

## **ENSC 2303 Hazardous Material and Emergency Response**

**Catalog Description:** This course will provide the student with a practical approach to the concepts of handling hazardous materials. Topics include: basic chemistry of hazardous materials, hazard classes and toxicology, evaluating risk, selecting correct protective equipment, specific competencies required of persons responding to a hazardous materials emergency, managing an incident, and addressing tactical and strategic issues while minimizing down – time and reducing risk to other workers. Available online.

**Prerequisite:** There are no prerequisites for the course.

**Credit hours/ Contact hours/ Load hours:** 3/3/3

**Target Audience/ Transferability:** Successful completion of this course should prepare students for successful further study in environmental and regulatory science. ENSC 2303 will transfer to the University of Arkansas at Fayetteville in the Environmental, Soil, and Water Science as elective credit. ENSC 2303 will also transfer to Southern Missouri, University and Northeastern Oklahoma State University at Tahlequah, Oklahoma.

**Student Learning Outcomes:** Students completing this course will:

- Identify training required for personnel including emergency plan implementation and emergency response roles within the incident command system (ICS).
- Demonstrate knowledge of personal protective equipment used to respond and proper procedures for decontamination after the response.
- Apply the principles of hazardous materials response to comprehend, evaluate and solve problems of an emergency response nature.
- Identify and use web based information sources to further their knowledge of hazardous materials and emergency response.

### **Topics:**

- An overview of emergency response
- Identification/characteristics of hazardous materials
- Hazardous material containments/absorbents
- Personal protective equipment
- Respiratory protection
- Incident Command System
- Emergency planning and response
- Spill simulations
- Treatment methods of hazardous waste
- OSHA 1910.120 (q)

**Forms of Assessment:** None