

COURSE OUTLINE

1. GENERAL

SCHOOL	AGRICULTURAL AND FORESTRY SCIENCES		
DEPARTMENT	AGRICULTURAL DEVELOPMENT		
LEVEL OF STUDIES			
COURSE CODE	B0024	SEMESTER	5th
COURSE TITLE	General Plant Pathology		
TEACHING ACTIVITIES <i>If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.</i>		TEACHING HOURS PER WEEK	ECTS CREDITS
Lectures and Practical courses		5 (3+2)	5
<i>Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.</i>			
COURSE TYPE <i>Background, General Knowledge, Scientific Area, Skill Development</i>	Core		
PREREQUISITES:	-		
TEACHING & EXAMINATION LANGUAGE:	Greek		
COURSE OFFERED TO ERASMUS STUDENTS:	Yes		
COURSE URL:	https://eclass.duth.gr/courses/GEO112		

2. LEARNING OUTCOMES

Learning Outcomes <i>Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</i>																		
<ul style="list-style-type: none"> • understand the basic concepts and terminology of plant pathology. • recognize the symptoms and signs of plant diseases. • understand the basic elements, the biology and the ecology of representative groups of phytopathogens (ii) understand the cycle of a plant disease and the factors influencing its development. • collect, prepare and observe specimens under the microscope. 																		
General Skills <i>Name the desirable general skills upon successful completion of the module</i>																		
<table border="0"> <tr> <td><i>Search, analysis and synthesis of data and information,</i></td> <td><i>Project design and management</i></td> </tr> <tr> <td><i>ICT Use</i></td> <td><i>Equity and Inclusion</i></td> </tr> <tr> <td><i>Adaptation to new situations</i></td> <td><i>Respect for the natural environment</i></td> </tr> <tr> <td><i>Decision making</i></td> <td><i>Sustainability</i></td> </tr> <tr> <td><i>Autonomous work</i></td> <td><i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i></td> </tr> <tr> <td><i>Teamwork</i></td> <td><i>Critical thinking</i></td> </tr> <tr> <td><i>Working in an international environment</i></td> <td><i>Promoting free, creative and inductive reasoning</i></td> </tr> <tr> <td><i>Working in an interdisciplinary environment</i></td> <td></td> </tr> <tr> <td><i>Production of new research ideas</i></td> <td></td> </tr> </table>	<i>Search, analysis and synthesis of data and information,</i>	<i>Project design and management</i>	<i>ICT Use</i>	<i>Equity and Inclusion</i>	<i>Adaptation to new situations</i>	<i>Respect for the natural environment</i>	<i>Decision making</i>	<i>Sustainability</i>	<i>Autonomous work</i>	<i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i>	<i>Teamwork</i>	<i>Critical thinking</i>	<i>Working in an international environment</i>	<i>Promoting free, creative and inductive reasoning</i>	<i>Working in an interdisciplinary environment</i>		<i>Production of new research ideas</i>	
<i>Search, analysis and synthesis of data and information,</i>	<i>Project design and management</i>																	
<i>ICT Use</i>	<i>Equity and Inclusion</i>																	
<i>Adaptation to new situations</i>	<i>Respect for the natural environment</i>																	
<i>Decision making</i>	<i>Sustainability</i>																	
<i>Autonomous work</i>	<i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i>																	
<i>Teamwork</i>	<i>Critical thinking</i>																	
<i>Working in an international environment</i>	<i>Promoting free, creative and inductive reasoning</i>																	
<i>Working in an interdisciplinary environment</i>																		
<i>Production of new research ideas</i>																		
<ul style="list-style-type: none"> • Autonomous work • Literature search, data analysis and synthesis 																		

- Development of inductive reasoning

3. COURSE CONTENT

1. Introduction - Course content - Course structure
2. Phytopathogenic Fungi (Morphology, Physiology, Ecology, Symptomatology)
3. Phytopathogenic Fungi (Reproduction and Systematics)
4. Prokaryotic Phytopathogens
5. Phytopathogenic Viruses and Viroids
6. Non-Parasitic Diseases
7. Parasitic Plants and Phytoparasitic Nematodes
8. Management of Plant Diseases: Principles and Methods
9. Diagnosis of Plant Diseases: Classical and Modern Methods
10. The Plant Defense System
11. Mechanisms of Pathogenesis
12. Review Course I
13. Review Course II

1. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD <i>Face to face, Distance learning, etc.</i>	In the classroom	
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) <i>Use of ICT in Teaching, in Laboratory Education, in Communication with students</i>	<ul style="list-style-type: none"> • Use of information technologies (power point, video) • Support of the learning process through the e-class online platform 	
TEACHING ORGANIZATION <i>The ways and methods of teaching are described in detail.</i> <i>Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.</i> <i>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards.</i>	Activity	Semester workload
	Lectures	39
	Laboratory courses	26
	Independent study	60
	Course Total	125
STUDENT EVALUATION <i>Description of the evaluation process</i> <i>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</i> <i>Please indicate all relevant information about the course assessment and how students are informed</i>	Written exams at the end of the semester.	

2. SUGGESTED BIBLIOGRAPHY

Selected Textbooks in the Eudoxus system:

Βιβλίο [50658372]: Φυτοπαθολογία, George Agrios

Βιβλίο [23047]: Φυτοπαθολογία, Τζάμος Ελευθέριος
Βιβλίο [12777556]: Γενική Φυτοπαθολογία, Γραβάνης Φώτης

Additional bibliographic resources will be available to students during the course

ANNEX OF THE COURSE OUTLINE

Alternative ways of examining a course in emergency situations

Teacher (full name):	Christos Zamioudis and Evangelia Sinapidou
Contact details:	czamioud@agro.duth.gr esinapid@agro.duth.gr
Supervisors: (1)	YES
Evaluation methods: (2)	Remote exams via the "EXERCISES" of the E-class combined with simultaneous mandatory connection to the Skype for Business platform.
Implementation Instructions: (3)	The date and time of the exams will be announced by the Secretariat of the Department. The Skype for Business (SfB) link will be provided by the instructor one to two days before the scheduled exam date. Eligible students should ensure that they are connected to the E-class platform. The examination of the course will be carried out via the EXERCISES of the E-class. Relevant instructions will be given and then the access to the EXERCISES entitled EXAMINATION TOPICS-DATE will be opened. Topics will include MULTIPLE-CHOICE SINGLE ANSWER QUESTIONS and/or MULTIPLE-CHOICE MULTIPLE-ANSWER QUESTIONS and/or MATCHING QUESTIONS (MATCH) and/or CORRECT-FALSE QUESTIONS. The time the students will have at their disposal will be on average 45 seconds for each question. In any case, it is up to the student to distribute the time as he/she wishes. The system will shut down automatically once the examination time is completed; after that, there is no possibility to submit the EXERCISE. Therefore, students are kindly requested to submit the EXERCISE on time. The available time is visible at the top of the EXERCISE page. When the attempt is completed, the EXERCISE is submitted by selecting "submit" at the bottom of the query page. Attention: there is only one attempt and there is no possibility of cancellation and restart. The SKYPE microphone remains muted throughout the exams; if there are questions or problems, the students are suggested to use the SfB chat. In order for the student to participate in the exams, he/she must read and accept the terms of his/her participation in the examination process. This can be done through the page https://students.duth.gr and from the menu "Service", by going to the option "Participation in the next exam period". The instructor will then attach before the examination date the list of student AEMs who are eligible to participate in the exams.

(1) Please write YES or NO

(2) Note down the evaluation methods used by the teacher, e.g.

- *written assignment* or/and exercises
- written or oral examination with distance learning methods, provided that the integrity and reliability of the examination are ensured.

(3) In the **Implementation Instructions** section, the teacher notes down clear instructions to the students:

a) in case of **written assignment and / or exercises**: the deadline (e.g. the last week of the semester), the means of submission, the grading system, the grade percentage of the assignment in the final grade and any other necessary information.

b) in case of **oral examination with distance learning methods**: the instructions for conducting the examination (e.g. in groups of X people), the way of administration of the questions to be answered, the distance learning platforms to be used, the technical means for the implementation of the examination (microphone, camera, word processor, internet connection, communication platform), the hyperlinks for the examination, the duration of the exam, the grading system, the percentage of the oral exam in the final grade, the ways in which the inviolability and reliability of the exam are ensured and any other necessary information.

c) in case of **written examination with distance learning methods**: the way of administration of the questions to be answered, the way of submitting the answers, the duration of the exam, the grading system, the percentage of the written exam of the exam in the final grade, the ways in which the integrity and reliability of the exam are ensured and any other necessary information.

There should be an attached list with the Student Registration Numbers only of students eligible to participate in the examination.