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CURRICULUM PROPOSAL COVER SHEET
University-Wide Undergraduate Curriculum Committee

I. CONTACT

Contact Person Dr. Anthony Joseph Phone 7-3018
Department Safety Sciences

II. PROPOSAL TYPE (Check All Appropriate Lines)

COURSE _____
Suggested 20 character title

New Course * SAFE 145 Workplace Safety Today and Tomorrow
Course Number and Full Title

Course Revision _____
Course Number and Full Title

Liberal Studies Approval + _____
for new or existing course Course Number and Full Title

Course Deletion _____
Course Number and Full Title

Number and/or Title Change _____
Old Number and/or Full Old Title

_____ New Number and/or Full New Title

Course or Catalog Description Change _____
Course Number and Full Title

PROGRAM: Major Minor Track

New Program * _____
Program Name

Program Revision * _____
Program Name

Program Deletion * _____
Program Name

Title Change _____
Old Program Name

_____ New Program Name

III. Approvals (signatures and date)

[Signature] Department Curriculum Committee
Mary C. Seemiller 2/7/01 College Curriculum Committee
[Signature] 2-22-01 + Director of Liberal Studies (where applicable)

Lou H. Ferguson Department Chair
Carleen C. Zoni College Dean
*Provost (where applicable)

Syllabus of Record

I. Catalog Description

SAFE 145 Workplace Safety Today and Tomorrow 3 lecture hours
0 lab hours
3 credits
(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. Contributions and role of women and minorities to workplace health and safety
5. The changing workplace demographics (women and minorities), and safety concerns (violence, and drugs).

B. WORKPLACE SAFETY MANAGEMNT (8 hours) and Test (1 hour)

1. Health and safety management styles
2. Areas of responsibility in safety and health

3. Employees' behavior and safety
4. Training of employees
5. Personal protection
6. Emergency planning
7. Test on Units A and B

C. KNOWING THE HAZARDS ON THE JOB (9 hours)

1. Acquiring and evaluating hazard information
2. Examining human factors and work environments
3. Investigating and analyzing accidents
4. Keeping reports, records and costs
6. Recognizing health stressors

D. STRATEGIES IN CONTROLLING HAZARDS IN SELECTED INDUSTRIES (8 hours) and Test (1 hour)

1. Electrical and electronic
2. Chemical processing
3. Metal product fabrication and finishing
4. Technology manufacturing
5. Test on Units C and D

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. Each of the two tests during the semester will be equivalent to 10% of the final grade, while the final examination will be equivalent to 20% of the final grade.

10% Quizzes. Periodic quizzes (on average 7 to 10 quizzes) will be given based on the homework reading assignments. The quizzes will be weighted based on the number of questions.

- 30% Homework Assignments. Four homework assignments (one per unit A to D) will be given on required readings. These assignments will be equally weighted.
- 20% Book Review/Position Paper. Each student will review one book selected from a list presented by the instructor. The student will prepare a summary and assessment of the substantial arguments or themes of the book. Evidence must be provided to support the assessment. Applying the arguments in the assessment the student will be required to recommend the ethical issues of safety, health and environment of the workplace in the future.

V. Grading Scale

Students are required to score the following percentages to obtain the equivalent letter grade

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

VI. Required textbooks, supplemental books and readings

Textbook

Students are required to purchase an approved book for the book review assignment. The instructor will not place an order for these books in the campus bookstore or any other bookstore.

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. (2000). Monkey Wrench. Harper Trade.

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

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

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

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

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

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

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

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

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

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

Toohy, John. (2001). Captain Bligh's Portable Nightmare. Harper Collins Publishing.

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

VII. Special resource requirements

None

VII. Bibliography

Ayers, et al. (2000). Environmental Science and Technology Handbook. Rockville, MD: Government Institutes, Inc.

Balchin, Nigel C. and Castner, Harvey R. (1996). Health and Safety in Welding and Allied Processes. (5th ed.). New York: McGraw-Hill, Inc.

Laing, P.M., Editor. (1998). Supervisor's Safety Manual, (10th ed.). Chicago: National Safety Council.

