COURSES

PHYSICS

PHY-110 Conceptual Physics **Lec 3 Lab 0 Clinic 0 Credit 3**
This course provides a conceptually-based exposure to the fundamental principles and processes of the physical world. Topics include basic concepts of motion, forces, energy, heat, electricity, magnetism, and the structure of matter and the universe. Upon completion, students should be able to describe examples and applications of the principles studied.

Co-Requisites: PHY-110A
Pre-Requisites: None

PHY-110A Conceptual Physics Lab **Lec 0 Lab 2 Clinic 0 Credit 1**
This course is a laboratory for PHY 110. Emphasis is placed on laboratory experiences that enhance materials presented in PHY 110. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in PHY 110.

Co-Requisites: PHY-110
Pre-Requisites: None

PHY-151 College Physics I **Lec 3 Lab 2 Clinic 0 Credit 4**
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.

Co-Requisites: None
Pre-Requisites: One: MAT-171 or MAT-271

PHY-152 College Physics II **Lec 3 Lab 2 Clinic 0 Credit 4**
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.

Co-Requisites: None
Pre-Requisites: PHY-151

PHY-251 General Physics I **Lec 3 Lab 3 Clinic 0 Credit 4**
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.

Co-Requisites: MAT-272
Pre-Requisites: MAT-271 MAT-172

PHY-252 General Physics II **Lec 3 Lab 3 Clinic 0 Credit 4**
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.

Co-Requisites: None
Pre-Requisites: All: MAT-272 and PHY-251