

Course Title	Hours Per Week			Semester Hours
	Class	Lab	Clinical	
<b>PHY 121 Applied Physics I</b>	3	2	0	4
Prerequisites: None Corequisites: None This algebra-based course introduces fundamental physical concepts as applied to industrial and service technology fields. Topics include systems of units, problem-solving methods, graphical analyses, vectors, motion, forces, Newton's laws of motion, work, energy, power, momentum, and properties of matter. Upon completion, students should be able to demonstrate an understanding of the principles studied as applied in industrial and service fields.				
<b>PHY 131 Physics-Mechanics</b>	3	2	0	4
Prerequisites: MAT 121 Corequisites: None This algebra/trigonometry-based course introduces fundamental physical concepts as applied to engineering technology fields. Topics include systems of units, problem-solving methods, graphical analysis, vectors, motion, forces, Newton's laws of motion, work, energy, power, momentum, and properties of matter. Upon completion, students should be able to apply the principles studied to applications in engineering technology fields.				
<b>PHY 133 Physics-Sound and Light</b>	3	2	0	4
Prerequisites: PHY 131 Corequisites: None This algebra/trigonometry-based course is a study of fundamental physical concepts as applied to engineering technology fields. Topics include systems of units, problem-solving methods, graphical analysis, wave motion, sound, light, and modern physics. Upon completion, students should be able to apply the principles studied to applications in engineering technology fields.				
<b>PHY 151 College Physics I</b>	3	2	0	4
Prerequisites: MAT 121, MAT 161 or MAT 171 Corequisites: None This course uses algebra- and trigonometry-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include units and measurement, vectors, linear kinematics and dynamics, energy, power, momentum, fluid mechanics, and heat. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered.				
<b>PHY 152 College Physics II</b>	3	2	0	4
Prerequisites: PHY 151 Corequisites: None This course uses algebra- and trigonometry-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include electrostatic forces, electric fields, electric potentials, direct-current circuits, magnetostatic forces, magnetic fields, electromagnetic induction, alternating-current circuits, and light. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered.				
<b>PHY 153 Modern Topics in Physics</b>	3	2	0	4
Prerequisites: PHY 151 Corequisites: None This course uses algebra- and trigonometry-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include atomic structure, nuclear processes, natural and artificial radioactivity, basic quantum theory, and special relativity. Upon completion, students should be able to demonstrate an understanding of the principles				

involved and display analytical problem-solving ability for the topics covered.

**PHY 251 General Physics I** 3 3 0 4  
Prerequisites: MAT 271  
Corequisites: MAT 272  
This course uses calculus-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include units and measurement, vector operations, linear kinematics and dynamics, energy, power, momentum, rotational mechanics, periodic motion, fluid mechanics, and heat. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered.

**PHY 252 General Physics II** 3 3 0 4  
Prerequisites: MAT 272, PHY 251  
Corequisites: None  
This course uses calculus-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include electrostatic forces, electric fields, electric potentials, direct-current circuits, magnetostatic forces, magnetic fields, electromagnetic induction, alternating-current circuits, and light. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered.