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WUCC — App-4/108

Senate — App-4/22/08

Curriculum Proposal Cover Sheet - University-Wide Undergraduate Curriculum Committee

Email Address

cekadat@iup.edu

Proposing Department/Unit		Phone		
Safety Sciences Department	7-3272			
Check all appropriate lines and con		ed. Use a separate	cover sheet for each	
course proposal and for each program	n proposal.			
Course Proposals (check all that a New CourseCo	.pply) ourse Prefix Change	Course D	Deletion	
X Course Revision Course Number and/or Title Change Catalog Description Change				
SAFE 212 Hazard Prevention Manager	nent I			
Current Course prefix, number and full title	<u>Proposed</u> course	Proposed course prefix, number and full title, if changing		
2. Additional Course Designations: c This course is also proposed This course is also proposed	as a Liberal Studies Course. as an Honors College Course.	Pan-African)		
Catalog Description ChangeProgram Revision  3. Program Proposals				
New Degree Program	Program Title Change	Other		
New Minor Program	New Track			
<u>Current</u> program name	Proposed progra	am name, if changing		
4. Approvals			Date	
Department Curriculum Committee	Lon Fuguson	<b>~</b>	2/6/08	
Chair(s)	O <sup>s</sup>		, ,	
Department Chair(s)	La Fergus	_	2/12/08	
College Curriculum Committee Chair	Elizabeth Kalme	1	3/6/08	

Fail S. Sechuist

\* Where appropriate

College Dean

Provost \*

(include title)

**UWUCC Co-Chairs** 

Director of Liberal Studies \* Director of Honors College \*

Additional signatures as appropriate:

Contact Person

Dr. Tracey Cekada

Received

MAR 17 2008

# Course Revision: SAFE 212 Hazard Prevention Management I

## Part II. Description of the Curriculum Change

1. Syllabus of Record.

The revised syllabus of record is attached in Appendix A.

- 2. A summary of the proposed revisions:
  - a. The course description, objectives and content were updated to better reflect program outcomes and to provide the needed foundations for SAFE 412 Hazard Prevention Management II.

The revised course description does not include reference to the development of safety programs to meet applicable standards which is now entirely covered in SAFE 412.

**New Course Description** 

SAFE 212 Hazard Prevention Management I 3 class hours
0 lab hours
Prerequisites: SAFE 101 3 credit hours
(3c-01-3cr)

Designed to teach the fundamental concepts involved in the management of safety programs. Basic safety management terminology, safety professional code of ethics, fleet safety and product safety are discussed. The class will also discuss risk management, worker's compensation as well as workplace violence.

Old Course Description

SAFE 212 Hazard Prevention Management I 3 class hours
0 lab hours
Prerequisites: SAFE 101 3 credit hours
(3c-01-3cr)

Designed to teach the fundamental concepts involved in the management of safety programs. Basic safety management terminology, safety professional code of ethics, fleet safety and product safety are discussed. The class will also discuss worker's compensation management as well as workplace violence. Development of safety programs to meet applicable standards such as OSHA, ANSI and ISO 14000 and 18001 will be stressed.

- b. The objectives related to safety leadership and cause effect flowcharts were removed and they are now included in SAFE 412.
- c. The course content in the following areas was removed from SAFE 212 and placed in SAFE 412: safety leadership, model programs and program evaluation. In addition, the following course content in SAFE 412 was removed and placed in SAFE 212: OSHA recordkeeping and accident trend analysis. There is somewhat of an overlap with accident causation but this is necessary because of the importance and the complexity of this content.

- d. The sample course evaluation was changed by removing the requirement for course portfolios.
- e. The textbook was changed.
- 3. Justification/rationale for the revision.

The Department Curriculum Committee recognized that with the changes to SAFE 412 from 4 credits to 3 starting in the Fall 2008 semester there was a need to revisit the content and objectives for both of the Hazard Prevention Management courses in our curriculum (SAFE 212 and 412). In addition, a review of program outcomes assessment in both spring 07 and fall 07 identified a need to improve our assessment results in the areas of hazard prevention management, see Appendix D outcomes #2.

