

COURSE OUTLINE

1. GENERAL

SCHOOL	AGRICULTURAL SCIENCES		
ACADEMIC UNIT	AGRICULTURE		
LEVEL OF STUDIES	UNDERGRADUATE		
COURSE CODE	AGRI EX15	SEMESTER OF STUDIES	7 th or 9 th
COURSE TITLE	ORGANIC AGRICULTURE		
FACULTY MEMBER			
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	2	
	Lab exercises	2	
	Total	4	5
COURSE TYPE <i>general background, special background, specialised general knowledge, skills development</i>	Specialized general knowledge		
PREREQUISITE COURSES:	Typically, there are no prerequisite courses		
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek. Teaching may be performed in English in case foreign students attend the course.		
IS THE COURSE OFFERED TO ERASMUS STUDENTS	Yes (English)		
COURSE WEBPAGE (URL)			

2. LEARNING OUTCOMES

Learning outcomes

- *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*

The course aims to introduce students into principles of Organic Agriculture in order to be able to apply alternative methods of cropping. By the end of this course the student will have developed the following skills:

- Be able to understand the principles of organic agriculture.
- Knowing historical elements and future trends in organic agriculture.
- Be informed for the regulatory framework for verification process and labeling of organic products.
- Be able to understand affecting parameters of organic agriculture (soil, propagation material, fertilization, pest and weed control, water management, harvest and postharvest processing).
- Be able to understand organic product certification processes, focusing on critical points of control per certification process and crop.

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	Project planning and management
Adapting to new situations	Respect for difference and multiculturalism
Decision-making	Respect for the natural environment
Working independently	Showing social, professional and ethical responsibility and sensitivity to gender issues
Team work	Criticism and self-criticism
Working in an international environment	Production of free, creative and inductive thinking
Working in an interdisciplinary environment
Production of new research ideas	Others...

- Search, analysis, data synthesis and information management, using necessary technological systems
- Autonomous work
- Group work
- Promotion of free, creative and inductive thinking
- Respecting natural resources
- Design and project management
- Interactions in global context.
- Decision making

3. SYLLABUS

Lectures

1. History of organic agriculture movements globally and in Greece.
2. Global and national regulatory framework.
3. Operational management and verification of organic products in Greece
4. Organic agriculture and environmental parameters.
5. Soil fertility and managerial ways of soil fertility to organic agriculture.
6. Crop fertilization and nutritive elements management in organic agriculture.
7. Fundamental principles in organic production: Soil sustainability and ecosystems.
8. Management of plant wastes.
9. Co-cropping, intercropping and related actions.
10. Crop protection and agrochemicals in organic agriculture.
11. Certification – Validation process & Checks – Transportation of organic products.
12. Packaging, ad and promotion of organic products.
13. Qualitative elements of organic agriculture products.

4. TEACHING AND LEARNING METHODS - EVALUATION

DELIVERY <i>Face-to-face, Distance learning, etc.</i>	Lectures, self-tests of students and problem-solving seminars., face to face.
USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES	Use of Information and Communication Technologies (ICTs) in teaching. Scenarios <i>in silico</i> and evaluation of organic agriculture data will be integrated in the course.

Use of ICT in teaching, laboratory education, communication with students	Exemplary solutions will be provided.	
<p>TEACHING METHODS</p> <p><i>The manner and methods of teaching are described in detail.</i></p> <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 nondirected study according to the principles of the ECTS</i></p>	Activity	Semester workload
	Lectures (2 conduct hours per week x 13 weeks)	26
	<i>Tutorials (2 conduct hour per week x 13 weeks)</i>	26
	Individual report	10
	Hours for private study of the student, preparation and attendance mid-term or/and final examinations.	63
Total number of hours for the Course (25 hours of work-load per ECTS credit)	125 hours (total student work-load)	
<p>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>Strong participation in the course is required. Projects need deep learning approach and student's critical thought. Final written examination is mandatory. Examination will be based on full length questions and / or multiple-choice questions.</p> <p>Minimum pass mark: 5 (full scale: 0-10)</p> <p>The above-mentioned process will be taking place in Greek and for foreign students (eg ERASMUS students) in English.</p>	

5. ATTACHED BIBLIOGRAPHY

Proposed literature (indicative and not restrictive):

1. Altieri M.A. (2018). *Agroecology: the science of sustainable agriculture*. CRC Press
2. Gliessman S.R. , Rosemeyer M. (2009). *The conversion to sustainable agriculture: principles, processes, and practices*. CRC Press.
3. Σιάρδος Γ., Κουτσούρης, Α. (2011), *Αειφορική Γεωργία & Ανάπτυξη Θεσσαλονίκη, Ζυγός*.

4. Σιδηράς, Ν. (2005). Βιολογική Γεωργία και Φυτική Παραγωγή. Αθήνα, ΔΗΩ.
5. Φωτόπουλος, Χ. (2000), Βιολογική γεωργία κόστος, αποδοτικότητα, ανάλυση αγοράς & στρατηγικές marketing. Αθήνα, Σταμούλη.

Proposed research journals for further reading (indicative and not restrictive):

1. HortScience
2. Journal of Horticultural Science and Biotechnology