

Natural Sciences

The Natural Sciences department offers courses in the areas of earth science, geology, oceanography, and meteorology. Natural Science courses fulfill Goals 3, 9 & 10 of the Minnesota Transfer Curriculum, as well as various graduation requirements.

Course		Cr
NSCI 1710	Earth Science	4
NSCI 1721	Introduction to Geology	4
NSCI 1730	Introduction to Oceanography	3
NSCI 1740	Introduction to Meteorology	3
NSCI 1750	Natural Disasters	3
NSCI 1770	Introduction to Energy and the Environment	3
NSCI 1780	Contemporary Issues in Science	3
NSCI 1782	Minnesota Geology	3
NSCI 1790	Special Topics in Natural Science	1-6
NSCI 2770	Natural Sciences Internship	1-4

NSCI 1710 Earth Science

This course introduces students to topics in geology, oceanography, meteorology and astronomy. The solid earth and earth processes, the liquid hydrosphere and the gaseous atmosphere are studied, as well as the earth as a part of the solar system. It is intended for students interested in the natural sciences and can be used to fulfill the lab science requirement. Two hours of lab per week are required. Lab time will be used to reinforce lecture concepts and will include experiments, hands-on activities, and field trips. Traditional, hybrid, and online sections are available. (Prerequisite(s): READ 0722 with a grade of “C” or better or appropriate assessment score) (MnTC: Goals 3 & 10) 4C/3/1/0

NSCI 1721 Introduction to Geology

This course introduces students to the fundamentals of geology, including rock and mineral formation, geologic time, global tectonic processes such as earthquakes and volcanoes, and earth surface processes that change our landscape. Current issues relating to geology, such as global climate change and energy resources will be addressed as well. Two hours of lab per week are required. Lab time will be used to reinforce lecture concepts and will include experiments, hands-on activities and field trips. Traditional and hybrid sections are available. (Prerequisite(s): READ 0722 with a grade of “C” or better or appropriate assessment score) (MnTC: Goals 3 & 10) 4C/3/1/0

NSCI 1730 Introduction to Oceanography

This course introduces students to basic scientific principles of oceanography. Topics covered will include the geological, biological, atmospheric, and chemical processes at work in the oceans, as well as contemporary issues related to marine pollution and resource use. Course includes lab-like learning activities. Traditional and online sections are available. (Prerequisite(s): READ 0721 with a grade of “C” or better or appropriate assessment score) (MnTC: Goals 3 & 10) 3C/3/0/0

NSCI 1740 Introduction to Meteorology

This course introduces students to basic scientific principles of meteorology. Topics include basic properties of the atmosphere, weather terminology, weather phenomena, instrumentation and forecasting. Course includes lab-like learning activities. Traditional and hybrid sections are available. (Prerequisite(s): READ 0721 with a grade of “C” or better or appropriate assessment score) (MnTC: Goals 3 & 10) 3C/3/0/0

NSCI 1750 Natural Disasters

This course introduces students to the investigation of the physical processes, origins of natural disasters and human and economic impacts caused by natural disasters. Content covered will include earthquakes, volcanoes, severe weather, climate change, wildfires, floods and other catastrophic phenomena. Course includes lab-like learning activities. Traditional, online and hybrid sections are available. (Prerequisite(s): READ 0721 with a grade of “C” or better or appropriate assessment score) (MnTC: Goals 3 & 10) 3C/3/0/0

NSCI 1770 Introduction to Energy and the Environment

This course introduces students to energy production, supply, efficiency and the projections of future needs. The potential of solar, biomass, photovoltaics, wind and other continuous flow sources are covered. Crude oil, natural gas, coal and nuclear sources of energy are studied. Environmental, political, economic and ethical considerations are reviewed. Course includes lab-like learning activities. Traditional and hybrid sections are available. (Prerequisite(s): READ 0721 with a grade of “C” or better or appropriate assessment score) (MnTC: Goals 3 & 10) 3C/3/0/0

NSCI 1780 Contemporary Issues in Science

Scientific dilemmas and advances in science make headlines every day. Without knowing the science behind the top issues, it is difficult to separate fact from hype. In this course we will focus on contemporary issues such as climate change, renewable energy, environmental toxins, stem cell research, gene therapy, and pandemic diseases. Students will learn the basic scientific concepts behind each issue and will then explore the ethical dilemmas that each issue brings up. Course includes lab-like learning activities. Traditional, hybrid, and online sections are available. (Prerequisite(s): READ 0721 with a grade of “C” or better or appropriate assessment score) (MnTC: Goals 3 & 9) 3C/3/0/0

NSCI 1782 Minnesota Geology

This course surveys Minnesota’s geological history, from exploring the formation of the bedrock more than 2 billion years ago to the current processes that shape the land usage in this State today. Students will learn about the many ways the state’s geology contributed to the economic, environmental and political development. Topics include: geologic time, plate tectonics, rock and mineral identification, topographic and geologic maps, superficial processes, and environmental concerns. Through numerous field trips, we will look to the Twin Cities metro area to provide examples of many different earth and environmental processes, and to give us hands-on experience understanding how these processes work (glacial history, rock formations, caves and ancient ocean floor, rivers, and other geologic sites). Course includes lab-like learning activities. Traditional and hybrid sections are available. (Prerequisite(s): READ 0722 with a grade of “C” or better or appropriate assessment score) (MnTC: Goals 3 & 10) 3C/3/0/0

NSCI 1790 Special Topics in Natural Science

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: Goals 3 & 10) Variable credits 1-6

NSCI 2770 Natural Sciences Internship

This course provides students with an opportunity to design and carry out a science research project under the supervision of a faculty advisor. The research report will be prepared using literature review, problem identification, procedural documentation, data collection, data analysis, findings, conclusions, and recommendations. Evaluation will be carried out by faculty teams and experts in the field. The course will also provide an opportunity for field study in an approved internship setting. (Prerequisite(s): Instructor approval) (MnTC: Goal 3) Variable credits 1-4

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