Place and Time: FREY HALL 102, Tuesday and Thursday 8:30pm-9:50pm
Instructor: Dr. Sam Huang, Light Engineering office 133, phone: 631-632-8309
Email: sam.huang@stonybrook.edu

Office hours: Mon 1:00 pm-2:30 pm Tuesday 10 am-11:30 pm, additional office hours can be arranged by sending me an email to schedule a time to meet.

Teaching Assistant:
Xuedong Zhai: Office Hour: Tuesday 10am-11am Room 232 light engineering building
Zi-An Jia: Office Hour: Monday 9:30am-11:30am Room 135 Heavy engineering building
Mang Zhan: Office Hour: Tuesday 3pm-4pm Room 135 Heavy engineering building

Recitation
Monday 10:00-10:53 MELVILLE LBR E4330 WESTCAMPUS: (Mang Zhang)
Monday 12:00-12:53 HVY ENGR LAB 201 WESTCAMPUS (Zi-An Jia)
Monday 12:00-12:53 PSYCHOLOGY A 137 WESTCAMPUS (Xuedong Zhai)

Test Books: Mechanics of Materials by James M. Gere and Barry J. Goodno


Grading: Homework (35%), Midterm I (25%), March 8 (tentative)
Midterm II (25%), April 12 (Tentative)
Final Exam (25%) Final Exam week

Learning Objective: The course is to provide students the knowledge of mechanics on material. 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.

Course outline:
1. TENSION, COMPRESSION, AND SHEAR
2. AXIALLY LOADED MEMBERS
3. TORSION
4. SHEAR FORCES AND BENDING MOMENTS
5. STRESSES IN BEAMS (BASIC TOPICS)
6. STRESSES IN BEAMS (ADVANCED TOPICS)
7. ANALYSIS OF STRESS AND STRAIN
8. APPLICATIONS OF PLANE STRESS (PRESSURE VESSELS, BEAMS, AND COMBINED LOADINGS)
9. DEFLECTIONS OF BEAMS
10. STATICALLY INDETERMINATE BEAMS
11. COLUMNS

Homework: Homework assignments will be given each week. Homework is due on the due day of 5 minutes after the class starts. Only hard copy is accepted. NO EXCEPTION.
DISABILITY SUPPORT SERVICES (DSS) STATEMENT (must be the following language)

If you have a physical, psychological, medical or learning disability that may impact your course work, please contact Disability Support Services, ECC (Educational Communications Center) Building, room128, (631) 632-6748. They will determine with you what accommodations, if any, are necessary and appropriate. All information and documentation is confidential.

[In addition, this statement on emergency evacuation is often included, but not required: 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.stonybrook.edu/ehs/fire/disabilities ]

ACADEMIC INTEGRITY STATEMENT (must be the following language as approved by the undergrad council):

Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. Faculty are required to report any suspected instances of academic dishonesty to the Academic Judiciary. Faculty in the Health Sciences Center (School of Health Technology & Management, Nursing, Social Welfare, Dental Medicine) and School of Medicine are required to follow their school-specific procedures. For more comprehensive information on academic integrity, including categories of academic dishonesty, please refer to the academic judiciary website at http://www.stonybrook.edu/uaa/academicjudiciary/

CRITICAL INCIDENT MANAGEMENT (must be the following language as approved by the undergrad council):

Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of Judicial Affairs any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, or inhibits students' ability to learn. Faculty in the HSC Schools and the School of Medicine are required to follow their school-specific procedures.