

Three Rivers Community College
Norwich, CT

ENV 220 HAZWOPER
(Hazardous Waste Operations & Emergency Response)

Spring 2012

Course Instructor: Stefan Wawzyniecki, CIH, CHMM

Class Day/Location/ Time : Tues/D224/ 5:00-7:45 PM

Office: NA; **Hours:** By App't only

Phone: (860) 234.3516

Email: S16W74@gmail.com

COURSE DESCRIPTION:

Knowledge and training necessary to meet the certification criteria recognized by the Occupational Safety & Health Administration (OSHA) in work activities related to hazardous waste sites and clean up operations involving hazardous substances.

COURSE OBJECTIVES

At the conclusion of this course, students will be able to:

1. Select, use, and maintain personal protective equipment to minimize hazardous chemical exposures
2. Assess hazardous waste sites in terms of risk evaluations, including but not limited to chemical, radiological, and biological hazards
3. Diagram site health and safety plans (HASPs), by means of organizational charts, and flow diagrams.
4. Identify proper monitoring and sampling protocols and equipment, based on the hazard assessment described above.

COURSE TEXT: TNEC (The New England Consortium)/ UMASS- Lowell, Student Manual HAZWOPER – No purchase required. Handouts of readings will be provided. This requires mandatory attendance in order to obtain all study materials.

Other required readings will be distributed in class.

CLASS ENROLLMENT

Class size will be limited to 20 students who are Environmental Sciences majors. Other students may enroll by permission of Instructor only. Pre-requisite courses of Chemistry.

SCHEDULE OF COURSE TOPICS

<u>Week</u>	<u>Topic</u>
Week 1	Overview of OSHA/EPA How to Read Regulations
Week 2	Laboratory Standards Overview of HAZWOPER
Week 3	Chemical Hazards Toxicology
Week 4	Air Monitoring and Equipment Radiation Safety
Week 5	Radiation Safety Respirator and Respiratory Protection
Week 6	Personal Protective Equipment (PPE) Confined Space Entry and Trenching
Week 7	MID-TERM EXAM
Week 8	Sampling, Handling, and Packaging Material Handling
Week 9:	Bloodborne Pathogens In-Class Site Project I
Week 10	Decontamination of Personnel and Equipment
Week 11	Emergency Response Medical Surveillance
Week 12	Material Safety Data Sheets/References Noise/Heat Stress
Week 13	Field Exercise*
Week 14	Field Exercise*
	FINAL EXAM

* Actual date to be determined

ADDITIONAL INFORMATION

A **MANDATORY** field exercise will be part of the semester's syllabus, and will take place as a single event, and be the equivalent of 6-8 class hours. This is a mock hazardous waste site, and students will practice sampling techniques, analytical methods, emergency response drills, and decontamination procedures. Student's performance during the exercise will be evaluated by the Instructor. There will be no opportunity for a make-up field exercise, and no substitution for the exercise will be offered or considered. Students will not have fulfilled the course requirements for the OSHA 40-Hour Certificate if they miss this exercise. Scheduling of the exercise will be dependant on the Laborer's AGC site availability.

Students who do successfully complete all course requirements will receive a certificate recognizing their completion of the requirements for the OSHA 40-hour credential. Successful completion of the course will increase the marketability of students planning to work in the environmental field.

COURSE EVALUATION

- Class Participation/Attendance - 10%
- Mid-term Exam- 25%
- Weekly Assignments- 10%
- Final Exam- 30%
- Field Exercise- 25%