

COURSE OUTLINE

1. GENERAL

SCHOOL	ENGINEERING		
DEPARTMENT	PRODUCT AND SYSTEMS DESIGN ENGINEERING		
LEVEL OF STUDIES	Undergraduate		
COURSE CODE	5308	SEMESTER	9 th
COURSE TITLE	Transportation Planning		
INDEPENDENT TEACHING ACTIVITIES <i>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</i>		WEEKLY TEACHING HOURS	CREDITS
Lectures		3	6
<i>Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).</i>			
COURSE TYPE <i>general background, special background, specialised general knowledge, skills development</i>	Scientific area		
PREREQUISITE COURSES:	NONE		
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	GREEK/ENGLISH		
COURSE DELIVERED TO ERASMUS STUDENTS	YES		
MODULE WEB PAGE (URL)	https://eclass.uowm.gr/		

2. LEARNING OUTCOMES

Learning outcomes
<p>Transportation Planning is a branch of scientific research which includes the formulation of general transportation and traffic problems as well as the formulation of solutions to deal with them in the long run. The subject of the course is the design of transport systems and includes the conceptual and quantitative approach of the analysis of the transport system as well as the related subsystems. The aim of the course is to understand the transport systems at a basic level, so that students can go ahead and design transport systems and programs based on sufficient knowledge and good understanding of how modern systems work.</p> <p>On successful completion of this module the learner will be able to:</p> <ol style="list-style-type: none"> 1. Knows the basic concepts of transport systems 2. Understands the characteristics of transport systems 3. Understands the operation of transport programs 4. Calculates characteristic traffic sizes 5. Recognizes the problems of traffic systems design 6. Understands the control elements of traffic systems
General Skills
<p>Upon successful completion of the program students will:</p> <ul style="list-style-type: none"> • have the theoretical and practical background on the field of product and systems design engineering and the corresponding profession. • utilize scientific knowledge to understand, analyze and solve problems.

- apply a wide range of scientific and technical knowledge concerning the design and development of products and systems.

3. COURSE CONTENTS

- The framework of transport and traffic studies,
- Basic concepts and principles of the urban transport system,
- Quantitative expression and characteristics of transport,
- Land transport,
- Typical traffic sizes,
- Traffic junctions,
- Circulatory capacity,
- Marking,
- Signaling.

4. TEACHING METHODS - ASSESSMENT

MODE OF DELIVERY	In class, face to face	
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	<ul style="list-style-type: none"> • Video and slide presentations via projector • Support of teaching process via the electronic platform e-class • Communication with students. 	
TEACHING METHODS	<i>Activity</i>	<i>Semester workload</i>
	Lectures	90
	Non-directed study	60
	Course total	150
ASSESSMENT METHODS	Final written exam which includes: <ol style="list-style-type: none"> Short-answer questions Multiple choice questions Problem solving 	

5. ATTACHED

- Suggested bibliography:

- Konstantinos G. Goulias, Transportation Systems Planning: methods and applications, 2003 CRC Press LLC, ISBN 0-8493-0273-0
- Σταθόπουλος Αντώνης, Καρλαύτης Ματθαίος, Σχεδιασμός μεταφορικών συστημάτων, 2008, Εκδ. Παπασωτηρίου, ISBN 960-7182-05-7
- Φραντζεσκάκης Ιωάννης, Γιαννόπουλος Γιώργος, Σχεδιασμός των μεταφορών και κυκλοφορική τεχνική, 2005, Εκδ. Επίκεντρο, ISBN 960-6647-20-X
- Γιαννόπουλος Γιώργος, Σχεδιασμός των μεταφορών, 2005, Εκδ. Επίκεντρο, ISBN 960-88681-0-6
- Sussman Joseph, Εισαγωγή στα συστήματα μεταφορών, 2003, Εκδ. Σταμούλη Α.Ε. ISBN 960-351-395-4