

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 :

- Conduct distance measurement operations and their usage in mapping.
- Use surveying instruments in mapping and various area computation techniques.
- Coordinate computations and manipulations.
- Compute angular measurements using theodolite and Traverse computation.

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 the main terms of distance measurement
2 -	Describe the main concept of scaling & surveying for mapping
3 -	Explain the principals of theodolite measurements

b. Intellectual Skills: :

1 -	Calculate the values of distance measurement
2 -	Solve problems regarding scaling & surveying for mapping
3 -	Calculate the values of points coordinates
4 -	Calculate the values of site area

c. Professional and Practical Skills: :

1 -	Proceed test steps of the distance measurement
2 -	Demonstrate presentation regarding theodolite measurements
3 -	Proceed test steps of the HL. angular measurements
4 -	Proceed test steps of the traverse

d.General and Transferable Skills: :

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| 1 - | Cooperate and communicate effectively |
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Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
Distance measurement	6	4	2
points coordinates	3	2	1
scaling & surveying for mapping	9	6	3
site area	6	4	2
theodolite measurements	3	2	1
HL. angular measurements	9	6	3
traverse	6	4	2
Revision	3	2	1

Teaching And Learning Methodologies :

Interactive Lec.
Discussion
Problem solving
Lab Exper.
Project
Report / Present

Course Assessment :

Methods of assessment	Relative weight %	Week No	Assess What
Final Examination	40.00		
lap exper.	10.00		
Mid Term Examinations	30.00		
quizzes and assignments	10.00		
report/present	10.00		

Course Notes :

- Handout notes on MOODLE

Recommended books :

- - "Surveying", Stanley Raymond, Pearson, Prentice Hall, 1998

Periodicals :

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Web Sites :

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