ENGR 234
Engineering Mechanics I: Statics

Fall XXXX

Instructor: **TBA**

Office Address	TBA
Office Hours	TBA
Phone Number	TBA
Email address	TBA

Webpage: We will use the Moodle course management system.

Class Times: TBA

Texts: *Engineering Mechanics: Statics, 14th ed.* Hibbeler. Prentice Hall.

Description: Engineering Mechanics I: Statics (=PHYS 234) (Prereq: PHYS 211 or permission of the instructor) (3 credits) This course deals with systems of forces acting on particles and rigid bodies at rest. The course addresses the finding of resultant forces and torques for various bodies. The covered topics include concentrated and distributed forces, equilibrium in two- and three-dimensions, moments, couples, and other key principles used in engineering design of structures that must remain static while bearing stress or performing a task. F.

Objectives: Students will gain an understanding of:

1. Methods of particle and rigid body force analysis
2. the importance of support reactions in real structures, machinery, other static systems
3. the use of engineering statics in the design process

Outcomes Upon completion of this course, student should be able to

1. Create mathematical models of static systems (point mass and rigid bodies)
2. Analyze the force balance of point mass and rigid body static systems.
3. Determine support reactions of point mass and rigid body static systems

ABET: This course supports the following ABET student learning outcomes:

1. ***an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics***
2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
3. an ability to communicate effectively with a range of audiences
4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions

7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Grading: Grades will be assigned according to the following scale:

A	90.0 – 100	exceptional work, significantly above the expectations of the course
B+	85.0 – 89.9	
B	80.0 – 84.9	excellent work, solid understanding of all concepts
C+	75.0 – 79.9	
C	70.0 – 74.9	good work, solid understanding of main concepts
D+	65.0 – 69.9	
D	60.0 – 64.9	poor work, weak understanding of main concepts

Grades will be weighted as follows:
TBA

Attendance: STUD-SENA-332: Unexcused Absence Penalties – an instructor is permitted to impose a penalty, including assigning the grade of F, for unexcused absences in excess of 25 percent of the regularly scheduled class meetings.
STUD-SENA-332 also lists the valid circumstances for an excused absence, notably:

- Incapacitating illness
- Official representation of the university
- Death of a close relative
- Religious holidays

Exams: TBA

Honesty: Code of Student Conduct: Plagiarism, cheating, attempted cheating and all other forms of academic dishonesty is prohibited. The Code of Student Conduct or the Academic Integrity Code <https://www.coastal.edu/academicintegrity/code/> provides further information, including other examples of cheating and the list of possible sanctions. In essence, academic dishonesty is pretending someone else's work is your own. Turnitin may be used for written assignments. **All academic dishonesty violations will be reported.**

Contingencies: If normal class and/or lab activities are disrupted due to illness, emergency, or crisis situation, the syllabus and other course plans and assignments may be modified to allow completion of the course. If this occurs, an addendum to your syllabus and/or course assignments will replace the original materials.

Communication: I will try to respond to emails within one business day. Please use your @coastal.edu email.

ADA statement: Coastal Carolina University is committed to equitable access and inclusion of individuals with disabilities in accordance with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act. Individuals seeking reasonable accommodations should contact Accessibility & Disability Services (843-349-2503 or https://www.coastal.edu/disabilityservices/).

Revisions: This syllabus and schedule are tentative and subject to change by the instructor with notice to the student as the semester progresses.