



HASAN KALYONCU UNIVERSITY
Faculty of Engineering
Course Description Form

COURSE: Surveying					
CODE: CE262		SEMESTER: SPRING			
LANGUAGE: ENGLISH		TYPE: COMPULSORY			
PRE-REQUISITES: - CO-REQUISITES: -		THEORY	PRACTICAL	CREDIT	ECTS
WEEKLY HOURS: 4		2	2	3	4

CONTENT OF THE COURSE:

Drawing: drawing maps with tachometric measurements, enlarging and reducing maps and plans, units of measurement: introduction of angle, length, area and volume units, conversion between angle units, errors: definition of error, classification of errors, correction, error limit, accuracy criteria, simple Measuring tools: jalon, jalon stand, steel tape measure, prism etc. Introduction and use of acid measuring instruments, simple measurements: application of points and lines with simple measuring instruments, length measurements: direct measurement or indirect calculation of lengths, simple pickup methods: definition of pickup, simple pickup methods and application, area calculations.

OBJECTIVE OF THE COURSE:

To gain the basic concepts of topography, to define the importance and place of civil engineering, to teach and apply the necessary information for the solution of engineering problems involving topography.

WEEKLY SCHEDULE

Week	Topics
1	Topography, map, plan concepts, shape and dimensions of the earth
2	Units of measure, length units and conversions
3	Angle measurement units and transformations, area measurement units
4	Vertical and polar coordinate systems, transformations between
5	Height measurements
6	Application of height measurements
7	Error calculations
8	Midterm Week
9	Error calculations and application
10	Length and angle measurement application
11	Length and angle measurement application
12	Land surveying methods
13	Land surveying methods
14	An overview

TEXTBOOK: Lecture Notes

EVALUATION SYSTEM:		
IN-TERM STUDIES	QUANTITY	PERCENTAGE (%)
Midterm Exam	1	40
Homework	-	
Laboratory works	-	
Quiz	-	
Final Exam	1	60
TOTAL		
CONTRIBUTION OF INTERM STUDIES TO OVERALL GRADE		
CONTRIBUTION OF FINAL EXAMINATION TO OVERALL GRADE		
TOTAL		100

COURSE CATEGORY:	PERCENTAGE (%)
Mathematics and Basic Sciences	20
Engineering	50
Engineering Design	30
Social Sciences	

TABLE OF ECTS / WORKLOAD:			
Activities	QUANTITY	Duration (Hour)	Total Workload
Course Duration	13	4	52
Hours for off-the-classroom study (Pre-study, practice)	14	4	56
Laboratory works	-	-	-
Mid-term	1	2	2
Final examination	1	2	2
Homework	-	-	-
Quiz	-	-	-
Total Work Load			112
Total Work Load / 30			3,7
ECTS Credit of the Course			4

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
LO1	3	0	0	0	0	0	0	0	0	0	0
LO2	3	0	0	0	0	3	0	0	0	0	0
LO3	3	0	3	3	3	3	0	0	0	0	0
LO4	3	0	3	3	3	3	0	0	0	0	0
LO5	3	0	3	3	3	3	0	0	0	0	0
LO6	3	0	3	3	3	3	0	0	0	0	0
LO7	3	0	0	0	0	3	0	0	0	0	0
	PO: Program Outcomes LO: Learning Outcomes Values: 0: None 1: Low 2: Medium 3: High										

INSTRUCTOR(S):	Inst.Nurullah AKBULUT
FORM PREPARATION DATE:	22.05.2019

LEARNING OUTCOMES OF THE COURSE:	PROGRAM OUTCOMES:
<p>LO1: Learns the concepts of topography, map and plan.</p> <p>LO2: Understand the measurement units and conversions between them.</p> <p>LO3: Learns to measure length.</p> <p>LO4: Learns angle measurement</p> <p>LO5: Makes coordinate calculations.</p> <p>LO6: Makes the height measurements and calculations.</p> <p>LO7: Learns to calculate measurement errors.</p>	<p>PO1: Adequate knowledge in mathematics, science and engineering subjects pertaining to the relevant discipline; ability to use theoretical and applied knowledge in these areas in complex engineering problems.</p> <p>PO2: Ability to identify, formulate, and solve complex engineering problems; ability to select and apply proper analysis and modeling methods for this purpose.</p> <p>PO3: Ability to design a complex system, process, device or product under realistic constraints and conditions, in such a way as to meet the desired result; ability to apply modern design methods for this purpose.</p> <p>PO4: Ability to devise, select, and use modern techniques and tools needed for analyzing and solving complex problems encountered in engineering practice; ability to employ information technologies effectively.</p> <p>PO5: Ability to design and conduct experiments, gather data, analyze and interpret results for investigating complex engineering problems or discipline specific research questions.</p> <p>PO6: Ability to work efficiently in intra-disciplinary and multi-disciplinary teams; ability to work individually.</p> <p>PO7: Ability to communicate effectively in Turkish, both orally and in writing; knowledge of a minimum of one foreign language; ability to write effective reports and comprehend written reports, prepare design and production reports, make effective presentations, and give and receive clear and intelligible instructions.</p> <p>PO8: Recognition of the need for lifelong learning; ability to access information, to follow developments in science and technology, and to continue to educate him/herself.</p> <p>PO9: Consciousness to behave according to ethical principles and professional and ethical responsibility; knowledge on standards used in engineering practice.</p> <p>PO10: Knowledge about business life practices such as project management, risk management, and change management; awareness in entrepreneurship, innovation; knowledge about sustainable development.</p> <p>PO11: Knowledge about the global and social effects of engineering practices on health, environment, and safety, and contemporary issues of the century reflected into the field of engineering; awareness of the legal consequences of engineering solutions.</p>