

California State University Northridge  
Department of Electrical and Computer Engineering  
Course: **Senior Design Project II (ECE 493)**  
Spring, 2018

Instructor: Jack Ou, Ph.D.  
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Office Hours: **TBD**  
Class Days/Time: TTH 9:30 a.m. to 10:45 a.m.  
Classroom: **TBD**

**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. Building Wireless Sensor Networks, Robert Faludi, Oreilly.

**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%)** IEEE paper contest (15%). ECE 101 presentation (10%).

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*)

#	Date	Topic	Notes
1	1/23	Discuss Turnitin, Latex templates, key milestones	Latex assignment
2	1/30	Intermediate milestone #1	market survey
3	2/6	Intermediate milestone #2	standard survey
4	2/13	<i>No meeting</i>	
5	2/20	Demonstrate working prototype Submit figures	
6	2/27	Submit <i>proof of concept</i> section	
7	3/6	Submit <i>background</i> and <i>theory</i>	
8	3/13	Submit <i>intro/abstract/conclusion</i> and the rest of the paper.	
9	3/20	<b>Spring recess</b>	
10	3/27	ECE 101 Rehearsal (3/28, 9:30-10:00) Turnitin deadline (3/29)	
11	4/4	Senior design paper context ( <b>WED</b> )	
12	4/11	Senior design paper context ( <b>WED</b> )	
13	4/17	Senior exit interview ( <b>WED</b> )	mandatory
14	4/24	/	/
15	5/2		
16	5/9		