

CEE 6551, Fall 2022
Strength of Materials (Advanced Mechanics of Solids)
Tuesdays-Thursdays 6:30-7:45 pm, Mason 5134

Instructor Prof. Arash Yavari
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Office Hours Tuesdays and Thursdays 4:00-5:00 pm (<https://gatech.zoom.us/j/92891966065>)
Meeting ID: 928 9196 6065, Passcode: 810517

TA Zixi Zhang (zzhang942@gatech.edu)
Office Hours Wednesdays 4-5pm (<https://gatech.zoom.us/j/6533303982>)

Course Overview: This is a course on fundamentals of solid mechanics for graduate students. One goal of this course is to introduce the first-year graduate students to some basic problems in solid mechanics that have many applications in both analysis and design of structures. Another goal of the course is to give civil engineering students enough solid mechanics background to enable them to learn the problems not covered in this course independently and to give them the confidence to read the advanced solid mechanics and structural engineering literatures.

IMPORTANT NOTICE: Students should expect to see many theoretical discussions (motivated by real applications) throughout the semester. Students should also be aware that this course will be more mathematical than an undergraduate-level course on solid mechanics.

Prerequisites: Undergraduate courses in statics and mechanics of materials (solid mechanics), calculus, matrix algebra, and undergraduate differential equations.

Textbook: *Engineering Mechanics of Deformable Solids: A Presentation with Exercises* by Sanjay Govindjee, 1th Edition.

Dates for Tests:

Midterm Exam 1: Thursday, September 22
Midterm Exam 2: Tuesday, October 25
Final Exam: Tuesday, December 13, 6:00- 8:50 PM

Grading:

Weekly Homeworks: 20%
Two Midterm Exams: 20% each
Final Exam: 40%

Please scan your homework and upload it as a single PDF file on Canvas every Thursday before 6:30pm.

ATTENDANCE MISC: Attendance at all lectures is required. Excused absences must be cleared with me in advance, by e-mail.

Academic Integrity: Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are expected to act according to the highest ethical standards. For information on Georgia Tech's Academic Honor Code, please visit <http://www.catalog.gatech.edu/policies/honor-code/> or <http://www.catalog.gatech.edu/rules/18/>. Any student suspected of cheating or plagiarizing on a quiz, exam, or assignment will be reported to the Office of Student Integrity, who will investigate the incident and identify the appropriate penalty for violations.

Accommodations for Students with Disabilities: If you are a student with learning needs that require special accommodation, contact the Office of Disability Services at (404)894-2563 or <http://disabilityservices.gatech.edu/>,

as soon as possible, to make an appointment to discuss your special needs and to obtain an accommodations letter. Please also e-mail me as soon as possible in order to set up a time to discuss your learning needs.