Welcome to SDP09!

- Senior Design Project
  - Capstone project course
  - One year to design, implement, and demonstrate system

- SDP is different from any other course
  - Main emphasis on project (but there are a few lectures...)
  - Teams
  - Practical skill set
  - Creativity
  - Application of classroom knowledge

- A great opportunity to gain project experience before you go out into the real world!
  - Design and build a system from scratch
  - Recruiters like to talk about SDP in interviews
SDP09 Information

- Web site
  - http://www.ecs.umass.edu/ece/sdp/sdp09/

- Course meetings
  - Thursdays 4:00 – 5:15 p.m.
  - Lectures: Elab 306
  - Lab: Marcus 10/12
  - Additional meetings: project reviews
  - See schedule on web site for details
  - Attendance required

- Textbook
  - Optional - one per team required
  - Reading required

SDP09 People

- Tilman Wolf
  - wolf@ecs.umass.edu

- T. Baird Soules
  - soules@ecs.umass.edu

- Fran Caron
  - fkcaron@ecs.umass.edu
**Lab Rules**

- Marcus 10/12
  - The code to 10 Marcus Hall XXXX
  - Hours are 24/7
  - When entering the lab, ALL lights must be on.
  - No food, alcohol drinks, bicycles, skate boards, roller blades, radios and sporting equipment, unless it is part of your project.
- PCs, password, and test equipment
- Safety:
  - AC/DC electrical power tools
    - **“Safety Glasses at all Times”**
  - Fire
  - Chemical
  - First aid kit
  - UMass police
- Lab bench sign-up (first come first serve)
  - Monday, 9/8/09 9:00 a.m. – 4:00 p.m. (Marcus 10/12)

**SDPo9 Teams & Projects**

- Teams of 4 students
  - Choose one “team coordinator”
- Advisor
  - Each team chooses its own ECE faculty advisor
  - Not available for advising: Prof. Ciesielski
- Meetings
  - Weekly meeting with advisor
  - Weekly team meeting
  - Course meetings
- Notebooks
  - Each team member should maintain a laboratory notebook
- Project budget: $500
  - Some parts available in SDP lab or M5
Review and Grading Process

- 2+2 review panels
  - Panels consist of several professors from our department
  - 20 min presentation by team + 20 min Q&A
- The final grade for ECE 415 (and ECE 416):
  - Advisor grade (50%): Given at the discretion of the advisor
  - Review Board grade (30%): Average of review panel grades
  - Course Coordinator grade (20%): Based on attendance and project documents.
    - If all required course documents are of an exemplary quality and the student has no unexcused absences, then the student will receive a grade of “A” from the course coordinators.
    - If all required course documents are of an exemplary quality and the student has one or more unexcused absences, then the grade from the course coordinators will be as follows:
      - A for one unexcused absence
      - B for two unexcused absences
      - C for three unexcused absences
      - D for four unexcused absences
      - F for five or more unexcused absences
    - If all required course documents are not of exemplary quality then the above course coordinator grades will be downgraded as appropriate.

Progress Card

SDP09 Progress Card – Team Progress

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<th>Advisor</th>
<th>Prof. Soules</th>
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SDP09 Progress Card – Individual Progress

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Attendance Fall 2008

- 9/4/08: Lecture: Introduction
- 9/11/08: Lab
- 9/18/08: Lab
- 9/25/08: Lecture: Presentations
- 10/2/08: Lab
- 10/6/08-10/10/08: Preliminary Design Review (PDR)
- 10/16/08: Lecture: Ethics
- 10/23/08: Lecture: Statistical Evaluation of Measurement Data
- 10/30/08: Lab
- 11/6/08: Lecture: EAGLE Software Tutorial
- 11/13/08: Lab
- 11/20/08: Lab / Deadline for Draft Report
- 12/1/08-12/5/08: Midway Design Review (MDR)
- 12/11/08: Lab / Deadline for Midway Report
Spring 2008 Schedule

- 1/29/09: Lecture: Spring Kick-Off
- 2/5/09: Lab
- 2/12/09: Lecture: Career and Entrepreneurship
- 2/19/09: Lab
- 2/26/09: Lab
- 3/2/09-3/6/09: Comprehensive Design Review (CDR)
- 3/12/09: Lab
- 3/26/09: Lab
- 4/2/09: Lab / Deadline for Final Report Draft
- 4/9/09: Lab
- 4/13/09-4/17/09: Final Project Review (FPR)
- 4/21/09-4/24/09: Final Advisor Demo
- 4/23/09: Lab
- 4/30/09: Lecture: SDP Day Prep. & SDP09 Introduction
- 5/1/09: Senior Design Project Day & ECE Picnic
- 5/7/09: Lab / Deadline for Final Report
- 5/8/09: ECE Banquet
- 5/12/09: Deadline for Team Clearance

Senior Design Project Day

- The big day...