

Curriculum Proposal Cover Sheet – form is available on-line as an interactive PDF

LSC Use Only Proposal No: LSC Action-Date: <u>AP-1/30/14</u>	UWUCC Use Only Proposal No: <u>13-119</u> UWUCC Action-Date: <u>AP-2/11/14</u>	Senate Action Date: <u>APP-2/25/14</u>
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Curriculum Proposal Cover Sheet - University-Wide Undergraduate Curriculum Committee

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Proposing Department/Unit Department of Safety Sciences	Phone 7-3275

Check all appropriate lines and complete all information. Use a separate cover sheet for each course proposal and/or program proposal.

1. Course Proposals (check all that apply)

New Course Course Prefix Change Course Deletion
 Course Revision Course Number and/or Title Change Catalog Description Change

Current course prefix, number and full title: SAFE 100 WORKPLACE SAFETY TODAY AND TOMORROW
Proposed course prefix, number and full title, if changing: SAFE 100 The Science of Living Safety

2. Liberal Studies Course Designations, as appropriate

This course is also proposed as a Liberal Studies Course (please mark the appropriate categories below)
 Learning Skills Knowledge Area Global and Multicultural Awareness Writing Intensive (include W cover sheet)
 Liberal Studies Elective (please mark the designation(s) that applies – must meet at least one)
 Global Citizenship Information Literacy Oral Communication
 Quantitative Reasoning Scientific Literacy Technological Literacy



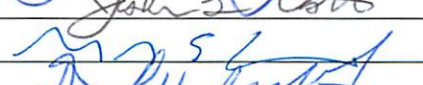
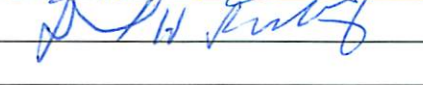
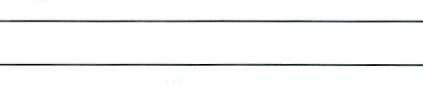

3. Other Designations, as appropriate




Honors College Course Other: (e.g. Women's Studies, Pan African)




4. Program Proposals

Catalog Description Change Program Revision Program Title Change New Track
 New Degree Program New Minor Program Liberal Studies Requirement Changes Other

Current program name: _____
Proposed program name, if changing: _____

5. Approvals	Signature	Date
Department Curriculum Committee Chair(s)	<u>DR. JAN K. WACHTER</u> 	<u>Nov 16, 2013</u>
Department Chairperson(s)	<u>DR. LON FERGUSON</u> 	<u>11/17/13</u>
College Curriculum Committee Chair <u>CS</u>	<u>DR. JAN K. WACHTER</u> 	<u>11/20/13</u>
College Dean	<u>DR. MARK CORREIA</u> 	
Director of Liberal Studies (as needed)	<u>DR. DAVID PISTOLE</u> 	<u>31 Jan 14</u>
Director of Honors College (as needed)		
Provost (as needed)		
Additional signature (with title) as appropriate		
UWUCC Co-Chairs		<u>2/12/14</u>

II. Description of the Curriculum Change

1. New Syllabus of Record

Syllabus of Record

I. Catalog Description

SAFE 100 The Science of Living Safely	3 lecture hours 0 lab hours 3 credits (3c-0l-3cr)
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Prerequisites: Non Safety, Health and Environmental Applied Sciences Major and Minor

Examines the relevance, impact and role that safety plays in the world today, especially in the workplace. Includes the historical and scientific development of safety and health regulations, the impact of injury on society, identification of hazards and hazard controls in specific industrial processes, and the personal and ethical responsibilities that individuals have for the safety and health protection of themselves, others and their community.

II. Course Outcomes and Assessment (Expected Undergraduate Student Learning Outcomes – EUSLO)

At the end of the course, students will be able to:

Objective 1: Examine the relevance, impact and role that safety plays in the world, including the workplace, at home, at play, and at school.

