



جامعة المجمعة
Majmaah University

رؤية
VISION
2030
المملكة العربية السعودية
KINGDOM OF SAUDI ARABIA

COURSE REPORT (CR)

Ramadan 1438 H, June 2017

Institution:	Majmaah University
Academic Department :	Civil and Environmental Engineering Department
Programme:	Civil Engineering
Course title and code:	Surveying 1 / CE 370
Report Approved Date :	29/ 08 / 1439 H

A separate Course Report (CR) should be submitted for every course and for each section or campus location where the course is taught, even if the course is taught by the same person. Each CR is to be completed by the course instructor at the end of each course and given to the program coordinator. A combined, comprehensive CR should be prepared by the course coordinator and the separate location reports are to be attached.

Course Report

Institution: Majmaah University	Date of CR: 15/05/2018
College/ Department: Engineering / Civil and Environmental Engineering	

A Course Identification and General Information

1. Course title: <i>Surveying 1</i>	Code # <i>CE 370</i>	Section # <i>565</i>
2. Name of course instructor: <i>Dr. SaMeH S. Ahmed</i>		Location <i>Main Building</i>
3. Year and semester to which this report applies: <i>Year 2/ Level 5</i>		
4. Number of students starting the course?	<input style="width: 40px; height: 20px;" type="text" value="9"/>	Students completing the course? <input style="width: 40px; height: 20px;" type="text" value="9"/>
5. Course components (actual total contact hours and credits per semester):		

		Lecture	Tutorial	Laboratory/ Studio	Practical	Other	Total
Contact Hours	Planed	32	16		32		80
	Actual	30	15		28		73
Credit	Planed	2	1		2		3
	Actual	2	1		2		3



B- Course Delivery

1. Coverage of Planned Program			
Topics Covered	Planned Contact Hours	Actual Contact Hours	Reason for Variations if there is a difference of more than 25% of the hours planned
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	

2. Consequences of Non Coverage of Topics

For any topics where the topic was not taught or practically delivered, comment on how significant you believe the lack of coverage is for the course learning outcomes or for later courses in the program. Suggest possible compensating action.

Topics (if any) not Fully Covered	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	The students shall be able to understand different types of surveying.	Quiz	Average = 2.33/3
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 = 1.56/3
3	Enhance student's ability to convert between different Units Systems for distances, areas, volume and angles. In addition to understand map scales.	Direct assessment using Quizzes and Exams	Average = 2.56/3
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 = 1.78/3



5	The students shall be able to carry out Earthwork calculations.	Questions in the final exam.	Average = 2.64/3.
6	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 = 2.33/3
7	The students shall be able to think through problems solving, reasoning for each problem solved.	Quizzes and Exams	Average = 2.22/3.
8	Using the step by step approach in solving the problems.	Exams and mini projects	Average = 1.67/3
9	The importance of problem definition and solutions using alternatives.	Question in Final Exam.	Average = 1.73/3
10	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= 1.67/3
11	The students shall be able to demonstrate their skills in the subject and be able to assess themselves.	Reports, Discussions	Indirect assessment
12	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
13	The students shall be able to work in a team for data gathering using surveying instruments.	Field work and reports	Average= 100%
14	The students shall be able to demonstrate and present their communication skills in the subject.	Reports and seminars	Indirect assessment.
15	Students have to be familiar with using the modern information technology such as internet, and smart board.	Reports and seminar, quiz	Indirect assessment.

Note: In order to analyze the assessment of student achievement for each course learning outcome, student performance results can be measured and assessed using a KPI, a rubric, or some grading system that aligns student work, exam scores, or other demonstration of successful learning.

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.



