



College: Programme Course : Engineering Civil Engineering. Surveying 1

Muharram 1437 H





Course Report

Institution :	Majmaah University	Date of CR	20 /05 / 2017.
College/ Department	Engineering / Civil and E	nvironmental E	Engineering

A Course Identification and General Information

1. Course title: Surveying 1			Code	CE 370	Section	446
2. Name of	2. Name of course instructor Dr. Sameh S. Ahmed Location : Majmaah					
3. Year and	3. Year and semester to which this report applies: 2016/17 – Second Semester					
4. Number of	students startir	ng the course?	11 \$	Students complet	ing the course	? 11
5. Course c	5. Course components:					
	Lecture	Tutorial	Laboratory Studio	Practical	Other	Total
Contact Hours	32	16	26			74
Credit	2	0	1			3

B- Course Delivery:

1. Coverage of Planned Program

Topics Covered	Planned Contact Hours	Actual Contact Hours	Reason for Variations (*)
Basic Definitions: What is Surveying? - Plane Surveying - Topographic Surveying - Geodesy - Photogrammetric - GIS, Remote Sensing - GPS.	5	5	
Units of Measurement: Metric equivalents - Tables - Field notes - Methods of keeping notes - Errors and mistakes - Accuracy and Precision.	5	5	
Measurement of Distances : Horizontal distance - Chains - Taps and its equipment - slope measurement by vertical angles.	5	5	
Measurement of Angles: Horizontal angles - Vertical angles - Angles by compass.	5	5	
Traverse Surveys and Computations: Traverse - Open traverse -Closed Traverse - Traverse computations - Traverse closure - Methods of plotting traverses - Cadastral surveying - Practical exercises - Planimeter and its applications.	10	8	Traverse computations not fully covered due to short time



Midterm - 1	2	2	
Levelling : General - Longitudinal levelling - Cross sections - Trigonometric levelling - Direct differential levelling -the Dumpy level - Sources of error in levelling. Height of Instrument Method - Rise and Fall Method - Profiles and areas measurement.	10	10	
International map Numbering	5	4	Were sufficient to cover the topic
Field operations with transit	5	4	
Areas and Volumes : areas of Regular and Irregular areas- Trapezoidal method - Simpson's one third rule, Volume calculations.	10	12	Taken from the above planned time
Midterm - 2	2	2	
Earthwork quantities: Remarks - Cross Sections - Distance between Cross sections - Calculation of areas - Volume by average end area - Earthwork quantities.	5	5	
Contour maps	5	3	2 hrs missed (Covered in CE 101)
Total	74	70	

(*) if there is a difference of more than 25% of the hours planned

2. Consequences of Non-Coverage of Topics

Topics not Fully Covered (if any)	Effected Learning Outcomes	Possible Compensating Action
Traverse computations	No much effect, 5%	Will be covered in CE 371
Contour maps	2%	Has been covered in CE 101
Chains	0%	Omitted due to old method, does
		not use any more.

3. Course learning outcome assessment.

	List course learning outcomes	List methods of assessment for each LO	Summary analysis of assessment results for each LO
1.0	Knowledge		
1.1	The students shall be able to understand different types of surveying.	Quiz	Average = 2.36/3
1.2	The students shall be able measure by instruments, and use mathematics formulae to determine distances, areas, and volumes.	Direct assessment using lab measurements	Average = 1.91/3
1.3	Enhance student's ability to convert between different	Direct	Average =



	List course learning outcomes	List methods of assessment for each LO	Summary analysis of assessment results for each LO
	Units Systems for distances, areas, volume and angles. In addition to understand map scales.	assessment using Quizzes and Exams	2.73/3
1.4	Student being able to draw cadastral and contour maps. Also, be able to conduct correct levelling measurements.	Lab work and producing a map	Average = 1.55/3
1.5	The students shall be able to carry out Earthwork calculations.	Questions in the final exam.	Average = 2.64/3.
2.0	Cognitive Skills		
2.1	The students shall be able to understand and locate International Map Numbering for any city.	Theory and Calculations, Examined in Midterm 2 and final exam.	Average = 2.18/3
2.2	The students shall be able to think through problems solving, reasoning for each problem solved.	Quizzes and Exams	Average = 1.64/3.
2.3	Using the step by step approach in solving the problems.	Exams and mini projects	Average = 1.73/3
2.4	The importance of problem definition and solutions using alternatives.	Question in Final Exam.	Average = 1.73/3
2.5	The students shall be able to differentiate between different units and have engineering scenes in estimating some surveying problems.	Practical sessions and Reports of field measurements	Average= 2.09/3
3.0	Interpersonal Skills & Responsibility		
3.1	The students shall be able to demonstrate their skills in the subject and be able to assess themselves.	Reports, Discussions	Indirect assessment
3.2	Help the student to solve the problem by asking questions during the office hour.	Evaluation of student response and activities in the class	Indirect assessment
4.0	Communication, Information Technology, Numerical		
4.1	The students shall be able to work in a team for data	Field work and	Average= %90.9
4.2	The students shall be able to demonstrate and present their communication skills in the subject.	Reports and seminars	Indirect assessment.
4.3	Students have to be familiar with using the modern information technology such as internet, and smart board.	Reports and seminar, quiz	Indirect assessment.
5.0	Psychomotor		
5.1	NA		



Summarize any actions you recommend for improving teaching strategies as a result of evaluations in table 3 above.

