



**Philadelphia University**  
 Faculty of Engineering and Technology  
 Department of Architecture  
 Second Semester 2022/2023

**Course Details:**

<b>Title:</b>	Manual Engineering Drawing (0660131)			
<b>Prerequisite:</b>	None			
<b>Credit Hours:</b>	2 credit hours (16 weeks per semester, approximately 32 contact hours)			
<b>Course Logistics</b>	Term, class location and time, notation if online			
<b>Textbook:</b>	Given by Instructor.			
<b>References:</b>	<ul style="list-style-type: none"> <li>• Bertolin, Wiebe, Miller, and Nasman, "<b>Technical Graphics Communication</b>", 9h Edition, Irwin Publishing Co., Inc., Chicago.</li> <li>• Smith and Ramirez, "<b>Technical Drawing 101</b>" 2nd Edition, Prentice Hall Publishers</li> <li>• Slocum, Alex. "<b>Fundamentals of Design</b>".</li> <li>• Blanco, Ernesto E., et al. "<b>Design Handbook: Engineering Drawing and Sketching.</b>"</li> </ul>			
<b>Course Description:</b>	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.			
<b>Course Content:</b>	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.			
	<b>Name</b>	<b>Rank</b>	<b>Office Number and Location</b>	<b>E-mail Address</b>
<b>Instructor:</b>	Arch. Noor Al-Huda Abu Ghunmi	Lecturer	61-301	<b>Nooralhuda.abugunmy@yahoo.com</b>
<b>TA information</b>				

## Course Outlines:

Calendar	Topic
Week 1	1. Drawing Instrument and Aids 2. Framing: Title Block and Sheet Layout
Week 2	1. Lines Types 2. LETTERING
Week 3	1. Dimensioning Practice 2. SCALES
Week 4	Geometrical Construction
Week 5	Orthographic Projection
Week 6	Exam 1
Week 7	Orthographic Projection
Week 8	Exam 2
Week 9	Isometric Projection
Week 10	Final Exam – Final Project

## Course Learning Outcomes with reference to NAAB Student Outcomes:

Upon successful completion of this course, student should be able to:

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

## Assessment Guidance:

Evaluation of the student performance during the semester (total final mark) will be conducted according to the following activities:

- Sub-Exams:** The students will be subjected to two scheduled Drawing exams, first exam and second exam during the semester. Each exam will cover materials given in lectures and Labs in the previous 3-4 weeks.
- Quizzes:** (1-2) quizzes of (10-15) minutes will be conducted during the semester. The materials of the quizzes are set by the lecturer.
- Homework:** Tutorials sheets will be handed out to the students and homework should be drawn individually and submitted before or on a set agreed date.  
Cheating by copying homework assignments from others is strictly forbidden and punishable by awarding the work with zero mark.
- Projects:** One project will be given to students at the end of the semester covering the 3D materials taught in the course.

## **Grading policy:**

Mid Exam	10%
Assignments, Homework and Quizzes	60%
Final Project	30%

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Total: 100%

## **Attendance Regulation:**

The semester has in total 32 credit hours. Total absence hours from classes and tutorials must not exceed 15% of the total credit hours. Exceeding this limit without a medical or emergency excuse approved by the deanship will prohibit the student from sitting the final exam and a zero mark will be recorded for the course. If the excuse is approved by the deanship the student will be considered withdrawn from the course.