Outcomes Based Learning Matrix

Course: ENGT 274 Dynamics **Department**: **ENGT**

Course Outcomes	Outcome Activities	Assessment Tools
Students will be able to:		
Determine the kinematics of particles in rectilinear and curvilinear motion.	Lecture and discussion of the principles of Angular Momentum and the	Assignments, exams, lab
Solve kinetics of particles problems using Newton's second law and energy and momentum methods.	Study Newton's Conservation of Energy principle as it applies to single particle and many particle mechanics.	Assignments, exams, lab
Solve kinematics problems involving rigid bodies.	Lecture on the kenitics of rigid bodies as well as the potential energy associated with gravity and spring forces.	Assignments, exams, lab
Analyze the plane motion of rigid bodies using forces & accelerations and energy & momentum methods.	Lecture and discussion of the motion of rigid bodies reviewing Kinematics, Inertia tension, Euler's Equations and their applications.	Assignments, exams, lab
Understand the elements of the Lagrangian approach	Learn to develop dynamical equations using the Lagrangian approach. Learn the concept of the Principle of Least Action.	Assignments, exams, lab