COURSE OUTLINE

1. GENERAL

SCHOOL	Environment and Agricultural Engineering		
ACADEMIC UNIT	Natural Resources Management and Agricultural Engineering		
LEVEL OF STUDIES	Undergraduate		
COURSE CODE	188	**SEMESTER**	8th
COURSE TITLE	Land Reclamation Projects		

INDEPENDENT TEACHING ACTIVITIES *if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, give the weekly teaching hours and the total credits*	**WEEKLY TEACHING HOURS**	**CREDITS**
Theory	3	3
Laboratory	2	2
TOTAL:	5	5

COURSE TYPE *general background, special background, specialised general knowledge, skills development*	special background, skills development
PREREQUISITE COURSES:	
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek
IS THE COURSE OFFERED TO ERASMUS STUDENTS	YES (In English)
COURSE WEBSITE (URL)	

2. LEARNING OUTCOMES

Learning outcomes

The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described.

Consult Appendix A

- *Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area*
- *Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B*
- *Guidelines for writing Learning Outcomes*

This course is an application of previous knowledge in the scientific field of Hydraulic Engineering. It aims to introduce students to the design and management of major hydraulic projects in rural areas. Students will learn to appreciate the irrigation needs of the study area, to choose the characteristics of the appropriate collective work specific to each case and to design a project that will gradually adapt to the evolving needs of the irrigation perimeter.

General Competences

Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and appear below), at which of the following does the course aim?

Search for, analysis and synthesis of data and information, with the use of the necessary technology	*Project planning and management*
Adapting to new situations	*Respect for difference and multiculturalism*
Decision-making	*Respect for the natural environment*
Working independently	*Showing social, professional and ethical responsibility and sensitivity to gender issues*
Team work	*Criticism and self-criticism*
Working in an international environment	*Production of free, creative and inductive thinking*

Working in an interdisciplinary environment *Production of new research ideas*	*……* *Others…* *…….*

- Search, analysis and synthesis of data and information with the use of the required technologies
- Team Work
- Production of new research ideas
- Respect for the natural environment

3. SYLLABUS

Introduction. Head works (dams, pumping stations, drillings). Transmission projects (pipelines and canals). Distribution projects (gravity networks and networks under pressure). Plans, designs and construction. Management of irrigation systems (operation, maintenance, modernization). Environmental impacts of irrigation projects. General principles for the assessment of irrigation networks.

4. TEACHING and LEARNING METHODS - EVALUATION

DELIVERY *Face-to-face, Distance learning, etc.*	The teaching methodology employed in the classroom and in the laboratory
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY *Use of ICT in teaching, laboratory education, communication with students*	Specialized software e-class platform
TEACHING METHODS *The manner and methods of teaching are described in detail.* *Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artistic creativity, etc.* *The student's study hours for each learning activity are given as well as the hours of non-directed study according to the principles of the ECTS*	
STUDENT PERFORMANCE EVALUATION *Description of the evaluation procedure* *Language of evaluation, methods of evaluation, summative or conclusive, multiple choice questionnaires, short-answer questions, open-ended questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory work, clinical examination of patient, art interpretation, other* *Specifically-defined evaluation criteria are given, and if and where they are accessible to students.*	I. Final written theory examination (50%) comprising: - Multiple choice questions - Open questions - Problem solving II. Laboratory Grade (50%) - Presentation of team project

Activity	***Semester workload (hours)***
Lectures	36
Team project	46
Study at home	43
TOTAL	125

5. ATTACHED BIBLIOGRAPHY

- Journal of Irrigation and Drainage Engineering, ASCE
- Journal of Hydraulic Engineering, ASCE