Expected Student Learning Outcome 1: *Informed Learners*

Rationale: Assignments will include students keeping a daily log of how safety interacts with the diverse world around them on a recurring and relevant basis. Particular attention should be paid to how safety impacts populations potentially affected by social justice issues and how safety affects or is affected by so many different disciplines. The student will incorporate perspectives from several disciplines (e.g., history, sociology, religion, ethics, psychology, biology, chemistry, and physics) in this examination, including the role that a diverse and changing workforce has in workplace safety. Information for this log can be derived from a number of sources, such as television news reports, newspapers, magazines, internet resources, social media sites, journal articles, and books. The intent is to inform students as world citizens that safety permeates their lives in so many different ways and through so many different disciplines and avenues.

Objective 2: Evaluate past safety, health and environmental events, including passage of key OSHA regulations, to prove (or disprove) their impact on the reducing workplace accident rates today and over time.

Expected Student Learning Outcome 2: *Empowered Learners*

Rationale: Through the use of a guided worksheet, students will examine the historical and scientific reasons as to why a particular section(s) of the OSHA regulations was passed (hypothesis) and how its passage has affected workplace safety today (current injury results data compared with historical injury results data). The intent is for the student to prove or disprove how these specific regulations/events are concretely affecting the reduction of hazards and risks in the workplace today as determined by the decrease (or increase) in current injury rates compared to historical rates (the student will have to track down these rates). Students are encouraged to include additional outcome measures other than injury rates to prove their hypothesis.

Objective 3: Describe personal responsibilities for safety and health promotion for one's self, others and the community.

Expected Student Learning Outcomes 2 and 3: *Empowered and Responsible Learners*

Rationale: Assignments will include students observing and analyzing the unsafe conditions and unsafe acts around them during school, at home and at play. These observations will translate into descriptions as to how these unsafe acts and conditions could be resolved by students and the people around them in order to reduce risk. The intent is for students to identify and evaluate hazardous conditions and acts around them and then to deduce ways in which these acts and conditions could be controlled by students and the people that they interact with. In this way, students become cognizant of the safety and health hazards associated with everyday living in an unsafe world and have a greater chance of being responsible and empowered "safety citizens" during their daily activities.

Objective 4: Examine by accessing a variety of scientific information sources the safety hazards, issues or concerns associated with the student's field of educational study or an industry/sector of personal choosing that they would like to work in or have interest in, and critically identify potential controls or solutions to reduce risk to levels deemed to be acceptable to the student.

Expected Student Learning Outcomes 1, 2 and 3: *Informed, Empowered and Responsible Learners*

Rationale: Assignments will include developing a paper on safety hazards and controls for a specific industry/sector of interest to the student or related to the student's chosen profession. The intent is to provide students the opportunity to use their critical scientific investigation and thinking skills in terms of uncovering the key safety hazards associated with their chosen profession or for an industry/sector in which they would like to be employed in the future and understanding the ways that these hazards can be mitigated or controlled through the use of engineering, administrative and personal protection controls. In this way, students become cognizant of the safety and health hazards associated with their future professions or work settings and have a greater chance of becoming informed, responsible and empowered safety-conscious employees in the workforce and in the future.

III Course Outline

- A. SAFETY PERSPECTIVES (9 hrs)
 - 1. Historical
 - 2. Scientific
 - 3. Sociological
 - 4. Economical
 - 5. Psychological
 - 6. Ethical
 - 7. Literary: *The Jungle* by Upton Sinclair
 - 8. Cinematic: *Norma Rae*, *Erin Brockovich*, and *Silkwood*
 - 9. Diversity and social justice

- B. SAFETY IN THE WORKPLACE: HISTORY OF REGULATIONS (6 hrs)
 - 1. The need for safety and health standards
 - 2. Basic safety and health terms used in the workplace
 - 3. History of occupational safety and health including the Occupational Safety and Health Act of 1970
 - 4. The changing workplace such as: minorities, violence, and drugs

