

Physics (PHY) Courses

PHY1011 General Physics I

This course is the first in a two-part introductory physics course sequence using algebra-based approaches to analyze physics phenomena. Students are introduced to vector algebra and the basic principles of classical mechanics, applying the concepts of work, energy, linear momentum and angular momentum to physical phenomena. This course must be taken concurrently with General Physics I Laboratory.

Prerequisite(s): MATH1020 (or concurrent) or math placement, Corequisite: PHY1015. (OL)

Offered at Denver, North Miami, Online, Providence, Providence CE
4.5 Quarter Credit Hours

PHY1015 General Physics I Laboratory

This is an introductory algebra- and inquiry-based physics laboratory course coordinated with PHY1011 General Physics I. Small teams of students work together to solve practical Newtonian physics problems by conducting a sequence of observations and tests. Students are responsible for developing their own experiments and task assignments as they work within collaborative team structures, using the collected data to construct original models of physical phenomena. Students practice skills employed by professional engineers and scientists. The laboratory exercises reinforce theories discussed in class, including error analysis, vector algebra, kinematics, conservation of energy, momentum and rotational motion.

Prerequisite(s): MATH1020 (or concurrent) or math placement, Corequisite: PHY1011. (OL)

Offered at Denver, North Miami, Online, Providence, Providence CE
1.5 Quarter Credit Hours

PHY1022 General Physics II

This course is the second in a two-part introductory physics course sequence using algebra-based mathematical approaches to analyze physics phenomena. Students are introduced to heat, wave propagation, wave energy, reflection, refraction, electricity, magnetism, circuits and semiconductors. This course must be taken concurrently with General Physics II Laboratory.

Prerequisite(s): MATH1020, (PHY1011, PHY1015 or SCI1011, SCI1041), Corequisite: PHY1025.

Offered at Denver, Providence, Providence CE
4.5 Quarter Credit Hours

PHY1025 General Physics II Laboratory

This course is an introductory algebra- and inquiry-based physics laboratory coordinated with PHY1022 General Physics II. Small teams of students work together to solve practical Newtonian physics problems by conducting a sequence of observations and tests. Students are responsible for developing their own experiments and task assignments as they work within collaborative team structures, using the collected data to construct original models of physical phenomena. Students practice skills employed by professional engineers and scientists. The laboratory exercises reinforce theories discussed in class, including error analysis, heat transfer, electric and magnetic fields, circuits, digital instruments and optics.

Prerequisite(s): MATH1020, (PHY1011, PHY1015 or SCI1011, SCI1041), Corequisite: PHY1022.

Offered at Denver, Providence, Providence CE
1.5 Quarter Credit Hours

PHY2011 Physics I

PHY2011 is the first of a two part introductory Physics course sequence using calculus-based approaches to analyze physics phenomena. It introduces students to vectors and the basic principles of classical mechanics, applying the concepts of work, energy, linear momentum, and angular momentum, to physical phenomena. PHY2011 must be taken concurrently with the laboratory section (see PHY2015, Physics I Laboratory).

Prerequisite(s): MATH1040 (or concurrent), Corequisite: PHY2015.

Offered at Providence, Providence CE
4.5 Quarter Credit Hours

PHY2015 Physics I Laboratory

PHY2015 is an introductory calculus based Physics Laboratory class that meets three hours per week. It is an inquiry-based laboratory course coordinated with PHY2011 Physics I. Small teams of students work together to solve practical Newtonian physics problems by conducting a sequence of observations and tests. Students are responsible for developing their own experiments and task assignments as they work within collaborative team structures, using the collected data to construct original models of physical phenomena. Students practice skills employed by professional engineers and scientists. The laboratory exercises reinforce theories discussed in class, including error analysis, vector algebra, kinematics, conservation of energy, momentum, and rotational motion.

Prerequisite(s): MATH1040 (or concurrent), Corequisite: PHY2011.

Offered at Providence, Providence CE
1.5 Quarter Credit Hours

PHY2022 Physics II

PHY2022 is the second of a two part introductory Physics course sequence using calculus-based mathematical approaches to analyze physics phenomena. It introduces students to heat, wave propagation, wave energy, reflection, refraction, electricity, magnetism, circuits, and semiconductors. PHY2022 must be taken concurrently with the laboratory section (see PHY2025, Physics II Laboratory).

Prerequisite(s): MATH1040, ((PHY1011, PHY1015) or (PHY2011, PHY2015) or (SCI1011, SCI1041) or (SCI2011, SCI2041)), Corequisite: PHY2025.

Offered at Providence, Providence CE
4.5 Quarter Credit Hours

PHY2025 Physics II Laboratory

PHY2025 is an introductory calculus based Physics Laboratory class that meets three hours per week. It is an inquiry-based laboratory course coordinated with PHY2022 Physics II. Small teams of students work together to solve practical Newtonian physics problems by conducting a sequence of observations and tests. Students are responsible for developing their own experiments and task assignments as they work within collaborative team structures, using the collected data to construct original models of physical phenomena. Students practice skills employed by professional engineers and scientists. The laboratory exercises reinforce theories discussed in class, including error analysis, heat transfer, electric and magnetic fields, circuits, digital instruments, and optics.

Prerequisite(s): MATH1040, ((PHY1011, PHY1015) or (PHY2011, PHY2015) or (SCI1011, SCI1041) or (SCI2011, SCI2041)), Corequisite: PHY2022.

Offered at Providence, Providence CE
1.5 Quarter Credit Hours

Font Notice

This document should contain certain fonts with restrictive licenses. For this draft, substitutions were made using less legally restrictive fonts. Specifically:

Times was used instead of Adobe Garamond Pro.

The editor may contact Leepfrog for a draft with the correct fonts in place.