

COURSE OUTLINE

(1) General information

FACULTY/SCHOOL	TECHNOLOGY		
DEPARTMENT	ENVIRONMENTAL SCIENCES		
LEVEL OF STUDY	<i>Undergraduate</i>		
COURSE UNIT CODE	NEW COURSE	SEMESTER	3
COURSE TITLE	PRINCIPLES OF ENVIRONMENTAL PLANNING		
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	CREDITS
THEORETICAL BACKGROUND		4	3
LABORATORY PRACTICE		2	2
TOTAL		6	5
COURSE TYPE Background knowledge, Scientific expertise, General Knowledge, Skills Development	BACKGROUND KNOWLEDGE, SKILLS DEVELOPMENT		
PREREQUISITE COURSES:	INTRODUCTION TO ENVIRONMENTAL ENGINEERING		
LANGUAGE OF INSTRUCTION & EXAMINATION/ASSESSMENT:	GREEK		
THE COURSE IS OFFERED TO ERASMUS STUDENTS	YES		
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 aim and purpose of the course is to acquire basic knowledge and develop basic skills related to sustainable management and environmental protection by scientists involved in the design, control and management of technical infrastructure projects, buildings, urban public space. , the landscape, the cities, the productive activities and the control of climate change or adaptation to it. Upon completion of the course, students will have the basic theoretical and technical foundations to understand the basic principles of sustainability, environmental legislation and environmental assessment and to be able to

conduct environmental impact studies. Also:

- To understand the principles of environmental processes and pollution, their impact on humans, and the impact of human activities on the environment.
- To be able to design infrastructure projects (transport, energy, plumbing, coastal and corrosion protection projects, pollution protection projects, etc.), buildings, cities and productive activities in a sustainable environmental way.
- To be able to understand the phenomenon of climate change and its effects, to apply ways to limit greenhouse gases and adapt to a world with a different climate.

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 information by the use of appropriate technologies, Adapting to new situations

Decision-making

Individual/Independent work

Group/Team work

Working in an international environment

Working in an interdisciplinary environment

Introduction of innovative research

Project planning and management

Respect for diversity and multiculturalism

Environmental awareness

Social, professional and ethical responsibility and sensitivity to gender issues

Critical thinking

Development of free, creative and inductive thinking

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(Other.....citizenship, spiritual freedom, social awareness, altruism etc.)

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- Search for, analysis and synthesis of data and information
- Decision-making
- Individual work
- Group/Team work
- Environmental awareness
- Critical thinking
- Development of free, creative and inductive thinking

(3) COURSE CONTENT

Course outline

- Environmental impact management technology
- Environmental planning of energy, hydraulic and marine works
- Environmental design of buildings
- Environmental urban and transport planning
- Environmental assessment

(4) TEACHING METHODS-ASSESSMENT

<p>MODES OF DELIVERY Face-to-face, in-class lecturing, distance teaching and distance learning etc.</p>	<p>In-class lecturing and practice</p>
<p>USE OF INFORMATION AND COMMUNICATION TECHNOLOGY Use of ICT in teaching, Laboratory</p>	<ul style="list-style-type: none"> • Powerpoint presentations • Communication via e-mail. • E-class platform

Education, Communication with students		
<p style="text-align: center;">COURSE DESIGN</p> <p>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.</p> <p>The study hours for each learning activity as well as the hours of self-directed study are given following the principles of the ECTS.</p>	Activity/Method	Semester workload
	Lectures	20
	Laboratory Practice	30
	Essay writing	20
	Theory study	55
	Course total (25 hours of workload per credit unit)	125
<p style="text-align: center;">STUDENT PERFORMANCE EVALUATION/ASSESSMENT METHODS</p> <p>Detailed description of the evaluation procedures:</p> <p>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.</p> <p>Specifically, defined evaluation criteria are stated, as well as if and where they are accessible by the students.</p>	<p><u>The final grade is the outcome of the following evaluations:</u></p> <ul style="list-style-type: none"> • Written examinations • Intermediate examination (optional) = 40% • Final examination = 60% or 100% if there is no intermediate examination grade • Instead of intermediate examination, the student can choose a written work. 	

(5) SUGGESTED BIBLIOGRAPHY:

-Suggested bibliography

- Ananiadou Mary-Tzimopoulou, (1992), *Landscape Architecture, Urban Spatial Design, Criticism and Theory, Contemporary Landscape Design Trends*, Volume A, Ziti Publications, Thessaloniki.
- Aravantinos A., (1997), *Urban Planning-For a sustainable development of the urban space*, Symmetria publications, Athens.
- Aravantinos A., (1999), *Urban land uses and the consequent environmental effects*, TH.E. Planning and Environmental Impacts, Volume A, published by EAP, Patras.
- Kosmaki P., (1999), *Environmental factors and design of land uses and building conditions*, City Planning and Environmental Impacts, Volume A, published by EAP, Patras.
- Kosmaki P. and D. Loukopoulos, (2004), *Environmental design of outdoor spaces in the city* Environmental Planning of Cities and Open Spaces, Volume B, published by EAP, Patras.
- Polychronopoulos D., (2002), *The integration of bioclimatic principles in urban planning. Control of sunburn and shading in the urban fabric*, Doctoral Thesis, NTUA.

-Complementary bibliography

Professor's notes: Material of theory lectures and laboratory exercises, which are available through the asynchronous training platform.

