07-546.

UWUCC Senate App-4/8/08 App-4/22/08

Curriculum Proposal Cover Sheet - University-Wide Undergraduate Curriculum Committee

Contact Person	Email Address
Dr. Jan Wachter	Jan.wachter@iup.edu
Proposing Department/Unit	Phone
Safety Sciences Department	7-3017
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Check all appropriate lines and complete information as requested. Use a separate cover sheet for each course proposal and for each program proposal.

			*
1. Course Proposals (check all that apply)			
New CourseCourse	Prefi	ix ChangeCourse I	Deletion
X_Course RevisionCourse	Num	ber and/or Title ChangeCatalog D	escription Change
SAFE 412 Hazard Prevention Management II			
Current Course prefix, number and full ti	tle	Proposed course prefix, number and fu	all title, if changing
2. Additional Course Designations: check if appropriate This course is also proposed as a Liberal Studies Course. This course is also proposed as an Honors College Course. Pan-African) Other: (e.g., Women's Studies, Pan-African)			
3. Program Proposals New Degree ProgramProgram Title ChangeOther			
New Minor ProgramNew	/ Trac	ck	-
Current program name		Proposed program name, if changing	
		1 Troposed program name, if changing	D.
4. Approvals			Date
Department Curriculum Committee Chair(s)		ForFegusa	2/6/68
		D de	7/10/10
Department Chair(s)		La Legusa	4/2/08
College Curriculum Committee Chair	E	Grabeth Halmer	3/6/08
College Dean		Jarley Pori	3-12-08
Director of Liberal Studies *	7		, , ,
Director of Honors College *		-	
Provost *		•	
Additional signatures as appropriate:		Gail Sechrist	4-9-08
UWUCC chair (include title)		ciay sources	/ 10 00

Received

MAR 17 2008

Liberal Studies

Course Revision: SAFE 412 Hazard Prevention Management II

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 consistency with SAFE 212 Hazard Prevention Management I.

The revised course description changes course prerequisites and focuses on safety management principles and implementation rather than the collection of loss incidents information (see below).

New Course Description

SAFE 412 Hazard Prevention Management II 2 class hours 3 lab hours Prerequisites: SAFE 212 3 credit hours (2c-31-3cr)

Designed to teach a systems-based approach to managing safety programs, hazards, and risk. Emphasis will be placed on understanding proactive approaches to conducting pre-hazard and life-cycle safety analyses of activities / operations and developing safety system documentation (e.g., policies, objectives, goals, performance measures, plans, committee charters, safety procedures, work procedures, audit plans, and accident investigation reports).

Old Course Description

SAFE 412 Hazard Prevention Management II 2 class hours 3 lab hours Prerequisites: MATH 217 and MGMT 311 3 credit hours (2c-31-3cr)

Examine various safety management techniques to identify and prevent the occurrence of hazardous behavior and conditions. Develop methods capable of extracting accurate, meaningful data, methods of collecting, codifying and processing hazard and loss incident information, and utilizing data retrieval systems to be used in cost/benefit decision-making for hazard prevention, safety program and performance evaluation.

- b. The objectives related to fishbone diagrams, analyzing hazardous behaviors and cost collection were removed with the cause analysis and accident cost now being covered in SAFE 212.
- The course content in the following areas was removed from SAFE 412 and placed in SAFE 212: recordkeeping, accident trend analysis, responsibilities for hazard prevention, cause and

- d. The course content in the following areas was removed from SAFE 412 and placed in SAFE 212: recordkeeping, accident trend analysis, responsibilities for hazard prevention, cause and effect sequencing and loss incident costs. In addition, the course content was reorganized to better reflect program outcomes and the revised content of SAFE 212. There is some duplication with SAFE 212 in terms of accident causation but this is necessary because of the importance and complexity of this content.
- e. The sample course evaluation was changed by removing the requirement for course portfolios.
- f. The textbook was changed.
- 3. Justification/rationale for the revision.

