



ENGR 244

Engineering Mechanics II: Dynamics

Fall 2019

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:	<i>Engineering Mechanics: Dynamics, 14th ed.</i> Hibbeler. Prentice Hall.
Description:	ENGR 244 - Engineering Mechanics II: Dynamics (3 credits). (Prereq: ENGR 234 or permission of the instructor) Kinematics of particles: coordinate systems, relative and dependent motions, Kinetics of particles: Newton's Second Law, Kinetics of particles: work and energy methods, Kinetics of particles: impulse and momentum methods, Kinematics of rigid bodies: absolute and relative motion, Review of mass moment of inertia, Planar kinetics of rigid bodies: Newton's Second Law, Planar kinetics of rigid bodies: work and energy methods, Planar kinetics of rigid bodies: impulse and momentum methods, Vibrations: free and forced. S.
Objectives:	Students will gain an understanding of: <ol style="list-style-type: none">1. Methods of particle and rigid body force analysis2. the importance of inertial forces in real structures, machinery, other accelerated systems3. the use of engineering dynamics in the design process
Outcomes	Upon completion of this course, student should be able to <ol style="list-style-type: none">1. Create mathematical models of dynamic systems (point mass and rigid bodies)2. Analyze the kinematics of point mass and rigid body systems.3. Determine the motion of point mass and rigid body systems
ABET:	This course supports the following ABET student learning outcomes: <ol style="list-style-type: none">1. <i>an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics</i>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 factors3. an ability to communicate effectively with a range of audiences4. 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 contexts5. 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.