



جامعة المجمعة
Majmaah University

Course Report

College: Engineering
Programme: Civil Engineering (2016-17-S)
Course : Surveying 2

Muharram 1437 H



This form compatible with NCAAA Edition

Course Report

| | | | |
|---------------------|---|------------|-----------------|
| Institution : | Majmaah University | Date of CR | 20 / 05 / 2017. |
| College/ Department | Engineering / Civil and Environmental Engineering | | |

A Course Identification and General Information

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|--|----------------------------------|---------------------------------|-----------------------|-----------|------------|--------------|
| 1. Course title: | Surveying 2 | Code | CE 371 | Section | 484 | |
| 2. Name of course instructor | Dr. Sameh S. Ahmed | Location : | Majmaah | | | |
| 3. Year and semester to which this report applies: | 2016-17 – Second Semester | | | | | |
| 4. Number of students starting the course? | 17 | Students completing the course? | 17 | | | |
| 5. Course components: | | | | | | |
| | Lecture | Tutorial | Laboratory/ Studio | Practical | Other | Total |
| Contact Hours | 30 | 15 | 30 | | | 75 |
| Credit | 2 | 0 | 1 | | | 3 |

B- Course Delivery:

1. Coverage of Planned Program

| Topics Covered | Planned Contact Hours | Actual Contact Hours | Reason for Variations (*) |
|---------------------------------------|-----------------------|----------------------|---|
| Introduction of surveying instruments | 5 | 5 | |
| Angle measurements | 10 | 10 | |
| Distance measurements | 10 | 10 | |
| Traverses | 5 | 5 | |
| Midterm - 1 | 2.5 | 2.5 | |
| Closed Traverses | 5 | 5 | |
| Intersection and resection | 5 | 5 | |
| Design of horizontal curves | 10 | 10 | |
| Design of vertical curves | 5 | 3 | Principles given but application not completed due time |
| Midterm - 2 | 2.5 | 2.5 | |
| Digital Mapping | 5 | 3 | Due time introduced but not fully |
| Mini Project | 10 | 10 | |
| Total | 75 | 71 | |

(*) 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) | Effectuated Learning Outcomes | Possible Compensating Action |
|-----------------------------------|-------------------------------|-------------------------------------|
| Design of vertical curves | No much effect, 2.5% | Will be covered in CE 381 |
| Digital Mapping | 2.5% | Covered partially in CE 370 and 101 |

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 will be able to recognize the errors in measurements | <ul style="list-style-type: none"> Regularly asking questions on different topics and concepts. Midterm and End-semester examinations that will force the student to think and apply the knowledge. Reports and discussions. | Average = 2.59/3 |
| 2.0 | Cognitive Skills | | |
| 2.1 | The students will be able to measure horizontal and vertical angles and distances using theodolite and total station | <ul style="list-style-type: none"> Asking the student to solve the problems on white board | Average = 2.47/3 |
| 2.2 | The students will be able to calculate areas based on field measurements | <ul style="list-style-type: none"> guiding him when required. Asking | Average = 2.12/3 |
| 2.3 | The students will be able to interpret and explain contour and digital maps. | <ul style="list-style-type: none"> students to participate in oral discussion during the class. | Average = 2.35/3 |
| 2.4 | The students will be able to design elements of horizontal and vertical curves | <ul style="list-style-type: none"> Assignment and mini project Questions in Quiz, Midterm and End exam. | Average = 2.0/3 |



| List course learning outcomes | | List methods of assessment for each LO | Summary analysis of assessment results for each LO |
|-------------------------------|--|---|--|
| 3.0 | Interpersonal Skills & Responsibility | | |
| 3.1 | The students will be able to demonstrate their teamwork and leadership skills through functioning in groups during field measurements and calculations | Group work in laboratory work and team activity. • Bonus marks to those who are improving and participating effectively in the class. | Average = 3/3 |
| 4.0 | Communication, Information Technology, Numerical | | |
| 4.1 | N/A | | |
| 5.0 | Psychomotor | | |
| 5.1 | N/A | | |

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

| |
|---|
| <p>Enhance the following points in the teaching strategies of the course:</p> <ul style="list-style-type: none"> • 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 computer for solving some practical problems. |
|---|

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

| List Teaching Methods 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. - Labs should be opened for longer time so students can review and do more practice during the available time. |

