ECTS

(B) Course information in english

General course information:

Course title:	Geodesy I	**Course code:**	CE03-U04
Credits:	5	**Work load (hours):**	120
Course level:	Undergraduate ☑	Graduate ☐	
Course type:	Mandatory ☑	Selective ☐	
Course category:	Basic ☑	Orientation ☐	
Semester:	3rd	**Hours per week:**	4
Course objectives (capabilities pursued and learning results):			
Introduction and terminology; Simple survey techniques and area calculation; Geodetic instruments and methods of distance measurements; Geodetic instruments and methods of angle measurements; Geodetic instruments and methods of levelling; Global Navigation Satellite Systems; Datum, map projections; Basic geodetic problems; Triangulation.			
Prerequisites:			

Instructor's data:

Name:	George Grekousis
Level:	Lecturer (P.D 407/80)
Office:	Civil Engineering Faculty University of Thessaly Pedion Areos, 38334 Volos, Greece
Tel. – email:	+30 24210 74315 – Laspidou@uth.gr
Other tutors:	Panajiotis Manetos

Specific course information:

Week No.	Course contents	Hours	
		Course attendance	Preparation
1	Introduction and terminology	4	2
2	Simple survey techniques and area calculation	4	2
3	Geodetic instruments and methods of distance measurements	4	2
4	Geodetic instruments and methods of distance measurements	4	2
5	Geodetic instruments and methods of angle measurements	4	2
6	Geodetic instruments and methods of angle measurements	4	2
7	Geodetic instruments and methods of levelling.	4	2
8	Geodetic instruments and methods of levelling.	4	2
9	Global Navigation Satellite Systems.	4	2
10	Datum, map projections	4	2
11	Basic geodetic problems.	4	2
12	Basic geodetic problems.	4	2
13	Triangulation	4	2
14	Triangulation	4	2

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

Suggested literature:

1. Γραικούσης Γ., Λαγός Α. Αρχές τοπογραφίας και γεωπληροφορικής. Σύγχρονη εκδοτική, Αθήνα, 2011.
2. Μπαντέλας, Σαββαϊδης, Υφαντής και Δούκας, Γεωδαισία Ι, εκδ. Κυριακίδη, Θεσσαλονίκη, 2005
3. Χ. Ι. Καλτσίκης, Α. Φωτίου , Γενική τοπογραφία : όργανα - μετρήσεις -

υπολογισμοί – απόδοση, εκδ. Ζήτη, Θεσσαλονίκη, 1990
4. Γ. Δ. Γεωργόπουλος, Μαθήματα Τοπογραφίας, εκδ. Τζιόλα, Θεσσαλονίκη, 2006
5. Ι.Ν. Χατζόπουλος, Τοπογραφία, εκδ. Β. Γκιούρδα εκδοτική, Αθήνα, 2005
6. Lev M. Bugayevskiy, John P. Snyder , Map projections : a reference manual, London ; Philadelphia : Taylor & Francis, 1998

Teaching method *(select and describe if necessary -* **weight***):*		
Teaching	☑	50 %
Seminars	☐	...%
Demonstrations	☐	...%
Laboratory	☑	50%
Exercises	☐	....%
Visits at facilities	☐	…….%
Other *(describe):* …….	☐	…….%
Total		100%

Evaluation method *(select)*- **weight:**				
	written	*%*	*Oral*	*%*
Homework	☐		☑	
Class project	☐		☐	
Interim examination	☐		☐	
Final examinations	☑	100%	☐	
Other *(describe):* ……	☐		☐	