MODULE DESCRIPTION

General

School	Geotechnical Sciences
Department	Forest and Natural Environment Sciences

Module Information

Title	Topography And Land Survey
Course Code	B.Y.3
Level of Studies	Undergraduate
Teaching Period	Spring Term
Attendance Type	Compulsory
Prerequisites	

Orientation	Weekly Hours		Year	Semester	ECTS
	Lectures	Laboratory work			
MANAGEMENT AND PROTECTION OF NATURAL RESOURCES & CLIMATE CHANGE	2	2	1	2	6

Faculty Instructor

LAZAROS SEHIDES

Type of Module

- [x] General Foundation
- [ ] Specific Foundation / Core
- [ ] Knowledge Deepening / Consolidation

Mode of Delivery

- [x] Face to face
- [x] Distance learning

Digital Module availability

- [x] E-Study Guide
- [x] Departments Website
- [ ] E-Learning

Language

	Teaching	Examination
Greek	☑	☑
English	☐	☐

Erasmus

- [x] The course is offered to exchange programme students

Learning Outcomes

The course aims to acquaint students with both the basic concepts and theoretical background of topography and the practical application of surveying. Upon successful completion of the course students will know the basic instruments for horizontal and vertical topographic mapping of surfaces and distance measurement. They will be able to perform a survey using different approaches depending on the complexity of the area. Finally, they will be able to use the different Geodetic Reference Systems used in the country.

List of General Competences

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

Module Content (Syllabus)

- Introduction to topography and basic definitions
- Topographic units of measurement
- Angle measuring instruments and methods.
- Instruments and methods of measuring distances.
- Instruments and methods for measuring altitudinal differences.
- Instruments, methods and calculations for horizontal mapping, vertical mapping and tachometric mapping.
- Polygonal Routes
- Drawing up a plan and measuring surfaces.
- Slope meters and distance measurements by electromagnetic method.

Educational Material Types

- [x] Book
- [x] Notes
- [x] Slide presentations
- [ ] Video lectures
- [x] Multimedia
- [x] Interactive exercises
- [ ] Other:

Use of Information and Communication Technologies

- [x] Use of ICT in Course Teaching
- [x] Use of ICT in Laboratory Teaching
- [x] Use of ICT in Communication with Students
- [x] 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	60
Independent Study	38
Total	150

* 1 ECTS unit corresponds to 25 hours of workload

Student Assessment Methods

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

Suggested Bibliography (Eudoxus and additional bibliography)

1. Νίκου Ν. (1999). Τοπογραφία Ι. Art of Text.
2. Νίκου Ν. (2000). Τοπογραφία ΙΙ. Εκδόσεις Γιαχούδη – Γιαπουλή
3. Δούκας Α.Κ. (2001). Τοπογραφία αγροτικών και δασικών περιοχών. Εκδόσεις Γιαχούδη ΙΚΕ.