Republic of Iraq

Ministry of Higher Education and Scientific Research Supervision and Scientific Evaluation Apparatus



College: Shatt Al-Arab University
Department: Civil Engineering

Stage: 2nd stage

Lecturer name: Ali Hussain Ali Academic title:Assistant Lecturer

Course Weekly Outline

Name	Ali Hussain Ali
E-mail address	Ali.hussain.alikareem@sa-uc.edu.iq
Course name	Engineering Survey-1
Course objective	 Introducing the student to the general fundamentals of surveying and preparing them to be capable of managing survey technicians and engineers working on civil projects. Introducing the student to the use of some surveying equipment, such as the leveling instrument (Level) and the Theodolite, to enable them to carry out simple surveying tasks needed in civil works, such as measuring elevations and angles. Providing the student with basics on advanced surveys, such as road surveying and coordinate measurement, which allows the student to develop their capabilities in the future through courses or further study to become a professional surveyor and carry out advanced surveying tasks.
Course description	Introducing and training the student in the fundamentals of surveying and the optimal use of surveying instruments, as well as developing their ability to carry out various leveling tasks.
References	 Yaseen Obaid Ahmed (1990), Engineering Surveying, Ministry of Higher Education and Scientific Research - University of Basra - College of Engineering - Basra - Iraq. Ziyad Abduljabbar (2004), Engineering and Cadastral Surveying - Baghdad.
External sources	 Surveying: Theory and Practice by James M. Anderson and Edward M. Mikhail, (7th Edition), 2002 Kavanagh, Barry F., Surveying: Principles and Applications (9th Edition), 2014 Kavanagh, Barry F., Surveying with Construction Applications (8th Edition), 2015 Ghilani, C.D., and Wolf, P.R., Elementary Surveying: An Introduction to Geomatics (13th Edition), 2011

	2007 6. La Putt	 5. Schofield W. and M. Breach, Engineering Surveying, (6th Edition), 2007 6. La Putt, J.P., Elementary Surveying (3rd Edition) 2013 Reprint 7. La Putt, J.P., Higher Surveying (2nd Edition) 2013 Reprint 				orint
Course assessment	projects / Lab.	Report	Quizzes	Assignments	Mid- term exam	Final exam
	10	10	10	10	10	50
General notes						

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Course Weekly Outline

Week No.	Theoretical	Experimental	Aims
1	Introduction to	Measuring long	ep cal the nts in
	surveying	distances	deep ctical of the nents ed in
2	Types of Surveying and	Measuring long	with a deep ies; practical reness of the levelopments employed in works.
2	devices used	distance with tape	ith vith ness st. Junes well nupl
3	Topograohic surveying	Measuring long	t w titie are dev dev g w
3		distance with tape	len triv aw on rres frin
4	Geodetic surveying	Surveying with	student with a deep n activities; practical an awareness of the uction developments edures employed in building works.
4		tape	e s son son son son son son son son son s
5	Plane surveying	Ploting amap with	this Module is to provide the student with a deep of surveying and construction activities; practical of topographic surveying skills, an awareness of the considerations involved in construction developments ledge of the materials and procedures employed in of small commercial/industrial building works.
		tape	stra stra g s in c and and
6	Units of Measurement	Ploting amap with	to provic and const surveying nvolved in aterials ar ercial/indu
		tape	o pour de contra
7	Distances.areas&angles	Leveling devices	s tc ar sur nva
		and their types	ing is is is is is is in ing ing ing ing ing ing ing ing ing
8	Measurement systems	Setting up levelling	Module is surveying ographic s derations ir of the manall comme
<u> </u>	and conversions	devices	focurvograph of all
	Tape errors	Finding elevation	s. Moc of surviopogra isidera ge of small
9		differences	this constant the
		between points	of din or
	Length Error	Drawing asite map	The aim of this Module is to prounderstanding of surveying and conspection of topographic surveying preliminary considerations involved and a knowledge of the materials construction of small commercial/in
10		with elevation and	ain ain airea ica ica imi imi a a la stru
10		laying asloped	The unde appli preli and and cons
		sewer pipe	T n a d o

	Measuring distances	map with elevation
11	with Obstacles	and laying asloped
		sewer pipe
	Applications of tape	map with elevation
12	Error Calculations	and laying asloped
		sewer pipe
13	leveling	Levelings
14	Leveling	Levelings
15	Leveling	Levelings