

## MODULE DESCRIPTION

### General

School	Geotechnical Sciences
Department	Forest and Natural Environment Sciences

### Module Information

Title	Forest Resource Planning and Management II
Course Code	G.Y.3
Level of Studies	Undergraduate
Teaching Period	Winter
Attendance Type	Compulsory
Prerequisites	Forest Resource Planning and Management I

Orientation	Weekly Hours		Year	Semester	ECTS
	Lectures	Laboratory work			
Natural Resource Management, Protection & Climate Change	2	3	4 <sup>o</sup>	7 <sup>o</sup>	6

### Faculty Instructors

Professor Vassiliki Kazana & Assistant Professor Dimitiros Raptis

### 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 checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

## Erasmus

- The course is offered to exchange programme students

## Learning Outcomes

Upon successful completion of the course students are expected to:

- understand the basic concepts of planning the forest management sustainability
- understand the concepts and tools of spatial analysis for sustainable forest management
- understand the tools for planning the sustainable wood production management of forests
- understand the concepts and tools for planning multi-purpose forest management
- understand the framework for drawing up forest management plans
- be able to compile forest management plans

## 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)

Introductory concepts on forest resource planning and management. The sustainability concept in forest management. Participatory forest management, goal setting, development of alternative management courses of action towards goal achievement. Spatial and temporal organization of wood stock. Growth, maturity, regularity. The even-aged regular forest model. The uneven-aged regular forest model. Site qualities, volume tables, yield models. Forest management planning methods for sustained yield production of high forests, coppiced and 2-storey forests. Forest management planning methods for recreation forests, aesthetic forests, resin production forests, protective and protected forests and forest lands. Multi-criteria Analysis methods for multiple use forest management. Compilation and standards for forest management plans.

Keywords

Forest resource management planning, forest management sustainability, wood production forest management, multi-criteria analysis of multi-purpose forest management, forest management plans

## 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	39
Laboratory work	59
Field Trip/Short Individual Assignments	
Independent Study	52
<b>Total</b>	150

\* 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. Buongiorno, J. and Gilless, J.K. (2003). Decision Methods for Forest Resource Management, Academic Press.
2. Bettinger, P., Boston, K., Siry, J.P., Grabner, D.L. (2017). Forest Management and Planning. Academic Press.
3. Grabner, D.L., Bettinger, P. and Siry, J.P. (2012). Introduction to Forestry and Natural Resource Management. Academic Press.
4. Jerram, M.R.K. (2006). A text-book on forest management. International Book Distributions.

5. Davis, L.S., Johnson, K.N., Bettinger, P. and Howard, T.E. (2005). Forest Management, CPS Publishers, 4<sup>th</sup> edition.
6. von Gadow, K., Pukkala, T. and Tome, M. (2001). Sustainable Forest Management. Springer-Verlag.
7. Fraser, A. (2019). Achieving the sustainable management of forests. Springer-Verlag.
8. Innes, J.L. and Tikina, A.V. (2016). Sustainable forests. From concept to practice. Routledge.
9. Martinez-Falero, E., Martin-Fernandez, S. and Garcia-Abril, A. (2016). Quantitative Techniques in Participatory Forest Management. CRC Press, 1<sup>st</sup> edition.
10. Kangas, A. Kangas, J., Kurttila, M. (2008). Decision Support for forest management. Springer, 224p.
11. Ελευθεριάδης Ν. (2003). Διαχείριση Φυσικών Χερσαίων Οικοσυστημάτων, ΧΑΡΙΣ ΕΠΕ, ISBN: 960-88036-1-6, σελ. 435.