Levitt, Raymond and Semelson, Nancy. (1997). Construction Safety Management, (3rd ed.). New York: McGraw-Hill.

Sullivan, Thomas F.P., Editor. (2000). Environmental Law Handbook, 16th edition. Rockville, MD: Government Institutes, Inc.

Woodside, G. (1995). Hazardous Materials and Hazardous Waste Management. New York: John Wiley & Sons.

Historic References

Anton, Thomas John. (1992). Occupational Safety & Health Management. (2nd ed.). New York: McGraw-Hill, Inc.

Ashfahl, C. Ray. (1990). Industrial Safety & Health Management. (2nd ed.). Englewood Cliffs, NJ: Prentice-Hall, Inc.

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

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

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

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

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

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

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

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

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

McGregor, Gregor I. (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.

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

Course Analysis Questionnaire SAFE 145

Section A: Details of the Course

- A1 This course is a requirement for the proposed degrees Associate in Applied Science in Electro-Optics (A.A.S.E.O.) and Associate in Science in Electro-Optics (A.S.E.O.). A copy of the proposed curriculum is included in Appendix A. This course is intended for inclusion in the Liberal Studies program.
- A2 This course does not require changes in any other courses in the department. The Applied Physics program will have an additional track associated with the A.S.E.O. degree and this course will be part of that track of the Physics Department.
- A3 This course has not been offered on a trial basis at IUP.
- A4 This course is not intended to be dual level.
- A5 This course is not to be taken for variable credit.
- A6 Similar introductory courses are offered at other institutions. A partial list of institutions is provided in Appendix B. Some of these courses have no prerequisite and are intended for students with little previous knowledge of the subject, as shown in Appendix B.
- A7 The contents or skills of this proposed course are not recommended or required by a professional society, accrediting authority, law or other external agency. The content and/or skills of this course cannot be incorporated into an existing course. The materials of this course are taught in greater details in SAFE 101, SAFE 111, SAFE 210, and SAFE 211, SAFE 301, SAFE 311 and SAFE 412 from a technical perspective for the budding professionals. This course is intended to provide safety and health information to students to allow them to apply methods of inquiry and vocabulary commonly used by safety and health professionals.

Section B: Interdisciplinary Implications

- B1 This course will be taught by one instructor.
- B2 This course does not overlap with any course offered by any other department at the University.
- B3 Five seats in each section of this course will be reserved for students in the School of Continuing Education.

Section C: Implementation

- C1 The faculty resources are adequate. No new faculty are needed to teach this course.
- C2 Other Resources
 - a. **Space:** Current space allocations are adequate to offer this course.
 - b. **Equipment:** No equipment is required
 - c. **Laboratory Supplies and other Consumable Goods:** No laboratory supplies and other consumables goods are required for this course.
 - d. **Library Materials:** Library holdings are adequate.
 - e. **Travel Funds:** When a faculty is required to teach this course off campus, the faculty will be reimbursed as per university policy. When taught on campus no travel funds are required.
- C3 No grant funds are associated with the maintenance of this course.
- C4 This course will be offered once a year. If offered in the summer, it will be offered as a distance education course.
- C5 One section of this course will be offered at a time.
- C6 Forty students will be accommodated in this course.
- C7 There is no professional society that recommends enrollment limits or parameters for a course of this nature.

Section D: Miscellaneous

No additional information is necessary.

Dennis Whitson

From: Lon Ferguson <ferguson@grove.iup.edu>
To: <whitson@grove.iup.edu>
Cc: Tony Joseph <ajjoseph@grove.iup.edu>
Sent: Thursday, October 19, 2000 9:34 AM
Subject: Support for Associate Program

Hi Dennis:

This email is written in support of the AS in Electro-Optics. Specifically, the Safety Sciences Department agrees to develop the course SAFE 145 Workplace Safety Today and Tomorrow which will be a required course in the AS curriculum sequence. Please keep in mind we plan to develop this course as a liberal studies course at IUP and are considering offering it as a distance education course so the audience can be increased hopefully improving enrollment!

Dr. Lon H. Ferguson
Chairperson - Safety Sciences
116 Johnson Hall
Indiana, PA 15705
(724) 357-3018