Course Details:

Title: Engineering Project 1 (610359)

Prerequisite: Electronics (1) (650242) and Engineering Workshop (2) (620172)

Credit Hours: 1 credit hour (16 weeks per semester, approximately 16 contact hours)

References: An introductory presentation is given in the first week and is available in the instructor's web page.

Course Description: Theoretical investigation, practical implementation or both of a project under the supervision of a faculty member. Detailed report as well as oral examination is required.

Course Outlines:

Week	Topic
1	Introduction to Engineering project (1).
2, 3, 4	Introducing to different electrical and electronic components in the workshop.
5, 6	Introducing to different tests and measurements methods that can be used in the workshop.
7, 8, 9	Electronic system design, circuit diagram, and implementing student's project on a breadboard.
10, 11	Design and Calculations, Cross Check before Implementation
12, 13	Project implementation using EAGLE software.
14, 15	PCB Soldering.
16	Presentations, discussions and evaluations.

Course Learning Outcomes with reference to ABET Student Outcomes:

Upon successful completion of this course, student should:

1.	Know how to use, test, conduct, and design using different electrical and electronic components	[b, c]
2.	Know how to implement a project on a breadboard.	[b, c]
3.	Use different CADs software.	[b, k]

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 exams, first exam and second exam during the semester. Each exam will cover materials given in workshop in the previous 3-4 weeks.

Quizzes: Short quizzes will be conducted during the semester. The materials of the quizzes are set by the lecturer.

Final Exam: The students will undergo a scheduled final exam at the end of the semester. This exam is divided into two parts; oral and practical. The student should provide a technical report describing his project.

Grading policy:

First Exam	20%
Second Exam	20%
Quizzes	20%
Final Exam	40%
Total:	100%

Attendance Regulation:

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.

May , 2018