

SYLLABUS
PART I
EDISON COMMUNITY COLLEGE
MET 211S APPLIED ENGINEERING DYNAMICS
3 CREDIT HOURS

COURSE DESCRIPTION

Non-calculus based study of rectilinear and curvilinear motion, rotation, plane motion, work, energy, and power. Prerequisite: MET 125S, PHY 121S.

COURSE GOALS

The student will:

Bloom's Level		Program Outcomes
1	1. Describe the basic principles of dynamics.	2
1	2. Identify the differences between kinematics and kinetics.	2
4	3. Analyze problems in the kinematics and kinetics of rectilinear motion.	2, 6
4	4. Analyze curvilinear motion.	2, 6
4	5. Analyze the kinematics and kinetics of rotation and plane motion.	2, 6
3	6. Solve work, energy, power, impulse, momentum, and impact problems.	2, 6

CORE VALUES

The Core Values are a set of principles which guide in creating educational programs and environments at Edison. They include communication, ethics, critical thinking, human diversity, inquiry/respect for learning, and interpersonal skills/teamwork. The goals, objectives, and activities in this course will introduce/reinforce these Core Values whenever appropriate.

TOPIC OUTLINE

1. Kinematics: Rectilinear Motion
2. Kinematics: Angular Motion
3. Plane Motion
4. Kinetics
5. Work, Energy and Power
6. Impulse and Momentum