- C. SAFETY IN THE WORKPLACE: IDENTIFYING AND EVALUATING HAZARDS (7 hrs)
 - 1. Acquiring and evaluating hazard information
 - 2. Human factors and work environments
 - 3. Accident investigation and analysis
 - 4. Reporting, record-keeping and costs
 - 5. Health stressors
 - 6. Personal responsibility
 - 7. Societal responsibility

- D. SAFETY IN THE WORKPLACE: CONTROLLING HAZARDS IN SELECTED PROFESSIONS AND INDUSTRIES (11 hrs)
 - 1. Health professions
 - 2. Law enforcement
 - 3. Education
 - 4. Transportation
 - 5. Food
 - 6. Entertainment
 - 7. Manufacturing sector
 - a. Electrical and electronic
 - b. Chemical processing
 - c. Metal product fabrication and finishing
 - 8. Service sector

- E. SAFETY AT HOME AND DURING LEISURE (7 hrs)
 - 1. Food and eating habits
 - 2. Child safety
 - 3. Home improvement and repair
 - 4. Household chemicals
 - 5. Hobbies
 - 6. Recreation

7. Travel
8. Personal responsibility
9. Societal responsibility

F. FUTURE OF SAFETY AND HEALTH REGULATIONS (2 hrs)
1. Lessons learned
2. The future

G. Final examination (2 hrs)

IV. Evaluation Methods

The final grade for the course will be determined from assignments and examinations. For example:

20% Daily Safety Log Assignment

A daily log will be kept by students. This log will describe how safety interacts with the world around them on a recurring and relevant basis. Information for this log can be derived from a number of sources, such as television news reports, newspapers, magazines, internet resources, social media sites, journal articles, and books.

20% Regulation Analysis and Application Assignment

Using a guided worksheet, students will determine the historical and scientific reasons why a particular section of the OSHA regulations was passed and how its passage may (or may not be) affecting workplace operations and safety today.

20% Safety Observation and Preventive Action Assignment

Students will observe the unsafe conditions and unsafe acts around them during school, at home and at play. These observations will translate into a short report describing how these unsafe acts and conditions could be resolved by students and the people around them in order to reduce personal risk.

25% Industry or Profession-Specific Hazard Analysis and Control Assignment

Students will write an essay on safety hazards and controls for a specific industry of interest to the student or related to the student's chosen profession.

15% Final Examination

Examination will cover reading materials and class lecture notes. Format includes multiple choice, true and false, and short answer questions.

V. Example Grading Scale

The following grading scale will be used to assign letter grades for this course:

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

VI. Attendance Policy

The undergraduate course attendance policy will be consistent with the university undergraduate attendance policy included in the Undergraduate Catalog.

VII. Required Textbooks, Supplemental Books and Readings

There is no required textbook for this course.

Readings for this course primarily reside on the OSHA website (www.OSHA.gov) and OSHA eTools website (<https://www.osha.gov/dts/osta/oshsoft/>).

The Jungle by Upton Sinclair (widely available including free downloadable e-versions) is assigned as a supplemental reading book for this course.

VI. Special Resource Requirements

Each student will be expected to purchase a log book for recording safety information and observations.

VII. Bibliography

Haight, JM, Editor, 2013. Environmental Safety and Health Regulations. Des Plaines, IL: ASSE.

Haight, JM, Editor, 2013. Recognition, Evaluation and Control of Workplace Health Hazards. Des Plaines, IL: ASSE.

Haight, JM, Editor, 2013. Workplace Hazard Prevention Management. Des Plaines, IL: ASSE.

OSHA Standard for General Industry (29 CFR 1910), 2013. Book Version. Mancomm.

Sanford, C, 2011. The Responsible Business. Somerset, NJ: Jossey-Bass.

Historical References

Anton, TJ, 1992. *Occupational Safety & Health Management*. Second Edition. New York: McGraw-Hill, Inc.

