MEC 363  
Mechanics of Solids  
Spring 2012

Instructor: Prof. Maen Alkhader, maen.alkhader@stonybrook.edu

Office Hours: M 2:00-4:00pm and W 2:00pm-4:00pm

Teaching Assistants: Peng Li, peng.li.1@stonybrook.edu, Sumantu Iyer, suyer@ic.sunysb.edu

Lectures: Tuesday-Thursday 8:20-9:40am (LE 102)

Recitation-01: M 9:35AM - 10:30AM (HARRIMAN HLL 116), Peng Li
Recitation-02: M 11:45AM - 12:40PM (HARRIMAN HLL 116), Sumantu Iyer

Catalog Data: Stress and deformation of engineering structures and the influence of the mechanical behavior of materials. Concepts of stress and strain, constitutive relations, analysis of statically indeterminate systems, study of simple bars and beams, and stability conditions. Emphasis on force equilibrium, elastic response of materials, geometric compatibility, Mohr's circle, stresses and deflections in beams, and torsion and buckling of rods. Design for bending, shear, and combined states of stress. Prerequisite: A grade of "C" or better in MEC 260


Grading: Homework (20%), Two Midterm Exams (2×20%), Final Exam (40%). Two or three Competency Tests will be given (dates will be announced in class). You must pass each test to receive a grade of 'C' or better.

Grading Scale:  
92 ≤ A ≤ 100  
88 ≤ A- < 92  
85 ≤ B+ < 88  
81 ≤ B < 85  
78 ≤ B- < 81  
74 ≤ C+ < 78  
70 ≤ C < 74  
67 ≤ C- < 70  
64 ≤ D+ < 67  
60 ≤ D < 64

Homework Assignments:

- **Guidelines:** your work will not be graded or you will lose points if these are not strictly followed
  - Homework must be submitted on loose-leaf notebook paper. Rough spiral bound edges will not be accepted.
  - Must be legibly written in pencil.
  - Must be neatly stapled in the top left corner.
  - Your name and recitation section number must appear in the top right corner.

- Graded homework will be returned during recitations
- Every week 4 problems will be assigned as homework and 4 other problems will be assigned as practice problems. Practice problems will be solved during recitation sessions.

Exams: All exams will be closed book and close notes.

Allowed Calculators: Following the Mechanical Engineering Department's mandatory calculator policy, only the following calculators will be allowed to be used on the midterm and final exams. There will be no exceptions. This list of calculators is identical to that allowed for the National Council for Examiners for Engineering and Surveying (NCEES) Fundamentals of Engineering (FE) exam that many of you will take in your senior year, as well as the Professional Engineering (PE) exam that you may take several years from now. The sooner you become comfortable on one of these calculators, the better. If you have any questions on this policy please feel free to contact me. The NCEES policy on calculators can be found here: [http://www.ncees.org/exams/calculators/](http://www.ncees.org/exams/calculators/).

- **Casio:** All fx-115 models. Any Casio calculator must contain fx-115 in its model name.
- **Hewlett Packard:** The HP 33s and HP 35s models, but no others.
- **Texas Instruments:** All TI-30X and TI-36X models. Any Texas Instruments calculator must contain either TI-30X or TI-36X in its model name.
**Statement on Academic Dishonesty:** Academic dishonesty is an extremely serious offense and will not be tolerated in any form. Academic dishonesty in general is the presentation of intellectual work that is not originally yours. Examples include, *but are not limited to*, copying or plagiarizing class assignments including homework, reports, designs, and other submitted materials; copying or otherwise communicating answers on exams with other students; bringing unapproved aids, either in physical (written) or electronic form to an exam; obtaining copies of an exam prior to its administration, etc. Academic dishonesty violates both the ethical and moral standards of the Engineering profession and all infractions related to academic dishonesty will be prosecuted to the fullest via the CEAS CASA committee. For you, the honest student, academic dishonesty results in lower class curves, hence a depression in your GPA and class standing, while cheapening the degree you earn.

**Americans with Disabilities Act:** If you have a physical, psychological, medical, or learning disability that may impact your course work, please contact Disability Support Services at (631) 632-6748 or [http://studentaffairs.stonybrook.edu/dss/](http://studentaffairs.stonybrook.edu/dss/). They will determine with you what accommodations are necessary and appropriate. All information and documentation is confidential. Students who require assistance during emergency evacuation are encouraged to discuss their needs with their professors and Disability Support Services. For procedures and information go to the following website: [http://www.sunysb.edu/ehs/fire/disabilities.shtml](http://www.sunysb.edu/ehs/fire/disabilities.shtml)