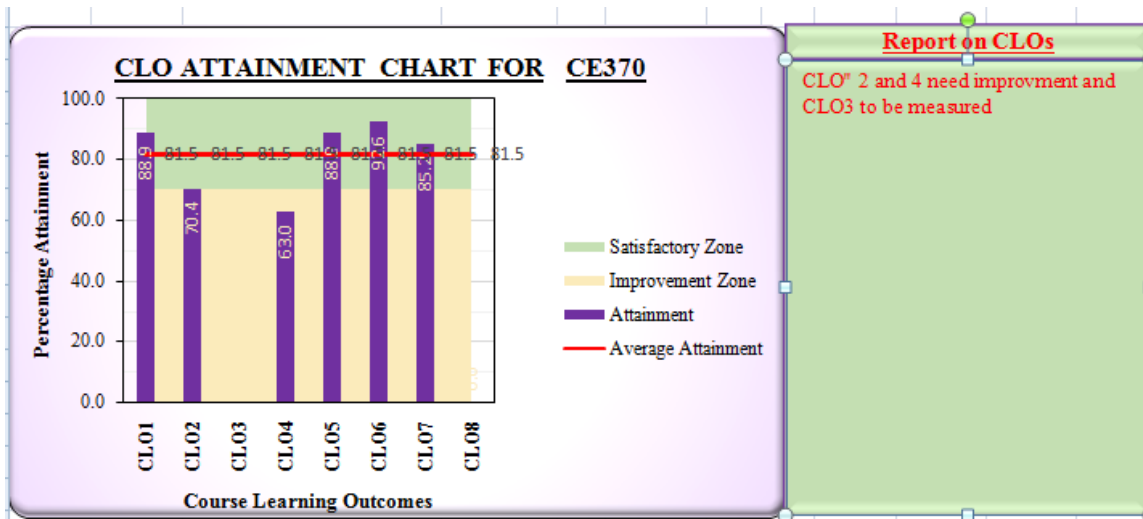
4. Effectiveness of used Teaching Strategies for Learning Outcomes set out in the Course Specification.
(Refer to planned teaching strategies in Course Specification and description of Domains of Learning Outcomes in the National Qualifications Framework)

List Teaching Strategies set out in Course Specification	Were They Effective?		Difficulties Experienced (if any) in Using the Strategy and Suggested Action to Deal with Those Difficulties.
	No	Yes	
<ul style="list-style-type: none"> - 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. 		y	<ul style="list-style-type: none"> - 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.
<ul style="list-style-type: none"> - 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. 		y	There is a need to ensure that the students are doing their assignments by themselves and they do not copy form each other.
<ul style="list-style-type: none"> - Different access to the student to be close with the teacher using, email, website and even phone calls in urgent. - Asking the students to express his opinion on a particular topic. - Divided the students into small groups during the lab sessions and re-arranging the groups. 		y

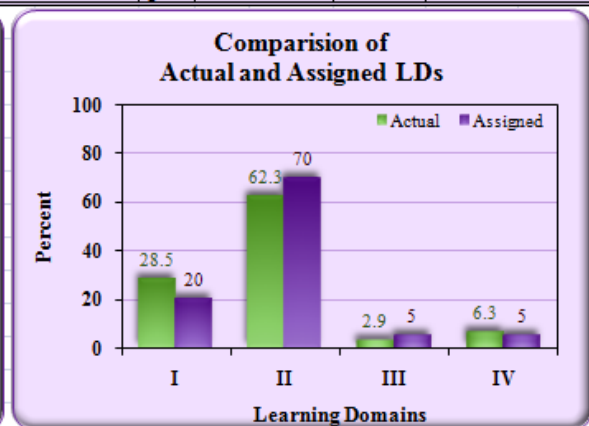
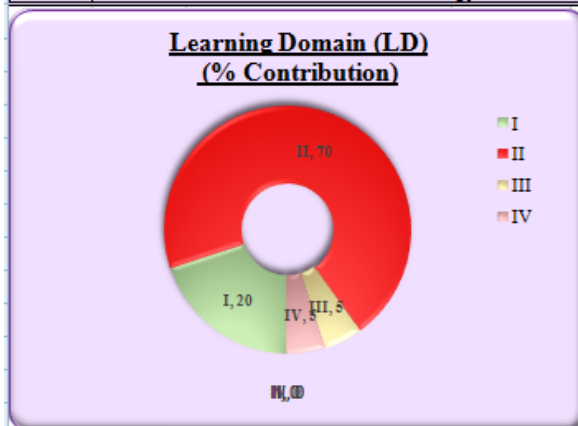


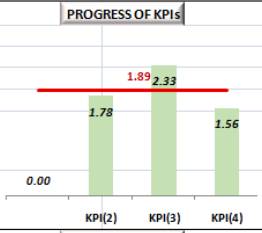
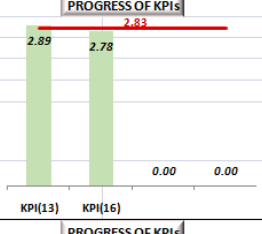

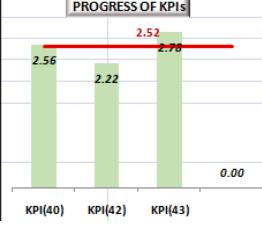
<ul style="list-style-type: none"> - Make the class attractive and full of activations by raising questions and discussions that requires straight thinking and also reverse thinking. - Questioning the students on solving the problem in a reverse manner. 		y	
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C. Results



