

INDUSTRIAL HYGIENE II
ENVR 332 & 532
Winter Term

Background

This course is the second in a three part Industrial Hygiene series and is a required course for the Environmental Health major. Its focus is the implementation of Industrial Hygiene programs in the workplace. **Students, who have completed Industrial Hygiene I (ENV 331 & 531)**, are introduced to the major OSHA regulations, which govern today's workplace.

Purpose: This course is intended to introduce the student to the process of establishing an Industrial Hygiene Program in the workplace. Students will address the issues involved in the prioritization, development and implementation of control programs that protect the health of individuals and achieve regulatory compliance. As with the other courses in this series, emphasis is placed on the practical application of the material. The course assignments are intended to sharpen the students' skills in researching regulations and developing technical presentations.

Course Description: This course will introduce students to the processes involved in taking risk assessment information and translating it into effective risk management programs. The course will primarily consist of a series of lectures and video presentations by faculty. Students will research OSHA regulations and prepare presentations for the class.

The course will cover regulated programs such as Hazard Communication, Respiratory Protection, Confined Space Entry, and Bloodborne Pathogens, and others. Classroom work will involve discussion of the regulatory requirements and key aspects of implementation as well as case histories. Students will be assigned topics to research and present.

At the completion of the course the student should:

- Understand the role and significance of OSHA compliance programs and accompanying training;
- Understand the requirements of major OSHA compliance programs for representative chemical, physical, and biological agents;
- Successfully integrate risk assessment, risk management, and risk communication policies to the mutual benefit of employer and employee, within the constraints of current Federal regulations.
- Enhance their organizational, research and presentation skills

Instructor:

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Class Period:

Three hours one evening per week, typically offered in the winter term

Required Text:

None

Other Resources:

www.osha.gov

Lecture Syllabus:

1. Introduction to IH II, developing an IH program.
2. Bridging the gap between management policy and the worker performance.
3. Hazard Communication, Emergency Response programs
4. Personal Protective Equipment, Respiratory Protection
5. Hearing Conservation, Machine Guarding
6. Confined Space Entry, Lock Out / Tag Out
7. Laboratory Hygiene, Chemical Process Safety
8. Asbestos, Lead
9. Indoor Air Quality
10. HAZWOPER interactive class exercise
11. Final Exam

Grading

Homework: weekly writing assignments & class exercise ----- 25%

Final exam: ----- 30%

Individual presentation: ----- 35%

Attendance: ----- 10%