College: Engineering Department: Civil Engineering

Course Title: Surveying laboratory

Course No: 0901308

Credit Hours: 1 C.H.

Semester: 2020/2021

About The Course

Course Title: Surveying laboratory Class:1

Course No: 0901308

Credit Hours: 3 C.H.

Lecture Room:204

Obligatory/ Optional: Obligatory

Text Book: Fundamentals of Surveying, by Schmidt and Kam W. Wong (2014) Prof. Yousif Syam.

The Instructor

Name: Dr. Dr. Hesham Al Sharie Title: Assistant Professor

Office Tel: 330

Office No: 206 Office Hours012:30-03:00 SUN &TUE , 9:30-12:30 MON&WED

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Course Description

Chain surveying, the use of the level and leveling staff; setting out levels; profile and cross-section leveling. The theodolite and its use traverse surveying. Tachometry and electronic distance measurements. Measurement of areas with plan meter. The use of laser theodolite and level.

Course Objectives

To provide an understanding of the behavior of Chain surveying, the use of the level and leveling staff;. The theodolite and its use traverse surveying. Tachometry and electronic distance measurements. Measurement of areas with plan meter. The use of laser theodolite and level.

Learning Outcome

After successfully completing this course, the students should be able to:

1- To develop firm basic understanding of linear measurement perpendicular line obstacles

Course Outline and Time schedule

Week	Topic	Chapter Reading Assignments
1/12	linear measurement	Experimental 1
2/12	perpendicular line	Experimental 2
3/12	obstacles	Experimental 3
4/12	layout of building	Experimental 4
5/12	profile leveling	Experimental 5
6/12	contour map	Experimental 6
7/12	**Mid Exam**	
8/12	theodolite	Experimental 7
9/12	electronic distance meter	Experimental 8
10/12	laser leveling	Experimental 9
11/12	total station	Experimental 10
12/12	**Final Exam**	

Presentation methods and techniques

Methods of teaching varied according to the type of text, student and situation. The following techniques are usually used:

1- Lecturing with active participations.

Involve the civil engineering students in asking some questions related to the target topic of the course.

2- Problem solving.

Encourage the students to solve the given assignments and submit them at the definite time,

3- Cooperative learning.

By enhancing the students studying in groups .

4- Discussion.

To discuss the results and the answers of the target problems.

5- Learning by activities.

To encourage the students to some group activity.

6- Connecting students with different sources of information.

Sources of information and Instructional Aids

- Computer software … power point
- Using weight board.
- Library sources

Assessment Strategy and its tools

The assigned syllabus is assessed and evaluated
Through: feedback and the skills that are acquired by the students
The tools:

1- Formal (stage) evaluation
   a) Class Participation 10%
   b) Ist Exam 20%
   c) 2nd Exam 20%
   d) Group activity and Quizzes 10%

Tool & Evaluation

Tests and quizzes are permanent tools & assessment, in addition to the activity file which contains curricular and the co-curricular activities, research, report papers and the active participation of the student in the lecture.

The following table clarifies the organization of the assessment schedule:

Test	Date	Grade
Midterm		20
	Students should be notified about their marks	40
	Activities & Participation	
Final Exam		40

Activities and Instructional Assignment

1- Practical assignments to achieve the syllabus objectives.

2- Group Activity.

Regulations to maintain the teaching-Learning Process in the Lecture:

1- Regular attendance.

2- Respect of commencement and ending of the lecture time.

3- Positive relationship between student and teacher.

4- Commitment to present assignments on time.

5- High commitment during the lecture to avoid any kind of disturbance and distortion.

6- High seuse of trust and sincerity when referring to any piece of information and to mention the source.

7- The student who absents himself should submit an accepted excuse.

8- University relevant regulations should be applied in case the student's behavior is not accepted.

9- Allowed Absence percentages is (20%).

References :

1. Surveying by Bannister and Raymond
2. Surveying Practice by Kissam
3. Elementary Surveying by Brinker and Wolf
4. Site Surveying and Leveling by Clancy
5. Surveying for Civil Engineers by Kissam
6. Surveying Theory and Practice by Davis *et. al*

Fundamentals of Surveying, by Yousif Syam (Arabic Reference)

Syllabus Classification

Objectives	***Learning outcome***	***Assessment tools***
1-	Students are able to apply knowledge of engineering	By using solved problems. Power point and weight board
2-	Students are able to design and conduct experiments	By using solved problems. Power point and weight board
3-	Students are able to analyze and interpret data	By using solved problems. Power point and weight board
4-	Students are able to work cooperatively and Students are able to apply knowledge of engineering	By using solved problems. Power point and weight board