Surveying Engineering Program Department of Civil Engineering College of Engineering King Saud University



King Saud University				
	SE 471 Survey Camp			
Credit and Contact hours	3 / 1(Lectures); 0(Tutorials); 2(Field Work)			
Required, or Elective	Required for a BSCE degree			
Course Description	Introduction; practical training on precise leveling & trigonometry; measuring distances using electronic distances measurements instrument; measurement of vertical & horizontal angles; GNSS observation & processing, observation treatment and electronic map drawings; computer applications.			
Prerequisites or Co- requisites	SE 413			
Course Learning Outcomes	Students completing this course successfully will be able to			
	Course Learning Outcomes	Related Student Outcomes (SO)		
	CLO1: Design and plan surveying project	SO2		
	CLO2 : Conduct field observations using survey instruments to produce final project group report	SO5		
	CLO3 : Use computer software in processing, analyzing data and producing map.	SO6		
	CLO4 : Write and present a group final report on the project	SO3		
Student Outcomes	 SO2: an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety; SO3: an ability to communicate effectively with a range of audiences. SO5:an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives SO6 :an ability to develop and conduct appropriate experimentation, analyze and interpret data and use engineering judgment to draw conclusions 			

Topics Covered	List of Topics	Related CLOs	
	Introduction and project description and planning	CLO1	
	practical training on precise leveling & trigonometry	CLO2	
	measuring distances using electronic distances measurements instrument;	CLO2	
	measurement of vertical & horizontal angles	CLO2	
	GNSS observation & processing	CLO3	
	Computer applications.	CLO3	
	observation treatment, electronic map drawings and final report writing	CLO4	
Textbook(s) and Other Required Material	Textbook:		
Grading System	Course Work 60%		
	Presentation and Oral Exam 40%		
Instructors	Prof. Abdullah Salman A. Alsalman (2 A 31); e-mail: asalman@ksu.edu.sa		
Date of Review	Nov, 2020		