

Agriculture [3655]

COURSE OUTLINE

(1) GENERAL

SCHOOL	ANIMAL BIOSCIENCES		
ACADEMIC UNIT	DEPARTMENT OF ANIMAL SCIENCE		
LEVEL OF STUDIES	Undergraduate [Required]		
COURSE CODE	3655	SEMESTER	2 nd
COURSE TITLE	AGRICULTURE		
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 (ECTS)
Lectures		2	2.5
Practical Exercises		2	2.5
Total		4	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>	Special Background		
PREREQUISITE COURSES:	No		
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek		
IS THE COURSE OFFERED TO ERASMUS STUDENTS:	Yes		
COURSE WEBSITE (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 course aims to provide both general and specialized knowledge concerning the cultivation of the most economically significant annual and perennial arable crops in the country. Specifically, the subject of the course Agriculture is to familiarize students, on both a theoretical and practical level, with the current status and future prospects of production, as well as the cultivation techniques of major field crops through the application of modern technologies. Emphasis is placed on the principles of integrated production management and the implementation of good agricultural practices. The student acquires all the necessary knowledge in order, as an agronomist in the future, to be able to support Greek producers in meeting the requirements for the production of competitive products, the adoption of good agricultural practices, and the sustainable management of the agricultural environment.	
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 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 Others...
Independent Work	

- Teamwork
- Decision-Making
- Generation of New Research Ideas
- Project Design and Management
- Development of Free, Creative, and Inductive Thinking

(3) SYLLABUS

1. Effects of Aerial Environmental Variables on the Growth, Productivity, and Quality of Major Field Crops. Opportunities for Interventions to Improve Plant Production
 - i. Solar Radiation
 - ii. Temperature
2. Effects of Aerial Environmental Variables on the Growth, Productivity, and Quality of Major Field Crops. Opportunities for Interventions to Improve Plant Production
 - i. Humidity
 - ii. Wind
 - iii. Atmospheric Evapotranspiration Capacity
 - iv. Carbon Dioxide Concentration
3. Effects of Soil Environmental Variables on the Productivity of Major Field Crops and the Quality of Produced Products. Interventions to Improve Plant Production
 - i. Effects of Physical, Biological, and Chemical Characteristics of the Soil Environment on the Growth and Yields of Major Field Crops
 - ii. Soil Tillage. Fertilization. Irrigation.
 - iii. Crop Rotation. Intercropping.
4. Major Field Crops for the Food Industry. Special Cultivation Topics for Improving Crop Yields and Quality
 - i. Temperate Climate Cereals (Wheat, Oats)
 - ii. Temperate Climate Cereals (Barley, Rye, Triticale)
 - iii. Warm Climate Cereals (Maize)
 - iv. Warm Climate Cereals (Rice)
 - v. Grain Legumes
 - vi. Fodder Legumes
 - vii. Oilseed Crops
 - viii. Sugar Crops
 - ix. Industrial Tomato
 - x. Aromatic and Medicinal Plants

(4) TEACHING and LEARNING METHODS - EVALUATION

TEACHING METHOD <i>Face-to-face, Distance learning, etc.</i>	Face to face, in class.	
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY <i>Use of ICT in teaching, laboratory education, communication with students</i>	Power point presentations. Course material also made available to the students via the e-class platform.	
TEACHING METHODS <i>The manner and methods of teaching are described in detail.</i> <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> <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>	Activity	Semester workload
	Lectures	26
	Laboratory work	26
	Individual lab project	42
	Independent study	31
	Course total (25 h of workload per ECTS)	125
STUDENT PERFORMANCE EVALUATION <i>Description of the evaluation procedure</i>	I. The language of assessment is Greek. II. The final written examination on the theoretical component of the course includes:	

<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> <i>Specifically-defined evaluation criteria are given, and if and where they are accessible to students.</i>	Evaluation of theoretical knowledge (100%). III. The assessment of the laboratory component of the course consists of: Evaluation of laboratory assignments (15%). Final oral examination (85%). The final oral examination of the laboratory component includes: a) Short-answer questions b) Identification of plant samples
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(5) ATTACHED BIBLIOGRAPHY

R. S. Loomis & D. J. Connor (1992). <i>Crop Ecology: Productivity and Management in Agricultural Systems</i>. Cambridge University Press. S. Galanopoulou-Sendouka (2002). <i>Industrial Crops</i>. Stamoulis Publications. • Relevant scientific journals: <i>Agronomy Journal</i>, <i>Crop Science</i>, <i>Advances in Agronomy</i>
