

**Outcome 1.** Demonstrate knowledge and skills to build a comprehensive safety and health program based on loss control and regulations.

The assessment is performed with respect to the key abilities that the students are expected to acquire in specific courses that have been identified with respect to this outcome.

Course	Key abilities	Performance indicators
SAFM 501	Required course: safety performance drivers	Student will be able to describe typical industrial roles and accountability methods after successfully completing SAFM 501.
SAFM 534	Required course: comprehensive fire plan	Student will be able to describe the basic elements of fire behavior and chemistry as it relates to ignition prevention, heat transfer, fire growth, and fire dynamics after successfully completing SAFM 534.
SAFM 471	Elective course: comprehensive fleet management plan	Student will be able to identify and evaluate key risk features of a large motor fleet.
SAFM 478	Elective course: comprehensive wellness program	Student will be able to identify elements of wellness program(s), and evaluate employee progress for ERTW.

Tools used: SAFM assessment rubric; graduate survey; employer survey; exit survey

Data Collected: SAFM assessment rubrics: student projects; homework; final grades

Surveys: Likert scale data

Frequency of data collection: SAFM Assessment rubrics: every semester

Graduate survey: every other year

Employer survey: every other year

Exit survey: every semester, third week in November or April

Analysis Method: Data reduced, tabulated and distributed as summaries to faculty and Visiting Committee members

Closing the loop: This outcome is subject to review based on performance criteria and metrics and specific action items are developed, if necessary, to revise the content of the courses.

*Performance criteria and metrics:*

- a) SAFM Assessment rubrics: grades of 1-3 need no work on supporting courses
- b) Graduate survey: qualitative data (open-ended) written out verbatim, quantitative data tabulated
- c) Employer survey: qualitative data (open-ended) written out verbatim, quantitative data tabulated
- d) Exit survey: qualitative data written out verbatim, quantitative data tabulated

**Assessment Tool:**

**SAFM Assessment Rubric**

# Assessment Rubric

## Course Objectives Against Student Learning Outcomes

SAFM XXX: [semester, year]

### Safety Function Integration

Course Objective	SLO	Quantitative Value (1-5)	Assessments * Used (See key*)	Decision P: 3-5; F: 1-2)	Remedial Action	Target Date for Completion
1	1,2,		MQ1, P, E			
2	4,6,		MQ2, P			
3	1		MQ3, P			
4	1		MQ4,6,7, 12, P			
5	3,6		MQ14, O			
6	2,3,5,6		FQ2,15			
7	1,3		FQ2,22,18  P, Pre			

Key to assessment

M = Midterm exam

Q = Question

Final = Final exam

P = Project

Po = Portfolio

Pre = Presentation or oral reports

Man = Manual

E = Exercise or Abstract

C = Computation

RP = Role-Playing

FT = Field Trip

L = Lab

O = Other

## **Closing the Loop: Details of efforts to correct deficiencies (G. Winn, instructor)**

\*\* For [ semester, year] the following deficiencies were noted:

\*\* For [ semester, year], the following actions were taken to address deficiencies:

Additional remedial work, if any:

Faculty discussion, if any:

SAFM 501 Objectives	Safety Management Program Outcomes						
	Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5	Outcome 6	
1. Describe an organization's safety mission	X		X	X			
2. Historical development of modern safety management			X	X			
3. Roles of personnel involved in safety management	X						
4. Major management theories related to safety management	X						
5. Safety-performance drivers in the various roles in an organization			X			X	
6. Models of accountability in safety management used to integrate the function	X	X			X	X	
7. Measures of safety performance used to evaluate persons involved in safety-functional roles		X	X		X	X	
8. Current examples of safety management and variants in industry	X		X				

Addendum to Spring, 2011 Rubric Assessment:  
Lecture notes:

Winn5012007  
Rev: 82410

**Assessment Tool:**

**SAFM Graduate Survey**

## SAFM Alumni Survey



### WVU Safety Management Alumni Survey West Virginia University Safety Management Graduate Program 2014 alumni survey

Please take a few minutes to complete the following survey to assist the WVU Safety Management Graduate Program in our efforts to continuously improve our programs and provide the best Safety graduates to industry.

- Year you graduated from the WVU Safety Management Program: \_\_\_\_\_
- Current industry of employment:

#### **Public**

- \_\_\_ Local
- \_\_\_ State
- \_\_\_ Federal

#### **Private**

- \_\_\_ Insurance
- \_\_\_ Manufacturing
- \_\_\_ Construction
- \_\_\_ Transportation
- \_\_\_ Mining
- \_\_\_ Oil / Natural Gas
- \_\_\_ Other: \_\_\_\_\_

- Your Job Title: \_\_\_\_\_
- How many safety or IH professionals report to you? \_\_\_\_\_
- Apart from Question 4 above, how many others report to you? \_\_\_\_\_
- Have you hired WVU Safety Management Program graduates?