Ashfahl, CR, 1990. *Industrial Safety & Health Management*. Second Edition.

Englewood Cliffs, NJ: Prentice-Hall, Inc.

Balchin, NC & Castner, HR, 1993. *Health and Safety in Welding and Allied Processes*. Fourth Edition. New York: McGraw-Hill, Inc.

BNA Books, 1973. *The Consumer Product Safety Act*. Washington, DC: BNA Books, 1973.

Brauer, RL, 1994. *Safety and Health for Engineers*. New York: Van Nostrand Reinhold.

Brown, DD, 1976. *Systems Analysis and Design for Safety*. Englewood Cliffs, NJ.

Colling, DA, 1990. *Industrial Safety Management & Technology*. Englewood Cliffs, NJ: Prentice-Hall, Inc.

Dickerson, FR, 1968. *Product Safety in Household Goods*. Bobbs-Merrill Co., New York, NY.

Grimaldi, J. & Simmons, R, 1989. *Safety Management*. Boston, MA: Irwin.

Hammer, W, 1989. *Occupational Safety Management & Engineering*. Englewood Cliffs, NJ: Prentice-Hall.

Laing, PM, Editor, 1991. *Supervisor's Safety Manual*, Seventh Edition. Chicago: National Safety Council.

La Dou, J, Editor, 1986. *Introduction to Occupational Health and Safety*. Chicago: National Safety Council.

Levitt, R & Semelson, N, 1993. *Construction Safety Management*, Second Edition. New York: McGraw-Hill.

Lowrance, W, 1976. *Of Acceptable Risk*. Los Altos, CA: William Kaufmann Inc.

McGregor, GI, 1994. *Environmental Law and Enforcement*. Boca Raton, FL: CRC Press/Lewis Publishers.

Society of Manufacturing Engineers, 1988. *Tool and Manufacturing Engineer's Handbook, Vol. 5*. Dearborn, MI: SME.

Sullivan, TFP, Editor, 1995. *Environmental Law Handbook*. Rockville, MD: Government Institutes, Inc.

Woodside, G, 1993. *Hazardous Materials and Hazardous Waste Management*. New York: John Wiley & Sons.

Yankee, HW, 1989. *Manufacturing Processes*. Englewood Cliffs, NJ: Prentice Hall.

SAFE 100 WORKPLACE SAFETY TODAY AND TOMORROW

II. Description of the Curriculum Change

2 Summary of Proposed Revisions

- Objectives for the course were revised.
- Course catalogue description was slightly changed.
- Course outline was revised.
- Assignments were changed.
- Course evaluation method was changed.
- Required text for class (the work of fiction) was changed.
- Bibliography was updated.

3 Justification of Proposed Revisions

- Objectives were changed to align with the new liberal studies requirements for expected undergraduate student learning outcomes. In particular, objectives were changed so that the course is considered as a liberal studies elective under the scientific literacy category.
- The course catalogue description was revised to align better with the new objectives and the scientific literacy category.
- The course outline was revised to better reflect the objectives.
- Assignments were revised to align closely with the objectives.
- Evaluation methods were changed due to the assignments changing.
- This required text is a seminal literary work in terms of workplace safety in America and showcases the social justice and political issues associated with safety conditions.
- The bibliography was outdated and needed to be updated.

Sample Assignment for a Liberal Studies Course

Industry or Profession-Specific Hazard Analysis and Control Assignment

Length: 2000 – 2500 words

Double-spaced

Assignment worth 25% of grade

Write an essay on the safety hazards and controls for a specific industry or profession of interest to you (e.g., potential future profession or industry that you would like to work in).

In your essay, provide the following:

1. Your choice of industry or profession.
2. The documented hazards associated with your chosen industry or profession.
3. The documented controls associated with your chosen industry or profession.
4. The safety and health regulations relevant to your chosen industry or profession.
5. An evaluation by you as to how safe you believe your chosen industry or profession to be.
6. Given the above information, how could you, your professional organizations, your employer, and/or the government improve the safety of your chosen industry or profession?
7. Citations and references.

