

Chapter 8 Dynamics

TIME SCHEDULE

The following schedule is suggested for a three-hour review class.

Minutes	Topics
5	KINEMATICS OF A PARTICLE, p. 194
5	Relating Distance, Velocity and the Tangential Component of Acceleration; Constant Tangential Acceleration
5	Rectilinear Motion
10	Rectangular Cartesian Coordinates
10	Circular Cylindrical Coordinates
5	Circular Path
	RIGID BODY KINEMATICS, p. 203
10	The Constraint of Rigidity
10	The Angular Velocity Vector
10	Instantaneous Center of Zero Velocity
5	Accelerations in Rigid Bodies
15	**Break**
	NEWTON'S LAWS OF MOTION, p. 210
10	Applications to a Particle
5	Systems of Particles
10	Linear Momentum and Center of Mass
5	Impulse and Momentum
10	Moments of Force and Momentum
	WORK AND KINETIC ENERGY, p. 219
5	A Single Particle
10	Work of a Constant Force
10	Distance-Dependent Central Force
	KINETICS OF RIGID BODIES, p. 225
15	Moment Relationships for Planar Motion
10	Work and Kinetic Energy