

COURSE OUTLINE

(1) GENERAL

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| SCHOOL | School of Agricultural Sciences | | |
| ACADEMIC UNIT | Biosystems & Agricultural Engineering | | |
| LEVEL OF STUDIES | UNDERGRADUATE | | |
| COURSE CODE | BAE_600 | SEMESTER | 6th |
| COURSE TITLE | VEGETABLE CULTIVATION | | |
| 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 | 3 | | |
| Tutorials | 0 | | |
| Laboratory | 2 | | |
| TOTAL | 5 | 5 | |
| <i>Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).</i> | | | |
| COURSE TYPE <i>general background, special background, specialised general knowledge, skills development</i> | Background and Scientific Area | | |
| PREREQUISITE COURSES: | There are no prerequisite courses. | | |
| LANGUAGE OF INSTRUCTION and EXAMINATIONS: | Greek. For Erasmus students in English | | |
| IS THE COURSE OFFERED TO ERASMUS STUDENTS | Yes | | |
| COURSE WEBSITE (URL) | | | |

(2) LEARNING OUTCOMES

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| <p>Learning outcomes</p> <p><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>Consult Appendix A</p> <ul style="list-style-type: none"> • 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 |
| <p>The object of the Vegetable Cultivation course is to familiarize students with the cultivation of both outdoor and greenhouse vegetables in our country. The teaching of the course includes the current situation, the economic importance and nutritional value of vegetables as well as the prospects for the development of vegetable cultivation in our country, giving emphasis on the application of appropriate cultivation techniques and integrated management methods which combined with the application of modern harvesting and post-harvest handling practices will lead to an increase in the competitiveness of the Greek Vegetable Cultivation.</p> <p>After the completion and the successful examination of the course, students will be able to know the current state of Greek vegetables cultivation (area, production, imports, exports), the modern cultivation practices that in combination with the application of appropriate harvesting, and post-harvest handling practices will lead to the production of competitive vegetables. They will also be able to provide advice to producers on the cultivation of vegetables, as well as to companies producing and marketing propagating material. Finally, they will be able to work in certification organizations of organic vegetables and integrated management products.</p> |
| <p>General Competences</p> <p><i>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?</i></p> <p><i>Search for, analysis and synthesis of data and information, with the use of the necessary technology</i> <i>Project planning and management</i> <i>Respect for difference and multiculturalism</i></p> |

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| <i>Adapting to new situations</i> <i>Decision-making</i> <i>Working independently</i> <i>Team work</i> <i>Working in an international environment</i> <i>Working in an interdisciplinary environment</i> <i>Production of new research ideas</i> | <i>Respect for the natural environment</i> <i>Showing social, professional and ethical responsibility and sensitivity to gender issues</i> <i>Criticism and self-criticism</i> <i>Production of free, creative and inductive thinking</i> <i>Others...</i> |
| <p>At the end of this course the student will have further developed the following general skills: 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 Production of new research ideas Respect for the natural environment Criticism and self-criticism Production of free, creative and inductive thinking</p> | |

(3) SYLLABUS

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| <ol style="list-style-type: none"> 1. Introduction - The evolution of vegetables cultivation in Greece 2. Nutritional value of vegetables 3. Classification and development perspectives of vegetables cultivation 4. Soil and climatic requirements for successful growth and development 5. Outdoor vegetables growing 6. Greenhouse cultivation of vegetables 7. Multiplication of vegetables 8. Seed production of vegetables 9. Transplantation of vegetables into the field 10. Sowing and Plant growth 11. Sustainable agricultural practices of vegetables 12. Irrigation - Fertilization of vegetable crops 13. Weeds control 14. Plant protection (pest and diseases of vegetables) 15. Cultivation of fruit vegetables (tomato, cucumber and watermelon) 16. Cultivation of root vegetables (potato, carrot and onion) 17. Cultivation of leafy vegetables (lettuce, cabbage and spinach) 18. Cultivation of perennial vegetables (asparagus - artichoke) 19. Harvest and post-harvest handling practices of vegetables <p>Laboratory exercises</p> <p>The purpose of the laboratory exercises is to familiarize students with the identification of the main types of seeds and vegetables in our country, the multiplication of vegetables, the transplanting techniques or/and sowing as well as with the post-harvest handling practices of them.</p> |
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(4) TEACHING and LEARNING METHODS - EVALUATION

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| DELIVERY <i>Face-to-face, Distance learning, etc.</i> | Lectures in the amphitheatre and laboratory exercises both in the laboratory and in the field. | |
| USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY <i>Use of ICT in teaching, laboratory education, communication with students</i> | <ul style="list-style-type: none"> • Use of ICT (power point) in Teaching • Use of ICT (power point) in Laboratory Training • Use of ICT in Communication with students (Learning process support through the electronic platform e-class). | |
| TEACHING METHODS <i>The manner and methods of teaching are described in detail.</i> | Activity | Semester workload |
| | Lectures | 39 |

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| <p><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></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> | Laboratory | 20 |
| | Writing short reports of laboratory exercises- Exams | 21 |
| | Study hours and preparation for the laboratory exercises and the final examination | 45 |
| | Course total | 125 |
| <p align="center">STUDENT PERFORMANCE EVALUATION</p> <p><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>1. The laboratories participate by 30% in the final grade. In order for the student to be examined in theory, he/she must have completed all the laboratories and have been successfully examined in them. The examination includes the identification of vegetable species as well as an oral or written examination with a comprehensive questioner or a multiple choice questioner.</p> <p>2. The examination in the theory of the course is done with a comprehensive questioner or a multiple choice questioner that focus on the understanding of the course giving weight to the student's critical ability.</p> <p>3. Oral exams may take place in cases of students who have been exempted from the writing exams and always the same time and day as the writing exams.</p> <p>4. The above are done in the Greek language. For foreign language students (eg Erasmus students) conducted in English</p> | |

(5) ATTACHED BIBLIOGRAPHY (In Greek)

- Suggested bibliography:

1. Σάββας, Δ., 2016. Γενική Λαχανοκομία. Εκδόσεις Πεδίο
2. Ολύμπιος, Χ., 2015. Η Τεχνική της Καλλιέργειας των Υπαίθριων Κηπευτικών. Εκδόσεις Αθ. Σταμούλη, Αθήνα.
3. Χα, Ι.Α., Πετρόπουλος, Σ., 2014. Γενική Λαχανοκομία και Υπαίθρια Καλλιέργεια Κηπευτικών. Πανεπιστημιακές Εκδόσεις Θεσσαλίας, Βόλος.

- Related scientific journals:

Scientia Horticulturae
Journal of Horticultural Science and Biotechnology
European Journal of Horticultural Science

