# **EECE401 Senior Design I**

CRN: 83550

Class hours: M 1 - 4 pm @ LKD 3015 Course website: www.mwftr.com/

**Instructor:** 

Dr. Charles Kim (office: 3014 LKD) Office Hours: TW 1 – 3 <u>ckim@howard.edu</u> 202-806-4821

### **Course Goals**

- Engineering design principles: "applying technical knowledge to meet people's needs"
- Process of design to meet the needs.
- Team project teamwork
- Professional communication
- Socially responsible engineering/design

**Prerequisites or Co-requisites:** Senior Standing (those who have acquired 90 or more credit hours of EE curriculum courses)

**TEXTBOOK:** Required (?): Vern Johnson and Reid Bailey, *Becoming a Technical Professional*, Kendal/Hunt Publishing Co. 3rd Edition. ISBN 13:978-0-7575-2765-4.

# **GRADING**

## **Individual 25 %**

Ethics Essay- 10%

Final Exam - 10%

Team Participation (graded by team leader) – 5%

### **Team 75%**

Team Contract – 5%

Problem Statement - 10%

Design Requirements – 10%

Solution Design Presentation – 20%

Solution Design Report – 20%

Other Team activities – 10%

Final individual grade = (individual score) + (team score) \*(peer evaluation point) + attendance (5%)

# **COURSE SCHEDULE** (subject to change)

Date	Topic	Assignment
Week 1	Kick-off meeting	
Week 2	Introduction to Project	Assignment 1
Week 3	School Holiday	
Week 4	Design Process	Assignment 2 - Practice for writing problem statement
Week 5	Team and Teamwork	Team Contract
Week 6	Design Requirement	Problem Statement & Design Requirements
Week 7	Solution Generation	Section 1 of Solution Report
Week 8	Engineering Ethics	Ethics Essay
Week 9	Solution Generation continued	Section 2 of Solution Report
Week 10	Intellectual Property Right	
Week 11	Team Presentation	Section 3 of Solution Report
Week 12	Life Long Learning	Section 4 of Solution Report
Week 13	Peer Evaluation	Final Solution Report
Week 14	Solution Presentation 1	Team presentation
Week 15	Solution Presentation 2	Team presentation
Week 16	Final Exam	