LSC Use Only	Proposal No:	
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UWUCC Use Only Proposal No: 11-53C

UWUCC Action-Date: App-12/13/11

Senate Action Date: App - 01/24/12

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

Contact Person(s) Dr. Tracey Cekada	Email Address Tracey.Cekada@iup.edu			
Proposing Department/Unit	ent/Unit Phone			
Safety Sciences   7-3272   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:				
Proposed course prefix, number and full title, if changing: SAFE 215 Safety, Health and Environmental Communications				
2. Liberal Studies Course Designations, as appropriate				
X This course is also proposed as a Liberal Studies Course (please mark the appropriate categories below)				
Learning Skills Knowledge Area Global and Multicultural AwarenessX 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				
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)	Dr. Jan K. Wachter and Wachter	9-13-2011		
Department Chairperson(s)	Dr. Lon Ferguson H. Fernan	9-15-2011		
College Curriculum Committee Chair	Dr. Jan K. Wachter and Washter	10-20-2011		
College Dean	Dr. Mary Swinker	10/-21 ) 11		
Director of Liberal Studies (as needed)	N 1/1 had	1//7//1		
Director of Honors College (as needed)	War 1111	11/4/1		
Provost (as needed)				
Additional signatures (with title) as appropriate:				
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# New Course Proposal: SAFE 215 Safety, Health and Environmental Communications

#### Part II. Description of Curricular Change

1. Syllabus of Record.

The syllabus of record is attached in Appendix A.

2. Course Analysis Questionnaire

#### Section A: Details of the Course

A1. How does this course fit into the programs of the department? For which students is the course designed? Explain why this content cannot be incorporated into an existing course.

This course is designed as a sophomore level course for Safety Science Majors that will be taken prior to SAFE Internship. Outcome assessments and feedback from internship supervisors have identified that additional written and oral communication skills need to be enhanced. Through this course, students will learn how to use their communication skills (both written and oral) to convince management and employees of safety initiatives in the workplace. Faculty members believe that this three credit course will help to improve students' communication skills during their internship as well as in advanced Safety, Health and Environmental courses and also help to support the following accreditation outcomes:

- A. Baccalaureate degree programs must demonstrate that graduates have:
- (a) an ability to apply knowledge of mathematics, science, and applied sciences
- (b) an ability to design and conduct experiments, as well as to analyze and interpret data
- (c) an ability to formulate or design a system, process, or program to meet desired needs
- (d) an ability to function on multidisciplinary teams
- (e) an ability to identify and solve applied science problems
- (f) an understanding of professional and ethical responsibility
- (g) an ability to communicate effectively
- (h) the broad education necessary to understand the impact of solutions in a global and societal context
- (i) a recognition of the need for and an ability to engage in life-long learning
- (j) a knowledge of contemporary issues
- (k) an ability to use the techniques, skills, and modern scientific and technical tools necessary for professional practice.
- A2. Does this course require changes in the content of existing courses or requirements for a program?

No, all content is new.

A3. Has this course ever been offered at IUP on a trial basis?

No, it has not been offered on a trial basis.

A4. Is this course to be a dual-level course?

No, this course will not be dual level.

A5. If this course may be taken for variable credit, what criteria will be used to relate the credit to the learning experience of each student?

This course will not be offered for variable credit.

A6. Do other higher education institutions currently offer this course?

No, there is no specific course on Safety, Health and Environmental Communications in other B.S. Safety Programs. However, this is a Student Outcome as part of our Applied Science Accreditation Commission (ASAC) of the Accreditation Board for Engineering and Technology (ABET) accreditation, see Appendix C. Therefore, it must be covered in the program. Some universities cover it as part of a Training Class. SAFE faculty believe this topic is significant enough that it warrants a three credit course prior to internship and taking advanced courses in the students' curriculum.

A7. Is the content, or are the skills, of the proposed course recommended or required by a professional society, accrediting authority, law or other external agency?

Yes, our accreditation criteria from the ASAC of ABET require the coverage of material that enables our students to learn how to communicate effectively (See appendix C).

## **Section B: Interdisciplinary Implications**

B1. Will this course be taught by instructors from more than one department or team taught within the department?

