Welcome to
Senior Design I: XYZ 487/485

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Agenda

- Sign in, distribute handouts
- Class Policies
- Course Schedule
- Major deliverables
- Teams/project adjustments
- Questions
- Meet with your team

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Handouts

- You should have a copy of each of the following:
  - Syllabus
  - Guide for XXX487/488
  - This presentation
- Additionally, each of the above documents will be posted on my website (http://faculty.mercer.edu/moody_le)
- Read and become familiar with **all** material handed out today
  - you're responsible whether we've specifically gone over subject or not
- We will cover Highlights today

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Class Policies (487/488)

- Attendance Policy
  - Attendance at all class meetings and management review meetings is mandatory
  - Attendance is a function of professionalism and therefore your grade
  - Be sure to **initial** the attendance sheet at each meeting
- BE ON TIME: Class will typically begin a couple of minutes late. Arrivals after the class has started will be noted

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Class Policies (XXX 487/488) – Due Dates

- I will not take late work (nonnegotiable)

- Close of Business (COB) is 5:00 p.m.

Schedule (see Syllabus)

Date	Week	Weekday	Topic	Deliverable
12-Jan	1	Tues.	First day of class	
14-Jan		Thurs.	Scheduled group meetings	
19-Jan	2	Tues.	Project Management	
21-Jan		Thurs.	No class: work on Proposal	
26-Jan	3	Tues.	Design Processes	Proposals, Budget Form Due by COB (5:00 pm.)
28-Jan		Thurs.	Meet with client and technical advisors	
2-Feb	4	Tues.	Design Applications	
4-Feb		Thurs.	Management review meeting	Team Progress Report Due (email)
9-Feb	5	Tues.	Codes and Standards; Licensing and FE	
11-Feb		Thurs.	Management review meeting	Individual Progress Report Due (email)
16-Feb	6	Tues.	Analysis for Engineering Design	
18-Feb		Thurs.	Meet with client and technical advisors	Team Progress Report Due (email)
23-Feb	7	Tues.	Designing Written Reports	
25-Feb		Thurs.	Management review meeting	Individual Progress Report Due (email)
1-Mar	8	Tues.	Effective Oral Presentations	
3-Mar		Thurs.	Meet with client and technical advisors	Journal/Patent Summaries Due
8-Mar	9	Tues.	SPRING BREAK	
10-Mar		Thurs.	SPRING BREAK	
15-Mar	10	Tues.	No class	
17-Mar		Thurs.	Management review meeting	
22-Mar	11	Tues.	No class	
24-Mar		Thurs.	Meet with client and technical advisors	Team Progress Report Due (email)
29-Mar	12	Tues.	Team Progress Report Presentations	
31-Mar		Thurs.	Management review meeting	
5-Apr	13	Tues.	No Class - PDR week	
7-Apr		Thurs.	No Class - PDR week	Last Day for PDRs - Thursday, April 7
12-Apr	14	Tues.	Seminar-Test Plans	Respond to PDR comments
14-Apr		Thurs.	No class	
19-Apr	15	Tues.	Brief Class Meeting	Submit Comprehensive Test Plan
21-Apr		Thurs.	No class	
26-Apr	16	Tues.	No class	
28-Apr		Thurs.	No class	Final: Peer Evaluations Due

Class Schedule Highlights

- We will generally meet as a full class only on Tuesdays (XXX488 – Thursday)
- Periodic 15-min team/management review meetings with your instructor will be held on Thursdays
- You will generally not be in class/meetings for the full scheduled time on either Tuesdays or Thursdays
  - The "off time" should be productively used to
    - Work as a group
    - Meet with your client
    - Meet with your technical advisors

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"Just in Time" Tuesday Lecture Series

- Project Management
- Introduction to Design Processes
- Design Selection and Merit Analysis
- Codes & Standards; Licensing and FE Exam
- Designing Written Reports
- Effective Oral Reports
- Engineering Test Plans

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Scheduled Group Meetings

- Occur on six selected Thursday afternoons (see schedule)
- Each group meets with their instructor for 15-min session
- Attendance by all team members is mandatory
- Be prepared to discuss:
  - Technical progress
  - Schedule
  - Budget
  - Concerns
- Be organized, be professional, be engaged