The Department Curriculum Committee recognized that with the changes to SAFE 212 there was a need to revisit the content and objectives for SAFE 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).

With regard to the prerequisites, MATH 217 was removed because at one time this course had a variety of statistical tools as part of safety program evaluation. Over the years this focus has lessened to the point where faculty did not believe MATH 217 needed to be a prerequisite. MGMT 311 was removed because our transfer students (50%) typically take this course the same semester as SAFE 412. This does not present a problem in SAFE 412 because the behavioral aspects of this course are not covered until the end of the semester.

3. 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

Letters of acknowledgement were sent to the Department Chairperson in Math and Management to alert them of the change in prerequisites in SAFE 412.

APPENDIX A: NEW SYLLABUS OF RECORD

I. Catalog Description

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SAFE 412 Hazard Prevention Management II

2 class hours
3 lab hours
3 credit hours

Prerequisites: SAFE 212

(2c-31-3cr)

Designed to teach a systems-based approach to managing safety programs, hazards, and risk. Emphasis will be placed on understanding proactive approaches to conducting pre-hazard and life-cycle safety analyses of activities and operations. Other areas addressed include developing safety system documentation such as policies, objectives, goals, performance measures, plans, committee charters, safety procedures, work procedures, audit plans, and accident investigation reports.

II. Course Objectives

The students will be able to:

- A. apply system-based consensus standards.
- B. develop safety goals, objectives, targets and performance measures.
- C. develop a safety procedure.
- D. develop and evaluate a comprehensive systems-based safety program.
- E. conduct a loss incident investigation and analysis.
- F. apply system- and risk-based approaches and concepts to the prevention of hazardous acts and conditions.
- G. develop and apply a behavior-based safety assessment tool.
- H. apply adult learning theories in the completion of safety, health and environmental training.

III. Course Outline

A. Review of Accident Causation Models

(Week 1)

- Energy releases (direct cause)
- Unsafe acts and conditions (indirect cause)
- Management system deficiencies (root cause)

B. Major Safety Management System Approaches

(Weeks 1-2)

- ANSI/AIHA Z10
- OHSAS 18001
- OSHA VPP

C. Components of a Safety Management System

(Week 3)

- Management leadership
- Employee involvement
- Organizational communications

D.	Components of a Safety Management System – Documentation	(Week 4)
	 Policies Goals, objectives, targets, mission statements Administrative safety procedures Work procedures 	
E.	Components of a Safety Management System – Planning	(Weeks 5-8)
	 Hazard recognition, evaluation and control Workplace design and engineering 	
F.	Components of a Safety Management System – Implementation and and Operation	(Weeks 9-11)
	 Operational safety and health programs Training and orientation Behavior-based system approaches 	
G.	Components of a Safety Management System – Evaluation and Corrective Action	(Weeks 11-14)
	 Inspections Accident investigations Root cause analyses Corrective and preventive actions Performance measures Benchmarking Continual improvement initiatives 	
H.	Components of a Safety Management System – Management Review	(Week 14)
	Management audits	
	Culminating Activity	(Finals Week)
Labora	atory Exercises	
A.	Understanding organization design; optimal placement of safety functions within an organizational structure	(Week 1)
B.	Developing a corporate safety policy, a mission statement for the safety function, and safety goals	(Week 2)
C.	Selecting safety programs for implementation based on hazards, regulatory and loss prevention considerations, and management prerogatives; developing safety objectives and targets	(Week 3)
D.	Developing a site-wide (administrative) safety procedure	(Week 4)

	E.	Developing and tracking safety performance measures	(Week 5)
	F.	Developing a standard operating procedure and operator aid for a task/activity	(Week 6)
•	G.	Flow-charting an environmental event, a near-miss event, and/or an injury event; conducting accident investigations and root-cause analyses	(Weeks 7-8)
	H.	Applying business and risk management concepts for selecting course(s) of action to manage an unsafe act / condition	(Week 9)
	I.	Developing an inspection plan; developing a charter for a site safety committee	(Week 10)
,	J.	Developing a training module / lesson plan	(Week 11)
	K.	Delivering a training lesson	(Week 12)
	L.	Developing an audit plan; developing requirements for a corrective action tracking system	(Week 13)
	M.	Developing and applying a behavior-based safety assessment tool	(Week 14)

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:

A.	Examinations	40%
B.	Homework	20%
C.	Laboratory Reports	33%
D.	Class Participation	7%

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.

