جامعة المجمعة
Majmaah University

Course Specifications

Muharram 1437 H

Institution:	Majmaah University
Academic Department :	Civil & Environmental Engineering
Programme :	Civil Engineering
Course :	Civil Engineering Drawing
Course Coordinator :	Dr. Amjad Khabaz
Programme Coordinator :	Dr. Abdullah Alsheri
Course Specification Approved Date :	3/ 9 / 2015

This form compatible with NCAAA 2013 Edition

A. Course Identification and General Information

1 - Course title : **Civil Engineering Drawing**	Course Code: **CE 102**
2. Credit hours : **3(1,0,4)**	
3 - Program(s) in which the course is offered: **Civil Engineering**	
4 – Course Language : English	
5 - Name of faculty member responsible for the course: **Amjad Khabaz**	
6 - Level/year at which this course is offered : ***level 4/ year 2***	
7 - Pre-requisites for this course (if any) : • **GE 101**	
8 - Co-requisites for this course (if any) : • **Non**	
9 - Location if not on main campus **:** ***(Building opposite Majmaah Governorate)***	

10 - Mode of Instruction (mark all that apply)

A - Traditional classroom	√	What percentage?	**70 %**
B - Blended (traditional and online)	√	What percentage?	**10 %**
D - e-learning	√	What percentage?	**10 %**
E - Correspondence		What percentage?	**……. %**
F - Other	√	What percentage?	**10 %**

Comments :

The course involves Lectures and exercises parts, teaching these two parts depends on explaining, reports, home works and assignments.

B Objectives

What is the main purpose for this course?

- To familiarize students with various civil engineering drawings in civil engineering projects.
- To develop the enough skills in preparing and presentation of civil engineering drawings at professional level.

Briefly describe any plans for developing and improving the course that are being implemented :

- Power point presentation notes
- Practical visits to the construction places to show the actual building construction components.

- Development of drawing using AUTOCAD
- Developing the designing understanding of different construction components and deriving the missing dimensions by simple equations.

C. Course Description

1. Topics to be covered

List of Topics	No. of Weeks	Contact Hours
Introduction: Scope and general principles; conventions in civil engineering drawing.	1	5
Steel Structures Drawings	2	10
Building drawing planning and Design	1	5
Foundation types and their drawing practices	2	10
Midterm-I	0.5	2.5
Retaining Walls and their drawing practices (Masonry & Concrete)	2	10
Culvert and Bridge types and drawing practices	1	5
Canal embankments & Road Crossings	2	10
Midterm-II	0.5	2.5
Architectural drawings	1	5
Reinforced concrete detailing	1	5
Final Exam	1	5
Total	15	75

2. Course components (total contact hours and credits per semester):

	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	15	0	60			75
Credit	1	0	2			3

3. Additional private study/learning hours expected for students per week. **2-3**

2-3 hours per week on an average for self-study and problem solving

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	**Knowledge**		
1.1	Demonstrate the ability to present drafting manually and using AUTOCAD.	– Course delivery by citing real life examples and problems. – Emphasis on understanding concepts and illustrating applications to problems. — Placing before the class mind provoking and thinking questions.	• Regularly asking questions on different topics and concepts. • Midterm and End-semester tests that will force the student to think and apply the knowledge. • Reports and discussions.
1.2	Understand and develop skills required for presenting drawing for CE projects.		
1.3	Knowledge of civil engineering drawing conventions		
1.4	Presenting the concepts, theory and applications by lectures, lab drawing and homework		
1.5			
1.6			
2.0	**Cognitive Skills**		
2.1	The student can draw any civil engineering project with the suitable scale.	- Solving problems through assignments on each topic. - Assignment problems, Exercise / tutorial problems for applications that will force the students to think and apply the knowledge	• Asking the student to solve the problems on white board guiding him when required. • Quizzes and Exams. • Asking students to participate in oral discussion during the class.
2.2	The student can imagine the different projection and deduce it.		
2.3	The student can read the different civil engineering drawings.		
2.4	The student can draw any civil engineering project with the suitable scale.		
2.5			
2.6			

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
		gained. - Asking to 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.	• Setting assignment problems or mini project which will apply principles and concepts. • Questions in Quiz, Midterm and End semester tests which will force the student to think and apply concepts and principles learnt.
3.0	**Interpersonal Skills & Responsibility**		
3.1	The students would be able to utilize diversely the knowledge of manual and AUTOCAD drawing in order to deal with complex projects swiftly.	- Solve the problems by asking sequential questions. - Paying personal attention to each student and caring about his situation.	• Group work in laboratory work and team activity. • Bonus marks to those who are improving and participating effectively in the class.
3.2	Drawing constraints and codes would be easily understood by the students with the use of drawing rules for different structures.		
3.3			
3.4			
3.5			
3.6			
4.0	**Communication, Information Technology, Numerical**		
4.1	The ability of student to join a team work for design projects.	Asking students to solve problems in the class by guiding	• Discussion, Questioning during topics.
4.2	Developing the communication skills through interactive discussing during the lab work, Assignment projects.		

