Course Information

This course is structured to offer an overview of the techniques employed in the design and operation of efficient wireless sensor networks, and an in-depth discussion of several major functional components of these networks. The strong presence of the lab component in the instruction material will provide the students with a hands-on experience in how a variety of algorithms and applications can be developed. A variety of actual sensor modules and wireless motes will be introduced and analyzed in the course. The course requires participation from the students in the form of in-class discussions, homework, term paper and term project. An objective of the course is to help prepare students to take on research projects in the related fields.

Instructor: Hamid Aghajan, 318 Packard (Wireless Sensor Networks Lab), Email: aghajan@OHs: Tue 4-6pm and by appointment

TA: Sumanth Jagannathan, Email: sumanthj@, Office/Lab Hours: Thu 4:15-5:15pm and TBA

WSNL Lab Assistant: Primoz Skraba, Email: primoz@, Lab Hours: TBA

Class Time and Location: T 1:15-2:30pm, Redwood Hall G19
Th 1:15-2:30pm, Packard 312 & WSN Lab

Class Homepage: http://eeclass.stanford.edu/ee392w/

Class Administrator: Joice Debolt, joice@isl, Packard 365, Tel: 3-3164

Prerequisites:
- Required: EE278, EE279 or EE265 or EE264
- Recommended: Advanced course in communications, wireless communications, signal processing, or networking (e.g. EE359, EE379, EE368, EE384)
- Familiarity with basic linear algebra (for example EE 263)
- Experience with algorithm simulation in Matlab
- Experience with C programming

Grading:
- Class Participation 10%
- Homeworks 25%
- Term Paper 20% (Proposal 5%, Paper 15%)
- Term Project 45% (Proposal 10%, Status Report 5%, Demo/Presentation 15%, Final Report 15%)

General Information:
- The course is structured to provide a conceptual as well as an applied approach to the field of wireless sensor networks. To facilitate the hands-on instruction components of
the course, the Thursday sessions of the class will be held at the conference room 312 near the WSN Lab on the 3rd floor of the Packard Bldg.

- Due to the lab-based components of the course and the term project requirement, enrollment in the course is limited. Instructor’s consent is required for enrollment.

- A list of required reading material will be provided at the course web site. In order to successfully participate in the class discussions, students are expected to study the required reading prior to the class and are also encouraged to perform their own literature search on the specified subjects.

- Handouts #2 and #3 with detailed information about term paper and term project components of the course will be handed out at the first session of the class.