

ME 305 Mechanics of Materials

T/Th 10am-12pm, PHO 210

Professor Catherine Klapperich, catherin@bu.edu

Office Hours W 1-3pm, Room 725 ERB

Blackboard 8 Website ME 305

Textbook: Mechanics of Materials, Beer and Johnston, 5th Edition, 2009.

Grading: Quizzes 20%, Midterm Exams 20%, Course Project 15%,
Laboratory Reports 20%, Final Exam 25%. Homework 0%

Teaching Ana Medina Ayala, duvinci@bu.edu Mark Slater, mslater@bu.edu

Fellows:

<u>Lecture</u>	<u>Date</u>	<u>Topic</u>	<u>Reading</u>
1	Th Sept 3	Tension	
2	Tu Sept 8	Compression	
3	Th Sept 10	Shear	
4	Tu Sept 15	Axially Loaded Members	
5	Th Sept 17	Axially Loaded Members	
6	Tu Sept 22	Axially Loaded Members	
7	Th Sept 24	Torsion	
8	T Sept 29	Torsion	
9	Th Oct 1	Torsion	
10	Tu Oct 6	Shear Forces	
11	Th Oct 8	Bending Moments	
	Tu Oct 13	No Class - Monday Classes	
12	Th Oct 15	Midterm #1	
13	Tu Oct 20	Stresses in Beams	
14	Th Oct 22	Stresses in Beams	
15	Tu Oct 27	Deflections of Beams	
16	Th Oct 29	Deflections of Beams	
17	Tu Nov 3	Guest Lecture	mtas
18	Th Nov 5	Columns	mtas
19	Tu Nov 10	Columns	
20	Th Nov 12	Midterm #2	avs
21	Tu Nov 17	Analysis of Stress and Strain	
22	Th Nov 19	Analysis of Stress and Strain	
23	Tu Nov 24	Plane Stress	
	Th Nov 26	No Class - Thanksgiving	
24	Tu Dec 1	Advanced Topics	
25	Th Dec 3	Advanced Topics	
26	Tu Dec 8	Advanced Topics	
27	Th Dec 10	Review	

Course Policies:

- Homework will be assigned each week but will not be collected or graded. Solutions to the homework will be posted in the Science and Engineering library.
- All discussion sections are open to any student enrolled in this course. The discussion sections will focus on solving problems assigned for homework and other, similar problems. The location of the discussion sections is TBA.
- If you must miss class, see a classmate to obtain the class notes. If, after reviewing the material that you have missed, you have questions, see the instructor during office hours and/or teaching fellows during discussion sections to get your questions answered.
- Quizzes will be given weekly and will test students' ability to solve problems similar to the problems on each week's homework assignment. The lowest quiz score for each student over the course of the semester will be dropped when computing the final course grade.
- The course project will be assigned in Lecture 6 and will consist of two parts. The first part will be due on **November 10**. The second part will be due **December 11**.
- There will be four laboratories in the course. Laboratory scheduling will be accomplished by a sign-up sheet outside the laboratory (Room 307, 730 Commonwealth Ave.)
- The date, time, and location of the final exam will be announced as soon as they have been determined.

Academic Conduct:

- Students must follow the COE Academic Conduct Code, which is found in the COE Undergraduate Student Handbook (<http://www.bu.edu/eng/handbook/>). Any violation of this conduct code will be reported to the COE Academic Conduct Committee.
- Plagiarism is discussed briefly in the conduct code. However, for several reasons, this subject warrants additional emphasis. In engineering, just as in humanities, science, and social science disciplines, plagiarism is unacceptable. Plagiarism is theft of another person's ideas and is a punishable offense in the same way that any form of theft is an offense. Plagiarism harms the individual whose ideas have been stolen. Original thought is highly valued in engineering and is expected from students in this course in preparing and completing all course assignments.
- Quizzes, Midterm and Final Exams: These assignments are to be completed by each student individually with no consultation with any other person other than the proctor. All quizzes and exams are closed note and closed book.
- Homework, Lab Reports, and Course Project: Students are permitted to consult with each other regarding approaches to solving problems in these assignments. However, everything that is written down and turned in must be authored by the student getting credit for the assignment, and any sources that were consulted while completing the assignment must be referenced. For example, if you consult with another person in preparing one section of a laboratory report, you should write "Consulted with <person's name> in preparing this section" in that section of the report. Similarly, if you consult with a textbook other than the course text or a webpage, acknowledge this in writing in the relevant section of the report or project.