

PHYSICS (PHY)

PHY-1810-9 Selected Topics in Philosophy (Variable semester hours)

This course will address a specific area of study in Philosophy not already covered by other course offerings. Prerequisites vary by topic.

PHY-2210 General Physics I (3 semester hours)

This is the first of a two-course non-calculus sequence in physics intended primarily for students in health science and biology. Mechanics topics covered in the first term include force and motion, work, energy, fluid behavior and waves. Biomedical applications are emphasized in all topics being explored.

Prerequisite(s): MTH-1310 with a grade of "C" or better.

Co/prerequisite(s): PHY-2210Z.

PHY-2210Z General Physics I Laboratory (1 semester hours)

This is a one-semester course that reinforces physics concepts of mechanics by engaging in experiments related to motion, free body diagrams, acceleration, momentum, conservation of energy, circular motion, material properties, fluid flow and waves. Data collection, analysis and presentation are emphasized with scientific practices. Lab reports required.

Co/prerequisite(s): PHY-2210.

Additional fee required

PHY-2220 General Physics II (3 semester hours)

This is the second of a two-course, non-calculus sequence in physics intended primarily for students in health science and biology. Topics include electrical force and field, circuits, electromagnetism, optics, and electromagnetic radiation. Modern communication and health-related technologies will be used to explore the four fundamental forces that govern the world.

Prerequisite(s): PHY-2210 with a grade of "C" or better; PHY-2210Z with a grade of "C" or better.

Co/prerequisite(s): PHY-2220Z.

PHY-2220Z General Physics II Laboratory (1 semester hours)

A one semester course that reinforces physics concepts of electricity, magnetism and optics by engaging in experiments related to electric fields, capacitors, circuits, magnetic fields, motors, spectroscopy, and optics. Data collection, analysis and presentation continue to be emphasized scientific practices. Real-world physics connections are explored in researching modern technological and health-care related instrumentation. Lab reports required.

Prerequisite(s): PHY-2210 with a grade of "C" or better; PHY-2210Z with a grade of "C" or better.

Co/prerequisite(s): PHY-2220

Additional fee required

PHY-2240 Physics I (Calculus Based) (3 semester hours)

An introductory calculus-based course where students explore Newtonian mechanics, conservation laws, energy, and waves.

Prerequisite(s): MTH-2210.

Co/prerequisite(s): PHY-2240Z.

PHY-2240Z Physics I (Calculus Based) Laboratory (1 semester hours)

Laboratory component to PHY2240 where students experience hands-on applications of Newtonian mechanics, conservation laws, energy, and waves.

Prerequisite(s): MTH-2210.

Co/prerequisite(s): PHY-2240.

Additional fee required

PHY-2250 Physics II (Calculus Based) (3 semester hours)

An introductory calculus-based course where students explore electromagnetism and its applications, light and optics.

Prerequisite(s): PHY-2240.

Co/prerequisite(s): PHY-2250Z.

PHY-2250Z Physics II (Calculus Based) Laboratory (1 semester hours)

Laboratory component to PHY2250 where students experience hands-on applications of electromagnetism, light, and optics. Lab reports required.

Prerequisite(s): PHY-2240.

Co/prerequisite(s): PHY-2250.

Additional fee required

PHY-2810-9 Selected Topics in Physics (Variable semester hours)

This course will address a specific area of study in Physics not already covered by other course offerings. Prerequisites vary by topic.

PHY-3810-9 Selected Topics in Physics (Variable semester hours)

This course will address a specific area of study in Physics not already covered by other course offerings. Prerequisites vary by topic.

PHY-4810-9 Selected Topics in Physics (Variable semester hours)

This course will address a specific area of study in Physics not already covered by other course offerings. Prerequisites vary by topic.