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

Laboratory Reports: Students will complete a laboratory report after each laboratory session. The format for these reports as well as a grading rubric will be provided during the first laboratory class.

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 grading scale is as follows:

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

VI. 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. Text

Czernial, J. & Ostrander, D. (2004). Nine Elements of a Successful Safety & Health System Chicago, IL. National Safety Council.

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, (2nd ed).
- O'Brien, D. (2000). <u>Business Measurements for Safety Performance</u>. Lewis Publishers, New York, N.Y.

Historical Bibliographies:

- Brassand, Michael. (1989). The Memory Jogger Plus: Featuring the Seven Management and Planning Tools. Methuen, MA: GOAL/QPC.
- Coyle, Ian R., et al. (1995). Safety Climate. Journal of Safety Research 26 (4).
- Fanning, F. (1998). <u>Basic Safety Administration: A Handbook for the New Safety Officer</u>. Des Plains, IL: American Society of Safety Engineers.
- Geller, E. Scott, et al. (1989). <u>Behavior Analysis Training for Occupational Safety</u>. Newport, VA: Make-A-Difference, Inc. (also companion Workbook and Discussion Workbook)
- Krause, Thomas R., et al. (1990). The Behavior-based Safety Process: Managing Involvement for an Injury-free Culture. New York, NY: Van Nostrand Reinhold.
- Mager, Robert F. and Peter Pipe. (1993). <u>Analyzing Performance Problems: Or You Really Oughta Wanna</u>, 3rd ed. Belmont, CA: Lake Publishing.
- Manuele, Fred A. (1995). Guidelines: Designing for Safety. (A technical paper from Marsh & McLennnan M&M Protection Consultants).
- Peterson, Dan. (1989). Safe Behavior Reinforcement. Goshen, NY: Aloray.

APPENDIX B: OLD SYLLABUS OF RECORD

I. Catalog Description

SAFE 412 Hazard Prevention Management II

Prerequisites: MATH 217 and MGMT 311

2 class hours 3 lab hours 3 credit hours (2c-31-3cr)

Examine various safety management techniques to identify and prevent the occurrence of hazardous behavior and conditions. Develop methods capable of extracting accurate, meaningful data, methods of collecting, codifying and processing hazard and loss incident information, and utilizing data retrieval systems to be used in cost/benefit decision-making for hazard prevention, safety program and performance evaluation.

II. Course Objectives

The students will be able to:

- A. use Fishbone diagrams, control charts, and force field analysis to determine action to prevent recurrence of hazardous behavior and conditions.
- B. determine who was responsible for allowing the condition to be created in the workplace and state the action corrective action needed to prevent recurrence.
- C. determine the causes of each unsafe act.
- D. analyze hazardous behaviors to determine obstacles to safe behavior and develop a safe behavior reinforcement program.
- E. write training behavioral objectives, determine teaching methods, and write lesson plans to train employees to remove these causes of hazardous behavior.
- F. describe methods to calculate and collect costs resulting from the occurrence of hazards.
- G. measure the effectiveness of a company's safety programs.

