SPECIALIZED TOPICS ON FIELD CROPS II

1. GENERAL

SCHOOL	AGRICULTURAL SCIENCES		
ACADEMIC UNIT	CROP SCIENCE		
LEVEL OF STUDIES	UNDERGRADUATE		
COURSE CODE	CRS_704	**SEMESTER**	7th
COURSE TITLE	Specialized Topics On Field Crops II		

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	2	
Tutorials	1	
laboratory exercises	2	
TOTAL	5	5
Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).		

COURSE TYPE *general background, special background, specialised general knowledge, skills development*	Specialised general knowledge, specialised general knowledge, skills development
PREREQUISITE COURSES:	Field Crops (CRS-405)
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
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 specialized topics in field crops course aims to train in depth students on cereal, industrial and legume crop cultivation. Students will be informed for the current status of most valuable field crops and learn to use frontline technology to achieve higher yields. Emphasis is given on proper cultivation methods, so that the farmer and/or the ag firm complies with the latest environmental regulatory frameworks.

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 for, analysis and synthesis of data and information, with the use of the necessary technology
- Working independently
- Teamwork

- Production of free, creative and inductive thinking
- Respect for the natural environment
- Project planning and management
- Working in an international environment
- Decision-making

3. SYLLABUS

Lectures

1. Corn, Sorghum, Millet: General characteristics, botany, ecological and agronomical requirements, cultivation practices.
2. Rice: General characteristics, botany, ecological and agronomical requirements, cultivation practices.
3. Cotton: General characteristics, trends, varieties, adaptation.
4. Cotton: Agronomical requirements, cultivation practices, harvest and quality.
5. Linum (flax). General characteristics, botany, ecological and agronomical requirements, cultivation practices.
6. Tobacco: General characteristics, trends, varieties, adaptation.
7. Tobacco: Agronomical requirements, cultivation practices, harvest and quality.
8. Sugarbeet: General characteristics, trends, varieties, adaptation, agronomical requirements, cultivation practices, harvest and quality.
9. Sunflower, Hop: General characteristics, trends, varieties, adaptation, agronomical requirements, cultivation practices, harvest and quality.
10. Cannabis, Sesame, Castor bean: General characteristics, trends, varieties, adaptation, agronomical requirements, cultivation practices, harvest and quality.
11. Industrial tomato: General characteristics, trends, varieties, adaptation, agronomical requirements, cultivation practices, harvest and quality.
12. Spring – summer Weeds: Identification.
13. Spring – summer Weeds: Management

Laboratory Exercises

Seed identification of spring field crops
Seed identification of industrial spring field crops
Development cereal demonstration farm.
Development industrial field crop demonstration farm.
Weeds identification
Biological cycle markers and cultivation practices of spring weeds
Biological cycle markers and cultivation practices of spring weeds

4. TEACHING and LEARNING METHODS - EVALUATION

DELIVERY *Face-to-face, Distance learning, etc.*	Lectures, self-tests of students and problem-solving seminars., face to face.
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY *Use of ICT in teaching, laboratory education, communication with students*	Power point presentations, i-books, videos, Educational process is supported by the online platform e-class.
TEACHING METHODS *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 non-directed study according to the principles of the ECTS*	

	Semester workload
Lectures (2 contact hours per week x 13 weeks)	26
Laboratory practice (2 contact hours per week x 7 weeks)	14
Tutorials	13
Final examinations	3
Hours for private study of the student and preparation for mid-term or/and final examination –	69

	Participation in the examinations		
	Total number of hours for the Course (25 hours of work-load per ECTS credit)	***125 hours (total student work-load)***	
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.*	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. 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. 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. Oral examination could take place if permitted by the legal/regulatory framework under which the student is affiliated (or enrolled) to the department. If permitted, oral examination will take place simultaneously with written exams.		

5. ATTACHED BIBLIOGRAPHY

Proposed literature (indicative and not restrictive):

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

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

Advances in Agronomy