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SCI 113: Physical Science

This lab science course for non-science majors provides a foundational understanding of the physical sciences such as physics, chemistry, and earth and space sciences. Topics covered include matter and energy, electricity and electromagnetic behavior, chemical bonds and reactions, force and motion, the Earth's geological and atmospheric processes, the formation of our Universe and its contents, important scientific laws and principles associated with any of these topics, and the underlying importance of the atom and its role in the many physical laws of nature. Students apply the scientific method and learn proper laboratory procedures and safety. No prior science background is required, but some high school level algebra and mathematics are recommended. Prerequisite(s): Introductory Algebra competency or high-school algebra. Three class-hours and two laboratory hours per week. Instructional Support Fee applies. General Ed. Competencies met: Scientific Reasoning and Discovery.

Course Student Learning Outcomes

1. Identify the core principles in Physics, Chemistry, and Earth and Space science. 2. Apply the scientific method to conduct experiments and investigations, collect data, and interpret results in a laboratory setting. 3. Determine whether a hypothesis is testable. 4. Recognize the real-world applications of physical science concepts and explain the relevance of these principles in everyday life. 5. Develop problem-solving skills and utilize critical thinking to understand and explain scientific phenomena. 6. Communicate scientific ideas effectively, using appropriate terminology. 7. Discuss the interdisciplinary nature of science and its impact on the understanding of the natural world. 8. Interpret and discuss current issues and developments in the physical sciences, demonstrating an awareness of science as a dynamic field of study. 9. Foster a curiosity and lifelong learning attitude towards science and the world around them.

Credits: 4 Program: Science