

CUMBERLAND COUNTY COLLEGE

Course: EG 202 Engineering Dynamics

Credits: 2 (2:2:0)

Prerequisite: EG 201

Description: This course covers Kinematics and Kinetics, the work-energy principle, impulse and momentum, rigid body motion.

Learning Outcomes:

At the completion of this course, students will be able to:

- Analyze a kinetic system
- Predict state of motion of a system
- Evaluate the energy any momentum of a system
- Apply the conservation laws
- Explain the motion of a rigid body
- Formulate motion in different coordinate systems

Topical Outline:

- Kinematics of a particle
- Rectilinear and Curvilinear Motions
- Rectangular, Tangent-Normal, and Cylindrical Coordinates
- Force and Acceleration
- Work and Energy
- Impulse and Momentum
- Rigid Body

Text:

Engineering Mechanics, Dynamics, 11th Ed., R. C. Hibbeler, Prentice Hall Pearson Education, Inc.

Student Assessment:

In the course of the semester two examinations will be given in addition to a comprehensive final exam. These exams in addition to the homework assignments constitute the basis for evaluation of the student proficiency. Course grade will be calculated as follows:

Two exams	50%
Final exam	30%
Homework	20%

Academic Integrity:

Plagiarism is cheating. Plagiarism is presenting in written work, in public speaking, and in oral reports the ideas or exact words of someone else without proper documentation.

Whether the act of plagiarism is deliberate or accidental [ignorance of the proper rules for handling material is no excuse], plagiarism is, indeed, a “criminal” offense. As such, a plagiarized paper or report automatically receives a grade of **ZERO** and the student may receive a grade of **F** for the semester at the discretion of the instructor.

Tutoring & Project Assist:

If you are having difficulty with work in this class tutoring is available through the Center for Academic & Student Success. If you think that you might have a learning disability, contact Project Assist at 856.691.8600 x 1282 for information on assistance that can be provided to eligible students.

Before Withdrawing From This Course:

If a student experiences adverse circumstances while enrolled in this course and considers withdrawing, s/he should see an advisor (division or advisement center) BEFORE withdrawing from the class. A withdrawal may cause harmful repercussions to completion rate standards and overall GPA which can limit or eliminate future financial aid in addition to causing academic suspension.