

LSC Use Only No:	LSC Action-Date:	UWUCC USE Only No.	UWUCC Action-Date:	Senate Action Date:
		05-50	Appr 3/21/06	Appr 5/2/06

**Curriculum Proposal Cover Sheet - University-Wide Undergraduate Curriculum Committee**

Contact Person Dr. Lon Ferguson	Email Address Ferguson@iup.edu
Proposing Department/Unit Safety Sciences	Phone 7-3019

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

<b>1. Course Proposals (check all that apply)</b> <input type="checkbox"/> New Course <input type="checkbox"/> Course Prefix Change <input type="checkbox"/> Course Deletion <input type="checkbox"/> Course Revision <input checked="" type="checkbox"/> Course Number and/or Title Change <input type="checkbox"/> Catalog Description Change		
SAFE 145 Workplace Safety Today and Tomorrow	SAFE 100 Workplace Safety Today and Tomorrow	
<i>Current Course prefix, number and full title</i>	<i>Proposed course prefix, number and full title, if changing</i>	
<b>2. Additional Course Designations: check if appropriate</b> <input type="checkbox"/> This course is also proposed as a Liberal Studies Course. <input type="checkbox"/> Other: (e.g., Women's Studies, Pan-African) <input type="checkbox"/> This course is also proposed as an Honors College Course.		
<b>3. Program Proposals</b> <input type="checkbox"/> New Degree Program <input type="checkbox"/> Catalog Description Change <input type="checkbox"/> Program Revision <input type="checkbox"/> New Minor Program <input type="checkbox"/> Program Title Change <input type="checkbox"/> Other <input type="checkbox"/> New Track		
<i>Current program name</i>	<i>Proposed program name, if changing</i>	
<b>4. Approvals</b>		
Department Curriculum Committee Chair(s)	<i>Lon Ferguson</i>	Date <i>2/13/06</i>
Department Chair(s)	<i>Lon Ferguson</i>	<i>2/17/06</i>
College Curriculum Committee Chair	<i>Elizabeth Palmer</i>	<i>2/27/06</i>
College Dean	<i>James Brycki</i>	<i>2/28/06</i>
Director of Liberal Studies *	<i>Cheryl Sellen</i>	<i>3/21/06</i>
Director of Honors College *		
Provost *		
Additional signatures as appropriate: (include title)		
UWUCC Co-Chairs	<i>Gail Sedquist</i>	<i>3-21-06</i>
<b>Received</b>		

**FEB 28 2006**

**Liberal Studies**

## Safety Sciences Department

### Memo

To: Dr. Mary Sadler – Director of Liberal Studies  
From: Dr. Lon Ferguson, Chair – Safety Sciences *LF*  
Date: February 13, 2006  
Re: Course Changes to SAFE 145 Workplace Safety Today and Tomorrow

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The Safety Sciences Department is notifying the Liberal Studies Office that we are making some changes to SAFE 145 Workplace Safety Today and Tomorrow. This course is currently approved as a Liberal Studies elective for the university.

The specific changes to the course are very minor and include:

- The course number has been changed from SAFE 145 to SAFE 100.
- The Bibliography was updated and a text book was added.

There are no changes to course content. The attached proposal outlines the above course changes and we would appreciate a letter of support from the Liberal Studies Office for these changes.

*Mary,*

*I changed the objectives to make the syllabus of record you faxed, see attached.*

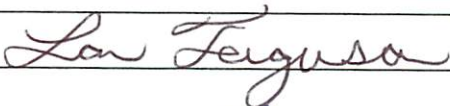
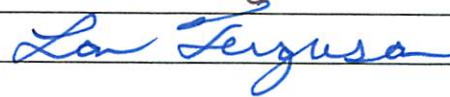
*LF*

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Contact Person Dr. Lon Ferguson	Email Address Ferguson@iup.edu
Proposing Department/Unit Safety Sciences	Phone 7-3019

