Course information in english

General course information:

Course title:	Land reclamation projects	**Course code:**	CE09-H08
Credits:	6	**Work load (hours):**	120
Course level:	Undergraduate ☒	Graduate ☐	
Course type:	Mandatory ☐	Selective ☒	
Course category:	Basic ☐	Orientation ☒	
Semester:	G	**Hours per week:**	4
Course objectives (capabilities pursued and learning results):			
Design of land reclamation projects (Water demand, Distribution systems, Sizing of irrigation networks, Canal and pipe structures)			
Prerequisites:			
• Hydraulics • Hydrology • Groundwater hydraulics • Soil mechanics			

Instructor's data:

Name:	Nikitas Mylopoulos
Level:	Professor
Office:	114
Tel. – email:	24210 74162 nikitas@uth.gr
Other tutors:	

Specific course information:

Week No.	**Course contents**	**Hours**	
		Course attendance	**Preparation**
1	Introduction to land reclamation projects	**4**	**2**
2	Soil moisture-Infiltration	**4**	**2**
3	Unsaturated-Saturated flow	**4**	**4**
4	Evapotranspiration (Potential & Actual)	**4**	**4**
5	Quality of water for irrigation	**4**	**4**

6	Crop water demand	**4**	**4**
7	Distribution methods	**4**	**4**
8	Surface irrigation networks	**4**	**4**
9	Pipe irrigation networks	**4**	**4**
10	Sprayers, microirrigation	**4**	**4**
11	Optimazation of networks	**4**	**4**
12	Structures in irrigation projects in stations (Siphons, culverts, pumps, etc)	**4**	**4**
13	Case studies	**4**	**4**
14	Case studies	**4**	**4**

Additional hours for:			
Class project	**Examinations**	**Preparation for examinations**	**Educational visit**
5	3	4	

Suggested literature:

- G. P. Tsakiris, 1986, Lectures on Land Reclamation Projects, NTUA, Athens (In Greek)
- Ch. D. Tzimopoulos, 1982, Agricultural Hydraulics, AUTH, Thessaloniki, (In Greek)
- G. A. Terzidis and Z. G. Papazaphiriou, 1997, Agricultural Hydraulics, AUTH, Thessaloniki, (In Greek)
- A. T. Aisenbrey et. Al, 1978, Design of small canal structures, USBR, Denver, USA

Teaching method *(select and describe if necessary* - **weight***):*		
Teaching	☒ Lectures covering the theoretical part of the course	50%
Seminars	☐	……%
Demonstrations	☐	……%
Laboratory	☐	……%
Exercises	☒ Solving of exercises – practical applications	50%

Visits at facilities	☐ Municipal water authorities – Reservoirs – Work site of pipe placing	%
Other *(describe):* 1. Students solve a λand reclamation project.	☒	beyond teaching hours
Total		100%

Evaluation method *(select)*- **weight:**				
	written	*%*	*Oral*	*%*
Homework	☐		☐	
Class project	☒	20	☐	
Interim examination	☐		☐	
Final examinations	☒	80	☐	
Other *(describe):* ……	☐		☐	