1. What student learning outcomes were assessed this year, and why?

There was no assessment activities performed in the last two years. The SHM program has hired a new program coordinator who started fall 2011. The new SHM program coordinator will lead the efforts to develop assessment goals.

The goal of the SHM program is to get accredited by the Applied Science Accreditation Commission (ASAC) of ABET by 2016. Hence, the program outcomes for the SHM program will be written to match the requirements of ASAC based on the 2012-2013 Accreditation cycle. The SHM program will use the program criteria that apply to safety, occupational safety, industrial safety, and similarly named applied science programs.

**According to ASAC Accreditation Criteria 2012/12, General Criterion 3: Student Outcomes**

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.

**According to ASAC Accreditation Criteria 2012/12, program criteria for safety, occupational safety, industrial safety, and similarly named applied science programs.**

Program graduates must possess the necessary knowledge and skills to competently and ethically implement and practice applicable scientific, technical and regulatory aspects of the safety, health, and environmental profession. In addition, the program must demonstrate that graduates can apply college algebra, statistics, chemistry, physics, and human physiology/biology as it pertains to the
practice of the safety, health, and environmental discipline. More specifically, graduates must be able to:

1. anticipate, recognize, evaluate, and develop control strategies for hazardous conditions and work practices;
2. demonstrate the application of business and risk management concepts;
3. demonstrate an understanding of the fundamental aspects of safety, industrial hygiene, environmental science, fire science, hazardous materials, emergency management, ergonomics and/or human factors;
4. design and evaluate safety, health, and/or environmental programs;
5. apply adult learning theory to safety training methodology;
6. identify and apply applicable standards, regulations, and codes;
7. conduct accident investigations and analyses;
8. apply principles of safety and health in a non-academic setting through an intern, cooperative, or supervised experience.

The SHM faculty will establish the program educational objectives and student outcomes for the B.S. Degree in Safety and Health Management and their direct links to both the ASAC General and Specific “Safety” Criteria identified above by end of spring 2012.

2. How were they assessed?

A) What methods were used? B) Who was assessed? C) When was it assessed?

Once established, the program educational objectives and student outcomes will be assessed using a variety of assessment activities.

1. **Program Student Learning Outcomes:** Three primary assessment tools are envisioned to be used to evaluate program outcomes:
   a. **Graduate exit surveys (spring qtr. SHM 485 Capstone Class):** Department chair or college associate dean will conduct an interview of the students. The report will be reviewed and deficiencies will be addressed as appropriate.
   b. **Internship site supervisor evaluations (fall qtr.):** Data will be summarized and a report will be drafted. The report will be reviewed and deficiencies will be addressed as appropriate.
   c. **Individual course assessments (every quarter):** For each course, a matrix will be developed by the SHM program faculty that links course outcomes to specific program outcomes to help ensure adequate coverage of the overall program outcomes.

2. **Program educational objectives:** The Program educational objectives are objectives after a student graduates and the SHM program will rely primarily on:
   a. Alumni surveys, and
   b. Employer surveys

The SHM faculty will finalize the various assessment activities, assessment population, and timing of assessment by end of spring 2012.
3. **What was learned?**

The goal of the program is to obtain assessment data starting academic year 2012-2013.

***However, an old alumni survey from the year 2009-2010 was obtained from archives. The survey was conducted in fall 2009 and the target population was SHM program graduates from 2004 to 2008. It is understood this was the last assessment activity performed by the SHM program. It provides some insight and opportunities for program improvement. Some of the responses are attached as Appendix A at the end of the report. Efforts are being made to address these concerns.***

4. **What will the department or program do as a result of that information?**

Based on data obtained during the 2012-2013 appropriate changes will be made to the program.

5. **What did the department or program do in response to last year’s assessment information?**

Not applicable.

6. **Questions or suggestions concerning Assessment of Student Learning at Central Washington University:**

Unable to complete at this time.
Appendix A
Program Alumni Assessment
Source: Alumni Survey Fall 2009
Response from 24 SHM alumni from 2004 to 2008

What aspect of the program needs the most improvement?
1. More field trips
2. Better teachers and better leadership of the program
3. Teachers expertise should match their classes
4. More and higher paid teachers that want to teach and want to be around
5. More hands on learning in the field (n = 3)
6. Need ergonomics related topics
7. Industrial hygiene sampling
8. More practical experience before internships
9. Modern lab equipment’s
10. Graduate should be well versed in all three aspects: E – Environmental; H – Health And S-Safety
11. More instructions from outside sources
12. Teachers with actual field experience. Some were totally out of the loop.

Any other comments for Safety and Health Management at CWU?
1. The program is a diamond in the ruff, it just needs some investment
2. Develop relationships with safety professionals from a diverse range of industries
3. CWU needs to teach students how to answer questions in the Certified Safety Professional (CSP) exams
4. Worst major ever – unprofessional teachers
5. Field trips
6. Need a Master’s program (n=2)
7. Keep alums in the loop on what is going on with the program

Several efforts have been made to address these concerns identified through the alumni survey since Fall 2011:

- A new program coordinator (tenure-track) was hired in fall 2011 to lead the program’s restructure/re-build efforts.
- The American Society of Safety Engineers (ASSE) student section has been re-established. Several guest lectures were arranged during the fall and winter quarters through this student section meetings
- The Industry Advisory Council for the program has been re-established with 16 safety professionals from a wide variety of industry.
- More than 100 alumni and industry professionals has been reached out to support the program through guest lectures and field trips. The response has been great and the program envisions more field trips and guest lectures in the future.
- The renovated Hogue building will house a new 2000 SF lab. The lab will be fully operational by end of 2012-2013 year. This will address the concerns of lack of hands-on experience to the students.