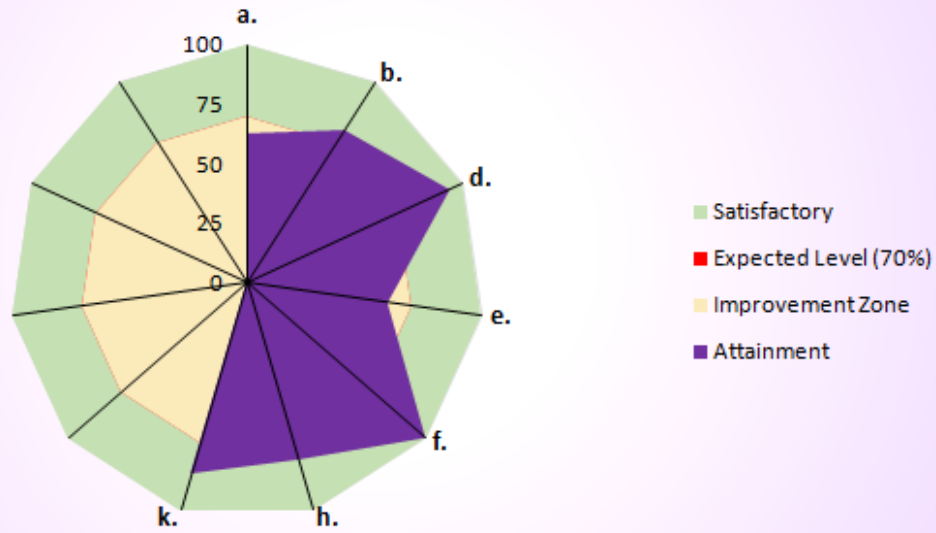
LD	LD Description		Marks		
			Assigned (%)	Actual	Actual (%)
I	Knowledge	a,j,k	20	29.5	28.5
II	Cognitive Skills	b,c,e	70	64.5	62.3
III	Interpersonal and Responsibility Skills	d,f	5	3	2.9
IV	Communication, Information Technology and Numerical Skills	g,h,i	5	6.5	6.3



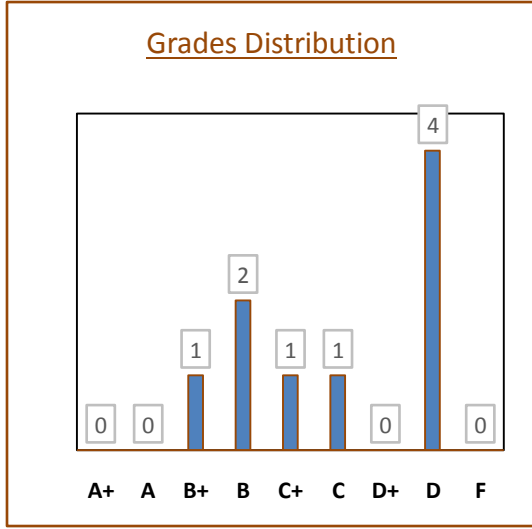
Course	CE370	Surveying-1	Instructor	Dr. Sameh S Ahmed					
Domain	SO	No. of SOs: 7	Section: 565						
a.	An ability to apply knowledge of mathematics, science, and engineering	Students	9	Students	9	Students	9	Weighted Average 1.89 (63.%)	
		Assessment (%)	56	Assessment (%)	33	Assessment (%)	67		
		Program (%)	11	Program (%)	0	Program (%)	11		
		Satisfactory (%)	33	Satisfactory (%)	67	Satisfactory (%)	22		
KPI(2)	1.78	KPI(3)	2.33	KPI(4)	1.56				
b.	An ability to design and conduct experiments, as well as to analyze and interpret data	Students	9	Students	9	Students	9	Weighted Average 2.30 (76.5%)	
		Assessment (%)	11	Assessment (%)	33	Assessment (%)	33		
		Program (%)	44	Program (%)	0	Program (%)	11		
		Satisfactory (%)	44	Satisfactory (%)	67	Satisfactory (%)	56		
KPI(5)	2.33	KPI(6)	2.33	KPI(8)	2.22				
d.	An ability to function on multidisciplinary teams	Students	9	Students	9	Students	9	Weighted Average 2.83 (94.4%)	
		Assessment (%)	0	Assessment (%)	0	Assessment (%)	0		
		Program (%)	11	Program (%)	22	Program (%)	0		
		Satisfactory (%)	89	Satisfactory (%)	78	Satisfactory (%)	0		
KPI(13)	2.89	KPI(16)	2.78						
e.	Ability to identify, formulate, and solve engineering problems	Students	9	Students	9	Students	9	Weighted Average 1.81 (60.2%)	
		Assessment (%)	56	Assessment (%)	56	Assessment (%)	22		
		Program (%)	33	Program (%)	22	Program (%)	11		
		Satisfactory (%)	11	Satisfactory (%)	22	Satisfactory (%)	67		
KPI(17)	1.56	KPI(18)	1.67	KPI(19)	2.44	KPI(20)	1.56		
f.	An understanding of professional and ethical responsibility	Students	9	Students	9	Students	9	Weighted Average 3.00 (100.%)	
		Assessment (%)	0	Assessment (%)	0	Assessment (%)	0		
		Program (%)	0	Program (%)	0	Program (%)	0		
		Satisfactory (%)	100	Satisfactory (%)	100	Satisfactory (%)	100		
KPI(21)	3.00								
h.	The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context	Students	9	Students	9	Students	9	Weighted Average 2.33 (77.8%)	
		Assessment (%)	44	Assessment (%)	0	Assessment (%)	0		
		Program (%)	22	Program (%)	22	Program (%)	22		
		Satisfactory (%)	33	Satisfactory (%)	78	Satisfactory (%)	0		
KPI(29)	1.89	KPI(30)	2.78						
k.	An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice	Students	9	Students	9	Students	9	Weighted Average 2.52 (84.%)	
		Assessment (%)	22	Assessment (%)	33	Assessment (%)	0		
		Program (%)	0	Program (%)	11	Program (%)	22		
		Satisfactory (%)	78	Satisfactory (%)	56	Satisfactory (%)	78		
KPI(40)	2.56	KPI(42)	2.22	KPI(43)	2.78				

