

COURSE OUTLINE

1. GENERAL

SCHOOL	AGRICULTURAL SCIENCES		
ACADEMIC UNIT	AGRICULTURE		
LEVEL OF STUDIES	UNDERGRADUATE		
COURSE CODE	AGRI EX20	SEMESTER OF STUDIES	7 th or 9 th
COURSE TITLE	AGROBIODIVERSITY AND PLANT GENETIC RESOURCES MANAGEMENT		
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	
	Tutorial	2	
	Total	4	5
<i>Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (4).</i>			
COURSE TYPE <i>general background, special background, specialised general knowledge, skills development</i>	Skills development		
PREREQUISITE COURSES:	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 (English)		
COURSE WEBPAGE (URL)			

2. LEARNING OUTCOMES

<p>Learning outcomes <i>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.</i></p> <p><i>Consult Appendix A</i></p> <ul style="list-style-type: none"> • <i>Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area</i> • <i>Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B</i> • <i>Guidelines for writing Learning Outcomes</i>
<p>The course aims at introducing the students to the concepts of agrobiodiversity and the maintenance of plant genetic resources.</p> <p>By completing this course, the students are expected to have achieved the following skills and capabilities.:</p> <ul style="list-style-type: none"> • Understand the concepts of biological diversity, agrobiodiversity and plant genetic resources • Acquire a comprehensive view regarding the threats and the benefit of preserving biodiversity • They will gain comprehensive knowledge regarding the traditional varieties and their impact in modern agriculture and the society • They will be able to get insight in applications for maintaining and preserving agrobiodiversity and the

indigenous genetic resources.

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

Teamwork

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

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Others...

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

Searching, analysis and synthesis of facts and information, as well as using the necessary technologies

Decision making

Respect for the natural environment

Working independently

Promotion of free, creative and inductive thinking

3. SYLLABUS

1. Biodiversity, definition of biodiversity.
2. Threats to Biodiversity (human activity, climatic change etc.)
3. Protection of Biodiversity, benefits from the preservation of biodiversity
4. Legal framework for the protection of Biodiversity (International conventions and treaties).
5. Agrobiodiversity
6. Threats to agrobiodiversity. Promotion of the benefits of agrobiodiversity.
7. Recording and characterizing agrobiodiversity.
8. Local varieties and traditional cultivars. Genetic erosion
9. Preservation and maintenance of plant genetic resources: *ex situ*, *in situ*/on farm
10. Plant genetic resources: their impact on the global feeding issue and the climate change
11. International efforts, organizations and foundations for the preservation of plant genetic resources.
12. Impact of agrobiodiversity in social culture and folk heritage.
13. Plant genetic resources as a repository for wild genes and plant breeding

4. TEACHING AND LEARNING METHODS - EVALUATION

DELIVERY <i>Face-to-face, Distance learning, etc.</i>	Face to face lectures in the classroom.										
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) (e.g. Microsoft PowerPoint) in teaching. The contents of the course of each chapter are uploaded on the internet, that the students can freely download using a password which is provided to them at the beginning of the course.										
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>	<table border="1" style="width: 100%;"> <thead> <tr> <th style="text-align: center;">Activity</th> <th style="text-align: center;">Semester workload</th> </tr> </thead> <tbody> <tr> <td>Lectures (2 contact hours per week x 13 weeks)</td> <td style="text-align: center;">26</td> </tr> <tr> <td>Tutorial (2 contact hours per week x 13 weeks)</td> <td style="text-align: center;">26</td> </tr> <tr> <td>Hours for private study of the student, preparation and attendance mid-term or/and final examinations.</td> <td style="text-align: center;">73</td> </tr> <tr> <td>Total number of hours for the Course</td> <td style="text-align: center;">125 hours (total student)</td> </tr> </tbody> </table>	Activity	Semester workload	Lectures (2 contact hours per week x 13 weeks)	26	Tutorial (2 contact hours per week x 13 weeks)	26	Hours for private study of the student, preparation and attendance mid-term or/and final examinations.	73	Total number of hours for the Course	125 hours (total student)
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<p>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</p>	<p>(25 hours of workload per ECTS credit)</p>	<p>workload)</p>
<p>STUDENT PERFORMANCE EVALUATION <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>Final mandatory written examination, full length questions and / or multiple-choice questions. Minimum pass grade= 5, scale 0-10.</p> <p>All the above are taking place in Greek as well as in English for foreign students (e.g. ERASMUS students) if any.</p>	

5. ATTACHED BIBLIOGRAPHY

- Suggested bibliography:

Gaston JK, Spicer IJ. Biodiversity: An Introduction, 2nd Edition, Wiley
 Resolving the challenge posed by agrobiodiversity and plant genetic resources - an attempt. K. Hammer. Kassel University Press
 Bhargava A and Srivastava S. Participatory Plant Breeding Across Continents. In Participatory Plant Breeding: Concept and Applications. Springer, Singapore.
 Hawkes JG, Maxted N and Ford-Lloyd BV. The Ex Situ Conservation of Plant Genetic Resources. Dordrecht: Kluwer Academic Publishers.
 Plant Genetic Resources: Horticultural Crops. Alpha Science International, Ltd

- Related academic journals:

Genetic Resources and Crop Evolution
 Agriculture
 Plant Genetic Resources