Grading Criteria for Assignment

Criteria	Points Awarded				
Page Length	2 points		1 point		0 point
	Essay falls within the 2000 – 2500 word limit		Essay consists of 1000 -1999 words		Essay is less than 1000 words
Organization	4 points	3 points	2 points	1 point	0 point
	Essay is well structured and organized in a logical manner as to make the essay easily comprehended and enjoyable to read	Essay is generally well structured and organized but there are a few gaps in the way the information is presented	Essay is not generally well structured and organized with many gaps in the way the information is presented	Essay is poorly structured and organized; essay appears haphazard	Essay is very poorly structured; essay appears haphazard; there appears to be no organization of information
Spelling and Grammar	4 points	3 points	2 points	1 point	0 point
	There are no major spelling and grammar errors	There are some spelling and grammar errors; however these do not impede the reader's understanding of the essay	Spelling and grammar mistakes impede the essay's readability	Spelling and grammar mistakes impede the essay's understand-ability	Spelling and grammar mistakes are so numerous that it makes it very difficult to finish reading the essay
Citations and References	4 points	3 points	2 points	1 point	0 point
	There are citations throughout the essay; there are more than 4 quality references provided	There are citations throughout the essay; there are two or three quality references provided	There are some citations in the essay; there are a few quality references provided	There are limited citations and quality references provided	There are no citations in the essay; there are no quality references provided
Hazard Identification	4 points	3 points	2 points	1 point	0 point
	The list of hazards identified are comprehensive and accurate	The list of hazards identified are accurate and somewhat comprehensive	The list of hazards are somewhat accurate and somewhat comprehensive	The list of hazards are not generally comprehensive and/or accurate	The list of hazards identified are not comprehensive and accurate
Hazard Controls	4 points	3 points	2 points	1 point	0 point
	The list of hazard controls identified are comprehensive and accurate	The list of hazard controls identified are accurate and somewhat comprehensive	The list of hazard controls are somewhat accurate and somewhat comprehensive	The list of hazard controls are not generally comprehensive and/or accurate	The list of hazard controls identified are not comprehensive and accurate

Safety Regulations	4 points	3 points	2 points	1 point	0 point
	The list of safety regulations are comprehensive and accurate	The list of safety regulations are accurate and somewhat comprehensive	The list of safety regulations are somewhat comprehensive and somewhat accurate	The list of safety regulations are not generally comprehensive and/or accurate	The list of safety regulations are not comprehensive and accurate
Personal Safety Evaluation	4 points	3 points	2 points	1 point	0 point
	The evaluation and discussion are profound and thought-provoking (post-college level)	The evaluation and discussion are interesting, logical and somewhat compelling (college level)	The evaluation and discussion are ordinary and not that compelling (high school level)	The evaluation and discussion are rudimentary and not very compelling at all (grade school level)	There is no evaluation and discussion
Responsibility Evaluation	4 points	3 points	2 points	1 point	0 points
	The evaluation and discussion are profound and thought-provoking (post-college level)	The evaluation and discussion are interesting, logical and somewhat compelling (college level)	The evaluation and discussion are ordinary and not that compelling (high school level)	The evaluation and discussion are rudimentary and not very compelling at all (grade school level)	There is no evaluation and discussion
GRADE	A	B	C	D	F
	34 – 30 points	29 – 23 points	22 – 13 points	12 – 6 points	< 6 points

