



Course Number	PHYS 1310, Calculus-based Physics I
Course Name	
Credit Value (Breakdown of theory and lab credits)	3 Theory
Catalog Course Description	A calculus level treatment of classical mechanics and waves, which is concerned with the physical motion concepts, forces, energy concepts, momentum, rotational motion, angular momentum, gravity, and static equilibrium. Prerequisite: MATH 1510. Corequisite 1310L (3, 3T+0L).
Course Student Learning Outcomes/Objectives /Competencies of the Course	<p>Student Learning Outcomes: Upon completion of this course, the student will be able to:</p> <ol style="list-style-type: none"> 1. Describe the relationships among position, velocity, and acceleration as functions of time. 2. Use the equations of kinematics to describe motion under constant acceleration. 3. Analyze linear motion using Newton's laws, force, and linear momentum. 4. Analyze rotational motion using torque and angular momentum. 5. Analyze motion using work and energy.
College-Wide Student Learning Outcomes	<p>PHYS 1310 will expose students to the following NNMC College Wide Goal:</p> <p><i>Critical thought: Students are required to analyze and synthesize information and draw reasoned conclusions.</i></p>
Program Student Learning Outcomes measured	None