

MODULE DESCRIPTION

General

School	Geotechnical Sciences
Department	Forest and Natural Environment Sciences

Module Information

Title	Silviculture
Course Code	E.Y.3
Level of Studies	Undergraduate
Teaching Period	Autumn Term
Attendance Type	Compulsory
Prerequisites	

Orientation	Weekly Hours		Year	Semester	ECTS
	Lectures	Laboratory work			
ECOLOGY AND BIODIVERSITY CONSERVATION	2	3	3	5	4

Faculty Instructor

Ioannis Takos

Type of Module

- General Foundation
- Specific Foundation / Core
- Knowledge Deepening / Consolidation

Mode of Delivery

- Face to face
- Distance learning

Digital Module availability

- E-Study Guide
- Departments Website
- E-Learning

Language

	Teaching	Examination
Greek	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
English	<input type="checkbox"/>	<input type="checkbox"/>

Erasmus

- The course is offered to exchange programme students

Learning Outcomes

Upon completion of the course students will know: the concept of stands and their structural characteristics. The advantages and disadvantages of pure and mixed stands. The growth stages of a forest. The concept of forest cultivation, its purpose and the methods used in its various growth stages. Methods of natural forest regeneration and methods of artificial re-establishment of stands after degradation. Silvicultural practices and forest management for biodiversity conservation, aesthetic improvement, carbon storage and other purposes. Forest growth modeling techniques.

List of General Competences

- Apply knowledge in practice
- Work autonomously
- Work in teams
- Work in an international context
- Work in an interdisciplinary team
- Respect natural environment
- Advance free, creative and causative thinking

Module Content (Syllabus)

- Definitions, objectives, purpose and historical development of Silviculture.
- Stand analysis.
- Structure and regeneration of natural forests.
- Managed forests, silvicultural and management forms.
- Natural regeneration of stands.
- Artificial establishment of stands (Reforestation, Horticultural practices).
- Forest cultivation.
- Introduction to specialized silviculture.
- Forest growth simulation models

Educational Material Types

- Book
- Notes
- Slide presentations
- Video lectures
- Multimedia
- Interactive exercises

Other:

Use of Information and Communication Technologies

- Use of ICT in Course Teaching
- Use of ICT in Laboratory Teaching
- Use of ICT in Communication with Students
- Use of ICT in Student Assessment

Module Organization

Please fill in the workload of each course activity

Course Activity	Workload (hours)
Lectures	26
Laboratory work	39
Field Trip/Short Individual Assignments	15
Independent Study	20
Total	100

* 1 ECTS unit corresponds to 25 hours of workload

Student Assessment Methods

- Written Exam with Multiple Choice Questions
- Written Exam with Short Answer Questions
- Written Exam with Extended Answer Questions
- Written Assignment
- Report
- Oral Exams
- Laboratory Assignment

Suggested Bibliography (Eudoxus and additional bibliography)

1. Νταφης, Σ. (1990). Εφαρμοσμένη Δασοκομική. Εκδόσεις Γιαχούδη – Γιαπουλή
2. Ashton, M. S., Kelty, M. J. (2018). The Practice of Silviculture-Applied Forest Ecology, 10th edition. Wiley-Blackwell
3. Hasenauer, H. (2006). Sustainable Forest Management, Growth Models for Europe. Springer.