LIBERAL STUDIES COURSE APPROVAL GENERAL QUESTIONS

- A. This course will typically be taught single session, but over multiple terms. A number of instructors could teach this course. All instructors involved in teaching the course will meet every year to exchange syllabi, discuss possible revised content (in keeping with advances in the discipline), and review course objectives, guidelines and grading criteria. Such meetings and exchanges will ensure maintenance of basic equivalency.
- B. This course specifically assesses the contributions and the role that diversity places in the workplace. This will be achieved in part by discussing videos that highlight woman or minority contribution to health, or safety, or the environment protection such *Silkwood*, (1983) directed by Mike Nichols (1993); *Norma Rae*, directed by Martin Pitt (1979) and *Erin Brockovich*, directed by Steven Soderbergh (2000). Diversity is also covered in discussing how regulations and requirements are set to protect a diverse workforce.
- C. Upton's Sinclair's *The Jungle* will be assigned as supplemental reading in this course. Sinclair wrote the novel to portray the lives of immigrants in the United States. The novel highlights the safety issues associated with working in the American meatpacking industry during the early 20th century. The book depicts poverty, the absence of social programs, unpleasant living and working conditions, and the hopelessness prevalent among the working class.
- D. While the content of this course was extracted from existing SAFE courses and a former LBST 499 course, this course is intended to provide an introduction of the safety and health field to non-safety students to allow them to identify hazards and apply methods of injury control to their lifestyles; encourage them to take responsibility for their personal health as well as the wellness of the family and community, and acquire a commonly used vocabulary of safety and health professionals. The major SAFE courses are taught from a technical perspective, while this course is taught more from a personal perspective.

Part II 4 Old Syllabus of Record

Syllabus of Record

I. Catalog Description

SAFE 100 Workplace Safety Today and Tomorrow

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

Prerequisites: Non Safety Sciences Major

Introduces workplace safety, health and environmental aspects to students with limited knowledge of the subject. It includes the historical development of safety and health regulations, the impact of injury on society, identifying and evaluating hazards and hazard controls in specific industrial processes, basic principles of loss management, and the future of safety, health and environmental regulations.

II. Course Objectives

Upon completion of this course, the student will be able to:

1. Describe the historical significance of occupational safety, health and environmental regulations and their impact on the workplace.
2. Define basic terms used in describing workplace health and safety.
3. Discuss the general requirements of Federal regulations for providing a safe workplace and protecting the environment.
4. Describe loss management styles.
5. Demonstrate an understanding of the personal responsibilities for safety and health to fellow employees, the environment and the community.
6. Recognize the role of women and minorities in the changing workforce.
7. Examine the influence of past safety, health and environmental events on current and future behaviors in the workplace.

III Course Outline

A. HISTORY OF SAFETY and HEALTH (9 hours)

1. The need for safety and health standards
2. Basic safety and health terms used in the workplace
3. History of occupational safety and health including the Occupational Safety and Health Act of 1970
4. The changing workplace such as: women and minorities, violence, and drugs.

B. LOSS MANAGEMENT OF WORKPLACE (9 hours)

1. Loss management functions

2. Areas of responsibility in safety and health
3. Employees' behavior and safety
4. Training of employees
5. Personal protective equipment
6. Emergency planning

IDENTIFYING and EVALUATING HAZARDS IN THE WORKPLACE (9 hours)

1. Acquiring and evaluating hazard information
2. Human factors and work environments
3. Accident investigation and analysis
4. Reporting, record-keeping and costs
5. Health stressors

D. HAZARD CONTROLS IN SELECTED INDUSTRIES (9 hours)

1. Electrical and electronic
2. Chemical processing
3. Metal product fabrication and finishing
4. Technology manufacturing

E. FUTURE OF SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS (6 hours)

1. Lessons learned
2. The future

F. Finals examination (2 hours)

IV. Evaluation Methods

The final grade for the course will be determined from tests, quizzes, homework assignments and projects. For example:

- 40% Tests. Three tests (two during the semester and the final) consisting of multiple choice, true-false and short answers.
- 10% Quizzes. Periodic quizzes will be given based on the homework reading assignments.
- 30% Homework Assignments. Four homework assignments (one per unit A to D) will be given on required readings.
- 20% Research Paper. Each student will review two books selected from a list presented by the instructor. The student will prepare a summary of the substantial arguments or themes of each book and confront the ethical issues of safety, health and environment of the workplace in the future.

