

PHYSICS (PHYS)

PHYS 1101 College Physics I (lab) 1 Credit (0 Lec, 3 Lab)

principles and applications of classical mechanics and thermodynamics, including harmonic motion, mechanical waves and sound, physical systems, Newton's Laws of Motion, and gravitation and other fundamental forces; with emphasis on problem solving.

Prerequisite(s): MATH 1314 and MATH 1316; or MATH 2412 or higher, Reading level 7, Math level 9

Co-requisite(s): PHYS 1301

Course Type: Academic

PHYS 1102 College Physics II (lab) 1 Credit (0 Lec, 3 Lab)

This lab course activities will reinforce fundamental principles of physics, using algebra and trigonometry; the principles and applications of electricity and magnetism, including circuits, electrostatics, electromagnetism, waves, sound, light, optics, and modern physics topics; with emphasis on problem solving.

Prerequisite(s): PHYS 1301 and PHYS 1101, Reading level 7, Math level 9

Co-requisite(s): PHYS 1302

Course Type: Academic

PHYS 1301 College Physics I (lecture) 3 Credits (3 Lec, 0 Lab)

This lecture course covers the fundamental principles of physics, using algebra and trigonometry; the principles and applications of classical mechanics and thermodynamics, including harmonic motion, mechanical waves and sound, physical systems, Newton's Laws of Motion, and gravitation and other fundamental forces; with emphasis on problem solving.

Prerequisite(s): MATH 1314 and MATH 1316; or MATH 2412 or higher, Reading level 7, Math level 9

Co-requisite(s): PHYS 1101

Course Type: Academic

PHYS 1302 College Physics II (lecture) 3 Credits (3 Lec, 0 Lab)

This lecture course covers fundamental principles of physics, using algebra and trigonometry; the principles and applications of electricity and magnetism, including circuits, electrostatics, electromagnetism, waves, sound, light, optics, and modern physics topics; with emphasis on problem solving.

Prerequisite(s): PHYS 1301 and PHYS 1101, Reading level 7, Math level 9

Co-requisite(s): PHYS 1102

Course Type: Academic

PHYS 2125 University Physics I (lab) 1 Credit (0 Lec, 3 Lab)

This lab course covers experiments supporting theoretical principles presented in PHYS 2325 involving the principles and applications of classical mechanics, including harmonic motion and physical systems; experimental design, data collection and analysis, and preparation of laboratory reports. It is designed to meet the needs of the pre-engineering student or physics major.

Prerequisite(s): MATH 2413 or MATH 2414

Prerequisite with concurrency: MATH 2414 or MATH 2415 Reading level 7

Co-requisite(s): PHYS 2325

Course Type: Academic

PHYS 2126 University Physics II (lab) 1 Credit (0 Lec, 3 Lab)

This lab course covers experiments supporting theoretical principles presented in PHYS 2326 involving the principles of electricity and magnetism, including circuits, electromagnetism, waves, sound, light, and optics; experimental design, data collection and analysis, and preparation of laboratory reports.

Prerequisite(s): PHYS 2325, PHYS 2125, and MATH 2414, Reading level 7

Co-requisite(s): PHYS 2326

Course Type: Academic

PHYS 2325 University Physics I (lecture) 3 Credits (3 Lec, 0 Lab)

This lecture course covers the fundamental principles of physics, using calculus, for science, computer science, and engineering majors; the principles and applications of classical mechanics, including harmonic motion, physical systems and thermodynamics; and emphasis on problem-solving. It is designed to meet the needs of the pre-engineering student or physics major.

Prerequisite(s): MATH 2413 or MATH 2414

Prerequisite with concurrency: MATH 2414 or MATH 2415 Reading level 7

Co-requisite(s): PHYS 2125

Course Type: Academic

PHYS 2326 University Physics II (lecture) 3 Credits (3 Lec, 0 Lab)

In this continuation of PHYS 2425, the topics covered include the principles of physics for science, computer science, and engineering majors, using calculus, involving the principles of electricity and magnetism, including circuits, electromagnetism, waves, sound, light, and optics.

Prerequisite(s): PHYS 2325, PHYS 2125 and MATH 2414, Reading level 7

Co-requisite(s): PHYS 2126

Course Type: Academic

PHYS 2389 Academic Cooperative 3 Credits (1 Lec, 8 Lab)

This is an instructional program designed to integrate on-campus study with practical hands-on work experience in the physical sciences. In conjunction with class seminars, the individual student will set specific goals and objectives in the scientific study of inanimate objects, processes of matter and energy, and associated phenomena.

Prerequisite(s): Eight hours of Physics, Reading level 7, Writing level 7, Math level 8

Course Type: Academic