

# EE15n Assignments and Deadlines: Winter 2019

## Reading Assignments:

Lecture 1 (1/9): Text, Chapter 1 (Introduction to Engineering Design)

Lecture 2 (1/16): Text, Chapter 2 (The Design Process)

Lecture 3 (1/23): Text, Chapter 15-16. (Design Teams and Management)

Lecture 4 (1/30): Text, Chapters 3-4. (Problem Definition: Requirements and Objectives)

Lecture 5 (2/6): Text, Chapters 5-6. (Problem Definition: Constraints and Design Specs)

Lecture 6 (2/13): Text, Chapter 7, 8, and 14 (Generating Design Ideas and Choosing a Design)

Lecture 7 (2/20): Posted Articles (Why Things Fail)

Lecture 8 (2/27): Text, Chapters 9-11 (Communicating the Design and Prototyping)

Lecture 9 (3/6): Posted Articles (Engineering Products that have Changed the World.)

Lecture 10 (3/13): Posted Articles (Wrapping up and Looking Ahead: Beyond the 1<sup>st</sup> Generation)

**Project presentations: March 21 3:30-6:30 (Final Report due 3:30 March 21)**

## Project-based assignments and deadlines

### Deadline      Assignment

Weekly      Notes from project meetings (starting 1/30)

Jan 23:      Form team, Choose project (1 paragraph Problem Statement – i.e. a description of the problem that your project will solve - due by email at midnight). The problem statement should be of appropriate scope, be specific, and should not include the solution in the problem description.

Feb 6:      Revised Problem Statement  
Preliminary list of project roles and tasks (and who assigned to them)  
Objective tree for your project

Feb 20:      Morphological Chart. Set of team member sketches for the Gallery Method.

Feb 27:      Weekly Project Meeting Notes

- Mar 6: Final Design Choice. Priority Checkmark Chart and Best-of-Class Chart. Weekly Project Meeting Notes
- Mar 13: Detailed Design: Detailed description/block diagram(s), Schedule, Cost Estimate, Prototype/model/proof of concept description (Optional), Weekly Project Meeting Notes
- Mar 21: Final Presentation (3:30-6:30pm in Hewlett 103) and Report Deadline (3:30pm)

### **Writing assignments**

Please choose one of the following options for each of your two writing assignments. The paper should be around 4-5 pages (double-spaced) without references. You must include multiple references that support the claims in your report and from which any quotes are taken.

- A report on how society shapes technology or vice versa (e.g. stem cell research, cell phones, nuclear power, the Internet, Twitter)
- A case study of a complex engineering project (e.g. the iPhone, Facebook, the space shuttle, the power grid, MRIs, electric cars.)
- Describe in more detail an engineering project executed by one of our guest speakers
- Chose your own topic related to engineering project design

### **Deadline      Assignment**

- Jan. 30      1<sup>st</sup> writing assignment
- Feb. 27      2<sup>nd</sup> writing assignment

### **Late Policy on All Assignments**

1<sup>st</sup> Day Late: 10% off, 2<sup>nd</sup> Day Late: 25% off, 3<sup>rd</sup> Day Late: 50% Off, No Credit Thereafter.