MODULE DESCRIPTION

General

School	Geotechnical Sciences
Department	Forest and Natural Environment Sciences

Module Information

Title	Forest Products Harvesting and Biomass
Course Code	B.Y.5
Level of Studies	Undergraduate
Teaching Period	Spring
Attendance Type	Compulsory
Prerequisites	-

Orientation	Weekly Hours		Year	Semester	ECTS
Onentation	Lectures	Laboratory work		Semester	
Διαχείρισης, Προστασίας Φυσικών Πόρων & Κλιματικής Αλλαγής	2	2	1 ⁰	2 ⁰	5

Faculty Instructor

Assistant Professor Dimitrios Raptis

Type of Module



- 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		Z
English	2	Z

Erasmus

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The course is offered to exchange programme students

Learning Outcomes

Upon successful completion of the course, students will acquire applied knowledge of maximizing the use value of forest products, while reducing at the same time the cost of production and the environmental impact of the tree harvesting on the forest ecosystem in the broader context of the used systems development from an economic, social and material point of view. Students are expected to become aware of the forestry work conditions in the Greek Forestry Sector and be able the select the most appropriate equipment, in order to increase the safety of staff during the implementation of forest works. At the same time, basic knowledge will be provided to ensure a uniform and efficient system for the exploitation of forest products.

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)

Main objectives of the Forest Products Harvesting and biomass module (primary exploitation). Main forest products (wood, bark, resin). Secondary forest products (leafs, extracts, fruits, shrubs). Analysis of harvesting systems (aim, forest harvesting environment, economic, social and operational aspects of harvesting). Preparation of harvesting (forest management plan, annual yield, deviations). Elements of ergonomics – Forest work (forest workers' needs, work performance, training, measures to reduce accidents, securing the working conditions). Forest product harvesting machinery. Harvesting operations and techniques (tree feeling, moving, shaping). Organizing the wood harvesting (silvicultural requirements, economic efficiency, impact alleviation, tree attributes). Non-wood Forest Products harvesting (resin).

Keywords

Wood and Non-Wood Forest Products, forest workers safety, primary exploitation, logging, forest products exploitation

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	26
Field Trip/Short Individual Assignments	40
Independent Study	33
Total	125

* 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)

 Τσουμής, Γ. 2009. Συγκομιδή Δασικών Προϊόντων. Εκδόσεις Γιαταγάνης. Κωδικός Ευδόξου 2258
Δήμου, Β. Γ. 2010. Συγκομιδή και Μετατόπιση Ξύλου. Εκδόσεις Χαρπαντίδης. Κωδικός Ευδόξου 837