SO ATTAINMENT CHART FOR

CE370



1. Distribution of Grades

Letter Grade	Number of Students	Student Percentage	Analysis of Distribution of Grades
A ⁺	0	0 %	<p style="text-align: center;"><u>Grades Distribution</u></p> 
A	0	0 %	
B ⁺	1	0 %	
B	2	9.1 %	
C ⁺	1	9.1 %	
C	1	0 %	
D ⁺	0	27.3 %	
D	4	27.3 %	
F	0	18.1 %	
DeniedEntry	0	0 %	
In Progress	9	100 %	
Incomplete	0	0 %	
Pass	9	100 %	
Fail	0	0%	
Withdrawn	0	0 %	

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

- No outstanding student in this group, only one student got B+
- High number of students got D and High passing percentage 100%.



3. Variations from planned student assessment processes (if any) (see Course Specifications).	
Variations (if any) from planned assessment schedule (see Course Specifications)	
Variation	Reason
High number of students got D	Attendance of some students and their weakness in Math
No outstanding students, 1 with B+ grade	The group was average

4. Student Grade Achievement Verification (eg. cross-check of grade validity by independent evaluator).	
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

1. Difficulties in access to resources or facilities (if any) Regular attend of the lab classes.	2. Consequences of any difficulties experienced for student learning in the course, and proposed action to overcome it. Select suitable time for exercise session between 10 and 12.
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E. Administrative Issues

1. Organizational or administrative difficulties encountered (if any) None	2. Consequences of any difficulties experienced for student learning in the course, and proposed action to overcome it
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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 going deeply in the topic.
b. Response of instructor or course team to this evaluation Partially satisfy
2. Other Evaluation (eg. by head of department, peer observations, accreditation review, other stakeholders)
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 quite 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 improved	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	Improved as seen in <i>b</i> and <i>k</i>	Action should be implemented for next semester

2. List what other actions have been taken to improve the course (based on previous CR, surveys, independent opinion, or course evaluation).

- 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)	Person Responsible
a) More exercises	More time for exercises in using field measurements to solve real problems	Instructor
b) Student participation	Ask students to complete solving some problems to the end during the class using calculators and Computer during lab session.	Instructor
c) Motivation	Encourage the students to anticipate questions on each topic	Instructor
d) Field work	Organize some field trips and allow students to participate in surveying projects	Instructor



Name of Course Instructor: Dr. Sameh S Ahmed

Signature: *Sameh*

Date Report Completed: 14/05/2018

Program Coordinator: Dr. Abdullah AlShehri

Signature: *AlShehri*

Date Received: Meeting #27 on 15/05/2018