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<b>3. Program Proposals</b> <input type="checkbox"/> New Degree Program <input type="checkbox"/> Program Title Change <input type="checkbox"/> Other <input type="checkbox"/> New Minor Program <input type="checkbox"/> New Track <input type="checkbox"/> Catalog Description Change <input type="checkbox"/> Program Revision		
<i>Current program name</i>		<i>Proposed program name, if changing</i>
<b>4. Approvals</b>		
Department Curriculum Committee Chair(s)		Date 2/13/06
Department Chair(s)		2/17/06
College Curriculum Committee Chair		
College Dean		
Director of Liberal Studies *		
Director of Honors College *		
Provost *		
Additional signatures as appropriate: (include title)		
UWUCC Co-Chairs		

## **Course Revision: SAFE 100 Workplace Safety Today and Tomorrow**

### **Part II. Description of the Curriculum Change**

1. Syllabus of Record.

The new syllabus of record for this revised course is attached in Appendix A.

2. A summary of the proposed revisions:

- a. The course number has been changed from SAFE 145 to SAFE 100.
- b. The Bibliography was updated and a text book was added.

3. Justification/rationale for the revision.

The change in course number was made to better reflect the level of content coverage in this course as compared to SAFE 101 Introduction to Occupational Safety & Health.

SAFE 145 was designed to be a liberal studies elective course and we hoped students would also consider it as a free elective. SAFE 101 was designed primarily as the introductory course to safety and health for Safety Science majors and minors. However, SAFE 101 is also a recommended elective for Environmental Health majors and for some business majors.

Despite our best efforts to reflect this in the course descriptions for these two courses, students were selecting SAFE 101 Introduction to Safety & Health as a free elective rather than SAFE 145 Workplace Safety Today and Tomorrow. We believe this was in part due to the fact that students perceived SAFE 101 would be easier than SAFE 145 simply because of the numbering sequence. For the past year we have offered two sections each semester of both SAFE 101 and 145 and invariably the SAFE 101 enrollment was double that of SAFE 145. This was detrimental to our SAFE 101 class because we had to move out of our traditional classrooms on the first floor of Johnson Hall and teach them in the auditorium where we do not have the safety and health equipment for illustration purposes.

4. The old syllabus of record.

The old syllabus of record is attached in Appendix B.

5. Liberal Studies course approval.

These changes were forwarded to Liberal Studies for their approval.

### **Part III. Letters of Support or Acknowledgement**

This course is a required Liberal Studies Elective for the Associate in Applied Science in Electro-Optics (A.A.S.E.O.) and Associate in Science in Electro-Optics (A.S.E.O.). Letters from the Physics Department regarding this course number change have been requested.

## APPENDIX A: NEW SYLLABUS OF RECORD

### I. Catalog Description

SAFE 100 Workplace Safety Today and Tomorrow

3 class hours

0 lab hours

3 credits

(3c-01-3cr)

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

Students completing this course will be able to:

- A. Assess the historical significance of occupational safety, health and environmental regulations and their impact on the workplace.
- B. Describe basic terms used in describing workplace health and safety.
- C. Interpret the general requirements of Federal regulations for providing a safe workplace and protecting the environment.
- D. Compare safety and health management styles.
- E. Demonstrate an understanding of the personal responsibilities for safety and health to fellow employees, the environment and the community.
- F. Assess the contributions and role of women and minorities in the workplace.
- G. Analyze the influence of past safety, health and environmental events on current and future behaviors in the workplace.

### III. Course Outline

#### A. HISTORY OF SAFETY & 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

C. 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
3. 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. FINAL EXAMINATION (2 hours)

#### IV. Evaluation Methods

The faculty person assigned to teach this course could be one of several faculty within the Safety Sciences Department. What follows is an example of the evaluation methods and weighting used for this course:

Your final grade in this class will be a compilation of the following:

A. Unit Quizzes (A-E)	50%
B. Homework	30%
C. Research Paper	20%

**Unit Quizzes:** The five quizzes will be short answer, multiple choice, true/false and matching with material coming from lecture notes, the text and handouts.

**Homework:** Homework will include specific assignments related to material covered in the specific unit, many of which are case studies and small group projects.

**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.

**Class Participation:** This includes but is not limited to individual participation in whole class and small group discussions and other brief class presentations.

## 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

Although there is no formal attendance policy for this course, all students are expected to attend and participate in class to enhance their learning.