V. Required textbooks, supplemental books and readings

Textbook

No textbook is required for this course. The instructor will provide handouts and references.

Readings

Students are required to select a book for reading from the following list, or a book approved by the instructor. A book can be approved by the instructor if it allows the student to find ideas for developing substantial arguments or themes related to environmental protection from industrial activities, or workplace health and safety.

Arbee, Edward. Monkey Wrench. Harper Trade, (July 2000).

Cal 2001/Wall Calendar. 2001 Greenpeace: Stepping Light on the Earth Wall Calendar. Workman Publishing, (August 2000).

Carson, Rachel L. Silent Spring. Houghton Mifflin Company, (1951).

De Becker, Gavin. Protecting the Gift. Dell Publishing, (May 2000).

Diamond, Jared. Guns, Germs and Steel: The fates of Human Societies. Norton, W.W. & Company Incorporated, (April 1990).

Gore, Albert. Earth in the Balance. Houghton Mifflin Company, (October 1992).

Keys, David. Catastrophe: An investigation into the Origins of Modern World. Ballantine Publishing Group, (February 2000).

Larsen, Margie, et al. Barney says "Play Safety". Lyrick Publishing, (February 1996).

Sinclair, Upton. The Jungle. Addison-Wesley Educational Publishers Incorporated, (June 1998).

Solzhenitsyn, Richard B. Running from Safety. Dell Publishing (November 1995)

Stegner, Wallace E. Crossing to Safety. Viking Penguin, (March 1990).

Toohey, John. Captain Bligh's Portable Nightmare. Harper Collins Publishing, (anticipated March 2001).

Nader, Ralph. Unsafe at Any Speed. Knightsbridge Publishing Company Incorporated, (January 1991).

VI. Special resource requirements

Each student will be expected to purchase a book (from approved list) as part of the reading requirements.

VII. Bibliography

Anton, Thomas John. Occupational Safety & Health Management. Second Edition. New York: McGraw-Hill, Inc., 1992.

Ashfahl, C. Ray. Industrial Safety & Health Management. Second Edition. Englewood Cliffs, NJ: Prentice-Hall, Inc., 1990.

Ayers, et al. Environmental Science and Technology Handbook. Rockville, MD: Government Institutes, Inc. 1994.

Balchin, Nigel C. and Castner, Harvey R. Health and Safety in Welding and Allied Processes. Fourth Edition. New York: McGraw-Hill, Inc., 1993.

Brauer, Roger L. Safety and Health for Engineers. New York: Van Nostrand Reinhold, 1994.

Colling, David A. Industrial Safety Management & Technology. Englewood Cliffs, NJ: Prentice-Hall, Inc., 1990.

Laing, P.M., Editor. Supervisor's Safety Manual, Seventh Edition. Chicago: National Safety Council, 1991.

Levitt, Raymond and Semelson, Nancy. Construction Safety Management, Second Edition. New York: McGraw-Hill, 1993.

McGregor, Gregor I. Environmental Law and Enforcement. Boca Raton, FL: CRC Press/Lewis Publishers. 1994.

Sullivan, Thomas F.P., Editor. Environmental Law Handbook, 13th edition. Rockville, MD: Government Institutes, Inc. 1995.

Woodside, G. Hazardous Materials and Hazardous Waste Management. New York: John Wiley & Sons. 1993.

Historic References

Brown, David D. Systems Analysis and Design for Safety. Englewood Cliffs, NJ: 1976.

BNA Books. The Consumer Product Safety Act. Washington, DC: BNA Books, 1973.

Dickerson, F. Reed. Product Safety in Household Goods. Bobbs-Merrill Co., New York, NY (1968).

Grimaldi, J. and Simmons, R. Safety Management. Boston, MA: Irwin, 1989.

