

COURSE DESCRIPTIONS

Faculty	Engineering				
Department	Civil Engineering			NQF level	9
Course Title	Civil Drawing	Code	702401	Prerequisite	
Credit Hours	1	Theory	1	Practical	2
Course Leader	Dr. Faten Albtoush	email	f.albtoush @jadara.edu.jo		
Lecturers	Dr. Faten Albtoush	emails	f.albtoush @jadara.edu.jo		
Lecture time	[13:00 – 16:00] Mon	Classroom	C002	Attendance	Fulltime
Semester	1 st Semester	Production	10/2023	Updated	10/2024
Type of Teaching	<input checked="" type="checkbox"/> Face to Face <input type="checkbox"/> Blended <input type="checkbox"/> Online				

Short Description

This course is designed to provide civil engineering undergraduates with a basic understanding of the theory and practice of civil engineering drawings. Students will learn to read and construct blueprints and working drawings by means of lectures, discussion of drawing, examples related to existing buildings or projects, and CAD practice. Topics will include basic fundamentals of graphics and drafting principles, Auto-Cad fundamentals, RCC and steel structural drawings, Geotechnical drawings, Transportation drawings, and Hydraulic structure drawings.

Course Objectives

This course covers the fundamentals of civil engineering drawings using Auto-Cad. Topics include: Auto-Cad: Symbols used in Civil Engineering drawing: Doors, Windows and Staircases Drawings. Comprehensive Drawing of Residential building, (Layout, plan, elevation and sectional elevation). Preparation of Layout planning for different Civil Engineering Projects. Preparation of layout plan/Maps and building drawing. At the end of the course, students should be able to:

1. Know symbols used in civil engineering drawings.
2. Draw different views and take sections in windows, doors and staircases.
3. Draw layout, plans and sections of residential buildings and different civil engineering project views.

Course Intended Learning Outcomes (CILOs)

A. Knowledge - Theoretical Understanding

- a1. The ability to use several engineering drawings tools.

B. Knowledge - Practical Application

- a2. The ability to use several principles and procedure of structures engineering drawing using AutoCAD.

C. Skills - Generic Problem Solving and Analytical Skills

- b1. Draw different views and take sections in windows, doors and staircases.
- b2. Draw layout, plans and sections of residential buildings and different civil engineering project views.

D. Skills - Communication, ICT, and Numeracy
C1:
E. Competence: Autonomy, Responsibility, and Context
Teaching and Learning Methods
<input checked="" type="checkbox"/> Face to Face Lectures <input type="checkbox"/> Brain Storming <input type="checkbox"/> Synchronous remote <input type="checkbox"/> Asynchronous remote <input type="checkbox"/> Using Video <input checked="" type="checkbox"/> Discussions <input type="checkbox"/> Research Project <input type="checkbox"/> Case Study <input type="checkbox"/> Field visit <input checked="" type="checkbox"/> Problem solving
Assessment Methods
<input type="checkbox"/> Formative Assessment <input checked="" type="checkbox"/> Quiz <input checked="" type="checkbox"/> Lab Exam <input checked="" type="checkbox"/> Homework <input type="checkbox"/> Project Assessment <input checked="" type="checkbox"/> Oral Presentation <input checked="" type="checkbox"/> Midterm <input checked="" type="checkbox"/> Final Exam

Course Contents					
Week	Hours	CILOs	Topics	Teaching & Learning Methods	Assessment Methods
1.	3	a1	Introduction to Civil Engineering Drawing	Theoretical Lecture + Demonstration	Exam
2.	3	a2	Drawing Instruments	Application on AutoCAD	Exam
3.	3	a1 & b1	Architectural drawing: Floor plan, Footing plan	Theoretical Lecture + Demonstration & Application on AutoCAD	Exam
4.	3	b1	Practice	Application on AutoCAD	Exam
5.	3	a2 & b2	Basement floor: Elevation, Sections	Theoretical Lecture + Demonstration & Application on AutoCAD	Exam
6.	3	a2 & b2	Basement floor: Elevation, Sections	Theoretical Lecture + Demonstration & Application on AutoCAD	
7.	Midterm Exam 30%				
8.	3	a1 & b2	Structural behaviour of reinforced concrete.	Theoretical Lecture + Demonstration & Application on AutoCAD	Exam

9.	3	a2 & b1	Detailing of reinforced concrete: Thickness of lines, Gridlines	Theoretical Lecture + Demonstration & Application on AutoCAD	Exam	
10.	3	b1	Practice	Application on AutoCAD	assignment	
11.	3	a2 & b2	Beam and column detail: Column details	Theoretical Lecture + Demonstration	Exam	
12.	3	B2	Practice	Application on AutoCAD	Exam	
13.	3	a2 & b2	Slabs, stair and wall detail.	Theoretical lecture + demonstration	exam	
14.	3	b2	Practice	Application on AutoCAD	assignment	
15.	2		REVISION	Face to Face Lectures, Asynchronous remote		
16.	2	Final Exam 40%				

Infrastructure	
Textbook	Thomas, Michael Victor. "A guide to the preparation of civil engineering drawings." (No Title) (1990).
References	
Required reading	“Understanding Construction Drawings” by Mark Huth, 2005, Thomson Delmar Learning
Electronic materials	Lecture slides & lecture links loaded on e-learning system.
Other	

Course Assessment Plan							
Assessment Method		Grade	CILOs				
			a1	a2	b1	b2	c1
First (Midterm)		30	7	8	15		
Second (if applicable)							
Final Exam		50	5	10	16	19	
Coursework		20					
Coursework assessment	Assignments				5	10	
	Case study						
	Discussion and interaction						
	Group work activities						

	Lab tests and assignments						
	Presentations						
	Quizzes	5				5	
Total		100	12	18	36	34	

Plagiarism

Plagiarism is claiming that someone else's work is your own. The department has a strict policy regarding plagiarism and, if plagiarism is indeed discovered, this policy will be applied. Note that punishments apply also to anyone assisting another to commit plagiarism (for example by knowingly allowing someone to copy your code).

Plagiarism is different from group work in which a number of individuals share ideas on how to carry out the coursework. You are strongly encouraged to work in small groups, and you will certainly not be penalized for doing so. This means that you may work together on the program. What is important is that you have a full understanding of all aspects of the completed program. In order to allow proper assessment that this is indeed the case, you must adhere strictly to the course work requirements as outlined above and detailed in the coursework problem description. These requirements are in place to encourage individual understanding, facilitate individual assessment, and deter plagiarism.