

MODULE DESCRIPTION

General

School	Geotechnical Sciences
Department	Forest and Natural Environment Sciences

Module Information

Title	Geology
Course Code	OPT.3
Level of Studies	Undergraduate Studies
Teaching Period	Winter
Attendance Type	Elective
Prerequisites	Not applied

Orientation	Weekly Hours		Year	Semester	ECTS
	Lectures	Laboratory work			
Management, Protection of Natural Resources & Climate Change	2	1	3	5	3

Faculty Instructor

Dr. Antonios N. Papadopoulos

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"/>
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Erasmus

- The course is not offered to exchange programme students

Learning Outcomes

The student will know, understand and be able to apply the theories, practices and techniques related to the subject of geology after successfully completing the learning process. He is expected to acquire the following knowledge, skills and abilities.

KNOWLEDGE

The student will be able to:

- Formulates and discusses the basic principles and theories related to geology.
- Describes and classifies igneous, sedimentary and metamorphic rocks.
- Understands and explains petrogenetic processes and their geological significance.

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)

Elements of crystallography, mineralogy. Land constitution. Petrogenetic minerals, rock categories (igneous, sedimentary, metamorphic). Elements of general geology, geotectonics and technical geology. Mechanical and physical properties of rocks. Elements of rock mechanics.

Keywords: crystallography, mineralogy, rock classes, geotectonics, physical properties, mechanical properties, rock mechanics

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

Course Activity	Workload (hours)
Lectures	26
Laboratory work	13
Field Trip/Short Individual Assignments	11
Independent Study	25
Total	75

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)

<ol style="list-style-type: none"> 1. Environmental Engineering Geology. 2. Technical Geology, (Eudoxus Book Code: 86198385), 2nd edition, Type: Syngam, Georgios Koukis, Nikolaos S. Sambatakakis, 2019, Papatotiriou, ISBN: 978-960-491-130-1
