



The Hashemite University
Faculty of Engineering
Department of Allied Engineering sciences
Course Syllabus
First Semester
2022-2023



COURSE TITLE:	Engineering Drawing (2 Credit Hours)			COURSE NUMBER:	110400201
DESIGNATION:	Compulsory			PREREQUISITE(S):	-
INSTRUCTOR:	Dr. Radwan Alelaïmat	OFFICE	Eng. 3082	INSTRUCTOR'S	radwana@hu.edu.jo
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OFFICE HOURS:	To be announced by the instructor on the Ms. Teams group.				

Course Description (catalog):

The course is designed to introduce principles of engineering drawing and descriptive geometry and enhance students' visualization capabilities to handle 3D problems. It is hoped that this course will enable students to read and understand design details of engineering projects.

Textbook(s) and/or Other Supplementary Materials:

Engineering drawing manual and lecture notes.

References:

James H. Earle, "Engineering Design Graphics", Addison Wesley.

Major Topics Covered:

Topic	# Weeks	# Contact hours*
Introduction to Engineering Drawing: Drawing instruments, Line techniques, Presentation of drawings, Lettering.	1	3
Geometric Construction: Lines, Angles, offsets, and tangency.	2	9
Geometric Construction: Ellipses.	1	3
Orthographic Drawing: Multi-view orthographic projections, Free hand sketching.	2	9
Dimensioning: Rules.	1	3
Sections: Basics of sectioning, Types of sections.	2	6
Pictorials: Isometric drawing and projection.	3	9
Missing Views	1	3
Total	13	45

*Contact hours include lectures, quizzes, and exams.

Specific Outcomes of Instruction (Course Learning Outcomes):

After completing the course, the student will:

- CLO 1:** Introduce the fundamentals of engineering drawing language that enables engineering ideas to be expressed clearly through visual illustration. (1,6).
- CLO 2:** Be able to enhance their 3D capabilities to visualize, analyze, and understand engineering related problems. (6)
- CLO 3:** Be able to provide completeness of details necessary for designing and construction of machines and or structural elements. (6)

Student Outcomes (SO) Addressed by the Course:

#	Outcome Description	Contribution
General Engineering Student Outcomes		
(1)	an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics	M
(2)	an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors	
(3)	an ability to communicate effectively with a range of audiences	
(4)	an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts	
(5)	an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives	
(6)	an ability to develop and conduct appropriate experimentation, analyze, and interpret data, and use engineering judgment to draw conclusions	H
(7)	an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.	
H=High, M= Medium, L=Low		

Grading Plan:	Midterm Exam	30 Points	Sunday 20/11/2022
	Lab. work	30 Points	(21-25)/12/2022
	Final Exam	40 Points	Sunday 08/01/2023

Prepared by: Dr. Radwan Alelaimat **Date:** 04 Nov. 2022