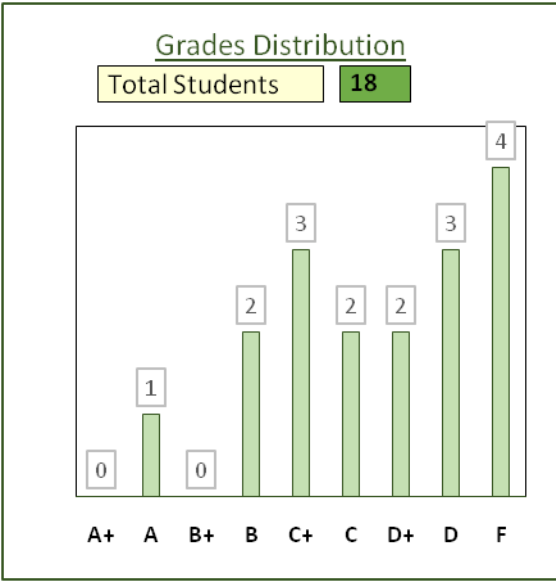


| | | | |
|---|--|---|--|
| <ul style="list-style-type: none"> - Solving surveying problems through assignments on each topic. - Explaining principles and concepts through real life problems. - Asking the students to suggest a solution before giving them the correct answer. - Asking the students to explain 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 | <p>There is a need to ensure that the students are doing their assignments by themselves and they do not copy form each other.</p> |
| <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 | <p>.....</p> |



C. Results

1. Distribution of Grades

| Letter Grade | Number of Students | Student Percentage | Analysis of Distribution of Grades |
|--------------|--------------------|--------------------|---|
| A+ | 0 | 0 % |  <p>Grades Distribution Total Students 18</p> <p>One student withdrawn and considered here fail</p> |
| A | 1 | 5.9 % | |
| B+ | 0 | 0 % | |
| B | 2 | 11.7 % | |
| C+ | 3 | 17.6 % | |
| C | 2 | 11.7 % | |
| D+ | 2 | 11.7 % | |
| D | 3 | 17.6 % | |
| F | 3 | 17.6 % | |
| Denied Entry | 0 | 0 % | |
| In Progress | 17 | 100 % | 17 student attended the final exam |
| Incomplete | 0 | 0 % | |
| Pass | 14 | 82.3 % | |
| Fail | 3 | 17.6 % | |
| Withdrawn | 1 | 5.9 % | |

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

- No outstanding student in this group
- A few number of students got A, B and B (3 students)
- Normal result for C and C+
- 3 students failed to pass; two of them did not attend regularly the class and the lab sessions.

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" | 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, but only 3 with A grade | Those students attended regularly and have good knowledge in Math |

4. Student Grade Achievement Verification:

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

D. Resources and Facilities

| Difficulties in access to resources or facilities (if any) | Consequences of any difficulties experienced for student learning in the course |
|--|--|
| Limited number of Total station instruments | <ul style="list-style-type: none"> Most students do not read sufficient texts and reference books. Getting 2 more Total Stations for the department. |

E. Administrative Issues

| Organizational or administrative difficulties encountered (if any) | Consequences of any difficulties experienced for student learning in the course |
|--|---|
| Mixing old and new study plan students in the same class, | Problem will end from next semester as old plan will be terminated. |

F Course Evaluation

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

| |
|--|
| a. List the most important recommendations for improvement and strengths <ul style="list-style-type: none"> Explain the basics of Math needed for calculations before go deeply in the topic. |
| b. Response of instructor or course team to this evaluation <ul style="list-style-type: none"> Satisfy. |



2. Other Evaluation:

- a. List the most important recommendations for improvement and strengths
- Give more practical sessions during lab work.
- b. Response of instructor or course team to this evaluation :
- Improve the marks of the final practical exam.

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) More time for exercises in using field measurements to solve real problems | Done | Improvement in student skills for using instruments | Instead of 4 practical exercises, they did 6 this semester |
| b) Ask students to complete solving some problems to the end during the class using calculators and Computer during lab session. | Done | Overall results remains almost constant | Students revealed faster ability in calculations using calculators and no complain w.r.t. exam time |

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.
- All exercises must be solved.

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 | 24/09/2017 | One week before the final exam | Instructor |



| | | | | |
|--------------------------|---|---------------|--------------------------------|------------|
| b) Student participation | Ask students to complete solving some problems to the end during the class using calculators and Computer during lab session. | 24/09/2017 | One week before the final exam | Instructor |
| c) Motivation | Encourage the students to anticipate questions on each topic | 24/09/2017 | One week before the final exam | Instructor |
| d) Field work | Allow the students to participate in senior surveying project to get more experience. | November 2017 | December 2017 | Instructor |

Course Instructor:

Name: Dr. Sameh S Ahmed
 Signature: *Sameh* Date Report Completed: 20/05/2017

Program Coordinator:

Name: Dr. Abdullah AlShehri
 Signature: *AlShehri* Date Received : 21/5/2017

