UNDERGRADUATE COURSES OF STUDY

PHYSICAL SCIENCE

PSCI 111.INTRODUCTION TO PHYSICAL SCIENCE

This course surveys the fundamental concepts in physical sciences and their application to everyday lives. Topics include structure and properties of matter, chemical reactions, forces and motion, types of interactions, definitions of energy, conservation of energy and energy transfer, relationship between energy and forces, wave properties, electromagnetic radiation, and information technologies. Three hours lecture, three hours laboratory weekly. (General Education – Scientific and Mathematical Reasoning) ***Four credit hours.***

PSCI 112.EARTH AND SPACE SCIENCE

An introduction to the fundamental concepts of astronomy, geology and meteorology and how they shape human understanding of the universe. Topics include the origin and characteristics of the solar system, stars, galaxies, cosmology, rocks and minerals, plate tectonics, and weather phenomena. Three hours lecture, three hours laboratory weekly. (General Education – Scientific and Mathematical Reasoning) ***Four credit hours.***

PSCI 451.SCIENCE PEDAGOGY

An exploration of problem-based teaching methods such as laboratory techniques, demonstrations, and teaching resources. Special emphasis is placed on instructional implementations of the NSTA Standards (Content knowledge, content pedagogy, learning environments, safety, impact on student learning, professional knowledge and skills). Prerequisite: formal admission to Teacher Education Program. Note: must concurrently enroll in the associated integrated arts course and field experience. ***Three credit hours.***

PSCI 499.SENIOR SEMINAR

This course provides instruction and practice in topics related to professional careers or advanced study in the physical sciences. Provides instruction in the preparation and presentation of a professional seminar and accompanying research paper, principles of professional conduct, beginning a career in the sciences, resumes and applications, interviews, and advanced educational opportunities. Students will participate in evaluations for program assessment purposes. The course is open to juniors majoring in chemical engineering and seniors majoring in chemistry or environmental science. ***Three credit hours.***