Solid Mechanics

Lecture Time: M W 11:00 a.m. - 12:15 p.m.   **Place**: 301-204

Instructor: Professor Jinkyu Yang   **Office:** 301-1424
Email: jkyang11@snu.ac.kr

Whom to contact?
If you have questions about course contents, please contact Professor Yang.
If you have questions about homework, contact TA. If not clear yet, contact Professor Yang.
If you have questions about grading, contact grader. If not clear yet, contact TA.

Catalog Course Description:
This course will examine the basic mechanics of rigid and deformable bodies in the equilibrium state. Topics to be discussed include free-body diagram, equilibrium conditions, stress and strain, shear force and bending moment applied to the interior of solids.

Objectives:
To provide the student with knowledge of stress analysis method for solids and structures consisting of truss, beam, and thin walled sections subjected to axial loading, bending, transverse shear, and torsion. The ultimate objective is to make the student realize how useful and practical solid mechanics is, such that he/she gets interested in the subject.

Prerequisite:
Basic knowledge in statics, mathematics, and physics

Textbook:
Mechanics of Materials, Russell Hibbeler, Pearson (11th edition)
An Introduction to the Mechanics of Solids, Stephen H Crandall, McGraw Hill

Computational software:
MATLAB, Python, Excel, or any computational software of your choice will be required to do homework

Homework:
- Homework due will be specified in every homework, and no late homework accepted (Only online submission is acceptable).
- Collaborations are allowed, but copying homework will be strictly prohibited. That is, you may discuss homework with your classmates, but all work must be your own.
- *In your homework, please box or highlight the final answer of each problem*, so that your homework can be easily graded. Due to limited time, grader does not grade your homework line by line. Elaborated homework will receive a near perfect score.

Quiz:
- Pop-up quiz will be conducted at the beginning of some classes without prior notification.
- Quiz problems will be based on homework problems.
- 8 scores (highest scored ones) will be counted out of about 10 pop-up quiz.

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Mid-term and Final exams: Two in-class mid-term exams (75 minutes, tentatively scheduled on April 5, Wednesday and May 10, Wednesday, during class hours) will be arranged. A 150 minute (2 ½-hour) final exam will be held on 6/14, Wednesday. The final exam will be comprehensive. No calculators or textbooks allowed. ___*No make-up exams will be given in any circumstances. Do not make travel plans that conflict with the final exam.*___

Course grade:

Homework	200 points
(~10 homework sets)	
Mid-term exam	300 points (150 points x 2 times)
Final exam	300 points
Quizzes	200 points
(10 pop-up quizzes and only 8 counts)	
Classroom attendance and attitude	-10 point subtraction per missing class*
PERFECT SCORE	1,000 points

* You need to contact the TA for any medical or urgent events, such that your absence can be excused in advance.

Grading scale: Instructor reserves the right to adjust the scale.
- Students who are absent more than 1/3 of class days will receive "F" grade.
- Students who are missing mid-term or final exams will receive "F" grade.

Misconduct: No tolerance for any misconduct (No cheating, no copying homework, no plagiarism)

Other policies and information:
- Sign the attendance sheet at the entrance of the classroom. Do not sign for your classmates. When caught, it would be considered as a cheating.
- Frequent cold calls.
- Lecture notes by instructors are not uploaded or shared with students.
- Recorded lectures will be available for those who have medical or urgent issues.