

NATURAL SCIENCE (NSM)

NSM-1150 Science Foundations (4 semester hours)

This course explores some of the fundamental physical concepts, including energy and the atomic view of matter, that are necessary to our understanding of science and technology in our world.

Co/prerequisite(s): MTH-1100 or higher is required.

NSM-1400 Earth and Space Science (4 semester hours)

This course includes an overview of those sciences that collectively seek to understand our dynamic Earth and its relationship to the larger universe. Includes material from the fields of geology, oceanography, meteorology and astronomy through which we examine the physical laws and natural processes that have helped to shape and change Earth and the universe around it. An introduction to astronomy will explore the universe and solar system, including basic cosmological principles, the life and death of stars, and the objects in our solar system.

NSM-2500 Integrated Mathematics and Science for Teachers (4 semester hours)

This course presents an integrated approach to mathematics and science and their applications to problem solving. Topics in science include exploration of fundamental physical concepts, including transformation of energy, force and motion, waves, electricity and magnetism, and the atomic view of matter. Topics in mathematics include real numbers, representation and evaluation of functions, properties of linear and nonlinear functions, problem solving with and without linear equations, problem solving and representation of systems of linear equations, the relationship between symbolic expressions, and graphs of lines. Note: Successful completion of MTH-1210, MTH-1220, NSM-2500 satisfies the mathematics competency requirement for graduation for elementary education majors.

Prerequisite(s): MTH-1100 or MTH-1220.

NSM-3200 Real World STEM Applications (4 semester hours)

This course will expand the breadth and depth of the students' content knowledge in various STEM fields and will emphasize the interdisciplinary nature of STEM. Topics in science, technology, engineering and mathematics will be addressed through a problem-based learning instructional approach in a collaborative environment. Through this course students will develop the skills, knowledge and practice to become civic minded, responsible, and ethical problem solvers in a global society.

NSM-3790 ACCA: Affiliated Course (2-4 semester hours)

Aurora University in collaboration with the other Associated Colleges of the Chicago Area (ACCA), the Shedd Aquarium and Morton Arboretum, offers a range of courses, including lecture series, laboratory courses and field experiences that enrich our core curriculum. These will be offered as student interests and needs indicate. Permission of department chair required.