III. Course Outline

A. Responsibilities for Hazard Prevention

(2 hours)

- 1. Staff and Line Department Responsibilities in Hazard Prevention Programming
- B. Cause and Effect Sequencing

(3 hours)

- 1. Fishbone Diagrams
- 2. Run Charts
- 3. Control Charts

6. 7.	Scatter Diagrams Force Field Analysis Universal Model Pope's Systems Safety Management	
C. Haz	zardous Condition Prevention	(2 hours)
	Systems Safety Management Loss Incident Sequence Model Using Inspections Measuring the Effectiveness of Programs	
D. Car	use Analysis of Hazardous Behavior	(2 hours)
2.	Hazardous Act Analysis Model Causes of Hazardous Behavior Hazardous Behavior Antecedents	
E. Saf	e Behavior Reinforcement	(2 hours)
2.	Performance Discrepancies Defining Safe Behavior Job Specific Critical Behavior Inventories Safety Sampling	
Midter	m	(1 hour)
F. Tra	ining to Prevent Hazardous Behavior	(4 hours)
2. 3.	Training Methods Performance Analyses Behavioral Objectives Lesson Plans	
G. Los	ss Incident Costs	(3 hours)
1. 2. 3. 4. 5. 6. 7.	Product Damage Government Fines, and Legal Fees Costing Rates	
H. Sat	fety Program Evaluation	(3 hours)
1. 2. 3.	OSHA and MSHA Injury Rates Safe-T-Score Technique Criteria to Measure Program Effectiveness.	

4. Pareto Charts

I. Management Performance Evaluation

(3 hours)

1. Data to Measure Individual Managers for Accountability Purposes

J. Loss Management Information Systems

(3 hours)

- 1. Categories of Data from Loss Incident Investigations
- 2. Using Computer Program to Investigate and Analyze
- 3. Cost-Benefit Analysis

Culminating Activity

(2 hours)

Title of Laboratory Exercises	# of Hours	Lecture Units Covered
Defining a System for Analysis	3	A,B,C
Developing Programs	3	A,B,C
Assessing Programs via Cause and Sequencing Analysis	3	В
Analyzing Hazardous Conditions	3	С
Analyzing Hazardous Behavior	3	D,E,F
Reinforcing Safe Behavior	3	D,E
Devising Training Programs	3	F
Creating Training Devices and Sessions	3	F
Analyzing Decisions via Cost/Benefit	3	G
Evaluating Safety Programs	6	H,I
Measuring Management Accountability	3	H,I
Developing a loss incident scenario and placing the incident data into LoMIS	6	J

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:

E.	Examinations	40%
F.	Homework	25%
G.	Laboratory Reports	25%
H.	Course Portfolio	5%
I.	Class Participation	5%

Examinations: The examinations 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.

Laboratory Reports: Students will complete a laboratory report after each laboratory session. The format for these reports as well as a grading rubric will be provided during the first laboratory class.

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 grading scale is as follows:

Α	90%-100%
В	80%-89%
С	70%-79%
D	60%-69%
F	< 60%

VI. Attendance Policy

The attendance policy for this course conforms to the University's Undergraduate Course Attendance Policy; in that all students are expected to attend and participate in class to enhance their learning.

VII. Required Textbooks, Supplemental Books and Readings

Pope, William C. (1990). <u>Managing for Performance Perfection: The Changing Emphasis</u>. Weaverville, NC: Bonnie Brae.

Lack, Richard (ed). (2000). <u>Essentials of Safety and Health Management</u>. Boca Raton, FL: CRC Press.

VIII. Special Resource Requirements

None

X. 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 Bibliographies:

Chekanski, R. Philip. (1974). A loss control information system: techniques for its implementation. Occupational Hazards – Focus Section: Journal of the National Safety Management Society, April.

Brassand, Michael. (1989). <u>The Memory Jogger Plus: Featuring the Seven Management and Planning Tools</u>. Methuen, MA: GOAL/QPC.

Coyle, Ian R., et al. (1995) Safety Climate. Journal of Safety Research 26 (4).

Geller, E. Scott, et al. (1989). <u>Behavior Analysis Training for Occupational Safety</u>.

Newport, VA: Make-A-Difference, Inc. (also companion Workbook and Discussion Workbook)

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.

