

TOROS ÜNİVERSİTESİ

Faculty Of Engineering
Civil Engineering (English)

Course Information

SURVEYING					
Code	Semester	Theoretical	Practice	National Credit	ECTS Credit
		Hour / Week			
CVE210	Spring	3	0	3	4

Prerequisites and co-requisites	NONE
Language of instruction	Turkish
Type	Required
Level of Course	Bachelor's
Lecturer	PROF.DR. MEHMET ÇAKIROĞLU
Mode of Delivery	Face to Face
Suggested Subject	NONE
Professional practise (internship)	None
Objectives of the Course	The aim of the course is to teach the students distance measurement, taping, Angle measurement, errors, direct, indirect and conditional adjustment of observations, differential leveling, rise and fall, height of collimation method, traverse surveys, Azimuth and coordinate computations.
Contents of the Course	Surveying in engineering, surveying equipment, theodolite, compass, inclination measuring equipment, measuring length equipments, planning, polygonation, measuring heights, geometric leveling and equipments, Area calculation, Underground measurement, measurement errors and balancing.

Learning Outcomes of Course

#	Learning Outcomes
1	To inform the students about surveying equipments
2	To learn planning and poligonation
3	To measure height
4	To calculate heihgt and areas by the data collected from field
5	To learn application and geometric leveling
6	To understand measurement errors and balancing

Course Syllabus

#	Subjects	Teaching Methods and Technics
1	Importance of Surveying Science in Civil engineering	Lecture
2	Land forms, units, scale concept	Lecture
3	Error concept, types of error and balancing	Lecture
4	Simple measuring equipment, introduction and usage	Lecture
5	Area calculations	Lecture
6	Cartesian coordinate and four basic homework	Lecture
7	Land control points and calculation of polygon	Lecture
8	Land control points and calculation of polygon	Lecture
9	Measuring heights and leveling	Lecture

10	Mid-Term Exam	
11	Measuring heights and leveling	Lecture
12	Usage of Theodolite, measuring lateral and vertical angles.	Lecture
13	Usage of Theodolite, measuring lateral and vertical angles.	Lecture
14	Sectioning and cubing, Constructional work, application and geometric leveling	Lecture
15	Sectioning and cubing, Constructional work, application and geometric leveling	Lecture
16	Final Exam	

Course Syllabus

#	Material / Resources	Information About Resources	Reference / Recommended Resources
1	Topografya Ölçme Bilgisi Yıldız, F., Inal, C., Erdi, A., Atlas Yayın Dağıtım		
2	Ölçme Bilgisi, Cilt: I, II C. Songu Birsen Yayınevi		

Method of Assessment

#	Weight	Work Type	Work Title
1	40%	Mid-Term Exam	Mid-Term Exam
2	60%	Final Exam	Final Exam

Relationship between Learning Outcomes of Course and Program Outcomes

#	Learning Outcomes	Program Outcomes	Method of Assessment
1	To inform the students about surveying equipments	2	1
2	To learn planning and poligonation	1	1
3	To measure height	1	1
4	To calculate heihgt and areas by the data collected from field	1	1
5	To learn application and geometric leveling	1	1
6	To understand measurement errors and balancing	1	2

PS. The numbers, which are shown in the column Method of Assessment, presents the methods shown in the previous table, titled as Method of Assessment.

Work Load Details

#	Type of Work	Quantity	Time (Hour)	Work Load
1	Course Duration	14	3	42
2	Course Duration Except Class (Preliminary Study, Enhancement)	14	2	28
3	Presentation and Seminar Preparation	0	0	0
4	Web Research, Library and Archival Work	0	0	0
5	Document/Information Listing	0	0	0
6	Workshop	0	0	0
7	Preparation for Midterm Exam	1	12	12
8	Midterm Exam	1	2	2
9	Quiz	0	0	0
10	Homework	0	0	0
11	Midterm Project	0	0	0
12	Midterm Exercise	0	0	0

13	Final Project	0	0	0
14	Final Exercise	0	0	0
15	Preparation for Final Exam	1	12	12
16	Final Exam	1	2	2
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