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
4.3		him.	• Highlighting the concepts and principles through real life problems • Asking the students to solve the numerical part and check that the answers are tallying with notes. • Asking the students to participate in evaluating their mates.
4.4			
4.5			
4.6			
5.0	**Psychomotor**		
5.1	Net drawing lines and at short time through lab drawing sheets.	- Make the class attractive and full of activations by raising questions and discussions that requires straight thinking and also reverse thinking.	• Questioning
5.2			
5.3			
5.4			
5.5			
5.6			

5. Schedule of Assessment Tasks for Students During the Semester:

	Assessment task	Week Due	Proportion of Total Assessment
1	Lab and homework assignments (Manual Drawing)	7	20%

2	First midterm exam (Manual Drawing)	12	10%
3	Second midterm exam (Manual Drawing)		10%
4	Lab, assignments, Quiz (AUTOCAD Drawing)		20%
5	Final Exam (Manual + AUTOCAD)		40%
6	Total	15	**100**
7			
8			

D. Student Academic Counseling and Support

Every day one hour is marked as Office Hour in the Time Table of teaching staff. During this hour the students can consult the teacher individually on a one to one basis for academic advice. In all, teaching staff is available for more than 7 hours per week for academic advice beyond lectures and tutorials.

E. Learning Resources

1. List Required Textbooks :

- Drawing sheets given in lecture

2. List Essential References Materials :

- Elsheikh, "Introduction to Drawing for Civil Engineering", McGraw-Hill, (Latest edition).

3. List Recommended Textbooks and Reference Material :

- Singh & Sharma, "Civil Engineering Drawing", Standard Publishers & Distributers, 1980.
- M.G. Shah, C.M. Kale, S.Y. Patki, "Building Drawing", Tata McGraw Hill, Delhi, (Latest edition).
- V.K. Jain, "Services in Building Complex", Khanna Publishers, (Latest edition).
- Chakraborty M., "Civil Engineering Drawing", (Latest edition).

4. List Electronic Materials :

- Selected Papers, and video clips from U-tube and trustable web sites.

5. Other learning material :

-

F. Facilities Required

1. Accommodation

- Lecture room available – (25 students/class) to avoid student movement. It is necessary to keep lectures for one course / level in the same classroom.
- Manual Drawing Lab
- Computer Lab

2. Computing resources

- AUTOCAD must be installed in the all PC of computer lab to improve the drawing skills.

3. Other resources

- None

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching:

- Importance of feedback should be first explained. Only then the feedback should be taken. Have a question as to how the teaching can be improved – speed, more problems etc. Still we depend on the evaluation of previous semesters. However, I intend to do assessment at the middle of each semester.

2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor :

- Completion course evaluation questionnaire,
- Classroom observations to measure Student Behaviour through how well the student groups are interacting in-class activity and how well the in-class activity went.

3 Processes for Improvement of Teaching :

- Plan: The instructor will develop a strategy for teaching.
- Do: The strategy will be implemented for one semester.
- Study: The experiences of the students will be collected through a survey.
- Act: Effective teaching strategies will be implemented and revised as more experiences are gained.

4. Processes for Verifying Standards of Student Achievement

- Check marking of a sample of examination papers.

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement :

- Continuous improvement is a circular process, encompassing student assessment, course planning and design, implementation, evaluation, and revision.
- A feedback from all relevant assessment tools must be considered in the continuous process of course objectives refinement and assessment.
- Continuous process for reviewing feedback from student on the quality of the course and planning for improvement.

Course Specification Approved
Department Official Meeting No (…..) Date … / …. / ….. *H*

Course's Coordinator		Department Head	
Name :	Dr. Amjad Khabaz	***Name :***	Dr. Abdullah Alshehri
Signature :	*Amjad*	***Signature :***	.....
Date :	3 / 9 / 2015	***Date :***	3 / 9 / 2015