li>• <i>Descriptors for Levels 6, 7 &amp; 8 of the European Qualifications Framework for Lifelong Learning and Appendix B</i></li> <li>• <i>Guidelines for writing Learning Outcomes</i></li> </ul>
<p>By the end of this course the student should be able to:</p> <p>1) understand the content and scope of animal behavior studies, 2) develop a critical view regarding explanations of animal behavior, 3) understand the various levels of ethological explanations, 4) identify important subjects for study in ethology, 5) formulate sound scientific questions and hypotheses on animal behavior, 6) discuss major theories and approaches in ethology and behavioral ecology, 7) develop an evolutionary point of view regarding explanations of animal behavior, 8) understand the comparative approach in ethology and, more generally, biology</p>

### General Competences

Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and appear below), at which of the following does the course aim?

Search for, analysis and synthesis of data and information, with the use of the necessary technology	Project planning and management
Adapting to new situations	Respect for difference and multiculturalism
Decision-making	Respect for the natural environment
Working independently	Showing social, professional and ethical responsibility and sensitivity to gender issues
Team work	Criticism and self-criticism
Working in an international environment	Production of free, creative and inductive thinking
Working in an interdisciplinary environment	.....
Production of new research ideas	Others...
	.....

By the end of the course, the student will have developed the following **Special skills/competences**:

1) ability to set up simple but robust experiments for the study of behavior, 2) ability to evaluate and present major theories and concepts of the evolutionary interpretation of behavior, 3) deeper understanding of human behavior and its evolutionary roots.

Additionally, by the end of this course the student will, furthermore, have develop the following

#### **General Abilities:**

1) Working independently, 2) Team work, 3) Generation of new research ideas, 4) Respect for the natural environment, 5) Development of free, creative and inductive thinking

### (3) SYLLABUS

1. Introduction to the study of ethology. Basic principles and concepts. 2. Animal behavior: history and development. 3. Proximate and ultimate questions and causes. 4. The development of behavior. 5. Control of behavior and neuronal mechanisms. 6. Organization of behavior: neurons and hormones. 7. Adaptations for survival, feeding and territoriality. 8. Communication: a world of signals and information. 9. Reproductive behavior. 10. Social behavior. Examples.

#### (4) TEACHING and LEARNING METHODS - EVALUATION

<p style="text-align: center;"><b>DELIVERY</b> <i>Face-to-face, Distance learning, etc.</i></p>	Face to face	
<p style="text-align: center;"><b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b> <i>Use of ICT in teaching, laboratory education, communication with students</i></p>	Support of educational procedure with use of the e-class electronic platform	
<p style="text-align: center;"><b>TEACHING METHODS</b></p> <p><i>The manner and methods of teaching are described in detail.</i></p> <p><i>Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artistic creativity, etc.</i></p> <p><i>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>	<b>Activity</b>	<b>Semester workload</b>
	Lectures (13 weeks x 2 hours per week)	26
	Elaboration of a project	7
	Home study	42
	<b>75</b>	
<p style="text-align: center;"><b>STUDENT PERFORMANCE EVALUATION</b></p> <p><i>Description of the evaluation procedure</i></p> <p><i>Language of evaluation, methods of evaluation, summative or conclusive, 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</i></p> <p><i>Specifically-defined evaluation criteria are given, and if and where they are accessible to students.</i></p>	<p>1) Written exams (at the semester's end), accounting for the 80% of the Final Grade.</p> <p>2) Elaboration &amp; Presentation of a project (at the semester's end), accounting for the 20% of the Final Grade.</p> <p>Final Course Grade: Exams Grade x 0.6 + Project's Grade x 0.2</p> <p>Grading scale: 1-10. Passing grade: 5</p> <p>Grading: 3 correspond to ECTS grade F. Grade 4 corresponds to ECTS grade FX.</p> <p>Passing grades correspond to ECTS grades as follows: 5=E, 6=D, 7=C, 8=B, 9=A.</p>	

#### (5) ATTACHED BIBLIOGRAPHY

<p>- <i>Suggested bibliography:</i></p> <p>1) Davies N.B, Krebs J.R, West S.A (2017) Introduction to Behavioral Ecology, 2) Instructors' Notes</p> <p>- <i>Related academic journals:</i></p>
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