COURSE OUTLINE

1. GENERAL INFORMATION

SCHOOL	APPLIED BIOLOGY AND BIOTECHNOLOGY		
DEPARTMENT	BIOTECHNOLOGY		
STUDY LEVEL	BACHELOR OF SCIENCE		
COURSE CODE	**115**	**Semester:**	3rd
COURSE TITLE	GENERAL VITICULTURE		

INDEPENDENT TEACHING ACTIVITIES *in case credits are awarded for separate components/parts of the course, e.g. in lectures, laboratory exercises, etc. If credits are awarded for the entire course, give the weekly teaching hours, and the total credits*	**WEEKLY TEACHNG HOURS**	**ECTS**
Lectures	3	1,56
Laboratory Exercises	2	1,04
Laboratory practice – Practice in the vineyard		0,40
Personal study		2,00
TOTAL		**5,00**

COURSE TYPE *general background, special background, specialised general knowledge, skills development*	General Knowledge
PREREQUISITE COURSES:	
LANGUAGE OF INSTRUCTION and EXAMS:	Greek
THE COURSE IS OFFERED TO ERASMUS STUDENTS	YES
COURSE WEBSITE (URL)	https://oeclass.aua.gr/eclass/courses/568/

2. LEARNING OUTCOMES

Learning Outcomes

The course learning outcomes, specific knowledge, skills and competences of an appropriate (certain)

level, which students will acquire upon successful completion of the course, are described in detail. It is necessary to consult.

Appendix A

- *Description of the level of learning outcomes for each level of study, in accordance with the European Higher Education Qualifications' Framework*
- *Descriptive indicators for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning*

And Appendix B

- *Guidelines for writing Learning Outcomes*

The objective of the course is to introduce students to the basic functions of the grape vine and their morphological and physiological basis, to the basic cultivation techniques which are used in a productive vineyard, as well as to the importance of the cultivation of the vine for the crop production.

The course aims to introduce students to the methodology used both in the installation and management of a modern productive vineyard, as well as to the viticultural techniques regarding the training, fruiting and the annual vegetation cycle of the vines.

The course is offered to the students of:

- 5th semester of the Department of Crop Science (compulsory)
- 3rd semester of the Department of Food Science and Human Nutrition (optional)
- 3rd semester of the Department of Biotechnology (optional)
- 7th semester of the Department of Agricultural Economics & Rural Development (optional)
- 9th semester of the Department of Natural Resources Management & Agricultural Engineering (optional)

Upon the successful completion of the course (theory and laboratory part of the course), students will have (Descriptive indicators for Level 6 of the European Qualifications Framework for Lifelong Learning):

- Understood the morphology and anatomy of the various organs of the vine and their utilization in productive viticulture.
- Understood the annual vegetation cycle, the phenological stages and their physiological basis
- Understood how a vineyard can be managed.
- Understood the importance of pruning, training and fruiting of the vines and their utilization in the viticultural practice.

General Competences

Taking into consideration the general competences that students/graduates must acquire (as those are described in the Diploma Supplement and are mentioned below), at which of the following does the course attendance aim?

Search for, analysis and synthesis of data and information by the use of appropriate technologies,
Adapting to new situations
Decision-making
Individual/Independent work
Group/Team work
Working in an international environment
Working in an interdisciplinary environment
Introduction of innovative research
Project planning and management
Respect for diversity and multiculturalism
Environmental awareness
Social, professional and ethical responsibility and sensitivity to gender issues
Critical thinking
Development of free, creative and inductive thinking
(Other…….citizenship, spiritual freedom, social awareness, altruism etc.)

- Individual/independent and team/group work
- Decision-making
- Working in an international
- Project planning and management
- Environmental awareness
- Development of free, creative and inductive thinking

3. COURSE CONTENT

i. INTRODUCTION

Origin of the vine – Viticulture in the Greek antiquity-
The contribution of the vine to the aesthetics of the rural landscape and the protection of the environment - Viticulture in Greece and the world - Productive grapevine varieties - Cultivated areas and production of viticultural products - Viticultural products - Problems and perspectives of the Greek vineyard.

ii. MORPHOLOGY AND ANATOMY OF THE VINE
Root-Shoot-Leaves-Helixes-Inflorescence-Flower-Bunch-Berry-Seed (Origin - Distinction - Role-Morphology-Anatomy) Grapevine buds - Shoot buds - Apical bud - Side buds- Cane buds (Anatomy-Fertility-Distinction and evaluation of latent vine buds)

iii. ANNUAL VEGETATION CYCLE
Introduction - Grapevine budbreak (Phenology-Break of the latent buds of the vine- Break of the lateral and latent buds of the shoot) - Shoot Growth - Differentiation of the shoots - Leaf fall.

iv. VINEYARD MANAGEMENT
Soil cultivation - Weed control - Fertilization - Irrigation - Harvest - Harvesting methods.

v. PRUNING OF THE VINE
Introduction-Pruning and training systems of the vines-Physical characteristics of the canopy Training systems and Selection Criteria-Methodology and techniques of training in the various systems- Fruit pruning-Effect of pruning on the budbreak and fruiting of the vines- Guidance and pruning principles - Fruit pruning systems and selection criteria - Season of execution of winter fruiting pruning-Training and trellis systems and fruiting pruning of the Greek vineyard.

4. TEACHING and LEARNING METHODS - Evaluation

USE OF INFORMATICS and COMMUNICATION TECHNOLOGIES *Use of ICT in teaching, laboratory education, communication with students*	Face-to-Face. In-class lecturing for the theory/lectures of the course. In-class lecturing for the laboratory exercises of the course as well as in the Vineyard of the Laboratory of Viticulture.
TEACHING ORGANISATION *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.* *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*	Use of slide presentation and blackboard, video. Learning process support by access to e-class asynchronous distance learning platform, on-line databases etc. Communication with students via e-mail.
USE OF INFORMATICS and COMMUNICATION TECHNOLOGIES *Use of ICT in teaching, laboratory education, communication with students*	

Activity / Method	***Semester Workload***
Lectures	39 h
Practice exercises focusing on the implementation of methodologies in smaller group of students in the vineyard (Laboratory exercises)	26 h
Laboratory practice – Practice in the vineyard	10 h
Personal study	50 h
Total of Course (25 hours of workload per ECTS)	***125 h***

STUDENT EVALUATION *Detailed description of the evaluation procedures*	I. The evaluation language is Greek. II. The grade in the theory of the course is the outcome of the final written or oral exam..

Language of evaluation, assessment methods, formative or summative (conclusive), multiple choice tests, short- answer questions, open-ended questions, problem solving, written work, essay/report, oral exam, presentation, laboratory work, other etc *Specifically defined evaluation criteria are stated, as well as if and where they are accessible by the students..*	III. The grade in the laboratory part of the course is the outcome of the final written or oral exam.

5. SUGGESTED BIBLIOGRAPHY

- Suggested bibliography: M.N.Stavrakakis Viticulture, 2019, Embryo Publications.
- Related scientific journals: Vitis, American Journal of Enology and Viticulture, Scientia Horticulturae .