## VII. Required Texts

Tompkins, N. (2004). Basics of Safety and Health, National Safety Council, Chicago, Ill.

Supplemental readings will be provided by the instructor as handouts.

## VIII. Special Resource Requirements

None

## IX. Bibliography

Fanning, F. Basic Safety Administration: A Handbook for the New Safety Officer. Des Plains, IL: American Society of Safety Engineers, 1998.

Gellar, S. The Participation Factor. Des Plains, IL: American Society of Safety Engineers, 2002.



Hansen, M. Out of The Box--Skills for Developing Your Own Career Path . Des Plains, IL: American Society of Safety Engineers, 2002.

Hart, J. & McKiel, M. ISO 14000: Questions and Answers. National Safety Council, Itasca, IL, 6th edition, 2002.

National Safety Council. 7 Elements of a Successful Environmental Program. National Safety Council, Itasca, IL, 2002.

#### Historic References

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.

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, 13<sup>th</sup> edition. Rockville, MD: Government Institutes, Inc. 1995.

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

## Appendix B: Old Syllabus of Record

### Syllabus of Record

#### I. Catalog Description

SAFE 145 Workplace Safety Today and Tomorrow

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

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. Assess the historical significance of occupational safety, health and environmental regulations and their impact on the workplace.
2. Describe basic terms used in describing workplace health and safety.
3. Interpret the general requirements of Federal regulations for providing a safe workplace and protecting the environment.
4. Compare safety and health management styles.
5. Demonstrate an understanding of the personal responsibilities for safety and health to fellow employees, the environment and the community.
6. Assess the contributions and role of women and minorities in the workplace.
7. Analyze 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

**C. 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. FINAL EXAMINATION (2 hours)**

**IV. Evaluation Methods**

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

- 50% Tests and or quizzes. Three tests (two during the semester and the final) consisting of multiple choice, true-false and short answers. Periodic quizzes will also be given.
- 30% Homework Assignments. Four homework assignments (one per unit A to F) 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).

Toohy, 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, 13<sup>th</sup> 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.

## Appendix C: Catalog Description

**SAFE 100 Workplace Safety Today and Tomorrow**

**(3c-01-3cr)**

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.

**Lon Ferguson**

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**From:** "Jolene Campbell" <jolenec@iup.edu>  
**To:** "Lon Ferguson" <ferguson@iup.edu>  
**Sent:** Wednesday, February 08, 2006 10:46 AM  
**Subject:** Fw: Course Clearance

----- Original Message -----

**From:** Marcy Rearick  
**To:** Jolene Campbell  
**Sent:** Wednesday, February 08, 2006 10:43 AM  
**Subject:** Re: Course Clearance

SAFE 100 is an available number. The CIP Code for SAFE is 150701.

----- Original Message -----

**From:** Jolene Campbell  
**To:** Marcy Rearick  
**Sent:** Wednesday, February 08, 2006 10:20 AM  
**Subject:** Course Clearance

Marcy,  
Please let us know if SAFE 100 has ever been used for a course. If not please email us with the go ahead to use it.

Thanks in advance for your help!

Jolene

\*\*\*\*\*

Jolene Campbell  
Dept. Secretary - Safety Sciences  
Indiana University of Pennsylvania  
Ph: 724-357-3017  
Fx: 724-357-3992

# Safety Sciences Department

## Memo

**To:** Dr. Kenneth Hershman, Chairperson – Physics Department  
**From:** Dr. Lon Ferguson, Chair – Safety Sciences  
**Date:** February 13, 2006  
**Re:** Course Changes to SAFE 145 Workplace Safety Today and Tomorrow

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The Safety Sciences Department is notifying the Physics Department that we are making some changes to SAFE 145 Workplace Safety Today and Tomorrow. This course is currently a required Liberal Studies elective for the Associate in Applied Science in Electro-Optics (A.A.S.E.O.) and Associate in Science in Electro-Optics (A.S.E.O.).

The specific changes to the course are very minor and include:

- The course number has been changed from SAFE 145 to SAFE 100.
- The Bibliography was updated and a text book was added.

The attached proposal outlines the above course changes and we would appreciate a letter of support from the Physics Department for these changes.