

## 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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