

Physics (PHYS)

PHYS 100: Survey of Physics

This is an introductory course in Physics with topics chosen from, but not limited to, mechanics, thermodynamics, electricity and magnetism, wave theory, optics, atomic and/or nuclear physics. Emphasis will be placed on understanding basic principles and concepts with application to "Real-Life" connections.

Credits: 3

Prerequisites: MATH 82X with a grade of CR or Qualification for a STEM track mathematics course

Recommended Prep: Concurrent enrollment in PHYS 100L

PHYS 100L: Survey of Physics Laboratory

Introduction to laboratory techniques and experimental methods of physics with emphasis on linking the understanding of physics concepts with "Real-Life" situations.

Credits: 1

Prerequisites: C or better for or concurrent registration in PHYS 100.

PHYS 151: College Physics I

The first course in a two-semester sequence in introductory physics intended for science majors. Emphasis is split between concepts and mathematical applications. Algebra, trigonometry and geometry are used; calculus is not. The course includes mechanics, kinetic theory and thermodynamics. Required: scientific calculator. Offered fall semester only.

Credits: 3

Prerequisites: C or better in MATH 140 or MATH 140X or by consent of instructor

PHYS 151L: College Physics I Lab

PHYS 151L is a non-calculus-based physics laboratory course designed to provide the students a hands-on experience in experimental analysis, physical observation, and measurements. Topics include the kinematics and dynamics of motion, heat, and thermodynamics. Offered fall semester only.

Credits: 1

Prerequisites: PHYS 151 with a grade of C or better or concurrent enrollment.

PHYS 152: College Physics II

The second course in a two-semester sequence in introductory physics intended for science majors. Emphasis is split between concepts and mathematical applications. Algebra, trigonometry and geometry are used; calculus is not. Course includes electricity and magnetism, wave motion, optics, and atomic and nuclear physics. Required: Pocket trig-type calculator. Offered spring semester only.

Credits: 3

Prerequisites: PHYS 151.

PHYS 152L: College Physics II Lab

PHYS 152L is a non-calculus-based physics laboratory course designed to provide the students a hands-on experience in experimental analysis, physical observation, and measurements. Topics include electricity, magnetism, and geometric optics. Offered in the spring semester only.

Credits: 1

Prerequisites: PHYS 152 with a grade of C or better or concurrent enrollment.

PHYS 170: General Physics I

A rigorous introductory course in classical mechanics and thermodynamics for physical science and engineering majors, emphasizing the mathematical techniques used in the explanation of physical phenomena.

Credits: 4

Prerequisites: MATH 242 with a grade of C or better or concurrent registration.

Recommended Prep: PHYS 100

PHYS 170L: General Physics I Lab

Experimental analysis in mechanics emphasizing error analysis, measurement techniques, and report writing.

Credits: 1

Prerequisites: PHYS 170 with a grade of C or better or concurrent enrollment.

PHYS 272: General Physics II

Electricity, magnetism, and geometric optics.

Credits: 3

Prerequisites: PHYS 170 and MATH 242 with a grade of C or better.

PHYS 272L: General Physics II Lab

Experimental analysis in electricity, magnetism and optics.

Credits: 1

Prerequisites: PHYS 272 with a grade of C or better or concurrent enrollment.

PHYS 274: General Physics III

Relativity, introduction to quantum mechanics, atomic and nuclear physics, and physical optics.

Credits: 3

Prerequisites: PHYS 152 or PHYS 272 with a grade of C or better and MATH 243 with a grade of C or better or concurrent registration in MATH 243.