

## ECTS

### (B) Course information in English

#### General course information:

<b>Course title:</b>	Geodesy II and Applied Mapping	<b>Course code:</b>	CE04-U06
<b>Credits:</b>	4	<b>Work load (hours):</b>	120
<b>Course level:</b>	Undergraduate <input checked="" type="checkbox"/>	Graduate <input type="checkbox"/>	
<b>Course type:</b>	Mandatory <input checked="" type="checkbox"/>	Selective <input type="checkbox"/>	
<b>Course category:</b>	Basic <input checked="" type="checkbox"/>	Orientation <input type="checkbox"/>	
<b>Semester:</b>	4th	<b>Hours per week:</b>	4
<b>Course objectives (capabilities pursued and learning results):</b>			
Geodetic Systems. Map Projections. Errors and Statistics. Traverse Survey. Open, closed traverses. Topographic Survey. Profile Leveling. Digital Elevation Models. Global Positioning Systems.			
<b>Prerequisites:</b>			
Geodesy			

#### Instructor's data:

<b>Name:</b>	George Grekousis
<b>Level:</b>	Lecturer (P.D 407/80)
<b>Office:</b>	Civil Engineering Faculty University of Thessaly Pedion Areos, 38334 Volos, Greece
<b>Tel. – email:</b>	+30 24210 74315 – <a href="mailto:geograik@gmail.com">geograik@gmail.com</a>
<b>Other tutors:</b>	Panajiotis Manetos

**Specific course information:**

Week No.	Course contents	Hours	
		Course attendance	Preparation
1	Geodetic Systems	4	2
2	Map Projections	4	2
3	Errors and Statistics I	4	2
4	Errors and Statistics II	4	2
5	Traverse Survey	4	2
6	Open traverses	4	2
7	Closed traverses	4	2
8	Topographic Survey I	4	2
9	Topographic Survey II	4	2
10	Profile Leveling I	4	2
11	Profile Leveling II	4	2
12	Digital Elevation Models	4	2
13	Global Positioning Systems I	4	2
14	Global Positioning Systems II	4	2

Additional hours for:			
Class project	Examinations	Preparation for examinations	Educational visit
		22	

**Suggested literature:**

Γραϊκούσης Γ., Λαγός Α. Αρχές τοπογραφίας και γεωπληροφορικής. Σύγχρονη εκδοτική, Αθήνα, 2011.  
Μπαντέλας, Σαββαΐδης, Υφαντής και Δούκας, Γεωδαισία Ι, εκδ. Κυριακίδη, Θεσσαλονίκη, 2005  
Χ. Ι. Καλτσίκης, Α. Φωτίου, Γενική τοπογραφία : όργανα - μετρήσεις - υπολογισμοί – απόδοση, εκδ. Ζήτη, Θεσσαλονίκη, 1990

Γ. Δ. Γεωργόπουλος, Μαθήματα Τοπογραφίας, εκδ. Τζιόλα, Θεσσαλονίκη, 2006  
 Ι.Ν. Χατζόπουλος, Τοπογραφία, εκδ. Β. Γκιούρδα εκδοτική, Αθήνα, 2005  
**Lev M. Bugayevskiy, John P. Snyder , Map projections : a reference manual,**  
 London ; Philadelphia : Taylor & Francis, 1998

<b>Teaching method (select and describe if necessary - weight):</b>		
Teaching	<input checked="" type="checkbox"/>	50 %
Seminars	<input type="checkbox"/>	... %
Demonstrations	<input type="checkbox"/>	... %
Laboratory	<input checked="" type="checkbox"/>	50%
Exercises	<input type="checkbox"/>	.... %
Visits at facilities	<input type="checkbox"/>	..... %
Other (describe): .....	<input type="checkbox"/>	..... %
Total		100%

<b>Evaluation method (select)- weight:</b>				
	<u>written</u>	<u>%</u>	<u>Oral</u>	<u>%</u>
Homework	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
Class project	<input type="checkbox"/>		<input type="checkbox"/>	
Interim examination	<input type="checkbox"/>		<input type="checkbox"/>	
Final examinations	<input checked="" type="checkbox"/>	100%	<input type="checkbox"/>	
Other (describe): .....	<input type="checkbox"/>		<input type="checkbox"/>	