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	1. Yaseen Obaid Ahmed (1990), Engineering Surveying, Ministry of Higher Education and Scientific Research - University of Basra - College of Engineering - Basra - Iraq. 2. 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

	5. Schofield W. and M. Breach, Engineering Surveying, (6th Edition), 2007				Edition),		
	6. La Putt	, J.P., Elen	nentary Surve	ying (3rd Editio	n) 2013 Rep	orint	
	7. La Putt	, J.P., High	er Surveying	(2nd Edition) 20	013 Reprint	print	
Course assessment	projects / Lab.	Report	Quizzes	Assignments	Mid- term exam	Final exam	
	10	10	10	10	10	50	
General notes							

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Week No.	Theoretical	Experimental	Aims
1	Introduction to	Measuring long	ep aal aal in in
1	surveying	distances	deep ctical of the nents ed in
2	Types of Surveying and	Measuring long	a prace of conference of confe
4	devices used	distance with tape	ith vith ness veloundly out of the velous velous vorth out of the vertical vorth vertical ver
3	Topograohic surveying	Measuring long	t w t w ittie are dev dev g w g w
3		distance with tape	len aw on con con ling.
4	Geodetic surveying	Surveying with	The aim of this Module is to provide the student with a deep understanding of surveying and construction activities; practical application of topographic surveying skills, an awareness of the preliminary considerations involved in construction developments and a knowledge of the materials and procedures employed in construction of small commercial/industrial building works.
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5	Plane surveying	Ploting amap with	the contract of the contract o
<u> </u>		tape	ide str. str. str. str. str. str. str. str.
6	Units of Measurement	Ploting amap with	rov con yin yin ed ls (
.		tape	o po nd o olvey olvey rria
7	Distances.areas&angles	Leveling devices	s tc; ar sur nave
<u> </u>		and their types	e is inging ing ing ing ing ing ing ing ing
8	Measurement systems	Setting up levelling	fulk /ey aph tion the cor
	and conversions	devices	Hoc urv ogr: era of
	Tape errors	Finding elevation	s N s lost sold side side side side side side side sid
9		differences	this g of the constant of the
		between points	of din n c swl
	Length Error	Drawing asite map	The aim of this Module is to provide the understanding of surveying and construction application of topographic surveying skills, preliminary considerations involved in constrand a knowledge of the materials and proconstruction of small commercial/industrial between the construction of small commercial between the construction of the commercial between the construction of the construction of the commercial between the construction of the
10		with elevation and	ain erst lica imi imi stru
10		laying asloped	The individual poor individual
		sewer pipe	u n p p p c c c c c c c c c c c c c c c c

	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