

# COURSES

## PHYSICS

### PHYS 1401 COLLEGE PHYSICS I

3 lec/3 lab (4 Cr.) This is a 4 semester hour course which is an algebra/trigonometry-level approach toward physics for students preparing for medical, dental, or other science-related fields. Topics include 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. Laboratory activities will reinforce 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; emphasis will be on problem solving.

Pre-requisite: MATH 1314 – College Algebra and MATH 1316 – Plane Trigonometry or MATH 2312/2412 Pre-Calculus

Credits

4

Distribution

PHYS

Offered

Spring Only

Course Fee

Lab fee: \$18

### PHYS 1402 COLLEGE PHYSICS II

3 lec/3 lab (4 Cr.) This four semester hour course is a continuation of PHYS 1401. Topics include the study of the 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. Laboratory 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: PHYS 1401 College Physics I

Credits

4

Distribution

PHYS

Offered

Fall Only

Course Fee

Lab fee: \$18

### PHYS 1403 STARS & GALAXIES

3 lec/3 lab (4 Cr.) Study of stars galaxies and the universe outside our solar system. (Formerly: PHYS 1412)

Credits

4

Distribution

PHYS

Course Fee

Internet course fee (if applicable): \$38, Lab fee: \$18

### PHYS 1404 THE SOLAR SYSTEM

3 lec/3 lab (4 Cr.) Study of the sun and its solar system including its origin. (Formerly: PHYS 1411)

Credits

4

Distribution

PHYS

Course Fee

Internet course fee (if applicable): \$38, Lab fee: \$18

## PHYS 1415 PHYSICAL SCIENCE I

3 lec/3 lab (4 Cr.) Course, designed for non-science majors, that surveys topics from physics, chemistry, geology, astronomy, and meteorology. May or may not include a laboratory.

Credits

4

Distribution

PHYS

Course Fee

Lab fee: \$18

## PHYS 1417 PHYSICAL SCIENCE II

3 lec/3 lab (4 Cr.) This course, designed for non-science majors, is a survey of topics in physics, chemistry, geology, astronomy, and meteorology.

Credits

4

Distribution

PHYS

Course Fee

Lab fee: \$18

## PHYS 2425 UNIVERSITY PHYSICS I

3 lec/3 lab (4 Cr.) 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. Basic laboratory 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.

Prerequisite: MATH 2413—Calculus I

Credits

4

Distribution

PHYS

Course Fee

Lab fee: \$18

## PHYS 2426 UNIVERSITY PHYSICS II

3 lec/3 lab (4 Cr.) 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. Laboratory 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.

Prerequisites: PHYS 2425 University Physics I, MATH 2414 Calculus II

Credits

4

Distribution

PHYS

Offered

Fall Only

Course Fee

Lab fee: \$18