

**Department:** College of Continuing Studies

**Course number:** 3277W (277W)

**Course title:** Hazardous Chemicals

**Number of Credits:** 3

**WQ:** W only

**Contact Person:** Jeet Joshee

**Current Catalog Copy:** -GS 277W - Hazardous Chemicals -Either Semester. Three Credits. Prerequisite: ENGL 1010 or 1011 or 3800. A writing course that has as its subject hazardous chemicals and their use in the workplace, their effects on the environment, and the hazards to workers caused by exposure to them.

**Revised Catalog Copy:** Either Semester. Three Credits. Prerequisite: ENGL 1010 or 1011 or 3800. Open to CCS students and Allied Health Sciences OSK concentration majors juniors or higher; others with consent of instructor. Hazardous chemicals and their use in the workplace, their effects on the environment, and the hazards caused by exposure to them.

**Course Information:** - The student will gain an understanding of what constitutes a hazardous chemical and its potential effects in the workplace, to the environment, and to those exposed to them. The students will gain a working knowledge to the mitigation and control of hazardous chemicals in their workplace using acceptable intervention mechanisms. The students in this course will be given a midterm and final examination, which will account 30% of their grade. Students will be expected to participate in specific hazardous chemical discussions that address their use in the industrial environment, any regulatory requirements, hazards of human exposure, and precautions that should be used when possible exposure exists will account for 20%. The written assignments include four three to five page papers and a final research paper that is equal to or greater than fifteen pages. These papers will account for 50% of the grade. All papers will be reviewed by the instructor and students will be required to edit and revise papers for final submission. Since this is a “W” course (writing course), failure of the writing component results in failure of the course as a whole.

The major areas or themes regarding hazardous chemicals include: toxicology, reactivity, flammability, health effects, occupational disease, safe handling, and safe systems and operating procedures in dealing with chemicals in the workplace.

**How Meets Goals of Gen Ed.: -**

**Specific Criteria Science and Technology:** (GEOC NOTE: NOT APPROVED FOR CA3) The content in GS 277W (Hazardous Chemical) fits nicely into the emphasis area of environmental/occupational safety and health where the goals are to identify hazards and

mitigate/control their effects in the workplace. Each course in this discipline is complimentary to the other courses that are intended for the development of a well rounded safety and health professional. With eleven courses that cover such topics as safety hazards, industrial hygiene, accident prevention, chemical safety, environmental issues, ergonomics, managing safety and health, applicable regulations, security, violence. With the world facing the threat of Nuclear, Biological, and Chemical (NBCs) terrorism, this course sets the foundation for understand one facet of this issue. Understanding the acute and chronic effects of hazardous chemicals will go a long way to preventing harmful exposure and the ensuing health effects that come from errant exposure. Prevention is the essence of environmental/occupational safety and health.

### W Criteria -

Hazardous Chemical (OSH 277) is designed to be a “W” course since writing is the major emphasis of the course. Enrollment in the course will be limited to 19 students each time it is offered. All written papers as well as the final 15 plus page research paper will be evaluated by the instructor for both content and writing excellence. The instructor will supervise all written assignments to assure clarity, concepts, mechanical correctness and grammatical structure including proofreading all assignments. Those not meeting acceptable writing standards will be returned to the students for revision. The short paper assignments are designed to allow student to grow in the writing competence prior to final paper submission and will follow the same review processes as for the final paper in order to assist students in meeting the writing requirement. Any student who fails the written portion of the course will fail the course itself. The vehicle for the course is hazardous chemical with the aim of teaching students to gather, glean, and write about research information on hazardous chemicals including their dangers and health effects.

The instructor will use the subject matter (hazardous chemicals) to guide the students' writings. There is adequate time built into the course for students to correct and revise any written assignments that do not meet the writing standards. The instructor will be in contact with students for feedback, written and verbal comments, review of drafts, and tutoring as necessary.

It is the students' responsibility to apply the subject matter of the course to the written assignments. This allows the connection between the learning objectives for the course and the writing requirement.

**Role of Grad Students:** - Not Applicable

**Supplementary Information:** -The GS 277W (Hazardous Chemical) is one offering in a group of courses aimed at developing a major emphasis in environmental/occupational, safety, and health at the University of Connecticut. This course will augment the existing courses entitled, Safety and Health Management (AH 280), Industrial Hygiene (AH 281), Accident Prevention Techniques (AH 282), Occupational Safety and Health Regulations (AH 283), and Ergonomics (AH 284). The completion of the previous five courses results in a UCONN Certificate in Occupational Safety and Health. The six other three-hour credit courses are Workplace Chemical Hazards (GS 271), Workplace Safety Hazards (GS 275), Psychology of Workplace Safety (GS 274), Workplace Environmental Issues (GS 272), Workplace Environmental Laws and

Regulations (GS 273), and Workplace Security and Violence (GS 276). The completion of Allied Health courses and the six General Studies courses will result in a UCONN Certificate in Environmental/Occupational Safety and Health. These courses are also a focus area in the Bachelor of General Studies