

ECTS

(B) Course information in english

General course information:

Course title:	Geodesy - Surveying	Course code:	CE03-U04
Credits:	4	Work load (hours):	120
Course level:	Undergraduate <input checked="" type="checkbox"/>	Graduate	<input type="checkbox"/>
Course type:	Mandatory <input checked="" type="checkbox"/>	Selective	<input type="checkbox"/>
Course category:	Basic <input checked="" type="checkbox"/>	Orientation	<input type="checkbox"/>
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:	Dimitra Vassilaki
Level:	
Office:	Civil Engineering Faculty University of Thessaly Pedion Areos, 38334 Volos, Greece
Tel. – email:	+30 24210 74315 – dimitra.vassilaki@gmail.com
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. Γραϊκούσης Γ., Λαγός Α. Αρχές τοπογραφίας και γεωπληροφορικής. Σύγχρονη εκδοτική, Αθήνα, 2011.
2. Μπαντέλας, Σαββαΐδης, Υφαντής και Δούκας, Γεωδαισία Ι, εκδ. Κυριακίδη, Θεσσαλονίκη, 2005
3. Χ. Ι. Καλτσικής, 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	<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%

Evaluation method (select)- weight:				
	<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"/>	