

COURSE OUTLINE

1. GENERAL

INSTITUTION	University of Thessaly		
SCHOOL	Technology		
DEPARTMENT	Forestry, Science of Wood and Design		
LEVEL	<i>Undergraduate</i>		
CODE	ΔΠΕ781	STUDENT SEMESTER	7 ^ο
COURSE TITLE	FOREST NURSERIES-REFORESTATIONS		
ACTIVITIES		WEEKLY HRS	ECTS
Lectures		3	6
TYPE OF COURSE	Elective- Major		
PREREQUISITES:	NO		
LANGUAGE TEACHING AND EXAMINATION:	Greek		
THE COURSE OFFERED TO STUDENTS ERASMUS	NO		
WEBPAGES COURSE (URL)			

2. LEARNING OUTCOMES

Learning Outcomes
<p>The aim of the course is to understand issues related to the establishment of forest nurseries and the production of planting material of excellent quality, as well as the design and implementation of projects for the artificial establishment of stands.</p> <p>At the end of the course students will be able to:</p> <ul style="list-style-type: none"> • Identify the building and other facilities of a nursery. • To apply the necessary controls of the sowing material. • To present the techniques of production of planting material and its treatment manipulations. • To plan and organize the operation of forest nurseries. • Describe the basic principles of reforestation. • To select the appropriate forest species, which will be used in a reforestation project. • To determine the method for the artificial establishment of forest stands and to determine the individual parameters of its application. • To design and implement projects for the artificial establishment-re-establishment of stands.
General Skills
<ul style="list-style-type: none"> • Search, analysis and synthesis of data and information using the necessary technologies. • Decision making and evaluation. • Independent and team work. • Work in an interdisciplinary environment. • Respect for the natural environment. • Planning, management and implementation of professional activities. • Demonstration of social, professional and moral responsibility. • Promoting free, creative and inductive thinking.

3. COURSE CONTENT

Establishment of a forest nursery (site selection, installation and organization). Sowing material. Checks, preservation of seeds. Production of seedlings (soil formation, sowing, irrigation, thinning, care-protection, transplanting, rooting, extraction of seedlings). Production of seedlings with rooted soil. Soil mixtures. Seedling production in greenhouses. Raw seedling production. Forest nurseries and soil. Nursery fertilization.

Cases of artificial establishment-re-establishment of clusters. Purpose, basic principles of reforestation. Selection of suitable forestry species (depending on the station, based on the intended purpose). Preparation of the regenerated surface (removal of dead soil cover and competitive vegetation, tillage and soil preparation). Methods of artificial establishment of forest stands. Sowing technique (season selection, soil preparation, sowing items). Planting technique (planting methods, seedling control, planting link). Reforestation care. Reforestation plan.

4. TEACHING AND LEARNING METHODS - EVALUATION

DELIVERY METHOD	In combination, educational methods and techniques are applied and aim to enhance the active participation of students and give the greatest possible effectiveness to "in person" teaching: Presentation enriched with questions and answers, discussion, case study, working groups, educational visit.													
USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES	Use, with flexibility and alternatively, ICT monitoring tools: PC (multimedia PC), video data projector, video presentation stand, internet, asynchronous platform distance learning (e-class).													
MANAGEMENT OF TEACHING	<table border="1"> <thead> <tr> <th data-bbox="687 1032 1031 1066"><i>Activity</i></th> <th data-bbox="1035 1032 1361 1066"><i>Semester Workload</i></th> </tr> </thead> <tbody> <tr> <td data-bbox="687 1072 1031 1106">Lectures</td> <td data-bbox="1035 1072 1361 1106">39</td> </tr> <tr> <td data-bbox="687 1113 1031 1146">Teamwork in a case study.</td> <td data-bbox="1035 1113 1361 1146">30</td> </tr> <tr> <td data-bbox="687 1153 1031 1220">Educational visit. Small individual practice tasks.</td> <td data-bbox="1035 1153 1361 1220">11</td> </tr> <tr> <td data-bbox="687 1227 1031 1261">Independent Study</td> <td data-bbox="1035 1227 1361 1261">70</td> </tr> <tr> <td data-bbox="687 1267 1031 1384">Course Total (25 hours of workload per credit unit)</td> <td data-bbox="1035 1267 1361 1384">150</td> </tr> </tbody> </table>	<i>Activity</i>	<i>Semester Workload</i>	Lectures	39	Teamwork in a case study.	30	Educational visit. Small individual practice tasks.	11	Independent Study	70	Course Total (25 hours of workload per credit unit)	150	
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STUDENT EVALUATION	Formative and overall evaluation procedures are applied. I. Written exams (weight 80%): a) in the middle of the semester a written midterm examination is held on development questions (the participation of students / three is optional), b) at the end of the semester, a final examination is held, according to the examination program of the Department, which also includes development questions. II. Writing and presentation of work (weight 20%).													

5. RECOMMENDED-BIBLIOGRAPHY

- Ντάφης Σ. και Α. Χατζηστάθης (1989). Αναδασώσεις-Δασικά Φυτώρια. Εκδόσεις Γιαχούδη.
- Τάκος Ι. και Θ. Μέρου (1995). Τεχνολογία σπόρων ξυλωδών φυτών. Εκδόσεις Art of Text.

