MODULE DESCRIPTION

General

School	Geotechnical Sciences
Department	Forest and Natural Environment Sciences

Module Information

Title	Snow Management
Course Code	OPT.15
Level of Studies	Bachelor's
Teaching Period	6th Semester
Attendance Type	Elective (optional)
Prerequisites	-

Orientation	Weekly Hours		Year	Semester	ECTS
	Lectures	Laboratory work			
Management and protection of natural resources and Climate Change	2	1	3th	6th	3

Faculty Instructor

_____George Zaimes – Assistant Professor_____

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	☑	☑
English	☑	☑

Erasmus

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

Learning Outcomes

The course teaches the basic methods for sustainable snow management in Greece.
The purpose of the course is to teach the basic knowledge about snow, its creation and properties, its proper management and its hazard management.
Upon successful completion of the course the student will be able to:

- Recognize the different types of snow, their properties
- Recognize the different types of snowstorms, their properties
- Manage snow hazards
- Manage snow to increase water production

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)

Process of snowfall, hail. Mechanical properties of snow, chemical properties of snow, endogenous and extrinsic forces. Methods for measuring snow cover. Snow conservation techniques. Ski resorts. Snow access techniques. Economic exploitation and sustainability of snow. Construction and maintenance techniques, snow and snow cover control principles and systems. Avalanches, mechanism and causes of creation, mode of protection, snow and winter tourism. Snow management and water production.

Keywords: Snow and Properties, Snow Management, Avalanches and Protection, Snow Management and Water Production

Educational Material Types

- [ ] Book
- [x] Notes
- [x] Slide presentations
- [ ] Video lectures
- [x] Multimedia
- [x] 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	25
Laboratory work	25
Field Trip/Short Individual Assignments	25
Independent Study	-
Total	**75**

* 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. Weekly notes are provided