Course Syllabus

EECS 1000 - EECS First Year Design

Credits/Contact Hours

3 credit hours/100 minutes classroom contact per week, plus 2.5 hours of lab contact per week.

Instructor's Name

Dr. Richard G. Molyet

Textbook

Amos Gilat, "MATLAB, An Introduction with Applications," Wiley, 5th edition, 2014.

Course Information

Orientation to the University, college and departmental facilities, procedures and methodologies available to the student for the academic journey. Introduction to engineering design to EECS freshmen with emphasis on a semester long team-based design project.

Prerequisite: None.

Required for CSE and EE majors.

Specific Goals- Student Learning Objectives (SLOs) The student will be able to

- 1. identify the stages of team development and give examples of team behavior that are characteristic of each stage.
- 2. function effectively on a team, with effectiveness being determined by instructor observation, peer ratings, and self-assessment.
- 3. write an effective technical report for a term project.
- propose a solution or critique a proposed solution to an engineering problem, identifying possible negative global or societal consequences and recommending ways to minimize or avoid them.
- understand the professional, ethical, legal, security and social impact and implication of an engineering problem and its solution.
- 6. use state-of-the-art methodologies, techniques, and paradigms.
- 7. use online resources to obtain current literature on engineering components.
- 8. understand the purpose and availability of professional societies and their programs.
- recognize and adopt a code of professional responsibility which will govern their actions as engineers including: their professional responsibility, competency, truthfulness in

- public statements, and the avoidance of both conflicts of interest and improper solicitation.
- 10. identify contemporary regional, national, or global socioeconomic problems that may confront engineers during the course of their professional careers

Topics

- 1. University, college and departmental policies and procedures
- 2. Skills for a successful academic journey
- 3. Registration and advising
- 4. Computer facilities and email
- 5. Engineering problem solving
- 6. Introduction to CSE fields
- 7. Introduction to EE fields
- 8. Introduction to MATLAB
- 9. Co-op program