

# PHYSICS (PHY) SOLANO CAMPUS

undefined

## **PHY Courses**

## PHY 1100 General Physics I (3 units)

Term Typically Offered: F, SP 2026-28 or later catalog: GE Area 5A 2020-26 catalogs: GE Area B1

Prerequisite: MTH 100 or MTH 1100. Concurrent: PHY 100L or PHY 1100L.

Offered at Solano Campus. Vectors and scalars, Newton's laws, statics and dynamics, translational and rotational kinematics, rotational dynamics, work and energy, momentum, conservation principles, equilibrium and elasticity, gravitation, periodic motion and, fluids and buoyancy. 3 lectures. Fulfills GE Area 5A (GE Area B1 for students on the 2020-26 catalogs). Formerly PHY 100 at Cal Maritime.

#### PHY 1100L General Physics I Laboratory (1 unit)

Term Typically Offered: F, SP 2026-28 or later catalog: GE Area 5C 2020-26 catalogs: GE Area B3

Prerequisite: MTH 100 or MTH 1100. Concurrent: PHY 100 or PHY 1100.

Offered at Solano Campus. Explores fundamental principles of kinematics, dynamics, work and energy, momentum, gravitation, simple harmonic motion, and other concepts studied in PHY 100 through experimentation. 1 laboratory. Fulfills GE Area 5C (GE Area B3 for students on the 2020-26 catalogs). Formerly PHY 100L at Cal Maritime.

## PHY 1105 General Physics II (3 units)

Term Typically Offered: SP 2026-28 or later catalog: GE Area 5A 2020-26 catalogs: GE Area B1

Prerequisite: PHY 100 or PHY 1100. Concurrent: PHY 105L or PHY 1105L.

Offered at Solano Campus. Fundamental principles of electrostatics, direct and alternating currents, electromagnetism, optics, electromagnetic waves, and quantum physics. 3 lectures. Fulfills GE Area 5A (GE Area B1 for students on the 2020-26 catalogs). Formerly PHY 105 at Cal Maritime.

## PHY 1105L General Physics II Laboratory (1 unit)

Term Typically Offered: SP 2026-28 or later catalog: GE Area 5C 2020-26 catalogs: GE Area B3

Prerequisite: PHY 100 or PHY 1100; and PHY 100L or PHY 1100L. Concurrent: PHY 105 or PHY 1105.

Offered at Solano Campus. Explores fundamental principles of electrostatics, direct and alternating currents, electromagnetism, optics, electromagnetic waves, and quantum physics through experiments. Experiments correspond to the theory learned in General Physics II. 1 laboratory. Fulfills GE Area 5C (GE Area B3 for students on the 2020-26 catalogs). Formerly PHY 105L at Cal Maritime.

# PHY 1120 Physics for Future Leaders (3 units)

Term Typically Offered: SP 2026-28 or later catalog: GE Area 5A 2020-26 catalogs: GE Area B1

Offered at Solano Campus. Intended primarily for nonscientists, covers topics relevant to leaders, policy makers, and citizens confronted with science and technology issues. Energy production and utilization. Atoms and heat. Radioactivity and nuclear reactions. Nuclear bombs. Light and radio waves for communication and navigation. Climate change. Quantum physics. 3 lectures. Fulfills GE Area 5A (GE Area B1 for students on the 2020-26 catalogs). Formerly PHY 120 at Cal Maritime.



## PHY 1120L Physics for Future Leaders Laboratory (1 unit)

Term Typically Offered: SP 2026-28 or later catalog: GE Area 5C 2020-26 catalogs: GE Area B3 Corequisite: PHY 120 or PHY 1120.

Offered at Solano Campus. Laboratory that is paired with the lecture series Physics for Future Leaders. Intended primarily for nonscientists, covers topics relevant to leaders, policy makers, and citizens confronted with science and technology issues. Energy production and utilization. Atoms and heat. Radioactivity and nuclear reactions. Nuclear bombs. Light and radio waves for communication and navigation. Climate change. Quantum physics. 1 laboratory. Fulfills GE Area 5C (GE Area B3 for students on the 2020-26 catalogs). Formerly PHY 120L at Cal Maritime.

## PHY 2200 Engineering Physics I (3 units)

Term Typically Offered: F, SP 2026-28 or later catalog: GE Area 5A 2020-26 catalogs: GE Area B1

Prerequisite: MTH 210 or MTH 2210. Concurrent: PHY 200L or PHY 2200L.

Offered at Solano Campus. Vectors and scalars, motion, Newton's laws, statics and dynamics, translational and rotational kinematics, rotational dynamics, work and energy, momentum, conservation principles, equilibrium and elasticity, gravitation, periodic motion and fluid mechanics. 3 lectures. Fulfills GE Area 5A (GE Area B1 for students on the 2020-26 catalogs). Formerly PHY 200 at Cal Maritime.

# PHY 2200L Engineering Physics I Laboratory (1 unit)

Term Typically Offered: F, SP 2026-28 or later catalog: GE Area 5C 2020-26 catalogs: GE Area B3

Prerequisite: MTH 210 or MTH 2210. Concurrent: PHY 200 or PHY 2200.

Offered at Solano Campus. Explores fundamental principles of kinematics, dynamics, work and energy, momentum, gravitation, simple harmonic motion, circular motion, and other subjects studied in Engineering Physics I through experimentation. 1 laboratory. Fulfills GE Area 5A (GE Area B1 for students on the 2020-26 catalogs). Formerly PHY 200L at Cal Maritime.

## PHY 2205 Engineering Physics II (3 units)

Term Typically Offered: F, SP 2026-28 or later catalog: GE Area 5A 2020-26 catalogs: GE Area B1

Prerequisite: MTH 211 or MTH 2211; and PHY 200 or PHY 2200. Concurrent: PHY 205L or PHY 2205L.

Offered at Solano Campus. Electrostatics and electromagnetic fields and forces, electric potential, Gauss' law, capacitance, resistance and inductance, direct and alternating currents circuits and instruments, R-L-C exponential circuits, Faraday's and Lenz's laws, Ampere's law, and Maxwell's equations. 3 lectures. Fulfills GE Area 5A (GE Area B1 for students on the 2020-26 catalogs). Formerly PHY 205 at Cal Maritime.

#### PHY 2205L Engineering Physics II Laboratory (1 unit)

Term Typically Offered: F, SP

Prerequisite: MTH 211 or MTH 2211. Concurrent: PHY 205 or PHY 2205.

Offered at Solano Campus. Explores fundamental principles of electrostatics, direct and alternating currents circuits and instruments, electromagnetism, and other concepts studied in Engineering Physics II through experimentation. 1 laboratory. Formerly PHY 205L at Cal Maritime.