



COURSE OUTLINE

(1) GENERAL

| SCHOOL | School of Technology | | | |
|-----------------------------|---|------|-------------------|---------|
| ACADEMIC UNIT | Department of Environmental Sciences | | | |
| LEVEL OF STUDIES | Undergraduate | | | |
| COURSE CODE | AE702 | | SEMESTER | 7th |
| COURSE TITLE | LANDSCAPE ECOLOGY | | | |
| INDEPENDENT TEACHING ACTIV | /ITIES | WEEK | LY TEACHING HOURS | CREDITS |
| Теа | ching Hours | | 4 | 4 |
| COURSE TYPE | Specialised general knowledge | | | |
| PREREQUISITE COURSES | None | | | |
| LANGUAGE OF INSTRUCTION and | Greek | | | |
| EXAMINATIONS | | | | |
| IS THE COURSE OFFERED TO | Νο | | | |
| ERASMUS STUDENTS | | | | |
| COURSE WEBSITE (URL) | https://eclass.uth.gr/courses/ENV U 191 | | | |

(2) LEARNING OUTCOMES

Learning outcomes

The course provides a presentation and analysis of the different types of landscape (natural, forest, urban, rural and artificial), its structures, its spatial patterns, as well as the role of anthropogenic interventions.

Upon successful completion of the course, students will have acquired the necessary knowledge, skills and competence, and will be able to:

- Comprehend the operation of key concepts of landscape ecology, such as spatial heterogeneity of resources.
- Understand the important elements of the landscape, the degree of fragmentation, etc.

• Use software and models for the analysis of the effects of anthropogenic interventions on the landscape.

General Competences

- Search for, analysis and synthesis of data and information, with the use of the necessary technology
- Decision-making
- Teamwork
- Production of free, creative, and inductive thinking

(3) SYLLABUS

- Landscape ecology, introductory concepts.
- Landscape Elements.
- Landscape Ecology and Scale: Relationship of Scale of Analysis and Ecological Questions.
- Spatial patterns and landscape features.
- Spatial pattern models and analysis software.
- Landscape Management and conservation.
- Landscape Restoration.
- Case studies. Examples, application exercises in landscape restoration.

(4) TEACHING and LEARNING METHODS – EVALUATION

| DELIVERY | Face-to-face | | | |
|---|---|-------------------|--|--|
| USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY | Use of PowerPoint slides Communication with students via e-mail Use of asynchronous distance learning (e-class) | | | |
| TEACHING METHODS | Activity | Semester workload | | |
| | Lectures | 52 | | |
| | Study and analysis of bibliography | 36 | | |
| | Essay writing | 12 | | |
| | Course total (25 hours workload per credit) | 100 | | |
| STUDENT PERFORMANCE | Students' performance is evaluated in the Greek language. The final grade is determined by: | | | |
| EVALUATION | | | | |
| | • A written exam (at the end of the semester) that contributes | | | |
| | 100% to the final grade, applying one or more of the following | | | |
| | evaluation methods: Multiple choice questions, short-answer questions, problem solving. | | | |
| | Final Grade = 100% Exam Grade | | | |

(5) ATTACHED BIBLIOGRAPHY

- Stamou, G.P. (2009) *Ecology. Introduction to the Ecology of Populations,* (1st Ed). Thessaloniki: ZITI Publications. (in Greek)
- Stamou, G. (2016) *Structure and Dynamics of Biocommunities,* 1st Edition. Kallipos Repository Open Academic Editions. <u>www.kallipos.gr</u> (in Greek)