PHYSICS

- Physics, Associate in Science for Transfer
- Physics, Associate in Science for UC Transfer

Physics (PHYS)

PHYS 2A - General Physics I (4 units)
Letter Grade (LG) or Pass/No Pass (P/NP) • Total hours: 51 hours lecture; 68 hours lab
This course is intended for students not majoring in physics or engineering but needing a one-year course in physics as a requirement for their major program. The course is part of a two-semester sequence whose contents may be offered in other sequences or combinations. Core topics include: kinematics, dynamics, work and energy, momentum, fluids, and simple harmonic motion. Portions of instruction may be offered online; may also be offered fully online. [C-ID PHYS 110S with PHYS 2B; PHYS 105]

Advisory: Completion of or concurrent enrollment in ENGL 1A or ENGL 1AE; MATH 13
Credit transferable: Transfers to CSU & UC
UC Transfer Limits: PHYS 2A, PHYS 2B and PHYS 3A, PHYS 3B, PHYS 3C combined: maximum credit, 1 series - deduct credit for duplication of topics
GE Credit: CSU B1 Physical Science, B3 Laboratory Activity; IGETC 5A Physical Science, 5C Science Laboratory; MPC B Natural Sciences (must include lab)

PHYS 2B - General Physics II (4 units)
Letter Grade (LG) or Pass/No Pass (P/NP) • Total hours: 51 hours lecture; 68 hours lab
This course is intended for students not majoring in physics or engineering but needing a one-year course in physics as a requirement for their major program. The course is part of a two-semester sequence whose contents may be offered in other sequences or combinations. Core topics include: electrostatics, magnetism, DC circuits, optics and modern physics. Portions of instruction may be offered online; may also be offered fully online. [C-ID PHYS 110S with PHYS 2A; PHYS 110]

Prerequisite(s): PHYS 2A
Credit transferable: Transfers to CSU & UC
UC Transfer Limits: PHYS 2A, PHYS 2B and PHYS 3A, PHYS 3B, PHYS 3C combined: maximum credit, 1 series - deduct credit for duplication of topics
GE Credit: CSU B1 Physical Science, B3 Laboratory Activity; IGETC 5A Physical Science, 5C Science Laboratory

PHYS 3A - Science and Engineering Physics I (4 units)
Letter Grade (LG) or Pass/No Pass (P/NP) • Total hours: 51 hours lecture; 68 hours lab
This course is intended for students majoring in physical sciences and engineering. It is part of a three-semester course whose contents may be offered in other sequences or combinations. Core topics include an introduction to kinematics, dynamics, work and energy, momentum, gravitation, and simple harmonic motion. Portions of instruction may be offered online; may also be offered fully online. [C-ID PHYS 205]

Pre/Corequisite(s): MATH 20B
Advisory: Completion of or concurrent enrollment in ENGL 1A or ENGL 1AE
Credit transferable: Transfers to CSU & UC
UC Transfer Limits: PHYS 2A, PHYS 2B and PHYS 3A, PHYS 3B, PHYS 3C combined: maximum credit, 1 series - deduct credit for duplication of topics
GE Credit: CSU B1 Physical Science, B3 Laboratory Activity; IGETC 5A Physical Science, 5C Science Laboratory; MPC B Natural Sciences (must include lab)

PHYS 3B - Science and Engineering Physics II (4 units)
Letter Grade (LG) or Pass/No Pass (P/NP) • Total hours: 51 hours lecture; 68 hours lab
This course, intended for students majoring in physical sciences and engineering, is part of a three-semester course whose contents may be offered in other sequences or combinations. Core topics include electrostatics, magnetism, DC and AC circuits, and Maxwell's equations. Portions of instruction may be offered online; may also be offered fully online. [C-ID PHYS 210]

Prerequisite(s): PHYS 3A
Pre/Corequisite(s): MATH 20C
Credit transferable: Transfers to CSU & UC
UC Transfer Limits: PHYS 2A, PHYS 2B and PHYS 3A, PHYS 3B, PHYS 3C combined: maximum credit, 1 series - deduct credit for duplication of topics
GE Credit: CSU B1 Physical Science, B3 Laboratory Activity; IGETC 5A Physical Science, 5C Science Laboratory

PHYS 3C - Science and Engineering Physics III (4 units)
Letter Grade (LG) Only • Total hours: 51 hours lecture; 68 hours lab
This course, intended for students majoring in physical sciences and engineering, is part of a three-semester course whose contents may be offered in other sequences or combinations. Core topics include mechanical waves, laws of thermodynamics, optics, and modern physics. Portions of instruction may be offered online; may also be offered fully online. [C-ID PHYS 215]

Prerequisite(s): MATH 20B; PHYS 3A
Credit transferable: Transfers to CSU & UC
UC Transfer Limits: PHYS 2A, PHYS 2B and PHYS 3A, PHYS 3B, PHYS 3C combined: maximum credit, 1 series - deduct credit for duplication of topics
GE Credit: CSU B1 Physical Science, B3 Laboratory Activity; IGETC 5A Physical Science, 5C Science Laboratory

PHYS 10 - Introduction to Physics (4 units)
Letter Grade (LG) or Pass/No Pass (P/NP) • Total hours: 51 hours lecture; 51 hours lab
This is a non-mathematical conceptual course for the non-science major. It covers the evolution of physical concepts and their importance and application in the modern world. Portions of instruction may be offered online; may also be offered fully online.

Advisory: Completion of or concurrent enrollment in ENGL 1A or ENGL 1AE
Credit transferable: Transfers to CSU & UC
UC Transfer Limits: No credit if taken after PHYS 2A or PHYS 3A
GE Credit: CSU B1 Physical Science, B3 Laboratory Activity; IGETC 5A Physical Science, 5C Science Laboratory; MPC B Natural Sciences (must include lab)

PHYS 12 - Integrated Physics and Chemistry (4 units)
Letter Grade (LG) or Pass/No Pass (P/NP) • Total hours: 51 hours lecture; 51 hours lab
This course provides an introduction to the basic physical and chemical properties of energy, matter, motion, chemical reactions, and atomic structure. The interdependence of chemistry and physics will be emphasized. This course is intended for non-science majors, including students majoring in education. Portions of instruction may be offered online; may also be offered fully online. [C-ID CHEM 140; PHYS 140]

Prerequisite(s): MATH 261 or higher; or MATH placement based on multiple measures
Advisory: Completion of or concurrent enrollment in ENGL 1A or ENGL 1AE
Credit transferable: Transfers to CSU & UC
UC Transfer Limits: No credit if taken after a college-level chemistry or physics course
GE Credit: CSU B1 Physical Science, B3 Laboratory Activity; IGETC 5A Physical Science, 5C Science Laboratory; MPC B Natural Sciences (must include lab)