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Major Deliverables

- Proposal and Budget Form
- Individual Progress Reports
- Oral Team Progress Reports
- PDR document
- PDR presentation
- Test Plan
- Peer Evaluations

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Individual Progress Report

- Delivered as an email
- Subject line: identify it as a progress report
- In the body, include:
  - One-sentence summary of your project
  - Your role in the project
  - Project schedule status
  - Summary of your individual contributions since last report
  - Indication of your plans for the next two weeks
- Identify any issues with the group
  - Are you pulling your weight?
  - Are your teammates pulling their weight?
  - Are there any teaming problems?
  - Are there any other issues that your manager can help you with?

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Oral Team Progress Report

- 5 – 10 minute presentations to the class
- Provide a brief summary of your team's project and its status
  - What is the problem?
  - What is your team's plan for addressing the problem?
  - What is your team's current status?
  - What are your team's future plans?

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PDR Document and Presentation

- Your team will schedule its one-hour presentation on or before Thursday, April 7
- Written PDR document is due no later than 3 business days before your presentation
  - Hard copy to your instructor
  - Hard copy or electronic copy (their preference) to client, tech advisors
  - CD to Ms. Rogers
- PDR is a detailed account of:
  - Your understanding of the problem
  - Your proposed solution to the problem with justification
    - Methodology
    - Schedule
    - Cost
  - Request for permission to proceed

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Test Plan

- Following your PDR presentation, your "technical oversight team" will provide permission to proceed
  - Often with suggestions/requirements to address weak points
- Your team formulates and submits a detailed plan for testing (to be done next semester) to verify that your design meets the requirements

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Final: Peer Evaluations

- The last week of class, submit to your instructor completed peer evaluation form
- An honest appraisal of all team members' (including your own) contributions to the project

Proposal

- First major deliverable: due COB Jan. 26
- "A proposal is a written offer to solve a problem or provide a service:
  - by following a specified procedure;
  - using identified resources;
  - adhering to a published schedule with milestones;
  - adhering to a published budget"
- Guidelines – page 8 of Guide
- Budget Request Form (see Forms in Guide)
- Proposal Requirements handout

Proposal

- Your proposal must reflect
  - An understanding of the problem based on your communication with your client
  - Possible solutions to the problem and a plan for identifying your solution
  - Detailed schedule for this semester
    - Major tasks/subtasks and their durations
    - Key milestones with dates
    - Deliverables with dates
  - Functions and qualifications of each team member

At this point -

- Everyone should be on a team

- Each team should have an approved project

- Everyone should be registered for the course

- Are there exceptions??

Administration

- See me after class if your team wishes to change your project (must have a specific project in mind) or if there are personnel changes on your team.
  - Any project change requires a new Project Approval Form
- If you are not officially registered for this course, see me after class

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Management Review Meeting Schedule

Thursdays Suite 201	
Time slots	Group Name/ members
3:00-3:20	Payne and Haney
3:25-3:45	Davis, Ginn, and Scruggs
3:50-4:10	Thompson, Brettin, Wynn
4:15-4:35	Wise
4:40-5:00	Connor, Page, Reveles

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The Process

- 1st semester – design your solution and create a test plan

- 2nd semester – build and test

Grade Considerations

- Engineering:
  - Complexity
  - Difficulty
  - Quality
  - Service
  - Content

- What did your Engineering Education allow you to accomplish? What content delivered distinguishes your abilities from non engineers? Did you develop/design independent from faculty advice?

Keys to Success

- Communicate
  - Frequently meet with
    - Client
    - Technical Advisor(s)
  - Keep management (me) informed
  - Surprises (especially at the PDR) are not appreciated
- Be professional
  - Be on time for all meetings
  - Be prepared
  - Be attentive
  - Be engaged
  - All deliverables must be on time and professional

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QUESTIONS?

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What's Next?

- Today
  - Resolve registration issues, missing persons, or incomplete teams
  - Meet with your team
- Thursday January 14: 1st scheduled team meeting
- Next full class meeting: Tuesday January 19

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