

COE 2001 Syllabus

Rev. 4/5/2026

Course Prefix: COE

Course Number: 2001

Course Name: Statics

Semester: SU

Academic Year: 2026

Instructor Information

Instructor: Prof. Jian Luo

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General Course Information

Course Description:

Elements of statics in two and three dimensions, free-body diagrams, distributed loads, centroids, and friction.

Course Learning Outcomes:

Outcome 1: The student will demonstrate an understanding of the basic mathematical and physical principles to describe, relate, and predict equilibrium interactions (forces) of physical systems at rest.

Outcome 2: The student will build on skills acquired in statics to solve problems in engineering applications such as structures, bridges, and buildings.

Required Course Materials:

Statics, Meriam, Kraige, and Bolton, Wiley 9th Edition. WileyPlus access is required for homework.

Grading Policy:

Homework

Weekly homework will be assigned through Canvas-integrated WileyPlus. Late homework will receive 1/2 credit. Homework will be submitted through the WileyPlus online system, in which you have online access to the textbook and other supplemental materials. You have 5 attempts for each homework problem to submit the correct answer (within a tolerance of $\pm 2\%$ to account for round-off errors), after which you can access the published solution. The assigned problems are algorithmic, which means each student will have unique input parameters and final answers.

Exams

We have in-class sample problem discussion and solution, quizzes, and a final exam. In-class quizzes are open to notes. The final exam is closed-book, but one page (8-1/2 inches by 11 inches) (single-sided) of notes is allowed.

Course Grade Scale

- A 100%-90%
- B 89%-80%
- C 79%-70%
- D 69%-60%
- F <60%

Method 1: attendance and in-class problem discussion (40%) + quizzes (50%) + graded homework (10%)

Method 2: attendance and in-class problem discussion (40%) + quizzes (20%) + final exam (30%) + graded homework (10%)

Your final course grade will be the higher grade of Methods 1 and 2. You have the option to accept the Method 1 grade and be exempted from taking the final exam.

Course Topics

Chapter 1	Introduction
Chapter 2	Force Systems
Chapter 3	Equilibrium
Chapter 4	Structures
Chapter 5	Distributed Forces
Chapter 6	Friction
	Review and Final Exam

Course Policies

Attendance Policy:

During the first two weeks, this course will be offered asynchronously; videos will be posted on Canvas, and no attendance is required. During the remaining weeks, students who miss classes, homework deadlines, or exams due to an emergency, such as a health issue, may make up for the work missed during their absences.

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 <https://policylibrary.gatech.edu/student-life/academic-honor-code/>. Any student suspected of violating the Honor Code, such as cheating or plagiarizing on a quiz, exam, or assignment, will be reported to the Office of Student Integrity, which will investigate the incident and identify the appropriate penalty for violations.

Student-Faculty Expectations Agreement

The Georgia Tech community believes that it is important to continually strive for an atmosphere of mutual respect, acknowledgment, and responsibility between faculty members and the student body. Therefore, we herein endeavor to enumerate the specific expectations of each side. However, this document is not intended to be either comprehensive or limiting in regard to the Institute's statutes. Ultimately, simple respect for knowledge, hard work, and cordial interactions will help build the environment we seek. We remain committed to the ideals of Georgia Tech, agree to abide by these principles in our time here, and will encourage each other to uphold these responsibilities.

Accommodation for Students with Disabilities

If you are a student with learning needs that require special accommodation, please contact the Office of Disability Services at (404)894-2563 or <http://disabilityservices.gatech.edu/> as soon as possible to discuss your special needs and to obtain an accommodations letter. Please contact me before and during the camp to discuss your learning needs.