EHS 510 Physical Exposures

Catalog Description: Participants will understand the health effects, evaluate exposures, and identify control options available to reduce exposures to physical stressors in the environment. The course focuses on noise, heat stress, vibration, radiation and ergonomics. (3 units)

Course Topics:
- Thermal Stress
- Non-ionizing Radiation
- Laser and Ionizing Radiation
- Occupational Hearing Conservation

Course Objectives: During this course, students will:

- Anticipate and recognize the major types of physical exposure stressors capable of inducing disease in occupational populations.
- Understand the basic strategies for evaluating or measuring exposure agents and health effects and relating these measurements to permissible exposure and other regulatory and recommended limits. This will include hands-on use of some of the equipment typically used to evaluate these hazards.
- Appreciate techniques for controlling exposures to physical agents.
- Appreciate some of the ethical and economic challenges to controlling physical exposures in the workplace.

Learning Outcomes (Competencies Obtained): Upon completion of this course students will be able to:

1. Anticipate, recognize, evaluate and develop control plans for the major types of physical exposure stressors capable of inducing disease in occupational populations, including thermal stress, radiation and noise
2. Understand the physiological effects of physical exposures
3. Specify correct PPE for physical exposures
4. Correctly apply legal standards to physical exposures in the workplace