

COURSE OUTLINE

1. GENERAL

SCHOOL	FOOD, BIOTECHNOLOGY AND DEVELOPMENT		
ACADEMIC UNIT	BIOTECHNOLOGY		
LEVEL OF STUDIES	BACHELOR OF SCIENCE		
COURSE CODE	294	SEMESTER	4 ^o
COURSE TITLE	Biological cycle and environmental effect		
INDEPENDENT TEACHING ACTIVITIES <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>	WEEKLY TEACHING HOURS	CREDITS	
Lectures and Practicals	4	4	
<i>Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (4).</i>			
COURSE TYPE <i>general background, special background, specialised general knowledge, skills development</i>	Field of Science		
PREREQUISITE COURSES:			
LANGUAGE OF INSTRUCTION and EXAMINATIONS :	Greek		
IS THE COURSE OFFERED TO ERASMUS STUDENTS			
COURSE WEBSITE (URL)	https://oeclass.aua.gr/eclass/courses/4918/		

2. LEARNING OUTCOMES

LEARNING OUTCOMES

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.

Consult Appendix A

- Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area
- Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B
- Guidelines for writing Learning Outcomes

Upon successful completion of the course the student will:

- Will know the different perennial plant species, their spread and their adaptability.
- Will have knowledge about the impact of environmental factors on the perennial plant growth as well as the management of environmental conditions for the plants' sustainability
- Will have knowledge on environmental management and development of appropriate interventions for the perennial plant growth optimization
- Will have knowledge about the perennial plant genetic diversity, the identification and description of species and genotypes of perennial plants using their genetic characteristics
- Will have knowledge of the strategies for conserving the perennial plant genetic diversity, developing new genotypes and preserving the genetic material of perennial plant species

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

Production of new research ideas
Project planning and management

<i>Adapting to new situations</i>	<i>Respect for differences and multiculturalism</i>
<i>Decision-making</i>	<i>Respect for the natural environment</i>
<i>Working independently</i>	<i>Showing social, professional and ethical responsibility and sensitivity to gender issues</i>
<i>Team work</i>	<i>Criticism and self-criticism</i>
<i>Working in an international environment</i>	<i>Production of free, creative and inductive thinking</i>
<i>Working in an interdisciplinary environment</i>	

- Independent work
- Teamwork
- Work in an interdisciplinary environment
- Generating new research ideas

3. SYLLABUS

- 1) Description-classification of perennial plants
- 2) Spatio-temporal distribution of perennial plants
- 3) Adaptability of perennial plants
- 4) Influence of aerial and root environment variables on the perennial plants' development
 - root microenvironment and the role of the water
 - aerial environment
- 5) Management of environmental conditions for the perennial plants' development and sustainability
- 6) Development of appropriate interventions for the perennial plants' growth optimization
- 7) Phenotypic characteristics of various perennial woody plants
- 8) Genetic diversity of perennial plant species
- 9) Identification and description of species and genotypes of perennial plants using their genetic characteristics
- 10) Strategies for conserving the perennial plants' genetic diversity
- 11) Ways of developing new genotypes of perennial plants
- 12) Conservation of the genetic material of perennial plants

4. TEACHING and LEARNING METHODS - EVALUATION

DELIVERY <i>Face-to-face, Distance learning, etc.</i>	In the classroom	
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY <i>Use of ICT in teaching, laboratory education, communication with students</i>	Lectures: Power point presentations Support of learning process through e-class platform	
TEACHING METHODS <i>The manner and methods of teaching are described in detail.</i> <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> <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>	Activity	Semester workload
	Lectures	39
	Lab exercises	26
	Autonomous study	35
	Course total (Total contact hours and training)	100
STUDENT PERFORMANCE EVALUATION <i>Description of the evaluation procedure</i>	Written Examination (100%)	

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

Specifically-defined evaluation criteria are given, and if and where they are accessible to students.

5. ATTACHED BIBLIOGRAPHY

-Suggested bibliography :

Biology of perennial fruit plants I, Dimitrios Vegetizes, Magdaleni Koukourikou-Petridou, 2009, Publisher: Gartagani Agis-Savvas

Biology of perennial fruit plants II, Dimitrios Vogiatzis, Magdaleni Koukourikou-Petridou, 2004, Publisher: Gartagani Agis-Savvas

-Relevant scientific journals: