PHYSICAL SCIENCE (PSCI)

PSCI 101 Introduction to Physical Science (4)
Designed to provide the non-science major with an understanding of the scientific process as seen through physics and chemistry and their impact on modern technology. A conceptual as well as empirical approach will be utilized in both theory and experiments. Topics covered are force and motion, work and energy, electricity and magnetism, nuclear physics, atomic structure, periodic table, chemical reactions and organic molecules. Three lecture periods and one two-hour laboratory meet per week.
Meets general education requirements: GE-Math/Science/Comp Sci Elec, GE-Scientific Inquiry
IAI Course Number: P9 900L

PSCI 102 Introduction to Physical Science for Educators (4)
This course has been designed to provide elementary education majors with the background in physical sciences needed to teach elementary science. While life and earth science concepts will be incorporated whenever possible to demonstrate the relationship between all fields of sciences, the course will emphasize basic chemical and physical principles and concepts through inquiry. The course will use laboratory investigations to enhance understanding of physical science concepts and to emphasize the discovery nature of science. An in-service learning experience has been added to this course to allow students to apply what they have learned by developing and teaching science lessons to 4th or 5th grade students at Farragut Elementary School. Three lecture periods and one two hour laboratory sections meet each week.
Meets general education requirements: GE-Math/Science/Comp Sci Elec, GE-Scientific Inquiry

PSCI 104 Astronomy (4)
Is a non-mathematical lecture/lab survey of astronomy from the ancient Egyptians to satellite space probes. The course is especially designed for non-science majors. Students with no mathematics or science courses should find the course as understandable and enjoyable asthose with strong science-math backgrounds. Outdoor (telescopic) and planetarium viewing of the night sky as well as simulated viewing may be included.
Meets general education requirements: GE-Math/Science/Comp Sci Elec, GE-Scientific Inquiry
IAI Course Number: P1906

PSCI 111 General Physics I (4)
Prerequisite: MATH 125 or MATH 175
Is a non-calculus study of mechanics, fluids and heat with special emphasis on applications of these concepts in various fields of science and technology. Three lecture periods and one two-hour laboratory meet per week.
Meets general education requirements: GE-Math/Science/Comp Sci Elec, GE-Scientific Inquiry
IAI Course Number: P1 900L

PSCI 112 General Physics II (4)
Prerequisite: PSCI 111
Is a non-calculus study of electricity, light, atomic and nuclear physics with special emphasis on applications of these concepts in various fields of science and technology. Three lecture periods and one two-hour laboratory meet per week.

PSCI 194 Topic in Physical Science (1-4)
This is a title given to a course which covers broad themes, practices and subject content not currently offered in the curriculum. This course is directed primarily at non-majors and may be used for general education where approved.

PSCI 211 Physics I (4)
Prerequisite: MATH 170 or MATH 181
This calculus-based course covers classical kinematics, work, energy, impulse, momentum, collision and thermodynamics. Students will gain an understanding of the physical concepts involved in the physics of motion including velocity, acceleration, circular motion, work, energy, momentum, rotation, and the laws of thermodynamics.

PSCI 212 Physics II (4)
Prerequisite: (PSCI 211) and MATH 182 (may be taken concurrently)
Is a calculus-based study of waves, electrostatics, magnetostatics, electric circuits, and optics. Students should, at the end of the course, have a basic understanding of the physical concepts involved in the physics of electricity and magnetism. These include the concepts of simple harmonic motion, electric charge, electric fields, magnetic fields, inductance, and both direct and alternating current circuits.

PSCI 294 Topics in Physical Science (1-4)
Is a title given to a course which covers broad themes, practices, and subject content not currently offered in the curriculum. This course is directed primarily at non-majors and may be used for general education where approved.