Mager, Robert F. and Peter Pipe. (1993) <u>Analyzing Performance Problems: Or You Really Oughta Wanna</u>, 3rd ed. Belmont, CA: Lake Publishing.

Manuele, Fred A. (1995). Guidelines: Designing for Safety. (A technical paper from Marsh & McLennnan M&M Protection Consultants).

Peterson, Dan. (1989). Safe Behavior Reinforcement. Goshen, NY: Aloray.

Pierce, F. David. (1995). <u>Total Quality for Safety and Health Professionals</u>. Rockville, MD, Government Institute, Inc.

Nolden, Carol. (1983). The work order system: key to effective maintenance management," <u>Plant Engineering</u>, October.

Police, Jacquelyn Marie. (1979). The 'systems' approach in accident reporting.

Occupational Hazards – Focus Section: Journal of the National Safety Management Society.

Samson, Thomas M. and Brian O. Hurt. (1995) Managing health and safety data. <u>Occupational Health and Safety</u>. December.

Wright, R. <u>Loss Management: International Management Audit System and LOMIS Incident Report Code Manual</u>. Toronto: Gulf Oil of Canada, Ltd.

Appendix C: Catalog Description

SAFE 412 Hazard Prevention Management II

2 class hours 3 lab hours

Prerequisites: SAFE 212

3 credit hours

(2c-31-3cr)

Designed to teach a systems-based approach to managing safety programs, hazards, and risk. Emphasis will be placed on understanding proactive approaches to conducting pre-hazard and life-cycle safety analyses of activities and operations. Other areas addressed include developing safety system documentation such as policies, objectives, goals, performance measures, plans, committee charters, safety procedures, work procedures, audit plans, and accident investigation reports.

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

 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.

From:

"Ramesh Soni" <rgsoni@iup.edu> "Lon Ferguson" <ferguson@iup.edu>

To: Cc:

<pnb@iup.edu>; "'Gail S. Sechrist"' <gailsech@iup.edu>

Sent:

Wednesday, April 02, 2008 11:09 AM

Subject:

RE: Fw: SAFE 212 and 412

07-546

Lon:

I have a little bit of problem with your justification statement. You indicate that the behavioral issues are not covered until the end of the course (SAFE 412). If we remove MGMT 311 completely then there will a possibility of students taking MGMT 311 later than SAFE 412 and that should not be acceptable to you.

I suggest that you change the prerequisite to indicate that the student should have completed or concurrently registered in MGMT 311 (that is, a combination or prerequisite or co-requisite).

---- Original Message -----

From: Lon Ferguson To: rgsoni@iup.edu

Sent: Wednesday, April 02, 2008 11:39 AM Subject: Re: Fw: SAFE 212 and 412

Ramesh:

SAFE 412 is the students last class prior to internship which is taken their last semester.

Behavioral aspects of safety used to be one Unit in this class (6 hours), it is now 2 hours and will be part of behavioral based systems approach.

Thanks,

Lon

Hi Francisoco and Prashanth:

I have been asked by the UWUCC to inform you of a prerequisite change to one of our courses SAFE 412. Both MATH 217 and MGMT 311 were prerequisites to this course but that is being changed in a proposed course revision, see rationale statement bleow:

2. Justification/rationale for the revision.

The Department Curriculum Committee recognized that with the changes to SAFE 212 there was a need to revisit the content and objectives for SAFE 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).

With regard to the prerequisites, MATH 217 was removed because at one time this course had a variety of statistical tools as part of safety program evaluation. Over the years this focus has lessened to the point where faculty did not believe MATH 217 needed to be a prerequisite. MGMT 311 was removed because our transfer students (50%) typically take this course the same semester as SAFE 412. This does not present a problem in SAFE 412 because the behavioral aspects of this course are

not covered until the end of the semester.

Please note that both MGMT 311 and MATH 217 will remain required courses in our program and remain valuable courses to our students.

Please let me know if you have any questions or concerns!