FUTURE UNIVERSITY IN EGYPT
جامعة المستقبل

Faculty of Engineering & Technology

Planimetric Surveying 2

Information :

Course Code :	SCM 222	**Level :**	Undergraduate	**Course Hours :**	2.00- Hours

Department : Department of Structural Engineering & Construction Management

Instructor Information :

Title	Name	Office hours
Professor	Tamer Fathy Fathallah Ahmed Soror	
Assistant Lecturer	Ahlam Ibrahim Sadek Elgendy	
Teaching Assistant	SARAH SALAH SAYED HUSSIEN ALI ELSHISHTAWY	

Area Of Study :

ÅScales used in mapping.
ÅSurveying application in mapping.
ÅCoordinate computations and manipulations.
ÅAngular measurements corrections using theodolite.
ÅTheodolite application through Tacheometry.
ÅThe total station as a powerful surveying tool.

Description :

Traverse, Tachometry, Surveying using plain table, Topographic surveying, Mapping, Horizontal and vertical curves layout, Engineering projects layout, Accuracy of surveying measurements, Probability theory.
Prerequisites : SCM 221

Course outcomes :

a.Knowledge and Understanding: :	
1 -	Define main concepts of surveying computations.
2 -	- Adequate knowledge of commonly used surveying instruments.
3 -	- Surveying as a mapping tool.
b.Intellectual Skills: :	
1 -	Capability to differentiate between mapping scales.
2 -	Usage of surveying for mapping purposes.
3 -	Handling of coordinates and bearings.
4 -	- Dealing with traverse calculations.
5 -	Ability to asses and correct angular measurements.
6 -	Fair knowledge of the total station.
c.Professional and Practical Skills: :	
1 -	- Ability to categorize theodolite screws and parts.

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2 -	Ability to handle and practically work with the theodolite.
3 -	Ability to classify and handle various kinds of total stations .
d.General and Transferable Skills: :	
1 -	The skill and gift of working in team.
2 -	Writing and presentation of surveying observations and results.

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
Angular measurements using theodolite	10	1	4
Computation of coordinates	4	1	1
Usage of scales for mapping	4	1	1
Surveying for mapping	6	2	1
Traverse computations	8	2	2
Theodolite Application - Tacheometry	6	1	2
Basic Concept of Total Station	2	1	
Theory of errors	4	2	

Teaching And Learning Methodologies :

4.1- Class Lectures

- Tutorials

Practicals

Course Assessment :

Methods of assessment	Relative weight %	Week No	Assess What
é Quizzes	5.00	3	
é Quizzes	5.00	9	
é 1st Mid term Exam	20.00	6	
é 2nd Mid term Exam	20.00	11	
Final Exam	40.00	15	

Course Notes :

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Recommended books :

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Periodicals :

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Web Sites :
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