## New Undergraduate Course Spring 2006 ECE 194C – Sensor Networks and Applications

**Description**: This is a new undergraduate seminar course on sensor networks and applications, with an emphasis on sensing in ecological, biomedical and marine sciences. Topics will include: Wireless sensor networks. Reconfigurable sensor hardware. Power scavenging. Sensing requirements for ecological research. Problems specific to underwater sensing and sonar. Measurement and imaging in biomedical applications. Presentations will be made by guest faculty and industry speakers. Students will prepare a 15-20 minute presentation on a sensor network topic of their choice as a final project.

**Prerequisites and Enrollment**: Sophomore standing or above in EE or CE. Freshmen by consent of instructor. First year graduate students with an interest in sensor networks are also welcome to enroll. Contact instructor for enrollment approval and obtain code from student office.

Instructor: Ronald A. Iltis, Eng. I Room 3159. Tel: (805) 893-4166. E-mail: <u>iltis@ece.ucsb.edu</u>.

**Time:** Spring Quarter: Tues, Thurs 5-6:15PM, location TBD.

Website: www.ece.ucsb.edu/Faculty/Iltis/ece194c.

Units: 3.

**Grading**: Letter grade based on final presentation and report.



