

Faculty of Engineering & Technology

Planimetric Surveying 1

Information :

Course Code : SCM 221 **Level :** Undergraduate **Course Hours :** 2.00- Hours

Department : Department of Structural Engineering & Construction Management

Instructor Information :

Title	Name	Office hours
Associate Professor	Ahmed Emad Hafez Mustafa Raghib	7
Assistant Lecturer	Ahlam Ibrahim Sadek Elgendy	2

Area Of Study :

- Distance measurements operations and its usage in mapping.
- Various area computation techniques.
- Leveling process and its application.
- Angular measurements using theodolite

Description :

Distance measurements and their corrections, Surveying operations using distance measurements, Area computations, Leveling, Grid leveling, Contour maps, Profiles, Cross sections, Volume computations, Angle measurements using theodolites.

Course outcomes :

a. Knowledge and Understanding :

- 1 - Define basic concepts of surveying operations
- 2 - Primary surveying applications in engineering projects

b. Intellectual Skills :

- 1 - Ability to derive different solutions for distance measurement obstacles.
- 2 - Ability to differentiate between area computational techniques
- 3 - Ability to analyze leveling data for elevation calculation
- 4 - Usage of leveling for volume computations and grid leveling

c. Professional and Practical Skills :

- 1 - Ability to distinguish distance measurement tools and instruments.
- 2 - Ability to identify different types of surveying levels.
- 3 - Ability to categorize surveying level and theodolite screws and parts
- 4 - Ability to handle and practically work with the level and theodolite

d. General and Transferable Skills :

- 1 - The skill and gift of working in team

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
Introduction	2	1	-
Distance measurement operations	7	2	1
Surveying for mapping	4	1	1
Area Computation	5	2	1
Leveling process	7	2	
Leveling applications	8	3	1
Basic Concept of Theodolite	3	1	-
Angular measurements using theodolite	2	1	-

Teaching And Learning Methodologies :

Lectures

Tutorials

practicals

Course Assessment :

Methods of assessment	Relative weight %	Week No	Assess What
1st mid term	10.00		
2nd mid term	10.00		
final	40.00		
quiz, oral	10.00		
semester work	30.00		

Course Notes :

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Recommended books :

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Periodicals :

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Web Sites :

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