

Physics

The study of Physics involves the study of matter and motion, energy and forces. The Physics department offers Principles of Physics 1 and 2 as well as General Physics 1 and 2 with a calculus base. Students enroll in physics courses to fulfill the Minnesota Transfer Curriculum requirements and various graduation requirements.

Course		Cr
PHYS 1720	Principles of Physics 1	4
PHYS 1722	Principles of Physics 2	4
PHYS 1760	Descriptive Astronomy (no lab)	3
PHYS 2700	General Physics 1 (with Calculus)	5
PHYS 2710	General Physics 2 (with Calculus)	5
PHYS 2760	Introductory Astronomy (with lab)	4
PHYS 2790	Special Topics in Physics	1-6

PHYS 1720 Principles of Physics 1

This course introduces students to fundamental principles of physics and their application to familiar phenomena. Topics include motion, fluids, heat, work, forces, gravity, waves and sound, and energy. The topics will be related to modern technology and everyday phenomena. The course is intended for students who have not had a high school physics course. Class includes lecture and lab. (Prerequisite(s): MATH 1730 with a grade of "C" or better) (MnTC: Goal 3) 4C/3/1/0

PHYS 1722 Principles of Physics 2

This course is a continuation of PHYS 1720 Principles of Physics 1. It covers electricity and magnetism, light and optics, simple circuits, topics in modern physics and applications and technology. Class includes lecture and lab. (Prerequisite: PHYS 1720 Principles of Physics 1) (MnTC: Goal 3) 4C/3/1/0

PHYS 1760 Descriptive Astronomy (no lab)

This course introduces students to astronomy. It includes the observation of the planets and stars weather permitting. The course will include topics such as life and death of stars, dark matter, formation of a solar system, the Big Bang Theory and more. Course includes lab-like learning activities. (Prerequisite(s): READ 0721 with a grade of "C" or better or appropriate assessment score) (MnTC: Goals 3 & 10) 3C/3/0/0

PHYS 2700 General Physics 1 (with Calculus)

Calculus-based course with a study of Kinematics, Dynamics, Laws of Motion, Gravitation, Kinetic and Potential Energy; Conservation of Energy; Linear and Angular momentum; Equilibrium and Fluid Dynamics. Designed to fulfill physics requirements for students in liberal arts and sciences, engineering, and other related science fields. Class includes lecture and lab. High School Physics is recommended. (Prerequisite(s): MATH 2749 Calculus 1 with a grade of "C" or better) (MnTC: Goal 3) 5C/4/1/0

PHYS 2710 General Physics 2 (with Calculus)

Continuation of General Physics 1 (with Calculus). Topics include: Wave Phenomenon, Fluids, Electricity and Magnetism; electrical circuits, light and optics. Designed to fulfill physics requirements for students in liberal arts and sciences, engineering, and other related science fields. Class includes lecture and lab. (Prerequisite(s): PHYS 2700 General Physics 1 with a grade of "C" or better) (MnTC: Goal 3) 5C/4/1/0

PHYS 2760 Introductory Astronomy (with lab)

This course is designed for the non-science student who wants to know more about astronomy. We'll be studying the motion of the night sky, the planets and what shapes them, how stars are made and what happens when stars die all the way out to the edges of the known universe. Topics of note will include Planetary Formation, Extra Solar Planet Search, Dark Matter, Dark Energy, the Expanding Universe, and many more fun topics! This course includes a laboratory component with hands on activities to help build understanding. (Prerequisite(s): MATH 0745 with a grade of "C" or better or appropriate assessment score) (MnTC: Goals 3 & 10) 4C/3/1/0

PHYS 2790 Special Topics in Physics

This course is designed to present additional or unique material and learning experiences within a specified discipline. The course will be based on student need, flexibility, and may be designed to meet various transfer and pre-major course requirements. Please see a current Course Schedule for complete course details. (MnTC: Goal 3) Variable credits 1-6

Information is subject to change.
This course information is not a contract.