# COURSE OUTLINE

## 1. GENERAL

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|---|---|---|---|
| **SCHOOL** | AGRICULTURAL AND FORESRTY SCIENCES | | |
| **DEPARTMENT** | FORESTRY AND MANAGEMENT OF THE ENVIRONMENT AND NATURAL RESOURCES | | |
| **LEVEL OF STUDIES** | POSTGRADUATE – LEVEL 7 | | |
| **COURSE CODE** | **ΔΣΠΜΣΠΣΠΕΑ4Υ** | **SEMESTER** | **2nd** |
| **COURSE TITLE** | DIDACTICS OF ENVIRONMENTAL SCIENCE | | |

| **TEACHING ACTIVITIES** *If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.* | **TEACHING HOURS PER WEEK** | **ECTS CREDITS** |
|---|---|---|
| | 2.3 | 7.5 |
| | | |
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| *Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.* | | |

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| **COURSE TYPE** *Background, General Knowledge, Scientific Area, Skill Development* | SCIENTIFIC AREA |
| **PREREQUISITES:** | NO |
| **TEACHING & EXAMINATION LANGUAGE:** | GREEK |
| **COURSE OFFERED TO ERASMUS STUDENTS:** | NO |
| **COURSE URL:** | https://eclass.duth.gr/courses/1425284/ |

## 2. LEARNING OUTCOMES

**Learning Outcomes**

*Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.*

After the successful completion of the course, students will be able to plan, apply and evaluate teaching performances in Environmental Science.

**General Skills**

*Name the desirable general skills upon successful completion of the module*

*Search, analysis and synthesis of data and information,*
*ICT Use*
*Adaptation to new situations*
*Decision making*
*Autonomous work*
*Teamwork*
*Working in an international environment*
*Working in an interdisciplinary environment*
*Production of new research ideas*
*Project design and management*
*Equity and Inclusion*
*Respect for the natural environment*
*Sustainability*
*Demonstration of social, professional and moral responsibility and sensitivity to gender issues*
*Critical thinking*
*Promoting free, creative and inductive reasoning*

Teamwork
Search, analysis and synthesis of data and information

## 3. COURSE CONTENT

- Theoretical foundations of teaching. Didactics as science. Special issues in the theory of teaching.
- Objectives of teaching. Taxonomies of educational objectives.
- Teaching materials. The concept of teaching materials. Types of teaching materials.
- Forms of teaching. The concept of forms of teaching. Direct instruction. Co-operative forms of teaching.
- Models of teaching. Model of five stages of learning. Kolb's model. Gross's model. Model combining four ways of learning.
- Student evaluation. Principles of evaluation. Evaluation methods.
- Exemplary teaching by the teacher.
- Exemplary teaching by the teacher.
- Exemplary teaching by the teacher.
- Exemplary teaching by students.
- Exemplary teaching by students.
- Exemplary teaching by students.

## 4. LEARNING & TEACHING METHODS - EVALUATION

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|---|---|
| **TEACHING METHOD**<br>*Face to face, Distance learning, etc.* | Face to face, distance teaching. |
| **USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT)**<br>*Use of ICT in Teaching, in Laboratory Education, in Communication with students* | Use of ICT in Teaching and in Communication with students. |
| **TEACHING ORGANIZATION**<br>*The ways and methods of teaching are described in detail.*<br>*Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.*<br><br>*The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards.* | |

| *Activity* | *Workload/semester* |
|---|---|
| Lectures | 30 |
| Bibliographic research & analysis | 275 |
| Exemplary teaching | 47,5 |
| Autonomous study | 35 |
| | |
| | |
| | |
| Course total | **187,5** |

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| **STUDENT EVALUATION**<br>*Description of the evaluation process*<br><br>*Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others*<br><br>*Please indicate all relevant information about the course assessment and how students are informed* | • Student presentations.<br>• Written examination.<br>• Each question in the final examination is accompanied by the grade students will earn if they answer it correctly.<br>• Students can see their answers in their examination sheet if they wish. |

## 5. SUGGESTED BIBLIOGRAPHY

Evangelos Manolas, The Teaching and Learning of Sociological Theory on the Natural Environment, Athens: Tipothito, 2001.

Anastasia Dimitriou, Environmental Education: Environment, Sustainability, Theoretical and Pedagogical Approaches. Thessaloniki: Epikentro Publications, 2009.

Christos Theofilidis, Interdisciplinary Approaches to Teaching, Athens: Grigoris Publications, 1997.
G. Tyler Miller & Scott E. Spoolman (P. Dimitrakopoulos & K. Gavrilakis). Environmental Science. Thessaloniki: Tziola Publications, 2018.

# ANNEX OF THE COURSE OUTLINE

## Alternative ways of examining a course in emergency situations

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|---|---|
| **Teacher (full name):** | Evangelos Manolas |
| **Contact details:** | emanolas@fmenr.duth.gr |
| **Supervisors:** (1) | NO |
| **Evaluation methods:** (2) | Team presentations and written examination |
| **Implementation Instructions:** (3) | Multiple choice questions and true false questions. The completion of student assignments during the semester is a pre-requisite for the participation of students in the written examination. |

**(1)** Please write YES or NO

**(2)** Note down the evaluation methods used by the teacher, e.g.

- *written assignment* or/and exercises
- written or oral examination with distance learning methods, provided that the integrity and reliability of the examination are ensured.

**(3)** In the **Implementation Instructions** section, the teacher notes down clear instructions to the students:

a) in case of **written assignment and / or exercises:** the deadline (e.g. the last week of the semester), the means of submission, the grading system, the grade percentage of the assignment in the final grade and any other necessary information.

b) in case of **oral examination with distance learning methods:** the instructions for conducting the examination (e.g. in groups of X people), the way of administration of the questions to be answered, the distance learning platforms to be used, the technical means for the implementation of the examination (microphone, camera, word processor, internet connection, communication platform), the hyperlinks for the examination, the duration of the exam, the grading system, the percentage of the oral exam in the final grade, the ways in which the inviolability and reliability of the exam are ensured and any other necessary information.

c) in case of **written examination with distance learning methods**: the way of administration of the questions to be answered, the way of submitting the answers, the duration of the exam, the grading system, the percentage of the written exam of the exam in the final grade, the ways in which the integrity and reliability of the exam are ensured and any other necessary information.

There should be an attached list with the Student Registration Numbers only of students eligible to participate in the examination.