



Foundation: Physical Sciences

The physical sciences seek to explore and explain the structure and processes of the physical universe. They seek to understand the fundamental workings of nature, from the behavior of atoms to the functioning of the galaxies. Study of the history, methodologies, concepts, and applications of the physical sciences assists students in becoming scientifically literate. Each course in this category is a broad introduction to one or more of the physical sciences. Courses contribute to the development of critical thinking and problem-solving skills, and help students apply an understanding of scientific thinking to their own lives and careers.

Knowledge Student Learning Outcomes

Students will:

1. Explain methodologies physical scientists use to explore and understand the physical universe.
2. Explain ways in which physical scientists use observations and theory to explain and predict the structure and processes of the physical universe.
3. Explain fundamental concepts, principles, and issues of the physical sciences.

Skills Student Learning Outcome 1 (choose one of the following):

Graduates are proficient in:

- a) Written Communication: Write effectively for multiple purposes and audiences; or
- b) Quantitative Literacy: Work effectively with numerical data; or
- c) Information Literacy: Identify the need for information; access, evaluate, and use information effectively, ethically, and legally.

Skills Student Learning Outcome 2 (choose one of the following):

Graduates are proficient in:

- a) Oral Communication: Effectively prepare and deliver a formal oral presentation. *{Students must give individual formal presentations; group presentations are acceptable if every student presents}*; or
- b) Problem Solving: Design and evaluate an approach to answer an open-ended question or achieve a desired goal.