Enhance the following points in the teaching strategies of the course:

- Asking the student to solve the problems on white board guiding him when required.
- Setting assignment problems or mini project which will apply principles and concepts.
- Use of computers for simulation and modelling.

4. Effectiveness of Planned Teaching Strategies for Intended Learning Outcomes set out in the Course Specification

List Teaching Methods set out in Course		They ctive?	Difficulties Experienced (if any) in Using the Strategy and Suggested Action to Deal
Specification	No	Yes	with Those Difficulties.
 Course delivery by citing real life examples and problems. Emphasis on understanding concepts and illustrating applications to problems. Conduct field measurements and creates maps for an urban area. Revise some principles and rule in Algebra and integration. Placing before the class mind-provoking and thinking questions. 		У	 There is no sufficient time to do all the planned actions. Parallel courses should be given like Auto-CAD Labs should be opened for longer time so students can review and do more practice during the available time.
 Solving surveying problems through assignments on each topic. Explaining principles and concepts through real life problems. Asking the students to suggest a solution before giving them the correct answer. Asking the students to explain the steps adopted in the problem and ensures that they understand the problem. Asking searching questions on topic fundamentals. Setting M-1 and M-2 + quizzes and mini projects so that students can apply the knowledge gained. 		У	There is a need to ensure that the students are doing their assignments by themselves and they do not copy form each other.



C. Results

1. Distribution of Grades

Letter Grade	Number of Students	Student Percentage	Analysis of Distribution of Grades
A+	0	0 %	Grados Distribution
Α	1	9 .1 %	Total Students 11
B +	0	0 %	3 3
В	1	9 .1 %	2
C+	1	9.1 %	
С	0	0 %	
D+	3	27.3 %	0 0 0
D	3	27.3 %	A+ A B+ B C+ C D+ D F
F	2	18.1. %	
Denied Entry	0	0%	
In Progress	11	100 %	
Incomplete	0	0 %	



Pass	9	82 %	
Fail	2	16 %	
Withdrawn	0	0 %	

2. Analyze special factors (if any) affecting the results

- No outstanding student in this group but one excellent
- Logic number of students got B
- Normal result for C and C+
- Two students failed.

3. Variations from planned student assessment processes (if any) .

a. Variations (if any) from planned assessment schedule (see Course Specifications)

Variation	Reason
High number of students got D and D+	Attendance of some students and their weakness in Math

b. Variations (if any) from planned assessment processes in Domains of Learning

Variation	Reason
No outstanding students, 1 with A grade	The group was above average

4. Student Grade Achievement Verification :

Method(s) of Verification	Conclusion
Level of fairness in correction is fairly high	All final papers are revised and checked by other faculty member.
Result fair across the C-S of students and earlier results.	Overall results are discussed with the head of department and vice Dean.

D. Resources and Facilities

Difficulties in access to resources or facilities (if any)	Consequences of any difficulties experienced for student learning in the course
Regular attend of the lab classes .	 Select suitable time for practical sessions between 10 and 12.



E. Administrative Issues

Organizational or administrative difficulties encountered (if any)	Consequences of any difficulties experienced for student learning in the course
None	

F Course Evaluation

1 Student evaluation of the course (Attach summary of survey results)

a. List the most important recommendations for improvement and strengths	
• Explain the basics of Math needed for calculations before go deeply in the topic	2.

b. Response of instructor or course team to this evaluation

Partially satisfy.

2. Other Evaluation:

a. List the most important recommendations for improvement and strengths

Sufficient practical sessions during lab work.

b. Response of instructor or course team to this evaluation :

• Results of the final practical exam were high.

G Planning for Improvement

1. Progress on actions proposed for improving the course in previous course reports (if any).

Actions recommended from the most recent course report(s)	Actions Taken	Action Results	Action Analysis
a) Review of strategy at the mid-semester and after assessment of Mid Term - 1.	Done	Overall results deos not improve	Keep trying next semester, this group was almost above average
 b) Group discussion and using different ways in teaching (seminars, Power point presentations, reading, conducting more field works, etc.) 	Done	No good sign for improvement	Action should be implemented again for another group before deciding whether it is effective or not.

2. List what other actions have been taken to improve the course

- Force the students to use reference books.
- Insist to submit the homework on time.



• More exercises must be given to the students.

3. Action Plan for Next Semester/Year

Actions Recommended for Further Improvement	Intended Action Points (should be measurable)	Start Date	Completion Date	Person Responsible
a) More exercises	More time for exercises in using field measurements to solve real problems	17/9/2017	2/1/2018	Instructor
b) Student participation	Ask students to complete solving some problems to the end during the class using calculators and Computer during lab session.	17/9/2017	2/1/2018	Instructor
c) Motivation	Encourage the students to anticipate questions on each topic	17/9/2017	2/1/2018	Instructor
d) Field work	Organize some field trips and allow students to participate in surveying projects	November 2017	December 2018	Instructor

Course Instructor:

Name: Signature:	Dr. Sameh S Ahmed. SaMeH	Date Report Comp	pleted: 20/5/2017	
Program Coordinator:				
Name: Signature:	Dr. Abdullah AlShehri <i>AlShehri</i> .	Date Received :	21/5/2017	