LSC Use Only

UWUCC Use Only

Submission Date:

Action Date:

Submission Date:

Action Date:

University-Wide

Course Number and Full Title

Course Number and Full Title

Liberal Studies Approval
for new or existing course

Course Number and Full Title

Deletion

Course Number and Full Title

Program Name

Program Deletion

Program Name

Title Change

New Program

I. Catalog Description

II: Description of the Curriculum Changes

B. Summary of Proposed Changes

1. Title: SAFE 301 Health Hazard Identification
   No change

2. Catalog Description
   Old Prerequisite: MATH 122
   New Prerequisite: MATH 121

3. Course Objectives
   Old:
   A. Students will have an understanding of the fundamentals, terminology, and [redacted]

   B. Students will be able to identify primary health hazards found in industry and their effects on the human body.
   C. Students will be able to identify appropriate workplace standards and threshold limit values.
   D. Students will demonstrate an understanding of the health hazards in the workplace.

   New:
   A. Define terms used in industrial hygiene as they relate to health hazard identification in the workplace.
   B. Identify primary health hazards found in the workplace and their effects on the human body.
   C. Identify appropriate workplace standards and threshold limit values.
   D. Describe methods used in the identification of health hazards in the workplace.
   E. Interpret the signs and symptoms of exposure to health hazards in the workplace.

4. Course Outline
   Adjusted hours per topic and included a new section L. Current Health Hazard Issues – 4 hours. This will include topics such as biohazards, barometric hazards, and indoor air quality.

C. Justification/Rationale for the Revision

Prerequisite

To be consistent with the recently approved curriculum changes of the program.

[redacted]

Course Objectives

The objectives were rewritten to elaborate and clarify learning objectives, and affirm what the students will achieve because of taking this course in measurable terms.

Course Outline: New Section

To include health hazard issues/concerns that are current major concerns or emerging [redacted]

[redacted]

pathogens, tuberculosis, indoor air quality, and legionnaires' disease. Within the past 10-15 years there has been an increase in the awareness of the potential hazards of biological agents. Note that the identification of the biological agent that caused Legionnaires' disease; the recognition of the AIDS (acquired immunodeficiency syndrome) epidemic; and the emergency of recombinant DNA (rDNA) technology as an industry and as a means to create goods and services; have all contributed to the [redacted]

PROPOSED
SYLLABUS OF RECORD

I. Catalog Description

SAFE 301 Health Hazard Identification

3 credits
0 lab hours
3 lecture hours
(3c-01-3sh)

Prerequisites: CHEM 102, PHYS 111, MATH 121, BIOL 155

Provides an understanding of the primary health hazards found in industry and their effects on

C. Body Response to Inhaled Toxic Materials (3 hours)

- The various types of responses which may result from inhalation to toxic substances, such as primary irritation, allergic reactions or sensitization
- Pneumoconiosis
- Systemic intoxication
- Metal fume fever
- Various Infections
- Radioactive damage
- Mutagenesis and cancer.

D. Exposure to Aerosols in Industry (4 hours)

- Exposure to air contaminants in industry
- The chemical and physical properties of airborne particulate contaminants from

metals, metalloid and organic solvents.

- Particle size and its significance in terms of deposition in the respiratory tract.
- Industrial sources of airborne particles and common diseases associated with aerosols exposure along with appropriate reference to permissible exposure limits.

E. Inhalation of Gases and Vapors in Industry (8 hours)

- Chemical and physical properties of common airborne gases and vapors.
- Industrial sources, uses, and potential exposure situations.
- The effects of exposure to gases and organic solvents including particles commonly encountered in industry.

I. Exposure to Noise in Industry (3 hours)

- Exposure to noise in industry
- The physics of sound and the various types of noise,
- The structure and function of the human hearing mechanism.
- Auditory sensitivity and the effects of exposure to excessive noise.
- Sources of noise in industry.

J. Exposure to Non-ionizing Radiation (3 hours)

- Definitions of the various types of non-ionizing radiation.
- Review of the physics of radiation.
- The common sources of non-ionizing radiation
- Specific hazards and exposure such as ultraviolet, lasers, infrared, microwave, radar and radio frequency (RF) radiation.

K. Exposure to Ionizing Radiation (3 hours)

- Sources of exposure in industry.

C. Homework 10%
Periodic out-of-classroom assignments consisting of short answer questions related to identifying health hazards in the workplace will be given.

[redacted]

Students will prepare a report on how to identify a specific health hazard in a specific industry.

E. Presentations 5%
Students will orally present their term project to the class, and answer questions that arising from the presentation.

G. Participation 10%
Each student will provide active engagement in the classroom.

The grading scale will be based on the following:

A = 90-100%
B = 80-89%
C = 70-79%
D = 60-69%
F < 60%

V. Required Text

Levy, B.S. and D.H. Wegman (editors). Occupational Health, 3rd Edition. Little, Brown, and Company, New York, NY, 1995

[redacted]

Historical Reference

[redacted]

Old Syllabus of Record

SYLLABUS OF RECORD

I. Catalog Description

SA 301 Health Hazard Identification 3c-01-3sh
Prerequisites: CH 102, PY 111, MA 122, BI 155

Provides an [redacted]

K. Exposure to Ionizing [redacted]

IV. Evaluation Methods

The final grade will be determined by [redacted]

A 90-100%
B 80-89%
C 70-79%
D 60-69%
F < 60%

or, at the discretion of the faculty member a grading curve that results in a normal distribution of grades.

V. Required Materials

[redacted]