4. The old syllabus of record.

The old syllabus of record is attached in Appendix B.

5. Liberal Studies course approval.

Not applicable.

## Part III. Letters of Support or Acknowledgement

This course is not a required or recommended course in another program so letters of support from other departments were not requested.

## APPENDIX A: NEW SYLLABUS OF RECORD

#### I. Catalog Description

SAFE 212 Hazard Prevention Management I

Prerequisites: SAFE 101

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

Designed to teach the fundamental concepts involved in the management of safety programs. Basic safety management terminology, safety professional code of ethics, fleet safety and product safety are discussed. The class will also discuss risk management, worker's compensation as well as workplace violence.

#### II. Course Objectives

The student will be able to:

- A. define the scope and roles of the safety function in a typical business.
- B. identify the common program elements in a systems based approach to safety management.
- C. complete a cost benefit analysis on a recommended control strategy.
- D. complete an OSHA Log including a trend analysis of accidents.
- E. describe different accident causation theories and apply them to an accident investigation.
- F. apply risk management strategies to workplace exposures.
- G. identify core elements of the American Society of Safety Engineers' professional code of ethics.
- H. describe the key elements in a fleet safety, product safety and a workplace violence programs.

#### III. Course Outline

A. Concept of Total Loss Prevention

(Weeks 1-3)

- Scope of loss prevention efforts
- Roles and responsibilities of safety & health professionals
- Loss prevention as a management function
- Types of financial losses and cost benefit analysis

#### B. Hazard Prevention Management

(Weeks 4-7)

- Professional code of ethics
- Policy statement
- Safety procedures
- Systems approach to hazard prevention management (Models Based on: Loss Prevention, Risk, Regulatory and Quality)

#### C. Hazard Prevention Programming

(Weeks 8-12)

- OSHA Recordkeeping
- Accident Causation and Investigation
- Accident Trend Analysis
- Workplace Stress and Workplace Violence
- Fleet Safety
- Product Safety

#### D. Risk Management in Hazard Prevention

(Weeks 13-14)

- Basic terminology
- Risk assessment
- Risk strategies
- Risk management
- Workers compensation and medical management

**Culminating Activity** 

(Finals Week)

#### IV. Evaluation Methods

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

Α.	Examinations	55%
B.	Homework & Projects	35%
C.	Class Participation	10%

NOTE: These percentages are approximates and may be changed.

**Examinations:** The examinations will be short answer, multiple choice, true/false and matching with material coming from lecture notes, the text and handouts. Missed examinations will not be made up unless prior arrangements have been made with the instructor.

Homework & Projects: Homework and projects will include specific assignments related to material covered in the specific unit, many of which are case studies and small group projects involving safety management. Late homework and projects will be penalized 10% per day and will not be accepted after they have been returned to the class.

Class Participation: This includes, but is not limited to, individual participation in whole class and small group discussions and other in-class assignments.

## 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. Course Attendance Policy

As student learning is enhanced by regular attendance and participation in class discussions, the instructor expects all students to attend class. The attendance policy for this class follows the Undergraduate Course Attendance Policy which is included in the Undergraduate Catalog.

#### VII. Required Textbooks

Manning, Michael. (2003). "So You're the Safety Director" – An Introduction to Loss Control and Safety Management. 3<sup>rd</sup> edition, Government Institutes, Rockville, MD.

#### VIII. Special Resource Requirements

None.

#### IX. Bibliography

- Gellar, S. (2002). The Participation Factor. Des Plains, IL: American Society of Safety Engineers.
- Geller, S. (2001). The Psychology of Safety Handbook. Lewis Publishers, New York, N.Y.
- Hansen, M. (2002). Out of The Box--Skills for Developing Your Own Career Path. Des Plains, IL: American Society of Safety Engineers.
- Janicak, C. (2000). <u>Applied Statistics in Occupational Safety and Health</u>. Government Institutes, Rockville, MD.
- Lack, R. (2002). <u>Safety, Health and Asset Protection- Management Essentials.</u> CRC Press, Taylor and Francis Group, New York, NY, (2<sup>nd</sup> ed).
- O'Brien, D. (2000). <u>Business Measurements for Safety Performance</u>. Lewis Publishers, New York, N.Y.

