

COURSE OUTLINE

1. GENERAL

SCHOOL	APPLIED SCIENCES		
DEPARTMENT	ENVIRONMENTAL ENGINEERING (DIVISION OF ENVIRONMENTAL GEOTECHNOLOGY ENGINEERING)		
LEVEL OF STUDY	UNDERGRADUATE		
COURSE UNIT CODE	G056B1-2	SEMESTER OF STUDY	7th
COURSE TITLE	Road Design And Construction		
COURSEWORK BREAKDOWN		TEACHING WEEKLY HOURS	ECTS Credits
Theory - lectures		2	5
Laboratory exercises		1	
Total (hours)		3	
COURSE UNIT TYPE	SC: Specialization Courses		
PREREQUISITES :			
LANGUAGE OF INSTRUCTION/EXAMS:	greek		
COURSE DELIVERED TO ERASMUS STUDENTS	no		
MODULE WEB PAGE (URL)	http://airlab.teikoz.gr/geope/semester5/geo5051.htm		

2. LEARNING OUTCOMES

Learning Outcomes

On successful completion of this module the learner will be able to Deal with problems that deal with road planning, construction, maintenance and circulation flow

General Skills

Upon successful completion of the programme students will:

- have the basic theoretical and practical knowledge in the fields of the subject area of Geotechnology and Environmental Engineering
- be able to properly apply the theoretical and practical knowledge acquired during the study period
- be able to cover a wide spectrum of scientific and technical knowledge related to mining and geotechnical projects as well as the sector of environmental reclamation
- have gained the necessary competencies to proceed to their second cycle study

Technical general knowledge that is related with road planning, construction, maintenance and circulation flow.

3. COURSE CONTENTS

Introduction. Isoclinal ground design. Longwise inclination of county roads. Legislations. Breadthwise inclination of county roads. Horizontiography designing. Cross-sections designing. Cross-sections designing using topographical elements or by using maps. Slopes, ditches, embankments. Formation of slopes. Drainage. Pitch calculation. Special subjects of road construction. Embankment's calculation. Financial elements of roads.

4. TEACHING METHODS - ASSESSMENT

MODE OF DELIVERY	At class	
USE OF INFORMATION AND COMMUNICATION TECHNOLOGY		
TEACHING METHODS	<i>Method description</i>	<i>Semester Workload</i>
	lectures	13
	<i>Exercises</i>	26 in theory + 13 at laboratory
	<i>Group work</i>	
	<i>Educational visit to industries</i>	
	<i>Atomic workout</i>	34
	<i>Personal study</i>	39
	Total (ects credits * 25)	125
ASSESSMENT METHODS	<ul style="list-style-type: none"> • Written final examinations in theory (60 %) • Written final examinations at laboratory (40 %) (50% exams and 50 % atomic workout). 	

5. RESOURCES

Choice 1 Book title: Στοιχεία οδοποιίας / Ιωάννη Δ. Κοφίτσα., , «*Eudoxus*» book code: **14710**, Έκδοση: 2003, Writer: Κοφίτσας, Ιωάννης Δ., ISBN: 960-411-185-X, Distributor (Edition): Ίων

Choice 2 Book title: Στοιχεία μελέτης οδού και διασταυρώσεων, , «*Eudoxus*» book code: **14707**, Έκδοση: 2003, Writer: Κοφίτσας, Ιωάννης Δ., ISBN: 960-411-549-9, Distributor (Edition): Ίων

Choice 3 Book title: Από τη χάραξη ως την κατασκευή των οδών, , «*Eudoxus*» book code: **10984**, Έκδοση: 2010, Writer: Ντίνης Ορέστης - Θωμάς, ISBN: 978-960-456-082-0, Distributor (Edition): Ζήτης