How to Be Successful in Mechanics of Materials

Course Description

Mechanics of Materials is an introductory engineering course that deals with basic formulations for stress, strain, and deformation of engineering materials and structures. In addition, simple engineering design problems are presented, and engineering professionalism is emphasized by using an engineering approach to problem solving.

For design engineers, Mechanics of Materials is the most important course that can be taken in the undergraduate curriculum. All subsequent design courses and structures courses will use concepts first introduced in Mechanics of Materials.

Course Goals

The instructor's goal for this course is that engineering students that pass the course are able to understand the basic concepts of stress, strain, and deformation; be able to use formulas derived in class for these quantities; know the limitations on these formulas; and to accurately apply these formulas using an appropriate engineering approach.

The methods that will be used to make an evaluation on the items above are daily homework, hour exams, a project, and a final exam.

The best ways for students to achieve these goals are to:

- keep up with daily work by reading ahead, doing all of the homework sets, and asking or answering questions in class;
- seek help from the tutor or instructor on any issues which are not clear; and
- work independently (with the exception of the group project).

Homework

The importance of doing homework on your own can not be emphasized enough. Although homework officially counts as only 10% of the course grade, poor homework performance is always reflected in the course grade by poor performance on the hour exams and the final exam. Treat each homework problem as a way to prepare for the exam--read the chapter and understand the formulas before you attempt the homework.

Exams

Each exam will be constructed to assess the course goals. All of the exams are comprehensive up to the date they are given. Do not wait until the third exam to understand the material presented at the beginning of the course.

Final Course Grade

If you demonstrate that you understand the material and are able to perform accurately on the examinations, this will be reflected by a good course grade. *Remember, focus on understanding the material, and a good course grade will follow.*

Use these boxes to record your homework grades and exam grades.

1	2	3	4	5	6	7	8	9	10

11	12	13	14	15	16	17	18	19	20

21	22	23	24	25	26	27	28	29	30

31	32	33	34	35	36	37	38	39	40

E1	E2	E3	PROJ