Philadelphia University

Faculty of Engineering and Technology
Department of Mechatronics Engineering

Course Information

Title:	CAD/CAM Lab (640541)
Prerequisite:	Computer Engineering Drawing (660132)
Credit Hours:	1 credit hour ((14 weeks per semester))
Textbook:	Pro/Engineer software Tutorials
References:	Engineering Design Graphics by James H. Earle, 7th edition.
Description:	The course is a requirement for Mechatronics Engineering students. At completing this course, the student should be able to understand how to draw parts in pro Engineering software by using the commands of Extrude, Revolve, Sweep, Blend, Helical sweep and assembly.
Instructor:	Eng. Nessreen Al-Zboon Office: Mechanical Engineering building, room E6313 , ext. : 2624

Course Topics:

Week	Topic
1	Introduction to Interface.
2	Extruding details.
3	Revolving details with hole tool.
4,5	Complex parts, Datum planes, Chamfer, Fillet.
6,7	Mirror, Pattern, Datum planes (inclined).
8	Sweep, Helical sweep, Blend.
9	Assembly
10	Engineering Drawings

Course Learning Outcomes and Relation to ABET Student Outcomes:

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

1.	Design a part by creating solids and design assembly module by allowing parts to be grouped into assemblies or subassemblies by using Pro Engineering software.	[6]
2.	Effectively use the Pro Engineering software.	[6]

Evaluation methods:

Evaluation of students' performance (final grade) will be based on the following categories:

Exams: Midterm exam in week 9.

Quizzes: 15-minute quizzes will be given to the students during the semester. These quizzes will cover material discussed during the previous lecture(s).

Homework: Homework should be solved individually and submitted before the due date.

Classwork Exercises should be solved during class

Final Exam: The final exam will cover all the class material.

Grading policy:

Midterm exam	30%
Home works, Quizzes and class works	30%
Final Exam	40%
Total:	100%

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 If the excuse is approved by the Dean, the student shall be considered to have withdrawn from the course.