

COURSE OUTLINE

1. GENERAL

INSTITUTION	University of Thessaly		
SCHOOL	Technology		
DEPARTMENT	Forestry, Science of Wood and Design		
LEVEL	<i>Undergraduate</i>		
CODE	KM421	STUDENT SEMESTER	4 ^o
COURSE TITLE	APPLIED SILVICULTURE		
ACTIVITIES		WEEKLY HRS	ECTS
	Lectures and Workshops	3	5
TYPE OF COURSE	Mandatory		
PREREQUISITES:	none		
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 structure of the forest, the analysis and application of methods of natural regeneration, as well as its cultivation, to ensure and fulfill the principles of sustainability in the best and most efficient way.</p> <p>At the end of the course students will be able to:</p> <ul style="list-style-type: none"> • Recognize and characterize the horizontal and vertical structure of the forest. • To record the conditions and characteristics that prevail in a forest and how to interpret them. • To distinguish the management and forestry forms of the forest and describe their particular characteristics. • To design plans for the natural regeneration of the stands. • To select the best forest practices that aim at the cultivation of forest stands.
General Skills
<ul style="list-style-type: none"> • Search, analysis and synthesis of data and information through the use of the necessary technologies. • Decision making and evaluation. • Autonomous and team work. • Work under an interdisciplinary environment. • Respect the natural environment. • Planning, management and implementation of professional activities. • Demonstration of social, professional and moral responsibility. • Promote free, creative and inductive thinking.

3. COURSE CONTENT

<p>The aim, principles and purpose of Forestry. Horizontal and vertical structure of the forest. Harvesting and composition of stands. Structure- analysis of the structure of natural forests. Evolution and development of</p>
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the structure-dynamics of natural stands. Natural forest regeneration process. Stand types of the natural forest. Logging and shaping forest environments.

Management and forestry or functional forms of stands. Natural regeneration of stands. Methods of natural regeneration. Forestry forms and regeneration of seed-derived forests. Forestry types, regeneration and alteration of stump-derived deciduous forests and stump and seed derived forests. Forest cultivation. Quality features and deforms of trees. Cultivation methods. Cultivation of seedlings, saplings, young and mature trees. Cultivation of secondary stand. Cultivation thinning. Cultivation of uneven-age forest. Crop design. Organization of cultivation practices.

4. TEACHING AND LEARNING METHODS - EVALUATION

DELIVERY METHOD	Educational methods and techniques are applied combined that are aiming to enhance the active participation of students and give the greatest possible effectiveness at the “in-person” teaching: Lectures enriched with questions and answers, discussion, exercises, case studies, group homework, educational visits. Use, flexibly and alternatively, of surveillance tools utilizing ICT: PC (multimedia PC), video data projector, video presentation stand, internet, platform asynchronous distance learning (e-class).	
USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES	Use, flexibly and alternatively, ICT monitoring tools: PC (multimedia PC), video data projector, video presentation stand, internet, asynchronous platform distance learning (e-class).	
MANAGEMENT OF TEACHING	Activity	Semester Workload
	Lectures	26
	Exercises focusing on the application of methodologies and analysis of case studies.	13
	Teamwork in a case study	25
	Educational visit. Small individual homeworks.	11
	Private study	50
	Course Total	
	(25 hours of workload per credit unit)	125
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 with essay questions (the participation of students is optional), b) at the end of the semester, a final examination is held, according to the examination program of the Department that also includes essay questions. II. Writing and presentation of homework (weight 20%).	

5. RECOMMENDED-BIBLIOGRAPHY

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- Dafis S. (1992). Applied Forestry. Yahoudis Publications.