Yes                       No

If yes, how many? \_\_\_\_\_

- Your current salary range

Less than 50,000

50,000 -75,000

76,000-100,000

101,000+

- In what state is your company based? \_\_\_\_\_

- Have you earned any additional degrees?

Yes                       No

If yes, what type(s):

MBA                       JD

PhD                       Other:

list: \_\_\_\_\_

- Have you earned any professional certifications/designations?

Yes                       No

If yes, what type(s):

ARM

CIH

OHST

CHMM

CSP

Other: \_\_\_\_\_

CHST

CSHM

- Based on your work experience in the safety field, what program areas do you feel need more emphasis to better prepare future graduates of the WVU Safety Management Program to meet the challenges they will face? \_\_\_\_\_

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- What aspects of the WVU Safety Management curricula proved to be the most helpful to you in your job(s) after you graduated? \_\_\_\_\_

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- What do you feel were the strengths of the Safety Management program? \_\_\_\_\_

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- What do you feel were the weaknesses of the Safety Management program? \_\_\_\_\_

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- What would you recommend for maintaining contact between past and current WVU Safety Management Program graduates?

Mailings

Electronic newsletter

LinkedIn

Other Social

Media: \_\_\_\_\_

Social Events at national EHS conferences

Safety Management Program website

Other (Specify: \_\_\_\_\_)

**Safety Management Alumni Assessment**

	Strongly Agree	Agree	Disagree	Strongly Disagree	Not Applicable
1. After graduating from the Safety program I had the basic skills you need to function as a Safety Manager/Director					
2. Did you have the technical skills you needed in:					
• Safety Management					
• Safety and Environmental Regulations					
• Hazard Recognition					
• Environmental Management and Permitting					
• Hazard Control					
• Loss Control					
• Training					
• Fire Safety					
• Other (specify)					
• Other (specify)					
3. Did you have the professional skills you needed in					
• Written communications					
• Oral communications					
• Making presentations					
• Developing Safety Programs and Manuals					
• Developing Evaluation Tools					
• Computer applications					
• Problem Solving					
• Data Analysis and Interpretation					
• Working on a team					

• Ethical and Professional Responsibilities					
• Other (specify)					

(end)

**Assessment Tool:**

**SAFM Employer Survey**

## **Employer/Supervisor Survey**

### **West Virginia University Safety Management Graduate Program 2014 Employer/Supervisor Survey**

The Safety Management, Master of Science program at West Virginia University is conducting this survey, as part of an ongoing assessment program to evaluate its educational objectives and outcomes. We desire to continuously improve the quality of the educational experience that we provide to our students and believe your assessment of our safety management graduate can help guide us to make those improvements. Perhaps the best measure of the quality of the education and training we give our students is the evaluation of their employers/supervisors.

We request that you take the time to respond to this questionnaire. All responses are anonymous and will be held in the strictest confidence. We sincerely thank you for your time and effort in this assessment process. Please return your completed survey in the self-addressed, stamped envelope by October 15<sup>th</sup>

Listed below are skills and abilities that we expect our graduates to possess at the time of graduation. Listed below are a series of questions addressing educational outcomes for the safety management program at West Virginia University.

Please base your evaluation on the following scale.

1 = strongly disagree

2 = disagree

3 = neutral

4 = agree

5 = strongly agree

Circle your rating for each question.

If for some reason a topic does not pertain to you, leave it blank.

We are particularly interested in comments (good or bad) regarding the quality of this individual's educational and professional training relative to graduate safety professionals from other institutions that have similar years of experience.

1. This individual has demonstrated adequate problem solving skills and abilities. (1 2 3 4 5) \_\_\_\_\_

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2. This individual has demonstrated adequate understanding and application of safety management methodologies to successfully solve safety, health or environmental problems (1 2 3 4 5)

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3. This individual has demonstrated adequate oral and written communication skills and abilities (1 2 3 4 5) \_\_\_\_\_

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4. This individual has demonstrated adequate ability and skill to use computer hardware and software. (1 2 3 4 5) \_\_\_\_\_

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5. This individual has demonstrated adequate ability and skill to work in project teams/groups. (1 2 3 4 5) \_\_\_\_\_

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6. This individual has demonstrated adequate ability to work on interdisciplinary problems required.