Hammer, Willie. Occupational Safety Management & Engineering. Englewood Cliffs, NJ: Prentice-Hall, 1989.

La Dou, Joseph, Editor. Introduction to Occupational Health and Safety. Chicago: National Safety Council, 1986.

Lowrance, William. Of Acceptable Risk. Los Altos, CA: William Kaufmann Inc., 1976.

Society of Manufacturing Engineers. Tool and Manufacturing Engineer's Handbook, Vol. 5. Dearborn, MI: SME, 1988.

Yankee, H.W. Manufacturing Processes. Englewood Cliffs, NJ: Prentice Hall, 1989.

ANSWERS TO PART IV

- A.** This is not a multiple-section course, hence there is no need to develop departmental guidelines, assignment of responsibility to a coordinating committee, exchange and discussion of individual instructor syllabi, periodic meetings among instructors, etc.
- B.** One of the objectives of this course is assessing the contributions and role of women and minorities in the workplace. This will be achieved by discussing videos that highlight woman or minority contribution to health, or safety, or the environment protection such *Silkwood*, (1983) directed by Mike Nichols (1993); *Norma Rae*, directed by Martin Pitt (1979) and *Erin Brockovich*, directed by Steven Soderbergh (2000); and reviewing articles or a book chapter written by a woman or minority such as "*Living Downstream*" by Sandra Steingraber, 1997.
- C.** Each student will review one book selected from a list presented by the instructor. The student will prepare a summary of the substantial arguments or themes of each book and confront the ethical issues of safety, health and environment of the workplace in the future. This will contribute 20% of the final grade.
- D.** While the content of this course was extracted from existing SAFE courses, this course is intended to provide safety and health information to students to allow them to apply methods of injury control to their lifestyles; encourage them to take responsibility for their personal health as well as the wellness of the family and community and acquire a commonly used vocabulary of safety and health professionals. The major SAFE courses are taught from a technical perspective, while this course will be taught from a personal perspective.

Checklist for Liberal Studies Electives Course Proposals

1. Review the Criteria for a Liberal Studies Elective – note how the competencies are to be handled.
2. Follow the 2012 Undergraduate Curriculum Handbook for new (p. 20-27) or revised courses (p. 15-19).
3. Use the new Curriculum Proposal Cover Sheet (interactive PDF or word document - available at <http://www.iup.edu/senate/uwucc/default.aspx>).
4. Course Outcomes and Assessment (Section II, The Syllabus of Record - p. 23 and 85 in UWUCC Handbook) map to the three required Liberal Studies Electives Expected Undergraduate Student Learning Outcomes (EUSLOs): Informed Learners (I), Empowered Learners (II), and Responsible (III) Learners.
5. Course content – meets the required course content for a Liberal Studies Elective. While the course outline may not explicitly state the items in the required content, it needs to be clear that the content of the course attempts to address these required elements.
6. Competencies - All Liberal Studies Electives must meet the EUSLOs and required course content from at least ONE of the following SIX competencies: Global Citizenship; Information Literacy; Oral Communication; Quantitative Reasoning; Scientific Literacy; and Technological Literacy. Note: a course may meet more than one competency.
7. Proposal includes the assignment instructions for one of the major course assignments and a grading rubric or grading criteria for that assignment (p. 33 UWUCC Handbook).
8. Proposal includes the answers to the four Liberal Studies questions (p. 91 UWUCC Handbook).
9. Proposal meets the spirit of Liberal Studies (p. 30 UWUCC Handbook).

If this is a course revision (p. 18 UWUCC Handbook)

10. Summary of the proposed revisions.
11. Justification/rationale for the revision – be sure to include any departmental discussions of the overall offerings of their Liberal Studies Courses and why this course is included in those offerings.
12. The old syllabus of record.
13. Review Liberal Studies course approval checklist (p. 90 UWUCC Handbook).

Part III Letters of Support or Acknowledgment

Not applicable.