ECE317 Final Project

Overview:

In lieu of a Final Exam you are required to do a Final Project for this course. You will divide into groups of 3-4 students and work together on the project. The project involves the investigation of some device, system, etc. and addressing the role of electrical and computer engineering in that device or system. You will do literature research using technical journals and the web, and can consult with faculty who are experts in your topic area.

Presentation:

Each group will make a 15 minute PowerPoint presentation with an additional 5 minutes for questions during one of the two last class sessions (either May 2 or May 4). During your presentation you will be expected to teach the rest of the class how your device or system works by using your knowledge of ECE.

Presentations will be in smart business casual attire (for example, a sport jacket and tie for men). You will be graded on appearance, presentation style, technical content, and comprehension of the material. In addition to your oral presentation, each group will submit an electronic copy of a formal Abstract and of the PowerPoint slides.

Other faculty will be invited to attend this series of presentations. I will take their comments into account, but the project presentation grade will be determined by me. Attendees may include the administrators and faculty of the T&M Program and of the ECE Department.

Schedule:

The following schedule provides due dates. Treat these as absolute deadlines. You are welcome (encouraged) to turn in materials early. Prof. Frizzell will review them and pass his comments on to you. You can resubmit as many times as you like prior to the due date. Grades are recorded for the version Prof. Frizzell has in his possession on the due date. Due dates are provided in the syllabus. There is a total of 125 points assigned to the final project. The point distribution is given below.

Topic and group members (5 points)

Rough Draft of Presentation Due (10 points)
Final Versions of both Abstract and Presentation Due at presentation (10 points)

Final Presentation: Your presentation of your final Project will be on one of the two following dates. (90 points)

Monday, May 2, 8:00 am - 9:20 AM in our classroom
Wednesday, May 4, 8:00 am - 9:20 AM in our classroom

Groups and Topics for Spring 2016

Examples of Some Topics from Previous Years

Self-Reconfiguring Robotics
Plug-in Hybrid Automobiles
3D Television
Portable Power Generation
Global Positioning Satellites
LED Technology
User Interface Technology
RFID Technology
Nanotechnology
Touchscreen Displays
The Taser
Digital Camera
MP3 Players
RADAR
Photovoltaics: Emerging Energy Technology
Touch Screen Technologies
Wireless Power Transmission
Cell Telephone Communications Protocols
Tesla Motors
Lilypad Arduinos
Flexible Electronics
Solid State Hard Drives
Electric Cars
Sound Engineering and Acoustics
3D Printing
FitBit
Tasers
Noise Cancelling Headphones