This course will be taught by Safety Sciences Faculty only and it will not be team taught.

B2. What is the relationship between the content of this course and the content of courses offered by other departments?

The content of this course focuses on methods of Safety, Health and Environmental Communication. Students will learn, both in writing and orally, how to use these communication skills to convince management and employees to embrace and adopt safety-related initiatives and changes in the workplace. They will learn how to communicate with regulators and they will apply these communication skills towards employees and effectively inform and educate them about specific hazards and risks in their jobs. This course can be considered a more technical and focused counterpart to

BTST 321 – Business and Interpersonal Communications; but SAFE 215 is aimed specifically at the writing and oral communication challenges facing our students in the workplace and the programs that they will have to manage.

B3. Will this course be cross-listed with other departments?

No, this course will not be cross listed with other departments.

## **Section C: Implementation**

C1. Are faculty resources adequate?

Faculty resources are adequate to support this new course with the following changes to our program (See SAFE Program Revision for specific details.) To add the new courses to our program, we needed to find ways to reduce faculty load so we could make these changes without increasing faculty complement. Based on input from faculty and our Advisory Committee, it was decided the best way to do that was to eliminate the lab in the fire class and take the most critical content from the labs and incorporate it into the fire lecture. This resulted in a savings of 10 credits of faculty load each year. To save an additional two credits of faculty load each year we also have decided to reduce SAFE 211 from a three credit lecture to a two credit lecture making it more in line with our existing SAFE 347 course.

- C2. What other resources will be needed to teach this course and how adequate are the current resources: Reply in terms of the following:
  - Space: We will use the existing classrooms for the lecture.
  - Equipment: We will use the existing classroom equipment.
  - Laboratory Supplies and other Consumable Goods: Not Applicable.
  - Library materials: The existing library resources to teach SAFE 215 course is adequate.
  - Travel Funds: Existing travel funds to support this class are adequate.
- C3. Are any of the resources for this course funded by a grant?

None of the resources for this course are funded by a grant.

C4. How frequently do you expect this course to be offered?

We plan to offer this course in both the Fall and Spring semesters.

C5. How many sections of this course do you anticipate offering in any single semester?

We plan to offer two lecture sections in the Fall semester and one lecture section during the Spring semester.

C6. How many students do you plan to accommodate in a section of this course? What is the justification for this planned number of students?

We plan to accommodate 25 students in the lecture due to this being a writing-intensive (W) course.

C7. Does any professional society recommend enrollment limits or parameters for a course of this nature?

No professional societies recommend any enrollment limits.

C8. If this course is a distance education course, see the Implementation of Distance Educations Agreement and the Undergraduate Distance Education Review Form in Appendix D and respond to the questions listed.

This course is not a distance education course.

#### Section D: Miscellaneous

Include any additional information valuable to those reviewing this new course proposal.

Not applicable.

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

This new course will be for SAFE Majors only and will not affect any programs on campus. Therefore, letters of support were not requested.

# Appendix A: Syllabus of Record

## I. Catalog Description

SAFE 215 Safety, Health and Environmental Communications

Prerequisite: Sophomore standing

3 class hours 0 lab hours 3 credits (3c-01-3cr)

Provides the student with the ability to apply the theories of learning and communication to aid them in becoming effective oral and written safety, health and environmental communicators and trainers. Students design and deliver training programs using modern technology and charismatic engagement tools. Students learn, both in writing and orally, how to use communication skills to convince management and employees to embrace and implement safety initiatives and to communicate with regulators and the public regarding safety, environmental, and health issues. Students develop a range of written documents, such as safety, health and environmental policies, procedures and/or programs, inspection and audit reports, and program and risk assessment and exposure reports and then communicate summaries of these documents orally. This is a writing intensive course.

## II. Course Objectives

Students will be able to:

- 1. Demonstrate their ability to effectively communicate safety, health, and environmental information in writing to different audience types (e.g., management, employees, public and regulators) and within/across different functions in an organization.
- 2. Demonstrate their ability to communicate safety, health, and environmental information persuasively and orally to different audience types (e.g., management, employees, public and regulators) and within/across different functions in an organization.
- 3. Summarize and contrast the content requirements and writing styles associated with various types of safety, health and environmental documentation (e.g., plans, procedures, audit reports, inspection reports).
- 4. Demonstrate competency in working in multidisciplinary teams.
- 5. Apply adult learning theories in the development and completion of safety, health and environmental training.
- 6. Develop an ability to apply business and risk management concepts as they pertain to safety, health and environmental program management and written documentation.
- 7. Explain the value of the safety function and safety initiatives to management and employees.

#### III. Course Outline

- A. Developing and Presenting Safety, Health and Environmental (SHE) Training (16 hours)
  - 1. Theories of SHE Communication
  - 2. Adult Learning Theories Applied to the SHE Field
  - 3. Conducting an SHE Training Needs Assessment
  - 4. Writing SHE Learning Objectives and Lesson Plans
  - 5. Delivering an Effective SHE Training Presentation
  - 6. Developing an On-Line SHE Training Course
- B. Communicating the Value of the SHE Profession

(8 hours)

- 1. Selling the Value of SHE to Management
- 2. Selling the Value SHE to Employees
- 3. Negotiation Skills for the SHE Professional
- 4. Leadership Skills for the SHE Professional
- C. Writing for the SHE Profession

(10 hours)

- 1. Writing SHE Programs, Plans and Procedures
- 2. Writing an SHE Inspection Report
- 3. Writing an SHE Audit Report
- 4. Writing an SHE Program Assessment Report
- D. Communicating Specifically with Different SHE Audiences

(4 hours)

- 1. Management
- 2. Employees
- 3. SHE Professionals
- 4. Contractors
- 5. Public
- 6. Public Regulators
- E. Communicating SHE Cost Analyses and Budgeting Information

(2 hours)

F. Delivering Summary Reports to Management/Employees

(2 hours)

Final Examination (group presentations during finals period) (2 hours)

#### IV. Evaluation Methods

The faculty person assigned to teach this course could be one of several faculty members 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. 6 Written Papers
- B. 2-3 Presentations
- C. Class Participation

Written Papers: Six written papers will be required. Students will apply concepts learned in class to real-world scenarios requiring written reports or documentation. Grading will focus on students' ability to convey their message clearly and concisely. 70% of grade.

**Presentations:** Students will be expected to present both individually and as part of a group. Students will be graded on their professionalism, their ability to convey their message clearly, and their ability to convince management or employees of their professional recommendations. 20% of grade.

Class Participation: This includes but is not limited to individual participation in whole class and small group discussions and other brief class presentations. Participation will be evaluated on class attendance, student's ability to constructively contribute to discussions, and student's ability to formulate insightful and accurate responses to directed questions. 10% of grade.

# V. Example Grading Scale

In general, the following scale will be used in assigning letter grades, related to the evaluation of student performance based on a "percentage" grading scale:

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

Drebinger, J. W. (1997). Mastering Safety Communication: Communication Skills for a Safe, Productive and Profitable Workplace. Galt, CA:Wulomac Publishing.

Markel, M. (2008). Technical Communications. Boston, MA: Bedford/St. Martin's.

#### VIII. Special Resource Requirements

Student will need to have a calculator for this course.

#### IX. Bibliography

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- Phillips, J. & Stone, R. (2002). How to Measure Training Results: A Practical Guide to Tracking the Six Key Indicators. New York, NY: McGraw-Hill.
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- Wick, C., Pollock, R. & Jefferson, A. (2010). The Six Disciplines of Breakthrough Learning: How to Turn Training and Development into Business Results. San Francisco, CA: Pfeiffer.

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- Craig, R. L. (1994). Training and Development Handbook. New York, NY: McGraw-Hill.
- Heath, E. & Ferry, T. (1980). Training in the Workplace. Goshen, NY: Aloray.
- Kingsley, H. (1990). Systematic Safety Training. New York, NY: Marcel Dekker.
- Kirkpatrick, D. (1977). "Determining Training Needs: Four Simple and Effective Approaches." *Training and Development*. February 1977. pp 22-25.
- Kirkpatrick, D. (1978). "How to Plan and Implement a Supervisory Training Program." *Training and Development*. April 1978. pp 8-10.