(1 2 3 4 5) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

7. This individual has demonstrated a level of understanding and awareness of ethics. (1 2 3 4 5)

\_\_\_\_\_

8. This individual has demonstrated a level of knowledge and awareness of contemporary issues affecting safety suitable for their current professional position. (1 2 3 4 5)

\_\_\_\_\_

9. This individual has demonstrated a level of commitment to and pursuit of self-learning/continuing education. (1 2 3 4 5)

\_\_\_\_\_

[survey ends]



**Assessment Tool:**

**SAFM Exit Survey**

## SAFM Graduate Exit Survey



### Safety Management Graduate Student Exit Survey Semester 20XX

*Do not put your name on this survey*

The Masters of Safety Management program at West Virginia University is conducting this survey as part of an ongoing assessment program to evaluate its educational objectives and outcomes.

We desire to continuously improve the quality of the educational experience that we provide to our students and believe your assessment of your graduate educational experience can guide us to make those improvements.

Your responses are totally confidential and will only be used to benchmark and improve the graduate Safety Management program at WVU.

Listed below are a series of questions addressing components of your educational experience in the Safety Management Program.

Please complete the following survey and return it. It is **important** that you fill it out completely and honestly. If you are taking comprehensive examinations, return it to the proctor at the end of the day. If you are defending a thesis or problem report return it to the secretary in Room 321 MRB.

- 1) From 1 to 5, rank the following topics as to your understanding. Give a 5 to the topic with which you are most knowledgeable. Give a 1 to the topic in which you have the least knowledge. (Use N/A if you didn't take a course in the area)

- \_\_\_\_\_ Safety Management
- \_\_\_\_\_ Safety Legislation and Regulations
- \_\_\_\_\_ Hazard Awareness (Recognition) and Control
- \_\_\_\_\_ Loss Control and Recovery
- \_\_\_\_\_ Safety and Health Training
- \_\_\_\_\_ Economics, Safety Evaluation and Research
- \_\_\_\_\_ Managing Fire Safety
- \_\_\_\_\_ Industrial Hygiene
- \_\_\_\_\_ Environmental Management and Permitting

2) Circle the class numbers in which you worked in **groups** or on group projects.

501	Safety Management Integration
502	Controlling Environmental and Personnel Hazards
505	Safety Legislation and Compliance
528	Economic Aspects of Safety
534	Managing Fire Safety
550	Loss Control and Recovery
552	Safety and Health Training
640	Instrumentation for Safety Managers

2a) Which **group** class project do you feel was the most successful? Why?

2b) Which **group** class project was the least successful? Why?

3) Circle the class numbers in which you worked on **individual** projects.

501	Safety Management Integration
502	Controlling Environmental and Personnel Hazards
505	Safety Legislation and Compliance
528	Economic Aspects of Safety
534	Managing Fire Safety
550	Loss Control and Recovery
552	Safety and Health Training
640	Instrumentation for Safety Managers

3a) Which **individual** project do you feel was the most successful? Why?

3b) Which **individual** project was the least successful? Why?

4) Rate your chances of getting **another** advanced degree at some point in your life

Very Unlikely

Extremely likely

1

2

3

4

5

For the following skill sets, please rate your experience in the MS Safety Management program.

1 = extremely poor experience, poorly prepared in this area

5 = excellent experience, well prepared for this area

Oral Communication	1	2	3	4	5
Written Communication	1	2	3	4	5
Ethical and Professional Responsibilities in the Workplace	1	2	3	4	5
Costs & Benefits, Research and Statistics	1	2	3	4	5
Computer applications: Spreadsheets, Presentation Software	1	2	3	4	5
Developing Evaluation Tools	1	2	3	4	5
Problem Solving	1	2	3	4	5
Data Analysis and Interpretation	1	2	3	4	5
Developing Safety Programs and Manuals	1	2	3	4	5
Summarizing and Understanding Regulations	1	2	3	4	5

- 6) List one or two areas in which you feel the Safety Management program excels. Why?
  
- 7) List one or two areas in which the Safety Management program needs improvement. Why?
  
- 8) What was the most valuable (useful) **course(s)** you took while enrolled? Why?
  
- 9) What was the most valuable **activity** you undertook while enrolled in the program?
  
- 10) List the course(s) which you feel did not have sufficient technical/scientific content.
  
- 11) List the course(s) which you feel did not have sufficient professional content
  
- 12) List the course(s) that you feel had significant **overlap** of material. Please **specify** the material that overlapped.
  
- 13) Which **topic(s)** in the program do you feel might need additional coverage?

14) Please check the following: 5 = Strongly agree; 1 = Strongly disagree

1 2 3 4 5

The classes were scheduled at convenient times.....					
The Reading Room (library on 3rd floor) was helpful to me.....					
The computer facilities in the department and college were helpful to me.....					
I improved my ability to write effectively.....					
I improved /made more effective my oral communication skills...					
I improved my problem-solving skills.....					
I improved my computer skills.....					
I improved my ability to work as part of a team.....					
I improved my knowledge of current technologies/issues in the safety field.....					

15) Additional comments:

[survey ends]