COE 2001 Syllabus

Statics COE 2001, Section RIN, 2 Credits
Summer 2026

Instructor Information

Instructor(s): J. Prasad / K. Griendling
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General Course Information

Description
Forces and moments; equilibrium in two and three dimensions; multi-force members; equilibrium, centroids and friction.

Course Learning Outcomes
Students will be able to:

- Apply the basic principles underlying the equilibrium of rigid bodies in planar and 3D spaces.
- Demonstrate an ability to apply fundamental rigid-body mechanics concepts to set up and solve engineering mechanics problems such as equilibrium and force-balance problems for single and assemblies of rigid bodies.
- Draw clear and appropriate free body diagrams.
- Apply skills in mathematics and physics to solve engineering mechanics problems.
- Identify appropriate supports and static knowns and unknowns in both 2D and 3D structures.

Required Course Materials
Recommended (not required) J. L. Meriam, L. K. Kraige Engineering Mechanics: Statics - Latest edition preferable but not required (any edition would work). Wiley. Subscription to Wiley Plus is not required.

Grading Policy:
Review questions (online): 15%, Homework: 35%, Quizzes: 35%, Final: 15%

A>90; B>80; C>65; D>50

Assignments:
Review questions from lecture videos: 15%
Six homework sets (equally weighted, lowest homework dropped): 35%
Six quizzes (equally weighted, lowest dropped): 35%
Final exam: 15%

Description of Graded Components
All homework will be posted as assignments on Canvas with no time limit. All quizzes are open book and open notes with one-hour time limit. The final exam is open book and open notes with three-hour time limit.

Course Policies

Attendance and/or Participation
This course is structured as a self-paced online course with lecture videos and on-line review questions. Class sessions will be used to cover example problems. Attendance and participation in class sessions is required.

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. Review Georgia Tech's Honor Code and the student Code of Conduct.
Any student suspected of cheating or plagiarism 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.

Core IMPACTS
Not Applicable

Accommodation for Students with Disabilities

If you are a student with learning needs that require special accommodation, contact the Office of Disability Services 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.

Student-Faculty Expectations Agreement

At Georgia Tech, we believe that it is important to strive for an atmosphere of mutual respect, acknowledgement, and responsibility between faculty members and the student body. The Student-Faculty Expectations articulate some basic expectations that you can have of me and that I have of you. In the end, simple respect for knowledge, hard work, and cordial interactions will help build the environment we seek. Therefore, I encourage you to remain committed to the ideals of Georgia Tech while in this class.

Pre-&/or Co-Requisites

MATH 1502 or MATH 1512 or (MATH 15X2 and MATH 1522) and PHYS 2211

Collaboration, Group Work, and Use of Generative AI

You are allowed to consult with one another on homework. However, you must submit entirely your own work. You are not allowed to use any online resources including Generative AI on quizzes and final exam.

Extensions, Late Assignments, & Re-Scheduled/Missed Exams

This is a self-paced on-line course. There are no time limits for homework assignments. You will be allowed to take quizzes at your own pace. You will have to complete the final exam by the official final exam date for the course.