#### **Historical References**

- Anton, T. (1992). Occupational Safety & Health Management, Second Edition. New York, NY: McGraw-Hill.
- Fanning, F. (1998). <u>Basic Safety Administration: A Handbook for the New Safety Officer.</u> Des Plains, IL: American Society of Safety Engineers.
- Krause, Thomas R., et al. (1990). The Behavior-based Safety Process: Managing Involvement for an Injury-free Culture. New York, NY: Van Nostrand Reinhold.
- Levitt, R. & and Semelson, N. (1993). <u>Construction Safety Nanagement, Second Edition</u>. New York, NY: McGraw-Hill.
- Manuele, F. (1993). On the Practice of Safety. New York, NY: Van Nostrand Reinhold.

- Pierce, F. David. (1995). <u>Total Quality for Safety and Health Professionals</u>. Rockville, MD: Government Institute, Inc.
- Vincoli, J. (1994). <u>Accident Investigation and Loss Control</u>. New York, NY: Van Nostrand Reinhold.

## APPENDIX B: OLD SYLLABUS OF RECORD

## I. Catalog Description

SAFE 212 Hazard Prevention Management I

Prerequisites: SAFE 101

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

Designed to teach the fundamental concepts involved in the management of safety programs. Basic safety management terminology, safety professional code of ethics, fleet safety and product safety are discussed. The class will also discuss worker's compensation management as well as workplace violence. Development of safety programs to meet applicable standards such as OSHA, ANSI and ISO 14000 and 18001 will be stressed.

## II. Course Objectives

The student will be able to:

- A. define the scope of the safety function in a typical business.
- B. identify the safety program elements recommended by both mandated as well as consensus standards.
- C. describe the elements involved in safety leadership and in the motivation of safe work behaviors
- D. map out cause and effect flowchart when given a description of an accident.
- E. apply risk management strategies to workplace exposures.
- F. identify core elements of the American Society of Safety Engineers' professional code of ethics
- G. describe the key elements in a fleet safety program, product safety program and a workplace violence program.

#### III. Course Outline

A. Concept of Total Loss Prevention

(9 Hours)

- Scope of loss prevention efforts
- Role of safety & health professionals
- Loss prevention as a management function
- Types of financial losses

## B. Hazard Prevention Programming

(12 Hours)

- Professional code of ethics
- Policy statement
- Safety procedures
- Basic elements
- Models: OSHA, ANSI, ISO 14000
- Program evaluation

Midterm (1 Hour)

#### C. Hazard Prevention Management

(10 Hours)

- Safety Leadership
- Accident Investigation
- Workplace Violence
- Fleet Safety
- Product Safety

## D. The Role of Risk Management in Hazard Prevention

(10 Hours)

- Basic terminology
- Workers compensation
- Risk assessment
- Risk strategies

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:

D.	Examinations	55%
E.	Homework & Projects	30%
F.	Course Portfolio	5%
G.	Class Participation	10%

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

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

Course Portfolio: All students will be required to complete a course portfolio. The specific requirements for the portfolio will be provided during the first class meeting.

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. Course Attendance Policy

As student learning is enhanced by regular attendance and participation in class discussions, the instructor expects all students to attend class. The attendance policy of the instructor recognizes students need to miss class because of illness or personal injury.

## VII. Required Textbooks

Reese, Charles. (2003). Occupational Health & Safety Management – A Practical Approach. Lewis Publishers, New York, NY.

## VIII. Special Resource Requirements

None.

#### IX. Bibliography

Fanning, F. (1998). <u>Basic Safety Administration: A Handbook for the New Safety Officer.</u> Des Plains, IL: American Society of Safety Engineers.

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

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

#### **Historical References**

Anton, T. (1992). Occupational Safety & Health Management, Second Edition. New York, NY: McGraw-Hill.

Krause, Thomas R., et al. (1990). <u>The Behavior-based Safety Process: Managing Involvement for an Injury-free Culture</u>. New York, NY: Van Nostrand Reinhold.

