

PHYSICAL SCIENCE (PSI)

Course Descriptions

PSI 101. Physical Science (MOTR PHYS 110). 3 Credit Hours.

Physical Science is a survey of the fundamental principles of physics and chemistry with applications to geology, astronomy, and meteorology. Topics include motion, energy, heat, temperature, waves, and electricity. The course is designed for students in non-science and career curricula.

Prerequisites: MTH 108 or MTH 140S with a minimum grade of "C", or placement into MTH 140 or higher, and Reading Proficiency

PSI 111. Introduction to Astronomy I (MOTR ASTR 100). 3 Credit Hours.

Introduction to Astronomy I presents the fundamental concepts and principles of the Universe. The topics covered include the Earth, solar system, stars, galaxies, and evolution of the Universe. The course is designed for students in non-science and career curricula.

Prerequisites: MTH 140S with a minimum grade of "C", or placement into MTH 140 or higher, and Reading Proficiency

PSI 115. Observational Astronomy (MOTR ASTR 100L). 1 Credit Hour.

Observational Astronomy presents both astronomical viewing and laboratory experimentation. Through direct observation, students will become familiar with constellations, planets, moons, stars, clusters, and nebulae, and will learn how to use small telescopes and other simple equipment. This course may accompany PSI 111 (Introduction to Astronomy I) or may be taken independently. No prior knowledge of astronomy is necessary.

Prerequisites: Reading Proficiency

PSI 123. Meteorology (MOTR PHYS 110AS). 3 Credit Hours.

Meteorology introduces the student to the basic concepts involved in the analysis of weather phenomena on the global and local scale. Topics include heat balance, atmospheric stability, precipitation processes, pressure systems, air masses, fronts, clouds, the jet stream, air-ocean interaction (El Nino and La Nina), thunderstorm and severe weather, hurricanes, and an introduction to weather forecasting. Particular attention is devoted to current weather analysis.

Prerequisites: Reading Proficiency

PSI 125. Introduction to Atmospheric Science (MOTR PHYS 110LAS). 4 Credit Hours.

Introduction to Atmospheric Science covers the basic principles of atmospheric processes. This course involves working with current weather maps and analyzing real-time weather information. The basic physical principles of atmospheric conditions are stressed through the study of weather data. Labs integrated throughout the course allow students to apply the scientific method by formulating a hypothesis, interpreting data, and deriving a conclusion based on scientific data. The course is designed for students in non-science and career curricula.

Prerequisites: MTH 020 or higher with a minimum grade of "C" or placement into MTH 140 or higher, and Reading Proficiency