Nebraska Wesleyan University

Catalog 2025-2026

PHYS 2500 Introduction to Health Physics

4 hours

Departments/Programs:

Physics

An introduction to radiation protection, also known as health physics, with emphasis on the practical aspects of radiation detection, protection, and regulation. Topics include the basic interaction of radiation with the human body, its beneficial and harmful biological effects, how to quantify radiation dose, and the use of radiation protection regulations to prevent harm to humans. Laboratory experience includes hands-on exercises in spectroscopy, dosimetry, and environmental monitoring of radiation. This course is particularly useful for those who will work with radiation in medical, radiology, energy production, or research settings.

Three lectures per week.

One laboratory per week.

Prerequisite(s): PHYS 1700 Principles of Physics II or PHYS 2100 General Physics II or permission of the instructor. (Normally offered alternate spring semesters.)