

ENVIRONMENTAL, HEALTH & SAFETY (ENV)

ENV 1000 – Introduction to EHS Technology

3 Credit hours

Addresses safety, health, and environmental issues in the workplace. Air quality and air emissions, water pollution, soil contamination, waste disposal, federal regulations, pollution prevention plans, OSHA rules and regulations, materials safety data sheets (MSDS), personal protective equipment.

ENV 1210 – Environmental Laws and Regulations

3 Credit hours

Explores the fundamental concepts of the American regulatory system, environmental law and the basics of environmental compliance. Through the use of the Federal Register, the Code of Federal Regulations and independent research students will gain both general education and technical skills necessary to understand/interpret regulations, current events/issues and how they impact environmental compliance. Topics include an introduction to the law/legal system, the environmental laws (i.e. Clean Air Act, Clean Water Act, RCRA, CERCLA/Superfund, SARA, TSCA) & international environmental law.

Corequisites: ENV 1000.

ENV 1300 – OSHA Regulations and Safety

3 Credit hours

Explores the fundamental concepts of the American health and safety system by providing the student understanding of safety regulations and compliance. Through the use of the Federal Register, the Code of Federal Regulations and independent research the student will gain basic understanding of the major laws, issues, and events which helped shape safety & health compliance in various industries and businesses. Emphasis will be placed on US OSHA standards.

ENV 2400 – Properties of HAZMAT

3 Credit hours

Introduces the fundamentals of chemistry apply to hazardous materials and will cover the risks of mass exposure to such substances. Students will examine the general features of hazardous materials and describe how Federal statutes reduce the risks associated with usage, storage, and transportation of various hazmat. Topics include: risk of exposure, EPA/DOT regulations, chemical behavior or hazardous materials (i.e. hydrocarbons, flammable liquids/solids, oxidizers, corrosives, compressed gases, radioactive materials, explosives, toxic materials, water reactive materials), identification of physical/ chemical properties of substances, the fire triangle, DOT hazard classifications/hazmat table. Responding to incidents involving hazmat & fundamentals of toxicology and toxicological effects.

Corequisites: CHM 1110.

ENV 2500 – OSHA 40-hr Training

2 Credit hours

Provides students with both general education and technical skills necessary to understand the regulatory requirements and procedures outlined in the OSHA's Hazardous Waste Operator & Emergency Response (HAZWOPER) standard (29 CFR 1910.120). The course is structured to be 50% distance learning, 50% hands-on training/classroom instruction. The online assignments are structured to be completed prior to the required 2, eight (8) hour & 1, four (4) hour hands-on sessions. Various topics covered in the course include general structure of the OSHA HAZWOPER standard, proper procedures used in responding to hazardous material incidents, hazardous materials chemistry, toxicology, air monitoring instrumentation, proper use and selection of personal protective equipment (PPE) & hazmat decontamination.

ENV 2970 – AS EHS Capstone Project

1 Credit hour

Integrates reading and case studies based on EHS related topics and/or research and other sources. The capstone project will require an oral presentation and related paper which focuses on a specific EHS issue, presenting the student's viewpoint while reasonably discussing opposing views.

Corequisites: ENV 1000, ENV 1210, ENV 2400, ENV 2500.