

COURSE OUTLINE

1. GENERAL

SCHOOL	AGRICULTURAL AND FORESTRY SCIENCES		
DEPARTMENT	AGRICULTURAL DEVELOPMENT		
LEVEL OF STUDIES	7		
COURSE CODE	B0025	SEMESTER	4th
COURSE TITLE	GENERAL AGRICULTURAL ENTOMOLOGY AND ZOOLOGY		
TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
Lectures and Labs	5 (3+2)	5	
COURSE TYPE	Scientific Area		
PREREQUISITES:	No		
TEACHING & EXAMINATION LANGUAGE:	Greek English (Erasmus students)		
COURSE OFFERED TO ERASMUS STUDENTS:	Yes		
COURSE URL:	https://eclass.duth.gr/courses/OPE01123/		

2. LEARNING OUTCOMES

Learning Outcomes
After the completion of the course the students will: <ul style="list-style-type: none"> (a) Have acquired the basic knowledge about the structure, anatomy, morphology and physiology and behavior of organisms of the Class Insecta (b) Be able to identify the most important Insect Orders from an agricultural point of view and make their own entomological collection
General Skills
Autonomous work Literature search, data analysis and synthesis Critical thinking

3. COURSE CONTENT

<ol style="list-style-type: none"> 1. The importance of insects, systematics, diversity and insect conservation 2. External morphology - exoskeleton, ecdysis 3. Insect body structure, the head, thorax, abdomen and their accessories (structure and types of antennas, wings, legs) 4. Insect body structure, the head, chest, abdomen and their accessories (structure and types mouthparts) 5. Orders of Hemimetabola species of agricultural importance 6. Internal morphology - Digestive system, feeding, nutrition and digestion, symbiotic microorganisms, fat body, excretion 7. Orders of Holometabola species of agricultural importance (I) 8. Orders of Holometabola species of agricultural importance (I) 9. Internal morphology – Circulatory system, respiratory system 10. Internal morphology - Nervous system, muscular system and reproductive system 11. Sensory organs and Insect behavior 12. Voltinism, phenology, diapause, polymorphism, polyphenism 13. Insect communication (chemical, visual, acoustic)
--

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD	Face to face	
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT)	Use of ICT in Teaching and in Communication with students	
TEACHING ORGANIZATION	<i>Activity</i>	<i>Workload/semester</i>
	Lectures	39
	Laboratory exercises	26
	Literature research & analysis	15
	Independent learning	45
		125
STUDENT EVALUATION	Concluding Laboratory exercise (15%) Multiple Choice Test & Short Answer Questions (85%)	

5. SUGGESTED BIBLIOGRAPHY

1. GULLAN P.J. AND CRANSTON P.S. (2014). THE INSECTS: AN OUTLINE OF ENTOMOLOGY, 5TH EDITION. WILEY-BLACKWELL, WEST SUSSEX, UK.
2. GILLOT, C. (1995). ENTOMOLOGY. SPRINGER
3. PEDIGO P. LARRY, RICE M.E., KRELL R.K. (2002). ENTOMOLOGY AND PEST MANAGEMENT. WAVELAND PRESS, INC.

ANNEX OF THE COURSE OUTLINE

Alternative ways of examining a course in emergency situations

Teacher (full name):	Maria Pappas
Contact details:	mpappa@agro.duth.gr
Supervisors:	NO
Evaluation methods:	Written examination
Implementation Instructions:	<p>Before the exam, a link to MS Teams which the students should follow on the day and time of the exam will be sent via e-class exclusively to the institutional accounts of the students who have registered for the course and declared to have accepted and understood the terms of distance learning and remote evaluation. MS Teams will be used for identification processes of the students via the demonstration of their academic identity. Students should also log in to the e-class page of the course using their institutional account. The exam will be available only to the registered users of the course who are eligible to participate in the exams. After logging in to e-class, students must select 'Exercises' from the options menu (left) and then the exercise entitled 'Exams'. The exam includes multiple choice questions, one of which is correct, while there is a negative score for wrong answers (not for the blank ones) equal to 1/2 of the correct answer. The total number of questions is 20 and the duration of the exam is 60 minutes. Each correct answer is scored with 0.5. From the beginning of the exam by the students, there will be a time limit of 20 minutes (at the top right of the screen, the students will be able to see the time left to complete the exam) per repetition. There is no limit in the number of repetitions allowed. However, the FIRST submitted exam will be the one to be considered. Participants must remain logged in to MS Teams during the exam. The procedure is governed by the rules described in the Code of Ethics and Good Practice of DUTH as well as the Policy for the Protection of Personal Data when using remote evaluation methods of DUTH.</p>