

ESE205 — Introduction to Engineering Design

Humberto Gonzalez (hgonzale@wustl.edu)

Fall 2016

General Information

Prerequisites: CSE131, Phy117A or equivalent.

Laboratory: Urbauer Hall 015.

Webpage: <http://classes.engineering.wustl.edu/ese205>

Teaching Assistants:

- Kjartan Brownell (kbrownell@wustl.edu).
- William Luer (wluer@wustl.edu).
- Andrew O’Sullivan (a.osull@wustl.edu).

Description

A hands-on course where students, divided in groups of two or three, will creatively solve one problem throughout the semester using tools from electrical and systems engineering. Each group decides their own work schedule throughout the semester, and a demo session will be held at the end of the semester where the resulting projects will be showcased to the SEAS community. The groups will work under the supervision of a teaching assistant which will help them complete their project.

Evaluation

Webpage and weekly journal: Each group must create a wiki page describing their project. Each group will maintain a weekly wiki journal, detailing their progress and the challenges they have faced.

Weekly meetings with TA: Each group will meet with their TA in the laboratory, at least once a week for one hour.

Progress evaluations: Twice in the semester we will evaluate the progress of each project in a 30-minute meeting with the team.

Final demonstration and report: We will hold a public poster and demonstration session at the end of the semester. Also, each group will update their project wiki page describing their results and conclusions.

Milestones

Group definitions and project wiki page: *Due Friday Sept. 9 at 5pm.*

Project proposal (10%): *Due Friday Sept. 16 at 5pm.* The proposal must be written in your wiki page, following the guidelines listed here:
http://classes.engineering.wustl.edu/ese205/Project_proposal_guidelines

First project evaluation (15%): *Week of Oct. 3 to Oct. 7.* The full academic team will meet with each group for 30 minutes to discuss the progress and challenges of their project. Each team is responsible for scheduling their meeting.

Second project evaluation (15%): *Week of Oct. 31 to Nov. 4.* Same procedure as with previous evaluation.

Demonstration and poster session (45%): *Tuesday Dec. 6 at noon-1pm* (to be confirmed later in the semester). Each group will present a poster and a demonstration of their project to the SEAS community.

Final report (15%): *Due Wednesday Dec. 14 at 5pm.* Finalize your wiki page with results and conclusions, following the guidelines listed here:

http://classes.engineering.wustl.edu/ese205/Final_report_guidelines