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 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			WEI	EKLY TEACHING HOURS	CREDITS (ECTS)
Lectures				2	2.5
Practical Exercises				2	2.5
Total				4	5
Add rows if necessary. The organisat	Add rows if necessary. The organisation of teaching and the teaching				
methods used are described in detail at	methods used are described in detail at (d).				
COURSE TYPE	Special Background				
general background, special background, specialised general					
knowledge, skills development					
PREREQUISITE COURSES:	No				
LANGUAGE OF INSTRUCTION	Greek				
and EXAMINATIONS:					
IS THE COURSE OFFERED TO	Yes				
ERASMUS STUDENTS:					
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, Project planning and management

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

Working independently 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...

• 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	Face to face, in class.
Face-to-face, Distance learning, etc.	
USE OF INFORMATION AND	Power point presentations. Course material also made available to the students via the
COMMUNICATIONS	e-class platform.
TECHNOLOGY	

Use of ICT in teaching, laboratory education, communication with students

TE	$^{\wedge}$	INIC	METL	1ODS

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 nondirected study according to the principles of the ECTS

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

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. The language of assessment is Greek.

II. The final written examination on the theoretical component of the course includes:

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

(5) ATTACHED BIBLIOGRAPHY

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