

COURSE OUTLINE

1. GENERAL

SCHOOL	AGRICULTURAL SCIENCES		
ACADEMIC UNIT	DEPARTMENT OF CROP SCIENCE		
LEVEL OF STUDIES	UNDERGRADUATE		
COURSE CODE	AGRI 301	SEMESTER OF STUDIES	3 rd
COURSE TITLE	FIELD CROPS		
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		
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

At the end of the course students will have general and specific knowledge about cultivation practices of economically important spring cereals, industrial and herbaceous crops. Extensive analysis is provided on current cultivation methods, new technologies applied to large scale of cultivated plants and integrated management of production.

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

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

<i>Working in an international environment</i>	<i>Production of free, creative and inductive thinking</i>
<i>Working in an interdisciplinary environment</i>
<i>Production of new research ideas</i>	<i>Others...</i>

- Autonomous (Independent) work
- Team work
- Project planning and management
- Respect for the environment
- Adaptation to environmental changes under optimum, suboptimum and extreme conditions.
- Production of new research ideas
- Promotion of free, creative and inductive thinking

3. SYLLABUS

<p>Lectures</p> <ol style="list-style-type: none"> 1. Maize, Sorghum, Millet (Botanical description, ecological requirements, cultivation techniques) 2. Rice: (Botanical description, ecological requirements, cultivation techniques) 3. Beans: (Botanical description, ecological requirements, cultivation techniques) 4. Lentil (Botanical description, ecological requirements, cultivation techniques) 5. Pea - Chickpea (Botanical description, ecological requirements, cultivation techniques) 6. Grass pea, soya bean ((Botanical description, ecological requirements, cultivation techniques) 7. Alfalfa, Clover, Vetch (Botanical description, ecological requirements, cultivation techniques) 8. Cotton (morphological characteristics, varieties, cultivation techniques, harvest, yield) 9. Tobacco plant crop (morphological characteristics, varieties, cultivation techniques, harvest, yield) 10. Sugar beet crop (morphological characteristics, varieties, cultivation techniques, harvest, yield) 11. Sunflower and common hop crops (morphological characteristics, varieties, cultivation techniques, harvest, yield) 12. Hemp, Sesame and castor bean crops (morphological characteristics, varieties, cultivation techniques, harvest, yield) 13. Tomato (morphological characteristics, varieties, cultivation techniques, harvest, yield) <p>Laboratory exercises</p> <ol style="list-style-type: none"> 1. Biological index of large-scale crops 2. Plant growth index 3. Irrigation and fertilization programs (spring cereals, industrial and herbaceous crops) 4. Seed identification 5. Spring cereals planting systems 6. Industrial crops planting systems

4. TEACHING AND LEARNING METHODS - EVALUATION

DELIVERY <i>Face-to-face, Distance learning, etc.</i>	Face to face lectures in the classroom and laboratory.	
USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES <i>Use of ICT in teaching, laboratory education, communication with students</i>	Use of Information and Communication Technologies (ICTs) in teaching. Exemplary solutions will be provided.	
TEACHING METHODS <i>The manner and methods of teaching are described in detail.</i> <i>Lectures, seminars, laboratory</i>	Activity	Semester workload
	Lectures (2 conduct hours per week x 13 weeks)	26
	Lab Practice (2 conduct hour per week x 6 weeks)	12

<p><i>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>	Individual and group lab reports	8
	Hours for private study of the student, preparation and attendance mid-term or/and final examinations.	79
	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>Optionally, two mid-term examinations, the first in the middle and the second at the end of the semester. The evaluation procedure is conducted with short answer questions and/or open-ended questions and/or multiple choice questionnaires and/or oral examination, as well as questions based on laboratory exercises. The final examination grade is the mean mark. It is mandatory to obtain pass grade (≥5) in each examination.</p> <p>Written examination after the end of the semester. The evaluation procedure is conducted with short answer questions and/or open-ended questions and/or multiple choice questionnaires and/or oral examination, as well as questions based on laboratory exercises (unless the student has successfully participated the mid-term examinations). Minimum passing grade: 5 (full scale: 0-10)</p> <p>1. The above mentioned process will be taking place in Greek and for foreign students (eg ERASMUS students) in English. Examination will be based on full length questions and / or multiple choice questions.</p>	

5. ATTACHED BIBLIOGRAPHY

- *Proposed literature* (indicative and not restrictive):

1. Μπιλάλης, Δ., Π.Θ. Παπαστυλιανού και Η.Σ. Τραυλός (2019). Γεωργία-Φυτά μεγάλης καλλιέργειας. Εκδόσεις Πεδίο.
2. Παπαστυλιανού Π.Θ., Μπιλάλης, Δ., Η.Σ. Τραυλός και Α. Παπαθεοχάρη. Ειδική Γεωργία ΙΙ- Εαρινά σιτηρά-βιομηχανικά ελαιούχα φυτά και εαρινά ζιζάνια. Εκδόσεις ΚΑΛΛΙΠΟΣ
3. Μπιλάλης, Δ., Π.Θ. Παπαστυλιανού και Η.Σ. Τραυλός (2019). Γεωργία-Φυτά μεγάλης καλλιέργειας. Εκδόσεις Πεδίο.
4. Δ.Παπακώστα -Τασοπούλου 2013. Βιομηχανικά φυτά. Εκδόσεις Σύγχρονη Παιδεία Θεσ/νίκη
5. Τραυλός Σ. Ηλίας, Κανάτας Ι. Παναγιώτης Ζιζανιολογία Και Γεωργία , Εκδόσεις Πεδίο

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

1. Advances in Agronomy
2. Journal of Cereal Science
3. Agronomy Journal