COURSE OUTLINE

1. GENERAL					
SCHOOL	AGRICULTURAL SCIENCES				
ACADEMIC UNIT	AGRICULTURE				
LEVEL OF STUDIES	UNDERGRADUATE				
COURSE CODE	AGR_809 SEMESTER OF STUDIES 8 th				
COURSE TITLE	Integrated Management of Agricultural Production				
INDEPENDENT TEACHING ACTIVITIES 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		WEEKLY TEACHING HOURS		CREDITS	
Lectures		res	3		
Seminars		ars	1		
Total		tal	4		5
Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (4).					
COURSE TYPE general background, special background, specialised general knowledge, skills development PREREQUISITE COURSES:	Specialised general knowledge, skills development 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 (in English)				
COURSE WEBPAGE (URL)					

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

The aim of the course is to introduce students to key issues of integrated management in agricultural production, as well as respect for and protection of the environment and to highlight the quality of agricultural products as the highest approach. Also, the objective of the course is acquiring knowledge on legal requirements, on the specifications for agricultural products, as well as on the information about significant environmental impacts. Students will be able to understand

- the requirements of integrated management for crop application (propagating material, care of cultivation, soil management, plant nutrition, irrigation, plant protection, harvesting and post-harvesting, equipment management, pollutants, environment, safety and employee training)
- the legal requirements and specifications for agricultural products
- the information about important environmental impact

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

Generally, by the end of this course the student will, moreover, have developed the following general abilities (from the list above):

Search for, analysis and synthesis of facts and information, as well as using the necessary technologies Decision making Project planning and management Respect for the natural environment

Working independently

Promotion of free, creative and inductive thinking

3. SYLLABUS

Theory

- 1. Definitions, standards, requirements and history of Integrated Management in Agricultural Production
- 2. International, European and national standards for Agricultural Products
- 3. Integrated Management System Certification
- 4. Integrated Management System standard requirements (planning, principles of production, traceability of agricultural products)
- 5. Requirements of Integrated management systems (propagating material, Cultivation, Plant nutrition, water management plan)
- 6. Management of plant protection
- 7. Harvesting and post harvesting
- 8. Equipment and energy management
- 9. Pollution management, environment, biodiversity
- 10. Hygiene, safety and employee training
- 11. Integrated management of horticultural crops
- 12. Integrated management of tree crops
- 13. Integrated management of arable crops

4. TEACHING AND LEARNING METHODS - EVALUATION

DELIVERY Face-to-face, Distance learning, etc.	Face to face lectures in the classroom.			
USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES Use of ICT in teaching, laboratory education, communication with students				
TEACHING METHODS	Activity	Semester workload		
The manner and methods of teaching are described in detail.	Lectures (3 contact hours per week x 13 weeks)	39		
Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography,	Seminars (1 contact hour per week x 13 weeks)	13		
tutorials, placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artistic creativity,	Hours for private study of the student, preparation and attendance mid-term or/and final examinations.	73		
etc.	Total number of hours for the Course (25 hours of workload per ECTS credit)	125 hours (total student workload)		
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	
STUDENT PERFORMANCE EVALUATION Description of the evaluation procedure 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.	 i. Written final examination of the lesson Minimum probable grade: 5. ii. All the above are taking place in the Greek language and for the foreign students (e.g. ERASMUS students) in English. iii. Oral examination can be made to students who have written tests on the same day and time that the progress or written examination of the course will take place. iv. Theory: Final Exam (100%) written of increasing difficulty, which may include multiple choice test, questions of short answers, questions on topic development, open-ended questions, essays and exercise solving based on the theoretical topics presented at the courses.

5. ATTACHED BIBLIOGRAPHY

Suggested bibliography:

- Bohlen PJ and House G, (2009). Sustainable agroecosystem management: integrating ecology, economics, and society. CRC Press.
- Εθνικά Πρότυπα Ολοκληρωμένης Διαχείρισης στην Αγροτική Παραγωγή και κτηνοτροφία (Σειρά AGRO).
- Πολυράκης, Γ. Θ. (2003). Περιβαλλοντική γεωργία. Θεσσαλονίκη, Εκδόσεις Ψύχαλου.