

ME 185 Mechanical Engineering Senior Project – Fall 2003

Time and Location: T R 5:00-6:15; Room 105 Votey

Instructor: JC Iatridis, 231b Votey Building, Phone: 656-2774, james.iatridis@uvm.edu

Office Hours: 2:00-3:00pm

URL: <http://www.emba.uvm.edu/~iatridis/me185>

Lab/Shop Coordinator: Dmitri Hudak, 122E Votey

Prerequisite: Senior standing

Catalogue Description: An individual engineering study designed to particular interest of the student, utilizing and synthesizing the student's total mechanical engineering educational experience.

Course Goals: The course goals are to design, construct and test a mechanical engineering solution to an industry- or research-based problem. Alternatively, an independent research project with significant measurement, data analysis and interpretation components may be pursued. Oral, web and written communication and teamwork skills will be emphasized in class. Projects must be chosen within the first two weeks of the fall semester.

Thereafter, independent research/design work will be performed outside of class and regular progress reports will be submitted. Reports (with sketches as appropriate) must be submitted in hardcopy. All students will receive a final grade for both ME185 and ME186 at the conclusion of the oral presentation.

<u>Date</u>	<u>Topics</u>	<u>Assignments</u>
9/2	Course introduction/Presentation of topic ideas	
9/4	Presentation of topic ideas	
9/9	Introduction to the design process	Assignment 1 – Mission Statement
9/11	Project planning, defining the client's needs	
9/16	Vermont Energy Alternatives/Carpenter Aud/Given	Assignment 2 – Oral presentation
9/18	Design process/Brainstorming ideas/presentation skills	
9/23	5 minute project presentations:In class workshop	
9/25	5 minute project presentations:In class workshop	
9/30	Objective Trees/Design Matrices	Assignment 3 – Web-page creation
10/2	Web-page design workshop	
10/7	Web-page design workshop 2	
10/9	Machine shop skill development/examples	Assignment 4 – formal progress report
10/14	Designing skill development/examples	
10/16	In class work session	2 week plans
10/21		
10/23	Technical writing	
10/28	Technical writing workshop	Assignment 5 – Review of progress report
10/30		
11/4		
11/6		
11/11	In class work session	Assignment 6 – Semester report
11/13		Assignment 7 –presentations, round 2
11/18	ASME conference – no class	
11/20		
11/25		
11/27	Thanksgiving	
12/2	Oral presentations: round 2	
12/4	Oral presentations: round 2/Final presentation ME186	
12/9	Final presentations for ME186 students	Semester Report Due

Grades:

Class participation (i.e., attendance and questions during all presentations)	10%
Short Assignments and Progress Reports	15%
Final Written Report	50%
Final Oral Presentation	<u>25%</u>
	100%

Lateness Penalty. An assignment is due at the end of the day of the due date. This is taken as before I arrive the next day. Assignments submitted after the due date will be assessed a late penalty of 10% for each day; documented extenuating circumstances may result in the lifting or reduction of the penalty.