

Date:	Examination No.:	Version:1/9/2021	Start: 1/9/2022
Module Name - Code	Fundamental of Surveying Engineering -7106		
Module Language:	English		
Responsible:	Lect. Bakhtyar Ahmed Mala		
Lecturer (s):	Mr. Bakhtyar Ahmed Mala Mr. Hemin Saaid		
College:	College of Engineering – Salahaddin University		
Duration:	15 weeks – 1 semester		
Course outcomes:	At the end of the semester, students would be able to understand the students knew the main subject that related to the surveying lecture from the distance measurement, leveling, and angle measurement by using tape, level and theodolite. Students learn how transfer an elevation for a benchmark to another benchmark and how create a profile, cross-section and contour line creation and layout a contour line by using level instrument.		
Course Content:	This course purposes to the following points: Teach our students in our department about the surveying engineering as a main branch of Geomatics specialty. Teach the students how use the instruments in the field of surveying and how they can be a success in their field especially tape and level instrument at this course. Understanding the means of measurement that it contains error. Based on this point determine the means of accuracy and precision.		
Literature:	<ul style="list-style-type: none"> ▪ Surveying with Construction applications, by Barry F. Kavanagh and Dianne K. Slattery eight editions 2012. ▪ Elementary of Surveying, by Charles D. Chilani and Paul R. Wolf, twelve editions 2001. ▪ Higher Surveying, by Dr. Chandra 2008. ▪ Basics of Geomatics. By Mario A. Gomarasca 2009 ▪ Engineering Surveying (Theory and Examination, Problems for Student). W. Schofield 5th edition 2008 		
Type of Teaching:	3 Hrs. in lectures 3 Hrs. laboratory working.		
Pre-requisites:			
Frequency:	Yearly in fall semester.		
Requirements for credit points:	For the award of credit points it is necessary to pass the module exam. The module exam contains: Practical/Written (written if 6 students or more) [practical minimum 30 min / Written 120 min] Student's attendance is required in all classes.		
Credit point:	7		
Grade Distribution:	The Grade is generated from the examination result(s) with the following weights (w): Midterm exam 20% Quizzes 10% Practicals 20% Final exam 50%		
Work load:	The workload is 180h. It is the result of 90h attendance and 90h self-studies.		