



Philadelphia University
Faculty of Engineering
Department of Architecture
First semester, academic year (2018-2019)

Course syllabus

Course title: Manual Engineering Drawing	Course code: 0660131
Course level: First year.	Course prerequisite (s) and/or corequisite (s):None
Lecture time: 13:10-15:00 Sun.,Tue.	Credit hours: 1 Hours
	Contact hours: 2 Hours
Location: Third Floor of the department of architecture, Hall 306	

Academic Staff

Specifics

Name	Rank	Office number and location	Office hours	E-mail address
Noor Al-huda Abu Ghunmi	Lecturer	Fourth floor, Office No. 412	11:15- 1:00 Sun, Tue.	Nabughunmi@philadelphia.edu.jo

Course description:

This course is designed to introduce students to the basic concepts, skill and techniques needed to create engineering technical drawings, using the principles of drafting to include terminology and fundamentals, including size and shape descriptions, projection methods, geometric construction, sections, and auxiliary views.

Content:

An insight into basic elements of drafting: selection and use of instruments, lettering, applied geometry, freehand sketching, orthographic projection, sectioning, dimensioning, isometric and oblique pictorial representation, and fastener symbols.

Course objectives:

no	Course objectives	SPC
1	To introduce the student to the fundamentals of engineering drawing.	A1
2	To develop basic skills in the use of drawing instruments and drafting techniques.	B4
3	To instill an attitude for neatness, orderliness, accuracy, speed, and legibility.	A1,B4
4	To introduce drafting terminology.	B4

Course/ resources:

1. Bertolin, Wiebe, Miller, and Nasman, "**Technical Graphics Communication**", 9th Edition, Irwin Publishing Co., Inc., Chicago.
2. Smith and Ramirez, "**Technical Drawing 101**" 2nd Edition, Prentice Hall Publishers
3. Slocum, Alex. "**Fundamentals of Design.**"
4. Blanco, Ernesto E., et al. "**Design Handbook: Engineering Drawing and Sketching.**"

Teaching Activities:

The course will be assigned to one 2 hour "lab" session each week. These "lab" sessions have multiple activities: lecture, tutorial studios, assignments, Quizzes and discussions.

Teaching Methodology:

This course is taught in the classroom in a lecture/laboratory format. The lecture will generally introduce concepts and skills, which will then be developed and applied in the laboratory.

Learning outcomes:

BY THE END OF THE COURSE STUDENT MUST PROVIDE A WAY TO STORE DRAWING OUTSIDE OF CLASS.

Expected workload:

On average students need to spend 5 hours of study and preparation for each 2 hours lecture/tutorial.

Attendance policy:

Absence from lectures and/or tutorials shall not exceed 15%. Students who exceed the 15% limit without a medical or emergency excuse acceptable to and approved by the Dean of the relevant college/faculty shall not be allowed to take the final examination and shall receive a mark of zero for the course. If the excuse is approved by the Dean, the student shall be considered to have withdrawn from the course

Assessment instruments

- Exams (First, Second Exam).
- Project reviews and evaluation.
- Quizzes.
- Short reports and/ or presentations, and/ or Short research projects.
- Homework assignments.

<u>Allocation of Marks</u>	
Assessment Instruments	Mark
First examination	5
Second examination	5
Projects submissions and developments, homework assignments	50
Final Project	40
Total	100

Course/ Module academic calendar

	Course Program	Calendar	Exams
1	1. Drawing Instrument and Aids 2. Framing: Title Block and Sheet Layout	26/2	
2	1. Lines Types 2. LETTERING	5/3	
3	Dimensioning Practice SCALES	12/3	
4	Geometrical Construction	19/3	
5	Orthographic Projection	26/3	
6	Exam 1	2/4	5%
7	Orthographic Projection	9-23/4	
8	Exam 2	7/5	5%
9	Isometric Projection	30/4-14/5	
10	Final Exam	21/5	

Development Tools			
no	Title	Student Performance Criteria (Realms)	
		CT	BP
		A1	B4
Exercises			
1	Exercise 1: Lines Types		√
2	Exercise 2: LETTERING	√	√
3	Exercise 3: Dimensioning Practice	√	√
4	Exercise 4: SCALES	√	√
5	Exercise 5: Geometrical Construction		√
6	Exercise 6: Orthographic Projection		√
7	Exercise 7: Isometric Projections	√	√