

# ESE205 — Introduction to Engineering Design

Humberto Gonzalez (hgonzale@wustl.edu)

Spring 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).
- Deko Ricketts (dricketts@wustl.edu).
- Alden Welsch (aldentwelsch@gmail.com).

## 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 webpage describing their project in the course's wiki webpage. Each group will maintain a weekly journal in their wiki page, detailing their progress and challenges.

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

**Progress evaluations:** Twice in the semester we will evaluate the progress made by each team.

**Final demonstration and report:** We will hold a public poster and demonstration session at the end of the semester. Also, each group will write a final report describing their work, and they will update their webpage showcasing their results and methodology.

## Milestones

**Group definitions and project title:** Due on Friday Jan 29 at 5pm.

**Project proposal (10%):** Due on Friday Feb 12 at 5pm. One page description of desired goals and proposed methodology. The proposal must include a budget and a week-by-week Gantt chart.

**First project evaluation (20%):** Week of Feb 29 to Mar 4. The full academic team will meet with each group for 15 minutes to discuss the progress and challenges of their project.

**Second project evaluation (20%):** Week of Apr 4 to Apr 8. Same procedure as with previous evaluation.

**Demonstration and poster session (25%):** Thursday Apr 28 (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 (25%):** Due May 6 at 5pm. Maximum of six pages. The report must clearly explain the motivation, goals, results, and challenges faced in the project.