

## ADVANCED VITICULTURE

### COURSE OUTLINE

#### 1. GENERAL

<b>SCHOOL</b>	AGRICULTURAL SCIENCES		
<b>DEPARTMENT</b>	AGRICULTURE		
<b>LEVEL OF COURSE</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	AGRI_403	<b>SEMESTER OF STUDIES</b>	4 <sup>th</sup>
<b>COURSE TITLE</b>	VITICULTURE		
<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>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
Lectures		2	
Laboratory exercises		2	
Total		4	5
<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>	General Background		
<b>PREREQUISITE COURSES:</b>	Typically, there are not prerequisite courses.		
<b>TEACHING AND ASSESSMENT LANGUAGE:</b>	Greek. teaching may be however performed in English in case foreign students attend the course.		
<b>THE COURSE IS OFFERED TO ERASMUS STUDENTS</b>	Yes		
<b>COURSE WEBPAGE (URL)</b>			

#### 2. LEARNING OUTCOMES

<p><b>Learning outcomes</b> <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>The course is the basic introductory course in the science of viticulture and aims to provide students with the necessary knowledge in matters of business viticulture, for the production of high-quality viticultural products.</p> <p>Upon successful completion of the course, the student will be able to:</p> <ul style="list-style-type: none"> <li>• Understand the morphology, anatomy and function of the trunk and the annual biological cycle of vegetation.</li> </ul> <p>Understand the process of producing propagating material - root cuttings for the planning and installation of a productive vineyard.</p> <ul style="list-style-type: none"> <li>• Understand the importance of vineyard bioclimatology and cultivation techniques.</li> </ul>

- To identify and evaluate all biotic and abiotic factors in the vineyard and their role in the ripening and quality characteristics of the vitis products.
- To have the basic communication skills with fellow students, lecturers, and potential external stakeholders in matters of viticulture.

### **General Abilities**

*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*

*Adapting to new situations*

*Decision-making*

*Working independently*

*Team work*

*Working in an international environment*

*Working in an interdisciplinary environment*

*Production of new research ideas*

*Project planning and management*

*Respect for difference and multiculturalism*

*Respect for the natural environment*

*Showing social, professional and ethical responsibility and sensitivity to gender issues*

*Criticism and self-criticism*

*Production of free, creative and inductive thinking*

by the end of this course the students will, furthermore, have develop the following general abilities (from the list above):

*Search for, analysis and synthesis of data and information, with the use of the necessary technology*

*Adapting to new situations*

*Decision-making*

*Working independently*

*Production of free, creative and inductive thinking*

*Respect for the natural environment*

### **3. SYLLABUS**

- Historical review of vitis.
- Spread of vitis cultivation in Greece and in general throughout the world.
- Vitis products and their nutritional value.
- Effect of phylloxera on crop development.
- Botanical classification of the genus Vitis.
- Morphology and anatomy of vitis organs.
- Specific elements of vitis physiology. Vegetative cycle (teaching, budding, growth, wood maturation, storage, hibernation). Reproductive phase (stages of flower development, flowering, pollination, fertilization, fruit set and vein development).

- Micro-climate, soil and their effects on vegetation and production.
- Viticultural characteristics and cultivation properties.
- Varieties of winemaking. Table varieties. Special cultivation techniques to improve the quality of table varieties. Raisin varieties. Raisin technology.
- Vineyard installation.
- Irrigation and vitis growth.
- Inorganic nutrition, fertilization, and nutrient deficiency/excess problems.

#### 4. TEACHING AND LEARNING METHODS - EVALUATION

<p><b>TEACHING METHOD</b> <i>Face-to-face, Distance learning, etc.</i></p>	Lectures in the class and in the laboratory (face to face)	
<p><b>USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES</b> <i>Use of ICT in teaching, laboratory education, communication with students</i></p>	Use of Information and Communication Technologies (ICTs) (e.g. PowerPoint) in teaching. Direct communication with the students (face to face and by e-mail), Support of the learning process and uploading of the educational material to the electronic platform (e-class): <a href="https://eclass.upatras.gr">https://eclass.upatras.gr</a>	
<p><b>TEACHING METHODS</b> <i>The manner and methods of teaching are described in detail. 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 (2 conduct hours per week x 13 weeks)	26
	Laboratory practice, fieldwork (2 conduct hours per week x 6 weeks)	12
	Total examinations x 2 conduct hours each)	2
	Hours for private study of the student and preparation for mid-term or/and final examination / Final examination	85
<p><b>STUDENT PERFORMANCE EVALUATION</b> <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><b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>      <b>125 hours (total student work-load)</b></p> <ol style="list-style-type: none"> <li>1. Optionally, two mid-term examinations with the final examination grade to be the mean mark. It is mandatory to obtain pass grade (<math>\geq 5</math>) in each examination.</li> <li>2. Written examination after the end of the semester. Minimum passing grade: 5.</li> </ol> <p><b>Evaluation of theoretical part (60%)</b> Written examination. It is mandatory to obtain pass grade (<math>\geq 5</math>).</p> <p><b>Evaluation of the laboratory work (40%)</b> Written examination. It is mandatory to obtain pass grade (<math>\geq 5</math>).</p>	

## 5. RECOMMENDED LITERATURE

- Ι. Βαγιάνος, ΠΡΑΚΤΙΚΗ ΑΜΠΕΛΟΥΡΓΙΑ-ΟΙΝΟΛΟΓΙΑ, Εκδόσεις Ψύχαλος, 1986.
- Ν. Α. , Νικολάου, ΑΜΠΕΛΟΥΡΓΙΑ, Εκδόσεις Σύγχρονη Παιδεία, 2008.
- Σταυρακάκης, Μ.Ν. 2010 . Αμπελογραφία
- Τσακίρης, Α., ΑΜΠΕΛΟΥΡΓΙΑ ΓΙΑ ΚΡΑΣΙΑ ΠΟΙΟΤΗΤΑΣ, Εκδόσεις Ψύχαλος, 2016.