- Mager, R. (1997). Measuring Instructional Results. Belmont, CA: David S. Lake.
- Mager, R. (1997). Preparing Instructional Objectives. Belmont, CA: David S.Lake.
- Mager, R. (1997). What Every Manager Should Know about Training: Or "I've Got a Training Problem"...and Other Odd Ideas. Belmont, CA: David S. Lake.
- McKeachie, W. J. (1994). Teaching Tips. Lexington, MA: D.C. Heath.
- Odiorne, G. S. & Rummler, G.A. (1988). Training and Development: A Guide for Professionals. Chicago, IL: Commerce Clearing House.
- Pater, R. (1995). How to Make High Impact Safety and Health Presentations. Des Plaines: IL: American Society of Safety Engineers.
- Piskurich, G., Beckschi, P. & Hall, B. (1999). The ASTD Handbook of Training Design and Delivery. Hoboken, NJ: Pfeiffer.
- ReVelle, J. B. (1995). Safety Training Methods. New York, NY: John Wiley and Sons.
- Saccaro, J. A. (1994). Developing Safety Training Programs: Preventing Accidents and Improving Worker Performance through Quality Training. New York, NY: Van Nostrand Reinhold.
- U.S. Department of Labor. (1995). "Training Requirements in OSHA Standards and Training Guidelines," OSHA 2254, OSHA Publication Distribution Office, Room S-4203, Washington, DC 20210.

# **Appendix B: Proposed Catalog Description**

# SAFE 215 Safety, Health and Environmental Communications 3c-01-3cr

Prerequisite: Sophomore standing

Provides the student with the ability to apply the theories of learning and communication to aid them in becoming effective oral and written safety, health and environmental communicators and trainers. Students design and deliver training programs using modern technology and charismatic engagement tools. Students learn, both in writing and orally, how to use communication skills to convince management and employees to embrace and implement safety initiatives and to communicate with regulators and the public regarding safety, environmental, and health issues. Students develop a range of written documents, such as safety, health and environmental policies, procedures and/or programs, inspection and audit reports, and program and risk assessment and exposure reports and then communicate summaries of these documents orally. This is a writing intensive course.

Appendix C: 2011-2012 Criteria for Accrediting Applied Science Programs

#### I. GENERAL CRITERIA FOR BACCALAUREATE AND ASSOCIATE DEGREE PROGRAMS

#### **Criterion 1. Students**

Student performance must be evaluated. Student progress must be monitored to foster success in attaining student outcomes, thereby enabling graduates to attain program educational objectives. Students must be advised regarding curriculum and career matters.

The program must have and enforce policies for accepting both new and transfer students, awarding appropriate academic credit for courses taken at other institutions, and awarding appropriate academic credit for work in lieu of courses taken at the institution. The program must have and enforce procedures to ensure and document that students who graduate meet all graduation requirements.

#### **Criterion 2. Program Educational Objectives**

The program must have published program educational objectives that are consistent with the mission of the institution, the needs of the program's various constituencies, and these criteria. There must be a documented and effective process, involving program constituencies, for the periodic review and revision of these program educational objectives.

#### **Criterion 3. Student Outcomes**

The program must have documented student outcomes that prepare graduates to attain the program educational objectives. There must be a documented and effective process for the periodic review and revision of these student outcomes.

## A. Baccalaureate degree programs must demonstrate that graduates have:

- (a) an ability to apply knowledge of mathematics, science, and applied sciences
- (b) an ability to design and conduct experiments, as well as to analyze and interpret data
- (c) an ability to formulate or design a system, process, or program to meet desired needs
- (d) an ability to function on multidisciplinary teams
- (e) an ability to identify and solve applied science problems
- (f) an understanding of professional and ethical responsibility
- (g) an ability to communicate effectively
- (h) the broad education necessary to understand the impact of solutions in a global and societal context
- (i) a recognition of the need for and an ability to engage in life-long learning
- (j) a knowledge of contemporary issues
- (k) an ability to use the techniques, skills, and modern scientific and technical tools necessary for professional practice.