

California State University Northridge
Department of Electrical and Computer Engineering
Course: **Senior Design Project II (ECE 493)**
Fall, 2017

Instructor: Jack Ou, Ph.D.
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Office Hours: M: 4:00 p.m. - 5:00 p.m.
Class Days/Time: TTH 9:30 a.m. to 10:45 a.m.
Classroom: JD 1612

Course Description

Continuation of ECE 492. Issues concerning science, engineering, economic and social concepts, as well as ethics, written, and oral communication and methods of technical problem solving will be further treated. Team project is completed under faculty supervision, culminating in a comprehensive report. May not be used for graduate credit.

Prerequisite: ECE 492

Textbook:

1. (Optional) "Analog Integrated Circuit Design", Tony Chan Carusone, David A. Johns, and Kenneth W. Martin, 2nd edition.

Software:

1. Matlab
2. Cadence

Course objectives:

After completing this course the students should be able to:

1. Prepare and present proposals orally and in writing
3. Design a project from a given set of functional specifications
4. Prepare a set of design specifications from the functional specifications
5. Prepare schematics from the design specifications and build the project
6. Package the project in a suitable container or chassis
7. Test the project and show that the project meets the specifications
8. Write a comprehensive final report on the project

Assessment

- 1. Weekly assignments (50 %)** This is *not* a lecture class, nor is it a laboratory class. There will be assignments throughout the semester. We will meet weekly to go over assignments and discuss the assignment that is due in the following week. *I will not be able to allow submission of late assignments.* Assignments are collected in the beginning of the class.
- 2. Technical report (25%):** You will be given specific instructions on how to format your report. You must format your report accordingly.
- 3. Oral presentation (25%)**

Grading scale: The course grade is computed from the cumulative *course total* percentage as follows: 100 - 94 = A, 93 - 90 = A-, 89 - 87 = B+, 86 - 83 = B, 82 - 80 = B-, 79 - 77 = C+, 76 - 73 = C, 72 - 70 = C-, 69 - 67 = D+, 66 - 63 = D, 62 - 60 = D-, 59 or < = F. (No **RP**, i.e. incomplete with no deadline, or **I**, incomplete with deadline.)

Course schedule (subject to change-check course website regularly for updates)

#	Topic	Notes
1	Discuss Turnitin submission, assign journal article	
2	Project assessment	
3	Submit figures	
4	Submit <i>proof of concept</i> section	
5	Submit future work section	
6	Submit theory section	
7	Submit background section	
8	Submit intro/abstract/conclusion	
9	Submit report and slides	Turnitin deadline (10/27, 11:59 p.m.). Must send slides to Dr. Law, rehearse presentation
10	Senior design paper context (11/1)	
11	Senior design paper context (11/8)	
12	Senior exit interview (11/15)	
13	TBD	Thanksgiving
14	TBD	
15	TBD	