**Department**: College of Continuing Studies

Course number: 4221W

**Course title**: Trends in Environmental and Occupational Safety and Health

Credits: 3

**Diversity:** CA3 Science and Technology, CA4 Diversity and Multiculturalism

**WQ**: W only

**Contact Person**: Jeet Joshee

**Current Catalog Copy**: - Either Semester. Three credits. Prerequisite: Completion of two or more OSH/ AH or equivalent courses; ENGL 1010 or 1011 or 3800l open only to BGS and Allied Health Services majors; others with consent.

Impact of issues in the workplace in promoting prevention of injuries and illness to workers, and protection of property and the environment.

**Revised Catalog Copy**: - Either Semester. Three credits. Prerequisite: AH 3570 or OSH 3570; ENGL 1010 or 1011 or 3800; open to CCS studnets and Allied Health Sciences OSK concentration majors juniors or higher; others by consent of instructor. Impact of issues in the workplace in promoting prevention of injuries and illness to workers, and protection of property and the environment.

Course Information: -Students will gain an understanding and awareness of the dynamics of the changing workplace and impact on promoting injury and illness prevention, and the ethical and professional challenges confronting a professional in Environmental/Occupational Safety and Health (EOSH). This course will be taught as a series of active seminars requiring the students to research, write, and discuss eight papers, of which one is a 15-page term paper. Topics to be covered are: The changing demographics of the workforce in USA; The changing design of the industrial work environment; The use of technology, automation and artificial intelligence; Globalization of Environmental, Safety and Health regulations; The fundamentals of product safety and liability; Fears and violence in the workplace; Techniques in promoting injury and illness prevention; and Professional and ethical issues.

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

Specific Criteria Science and Technology: This course will acquaint students with scientific thoughts, observations, and evaluation of propositions, and enable students to consider the impact that developments in science and technology have on the nature and quality of life. The content in OSH 221W (Trends in Environmental and Occupational Safety and Health) compliments the other EOSH courses in the focus that are intended for the development of a safety and health professional. The tenet of the safety and health profession is the ability to anticipate, identify, evaluate and control hazards using scientific and technological techniques

and approaches. This course will afford students to apply and appraise scientific thoughts, observations, and information, and evaluate their impact on developments in science and technology and the nature and quality of life. In particular students by examining:

- Workplace issues such as work-related musculoskeletal disorders and researching for interventions students will explore and apply chemistry, biology and physics.
- Globalization of EOSH laws and regulations, students will gain an understanding of the nature of modern scientific inquiry, the process of investigation, the use of epidemiological data, and principles in the development and application scientific knowledge to propagate regulations.
- Fear and violence in the workplace such as control panel security, students will be introduce to unresolved questions in the application of science and technology and discuss how progress might be made in resolving these questions.

The changing work environment such as robotics and automation, the interest, competence, and commitment of students to continued learning about contemporary science and technology and their impact upon the world environment and human society will be promoted.

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Specific Criteria Diversity and Multiculturalism: -This technical course will lead students to an appreciation of the differences as well as commonalities among people by studying the ideas, values, and/or creative expressions of diverse groups from the perspectives of the work environment. Subjects such as age, race, gender, class, cultural diversity and discrimination will be discussed, especially when examining "The changing demographics of the workforce" and "Fear and Violence in the workplace". Overall this course will emphasize that:

- a. There are varieties of human experiences, perceptions, thoughts, values, and/or modes of creativity;
- b. Interpretive systems and/or social structures are cultural creations and the similarities that may exist among diverse groups;
- c. An understanding of and sensitivity to issues involving human rights and migration are essential for our growth and development; and
- d. An awareness of the dynamics of social, political, and/or economic power in the context of any of the above four items are essential for survival.

<u>W Criteria</u>: -1. The writing assignments will enhance learning by allowing each student to gather, analyze, evaluate and write eight papers on issues affecting safety and health in the work environment, hence the quality of life. Each student will be required to search the scholarly literature, select appropriate materials pertaining to the topic, and then read and incorporate these into their writing assignments. This course will be taught as a series of active seminars requiring the students to research, write, and discuss eight papers, of which one is a 15-page term paper,

and due the last day of class. The other seven written papers will be 3-5 pages. Students are expected to participate in the discussion of each topic, which account for 35% of the final letter grade. The writing component of this course will constitute 40% of the course grade. Failure to pass the writing component results in failure of the course.

- 2. The primary modes of writing instruction will be formal in-class instruction and written commentary provided by the instructor. At the beginning of the semester, formal writing instructions will be given, and these will be repeated prior to each of the writing assignments. The instructor will provide written commentaries on all written assignments using the editing features of Microsoft Word and the writing guidelines listed in St. Martin 's Reference Handbook. On request by either the instructor or student, the instructor will meet face to face or by telephone to provide discuss a submitted paper.
- 3. Each writing assignment will be reviewed, and comments and suggestions for improvement provided. Each assignment will be graded for content, logical evolution, organization, structure, grammar, punctuation, spelling, and clarity. Those not meeting acceptable writing standards will be returned to the students for revision. Student will be required to submit a draft of the 15-page term paper for comments and suggestions for improvement, and revise it as per comments and suggestions for submittal as the final 15-page paper. The student will submit the first 15-page draft along with the final draft so that the instructor can easily evaluate how well the student has incorporated comments and suggested changes. 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.

## Role of Grad Students: -Not applicable

**Supplementary Information**: -This course is a new offering in a group of courses aimed at developing foci in Environmental, Occupational Safety and Health (EOSH) at the University of Connecticut, that meet the requirements of the Accreditation Board for Engineering and Technology (ABET). This course will meet general writing educational requirement in the content area as required by the general education system. It will be a core required course for all EOSH foci. This course is being offered with the aimed at developing awareness of the cultural, the dynamics of the changing workplace, and the ethical and professional challenges confronting a professional in EOSH.