COURSE OUTLINE

1. GENERAL INFORMATION

FACULTY/SCHOOL	School of Plant Sciences		
DEPARTMENT	Department of Crop Science		
LEVEL OF STUDY	Postgraduate		
COURSE UNIT CODE	120108	**Semester:**	**S-1**
COURSE TITLE	Landscape Construction		
INDEPENDENT TEACHING ACTIVITIES *in case credits are awarded for separate components/parts of the course, e.g. in lectures, laboratory exercises, etc. If credits are awarded for the entire course, give the weekly teaching hours and the total credits*		**WEEKLY TEACHNG HOURS**	**ECTS**
	Lectures and Design Tutorials	3	3
Add rows if necessary. The organization of teaching and the teaching methods used are described in detail under section 4			
COURSE TYPE *Background knowledge, Scientific expertise, General Knowledge, Skills Development*	Scientific expertise		
PREREQUISITE COURSES:			
LANGUAGE OF INSTRUCTION:	Greek		
THE COURSE IS OFFERED TO ERASMUS STUDENTS	No		
COURSE WEBSITE (URL)			

2. LEARNING OUTCOMES

Learning Outcomes

The course learning outcomes, specific knowledge, skills and competences of an appropriate (certain) level, which students will acquire upon successful completion of the course, are described in detail. It is necessary to consult:

APPENDIX A

- *Description of the level of learning outcomes for each level of study, in accordance with the European Higher Education Qualifications' Framework.*
- *Descriptive indicators for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and*

APPENDIX B

- *Guidelines for writing Learning Outcomes*

The ultimate goal of the course "Landscape Construction" is to equip students with knowledge, skills and competences to successfully meet the demands they will face in their careers in Landscape Architecture. Specifically, upon completion of the course, students will:

- acquire specialized knowledge to design and construct green roofs, living walls, artificial aquatic ecosystems, automatic irrigation systems for green spaces, as well as lighting in gardens and public urban areas,
- know the main principles of preparing a planting study and will be able to design and present a planting design.

General Competences	
Taking into consideration the general competences that students/graduates must acquire (as those are described in the Diploma Supplement and are mentioned below), at which of the following does the course attendance aim?	
Search for, analysis and synthesis of data and	*Project planning and management*
information by the use of appropriate	*Respect for diversity and multiculturalism*
technologies,	*Environmental awareness*
Adapting to new situations	*Social, professional and ethical responsibility and*
Decision-making	*sensitivity to gender issues*
Individual/Independent work	*Critical thinking*
Group/Team work	*Development of free, creative and inductive thinking*
Working in an international environment	*……*
Working in an interdisciplinary environment	*(Other…….citizenship, spiritual freedom, social*
Introduction of innovative research	*awareness, altruism etc.)*
	……
Search for, analysis and synthesis of data and information by the use of appropriate technologies Adapting to new situations Decision-making Individual/Independent work Group/Team work Working in an interdisciplinary environment Introduction of innovative research Project planning and management Respect for diversity and multiculturalism Environmental awareness Critical thinking Development of free, creative and inductive thinking	

3. COURSE CONTENT

Theory and design of various technical projects required for the aesthetic upgrading, integrated management, and sustainability of the landscape. Categorization and guidelines for creating green roofs in building facilities, analysis of their environmental, aesthetic, economic, and social benefits, selection of substrates and suitable plant species with an emphasis on the use of native Greek flora, determination of water requirements for selected plants, and methodologies for supporting large-sized plants. Green roof establishment for urban food production. Presentation of techniques and construction systems for living walls. Theory and design application of automatic irrigation systems in landscape projects. Design of drainage systems in landscape projects. Construction methodologies and examples from artificial aquatic ecosystems. Theory and calculations behind soil reinforcement techniques. Theoretical understanding and practical application of electrical lighting in landscape projects. Familiarization with the "Detailed Bill of Quantities for Green Works Projects ", material and labor quantification, and the preparation of a budget for landscape projects. Case study analyses from Greece and abroad are included, as well as on-site visits to related locations.

4. TEACHING METHODS--ASSESSMENT

MODES OF DELIVERY *Face-to-face, in-class lecturing, distance teaching and distance learning etc.*	The teaching of the coursetakes place in-person, in a well-equipped classroom/studio, complete with the necessary audiovisual equipment for conducting lectures and presentations, as well as drafting tables and computers. These computers have suitable design software installed to assist in teaching the course. Additionally, teaching can also be conducted remotely through video conferencing.
USE OF INFORMATION AND COMMUNICATION TECHNOLOGY *Use of ICT in teaching, Laboratory Education, Communication with students*	Slide Presentations in PowerPoint format are used for teaching purposes. Video projection. Use of appropriate design software (such as AutoCAD, 3D Studio Max, Google SketchUp, Rhinoceros 3D, etc.). Use of suitable image editing and presentation creation software (such as Adobe Photoshop, CorelDRAW, etc.). Communication with students is facilitated through email.

	The learning process is supported through the digital platform Microsoft Teams. Access to online databases is provided for research purposes.

COURSE DESIGN

Description of teaching techniques, practices and methods:
Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, Internship, Art Workshop, Interactive teaching, Educational visits, projects, Essay writing, Artistic creativity, etc.

The study hours for each learning activity as well as the hours of self-directed study are given following the principles of the ECTS.

Activity/ Method	Semester workload
10 Lectures	30 hours
Completion of individual and group assignments at home	19 hours
Educational visit	3 hours
Design tutorials	8 hours
Individual design work	15 hours
Total of Course (25 hours of workload per ECTS)	***75 hours***

STUDENT PERFORMANCE EVALUATION/ASSESSMENT METHODS

Detailed description of the evaluation procedures:

Language of evaluation, assessment methods, formative or summative (conclusive), multiple choice tests, short- answer questions, open-ended questions, problem solving, written work, essay/report, oral exam, presentation, laboratory work, other……etc.

Specifically defined evaluation criteria are stated, as well as if and where they are accessible by the students.

The evaluation language is Greek (and English if required). Learning assessment is done through design exercises and written assignments. The grade is derived from the submission of designs and supplementary tasks related to home-based work, combined with significant completion within the classroom (studio) under the direct supervision and guidance of the instructors. The evaluation criteria focus on the accuracy and clarity of the design proposals and written assignments.

5. SUGGESTED BIBLIOGRAPHY:

- Suggested Bibliography:

Smith, S. W. (1997). Landscape irrigation: design and management. John Wiley & Sons.
Dunnett, N., & Kingsbury, N. (2008). Planting green roofs and living walls. Portland, OR: Timber press.
Luckett, K. (2009). Green roof construction and maintenance. McGraw-Hill.
McIntyre, L., & Snodgrass, E. C. (2010). The green roof manual: a professional guide to design, installation, and maintenance. Timber Press.
Moyer, J. L. (2013). The landscape lighting book. Wiley.
Moyer, J. L. (2022). The art of landscape lighting: a designer's companion. Routledge.

- Related Scientific Journals:

- Landscape Architecture Magazine

- Topos
- Landezine
- 'scape
- The American Society of Landscape Architects
- Journal of Landscape Architecture
- Landscape Research
- Landscape Journal
- Landscape and Urban Planning
- Land (MDPI)
- Sustainability (MDPI)