Department: Electrical and Computer Engineering

**EEL 4911C – Senior Design Project I**

**Curriculum Status:** Required course for EE and CpE majors.

**Catalog Description:** Senior students are exposed to concepts in design, project management, engineering team organization, and professionalism. Students are grouped into design teams where these principles are put into practice in organizing, proposing, and developing an engineering project. Periodic written reports and oral presentations and a final written proposal are required. The lecture material and texts provide instructions on project management, ethics, and design skills.

**Prerequisites:**
For EE Majors: EEL3111, EEL3112, EEL3705, EEL3300, and at least 4 out of the following 5 required EE courses: EEL3135, EEL3472, EEL4515, EEL4021, EEL4746.

For CpE Majors: EEL3111, EEL3112, EEL3705, EEL3300, EEL4746, EEL4712, and COP 3530 (FAMU) or COP 4530 (FSU)

**Note:** Up to 2 of the prerequisites can be taken as co-requisites.

**Textbooks/Required Material:**
1. Handbook of Public Speaking for Scientists & Engineers, Author: Kenny, Publisher: TAYL, Copyright Year: 1982.
2. Design for Electrical & Computer Engineers, Author: Ford, Publisher: MCG, Copyright Year: 2008.

**Course Objectives:**
1. Identify engineering problems using a needs assessment
2. Estimate the costs of a project and prepare a proposed budget.
3. Prepare a project schedule
4. Develop effective oral presentations and written documentation.
5. Utilize available resources to engage in life-long learning.
6. Recognize the impact of engineering solutions on society
7. Develop an understanding of the professional and ethical responsibility

**Topics covered:**
1. The System Design Process
2. Requirements Analysis
3. Project Management
4. Team Dynamics
5. Effective Oral and Written Presentations
6. Preparing for life-long learning
7. Professional and Ethical Responsibility
Class Schedule: One 50 minute lecture per week and laboratory hours (3 credit hours).

Subject Area: Engineering

Significant Design: Yes

Relationship to Assessed ABET Student Outcomes: 2(a-d), 5(a-d)

Last Updated by: R.J. Perry   Date: 4/30/2021