

Course information in english

General course information:

Course title:	Land reclamation projects	Course code:	CE09-H08
Credits:	4	Work load (hours):	120
Course level:	Undergraduate <input checked="" type="checkbox"/>	Graduate <input type="checkbox"/>	
Course type:	Mandatory <input type="checkbox"/>	Selective <input checked="" type="checkbox"/>	
Course category:	Basic <input type="checkbox"/>	Orientation <input checked="" type="checkbox"/>	
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:			
<ul style="list-style-type: none"> • Hydraulics • Hydrology • Groundwater hydraulics • Soil mechanics 			

Instructor's data:

Name:	Nikitas Mylopoulos
Level:	Associate 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	Optimization 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:
<ul style="list-style-type: none"> • 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	<input checked="" type="checkbox"/> Lectures covering the theoretical part of the course	50%
Seminars	<input type="checkbox"/>%
Demonstrations	<input type="checkbox"/>%
Laboratory	<input type="checkbox"/>%
Exercises	<input checked="" type="checkbox"/> Solving of exercises – practical applications	50%

Visits at facilities	<input type="checkbox"/> Municipal water authorities – Reservoirs – Work site of pipe placing	%
Other (<i>describe</i>): 1. Students solve a land reclamation project.	<input checked="" type="checkbox"/>	beyond teaching hours
Total		100%

Evaluation method (<i>select</i>)- weight:				
	<u>written</u>	<u>%</u>	<u>Oral</u>	<u>%</u>
Homework	<input type="checkbox"/>		<input type="checkbox"/>	
Class project	<input checked="" type="checkbox"/>	20	<input type="checkbox"/>	
Interim examination	<input type="checkbox"/>		<input type="checkbox"/>	
Final examinations	<input checked="" type="checkbox"/>	80	<input type="checkbox"/>	
Other (<i>describe</i>):	<input type="checkbox"/>		<input type="checkbox"/>	