Levitt, R. & and Semelson, N. (1993). <u>Construction Safety Nanagement, Second Edition.</u> New York, NY: McGraw-Hill.

Manuele, F. (1993). On the Practice of Safety. New York, NY: Van Nostrand Reinhold.

- Pierce, F. David. (1995). <u>Total Quality for Safety and Health Professionals</u>. Rockville, MD: Government Institute, Inc.
- Vincoli, J. (1994). <u>Accident Investigation and Loss Control</u>. New York, NY: Van Nostrand Reinhold.

# Appendix C: Catalog Description

## SAFE 212 Hazard Prevention Management I

3c-01-3cr

Prerequisites: SAFE 101

Designed to teach the fundamental concepts involved in the management of safety programs. Basic safety management terminology, safety professional code of ethics, fleet safety and product safety are discussed. The class will also discuss risk management, worker's compensation as well as workplace violence.

## Appendix D

### Safety Sciences Department - Program Outcomes Review for Fall 2007

#### Introduction

The Banner Assessment of our Program Outcomes was run on January 16, 2008. A summary of the assessment finding is attached with the first series of reports addressing program outcomes for the entire department. The second series of reports address program outcomes from individual SAFE courses.

Note: Percentages are identified for each outcome as well as "Mean Rating" with the following scale used Unacceptable = 1, Acceptable = 2 and Target = 3.

#### Findings for Specific Program Outcomes

1. Students will have demonstrated their ability to anticipate, identify, and evaluate hazards and develop hazard control methods, procedures and programs.

Outcome was met, 168 students were assessed using 490 assessment tools and the results showed 87.7 % were target or acceptable and the mean rating was 2.3.

1.1 Students will demonstrate an ability to apply knowledge for solving applied science problems in algebra, statistics, human physiology and anatomy, physics and chemistry, including the ability to conduct experiments in prerequisite courses and safety sciences courses.

Outcome was met, 130 students were assessed using 386 assessment tools and the results showed 87.8 % were target or acceptable and the mean rating was 2.6.

1.2 Students will demonstrate an ability to recognize, evaluate and control hazards while on their internship.

Outcome was met, 10 students were assessed using 20 assessment tools and the results showed 87.5 % were target or acceptable and the mean rating was 2.6.

2. Students will have developed an ability to analyze and improve the management system with the goal of preventing hazardous acts and conditions that lead to loss events.

Outcome was not met, 127 students were assessed using 198 assessment tools and the results showed 74.8 % were target or acceptable and the mean rating was 2.5.

2.1 Students will complete a loss incident investigation and analysis.

Outcome was met, 93 students were assessed using 93 assessment tools and the results showed 89.2 % were target or acceptable and the mean rating was 3.0.

2.2 Students will develop and evaluate a comprehensive SHE Program.

Outcome was not met, 35 students were assessed using 55 assessment tools and the results showed 74.5 % were target or acceptable and the mean rating was 2.1.

2.3 Students will apply business and risk management concepts as they relate to the prevention of hazardous acts and conditions, i.e. cost benefit analysis, behavioral strategies, modified work programs, etc.

Outcome was not met, 35 students were assessed using 55 assessment tools and the results showed 74.5 % were target or acceptable was 2.1.

2.4 Students will apply adult learning theories in the completion of the SHE Training.

Outcome was not met, 35 students were assessed using 60 assessment tools and the results showed 51.7 % were target or acceptable and the mean rating was 1.9.

3. Students will have developed an understanding of their professional and ethical responsibilities within the Safety, Health and Environmental field.

Outcome was met, 103 students were assessed using 113 assessment tools and the results showed 89.4 % were target or acceptable and the mean rating was 2.9.

4. Students will have demonstrated their ability to communicate effectively and to work in multidisciplinary teams.

Outcome was not met, 131 students were assessed using 304 assessment tools and the results showed 73.7 % were target or acceptable and the mean rating was 2.0.

5. Students will develop knowledge of contemporary safety, health and environmental issues within a global and social context.

Outcome was met, 126 students were assessed using 176 assessment tools and the results showed 88.4 % were target or acceptable and the mean rating was 2.6.