

**UNC - Charlotte, College of Engineering.**  
**Syllabus for Senior Design II – Spring 2008 –**  
**ECGR, MEGR, CVGR, ETGR**

Instructors:

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Lecture: Fri. 2:00 – 3:45 p.m., Duke 345

Lab Assistant: None

Website: <http://www.srdesign.uncc.edu>

*Check the web site frequently!*

## **Textbook**

None. The course will rely on presentations, notes and documents. These materials can be found on the course website.

## **Purpose of Course**

The Lee College of Engineering's senior design program brings together students and industrial partners in a collaborative research environment. As they tackle real-world engineering projects, the engineering students and their industry sponsors are afforded unlimited possibilities for learning and achievement. Engineering students profit from:

- practical real-world experience,
- the opportunity to learn design philosophies,
- the development of team problem-solving skills,
- experience budgeting time and finances,
- the performance of project management skills, and
- the chance to meet and work with potential employers.

## **Exams**

There are no examinations. Instead of a final exam time, students will be expected to present their design at the Expo on April 30, 2008 in the Cone Center.

## **Missing Class/Assignments**

Throughout the semester, a student may miss classes due to many reasons. Most of the reasons will not be accepted as an "excused" absence. Assignments can always be turned in by other project members.

## Assignments

Assignments are an example of learning by doing and are essential to learning the concepts in this course. **No late assignments will be accepted.** Assignments must be turned in at **the beginning of lecture**. Here are some guidelines for homework assignments:

- All assignments must be typed.
- Staple all pages together
- Do not fold the assignment when you turn it in.
- Hand in a hard copy of your assignment.
- Email your assignment to your faculty mentor and industry sponsor (except for the resume/cover letter)

## Academic Dishonesty

All the provisions of the University code of academic integrity apply to this course. Refer to the web page <http://www.uncc.edu/catalog/yr2001-03/student%20conduct.htm> for the UNC Charlotte policy.

## University Calendar

Refer to the web page: <http://www.registrar.uncc.edu/calendar.htm> for the academic calendar, including specific days to add or withdraw.

## Lab Notebook

Engineers in the workplace carry a lab/design notebook with them wherever they go. They write everything in this notebook with respect to product design. You have been provided the notebook. You will be expected to maintain this notebook and use it to enter all of your design ideas. These notebooks will be offered to the companies when you are done with the project. We will examine these notebooks throughout the semester and assign grades based on the value of their contents.

## Grading

Grading for assignments will be by an Expert/Practitioner/Apprentice/Novice rubric. Grades are not “arbitrarily” assigned, but are based on the quality and adherence to pre-published criteria. These criteria will be posted on the course website when the assignment is distributed.

## Grading Percentages

<b>% of Grade</b>	<b>Assignment</b>	<b>Due date</b>	<b>Description</b>
10%	Lab Notebooks	all	Keep a lab notebook with all of your ideas for design. Bring to every class for “pop” grading.
20%	Status reports (6)	See syllabus	Template online
20%	Final Written Report	4/30/08	Templates online. This should be a report of your design and implementation results based on sound engineering processes and practices.
30%	Project results and meeting the project requirements	4/30/08	How well did you meet the intended capability and requirements that you promised in the Fall semester?
10%	Expo presentation	4/30/08	You will make presentations from 2 to about 5 p.m., similar to the poster presentation.
10%	Peer Evaluation	4/30/08	You will assess your project teammates and their effort
<b>100%</b>	<b>Total</b>		

## Senior Design - Second Semester Topics and Deliverables

Date	Topics	Assignment Due
1/11/08	Overview, assignments, syllabus (Conrad, Skinner), Design for manufacture, test, and maintenance (Skinner)	None
1/18/08	Individual project meetings and work	None
<b>1/25/08 2-5pm</b>	Team building exercises during class	Project Status Report 1, change requests
2/1/08	Individual project meetings and work	None
2/8/08	Individual project meetings and work	Project Status Report 2, change requests
2/15/08	Individual project meetings and work	None
2/22/08	Individual project meetings and work	Project Status Report 3, change requests
2/29/08	Individual project meetings and work	None
3/7/08	Spring Break	None
3/14/08	Individual project meetings and work	Project Status Report 4, change requests
3/21/08	Holiday	None
3/28/08	Individual project meetings and work	Project Status Report 5, change requests
4/4/08	Individual project meetings and work	None
4/11/08	Individual project meetings and work	Project Status Report 6, change requests
4/18/08	Posters and presenting at the Expo (Guest Speaker and Conrad)	None
4/25/08	Sponsor/team design review ( <b>arranged during class time or on their own</b> )	Draft of poster and Draft of report due to your Faculty Mentor and Sponsor.
4/30/08 Wed time TBD	Reading Day – Senior Design Expo Day – booth demonstrations and presentations	Poster and deliverables demo at Expo. Final project report; deliverables (hardware/device, code); notebooks, updated design, requirements, WBS, GAANT, risk assessment, budget, BOM