

Student Learning Outcomes
Bachelor of Science, Safety
Department of Health Sciences
College of Applied Science and Technology

Upon successful completion of the program, the graduate of the Bachelor of Science program in Safety will have acquired a foundation in the physical, biological and behavioral sciences, and be able to demonstrate the ability to:

1. Anticipate potential hazards to people, property and the environment.
2. Recognize existing hazards to people, property and the environment.
3. Evaluate potential and existing hazards to people, property and environment with respect to risk and regulatory requirements.
4. Control potential and existing hazards to people, property and the environment to achieve acceptable levels of risk or meet regulatory requirements.
5. Develop loss prevention and control programs, including engineering and behavioral strategies.
6. Evaluate the effectiveness of loss prevention and control programs, including engineering and behavioral strategies.
7. Manage and communicate safety, health and environmental information to stakeholders.
8. Function as a member of the safety professional community, with a commitment to continuing professional growth.
9. Acknowledge the standards of professional conduct that are published by professional safety organizations and/or certification bodies.

Safety Program Assessment Plan

The Department of Health Sciences has implemented a multiple measures assessment procedure that includes evaluation of faculty (by students and professional peers), facilities, curriculum, and advising (See Table I). The methods include class evaluations; surveys of new graduates, 1st- and 5th-year alumni; professional practice evaluations; and the IBHE Student Outcomes Initiative. The Safety Program utilizes a multiple-measures approach to program quality management on a course, program, departmental, and university level. The evaluation strategies target four major “customers” of the Safety program: students, graduates, employers, and institutional accreditation agencies. In addition, the University surveys students regarding attainment of program learning outcomes and career success. The survey data has, for example, led to an increase in the ergonomics content of HSC 370 and was also a factor in the decision to change HSC 462 (Ergonomics) to HSC 362 (Ergonomics). In 2002, the program began implementing IBHE Student Outcomes Project. Ongoing assessment led to a major program revision during 2006.

Table I: Summary of Safety Program Evaluation Activities

Evaluation Programs	Responsible Authority	Evaluators	Evaluation Techniques	Frequency
HSC Dept. Assessment Program	Department Chairperson	Students Graduates Employers	Survey Questionnaires	Annually
Safety Program Advisory Committee (planned)	Safety Program Director	Alumni, Employers and Subject Matter Experts	Open Discussion	Annually
Program Faculty Meetings	Program Faculty	Faculty	Open Discussion	Weekly to bi-weekly
Professional Practice	Professional Practice Coordinator	Professional Practice Supervisors	Performance evaluations	Every Semester
Faculty Evaluations	Department Chairperson	Faculty Peers, Department Chair, Students	Performance evaluations	Every Semester
Scope of Practice	Program Director	Faculty	Review Accreditation Standards and other Studies of Professional Safety Practice	Annually

Data From Assessment Program

Table II: Senior Satisfaction Survey Results for 2000-2002, 2004, and 2007-2008

Educational Preparation	Year 2000-02	Year 2004	Year 2007-08
	(n=10)	(n=10)	(n=11)
• Satisfied with instruction on writing effectively.	90%	100%	95%
• Satisfied with instruction on speaking effectively.	100%	100%	100%
• Satisfied with instruction on listening effectively.	100%	100%	100%
• Satisfied with instruction on using computer technology.	80%	60%	70%
• Satisfied with instruction on professional behavior.	100%	90%	95%
• Satisfied with instruction on problem solving.	100%	90%	95%
• Satisfied with instruction on teamwork.	100%	90%	95%
• Satisfied with instruction on continuous professional development.	100%	100%	100%
Program Performance			
• Overall experience in Safety Program	100%	100%	100%
• Satisfied with course content	100%	100%	100%
• Satisfied with class size	90%	100%	95%
• Satisfied with computer equipment and facilities	100%	80%	90%
• Satisfied with classrooms	100%	90%	95%
• Satisfied with student club experience	100%	100%	100%
• Satisfied with faculty encouragement to attend professional meetings	90%	100%	95%
• Satisfied with professional practice experience	90%	90%	90%
• Satisfied with faculty interaction.	100%	100%	100%
• Satisfied with student interaction.	100%	100%	100%
• Satisfied with academic advisement.	100%	70%	85%
• Satisfied with laboratory experiences.	80%	90%	85%
• Satisfied with laboratory equipment and facilities.	70%	80%	75%
• Satisfied with field experiences	90%	100%	95%

Responses to open-ended questions for graduating seniors:

- Every time I would go into the computer lab, I would have at least one problem (printer not working, computer crashes, etc.). Not much was done to utilize the

computers & only a few projects were given as strictly a group project. If I had the opportunity to work individually, I would.

- The Felmley computer labs were constantly being reserved at times when I needed to use them Printers were always broken.
- I thoroughly enjoyed the program and the faculty. I hope that the courses continue to develop and the program continues to grow/improve.
- I had an overall excellent experience with my time at ISU and in the Safety Department. You could tell that the teachers cared.
- I rated the faculty encouragement and interaction with faculty as satisfactory.
- I would like to have seen some of the required science courses more safety-related, instead of so broad. Also, I would have liked more Elective courses in areas that are perhaps more specialized.

100% of seniors agreed that majoring in Safety was a good decision.

Alumni Satisfaction

The Health Sciences Department Assessment Program sends a survey to first-year and fifth-year graduates of the program. The results of this 5th-year alumni survey for 1999-2000 and 2002 indicate graduate satisfaction with the program.

Table III: First-Year Alumni Satisfaction Survey Results for 1999-2000, 2003, and 2006-2007

Educational Preparation	Year 1999-2000	Year 2003	2006-2007
	(n=21)	(n=4)	(n=6)
• Satisfied with instruction on writing effectively.	95%	75%	83%
• Satisfied with instruction on speaking effectively.	95%	75%	83%
• Satisfied with instruction on listening effectively.	95%	100%	100%
• Satisfied with instruction on using computer technology.	81%	100%	100%
• Satisfied with instruction on professional behavior.	100%	100%	100%
• Satisfied with instruction on problem solving.	100%	100%	100%
• Satisfied with instruction on teamwork.	100%	100%	100%
• Satisfied with instruction on continuous professional development.	100%	100%	100%

Table III, cont'd: First-Year Alumni Satisfaction Survey Results for 1999-2000, 2003, and 2006-2007

Program Performance			
• Satisfied with course content	91%	100%	100%
• Satisfied with class size	100%	100%	100%
• Satisfied with computer equipment and facilities	81%	100%	100%
• Satisfied with classrooms	95%	100%	100%
• Satisfied with student club experience	91%	100%	100%
• Satisfied with professional practice experience	76%	100%	100%
• Satisfied with faculty interaction.	100%	100%	100%
• Satisfied with student interaction.	100%	100%	100%
• Satisfied with academic advisement.	62%	75%	83%
• Satisfied with laboratory experiences.	95%	100%	100%
• Satisfied with laboratory equipment and facilities.	86%	100%	100%
• Satisfied with field experiences	85%	75%	83%

Comments:

- Should have more technical writing classes.
- Field experiences should be used more.
- More PHA, FTA
- More everyday safety tips and advice regarding buildings, MSDS, construction
- More coverage of training and delivering classes
- More management/networking with workgroups of various backgrounds