



Central Washington University

Degree Program Student Learning Outcome Assessment Plan

Department: Industrial & Engineering Technology

Program: B.S. Safety and Health Management

Student Learning Outcomes At the time of graduation, students will demonstrate their:	Related CWU Strategic Outcome(s) http://www.cwu.edu/sstragic-planning/	Method(s) of Assessment (What is the assessment?)*	Who Assessed (Students from what courses - population)**	When Assessed (term, dates)***	Standard of Mastery/ Criterion of Achievement (How good does performance have to be?)
1. Understanding of professional and ethical responsibilities as safety and health professionals.	1.1.1 Students will achieve programmatic learning outcomes.	SHM 490 Site Supervisor Evaluation SHM 485 Ethics and Professionalism Paper	Seniors	Summer Spring	85%
2. Ability to apply their applied science knowledge and solve problems using algebra, statistics, human physiology and anatomy, physics, chemistry, as it pertains to the practice of safety and health discipline.	1.1.1 Students will achieve programmatic learning outcomes.	SHM 301 Safety Performance Metrics Quiz (Algebra) SHM 352 Statistics Assignments (Statistics) SHM 472 NIOSH Lifting Equation Problem (Anatomy) SHM 471 Heat Stress Assignment (Physiology) SHM 480 Noise Evaluation/Control Assignment (Physics) SHM 377 Hazardous Materials Characteristics	Juniors Juniors Seniors Seniors Seniors	Fall Winter Winter Fall Winter	80% 80% 85% 85% 85%

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		(Chemistry)			
3. Ability to design and conduct experiments, and to analyze and interpret data pertinent to the safety and health discipline.	1.1.1 Students will achieve programmatic learning outcomes.	SHM 480 Noise Evaluation/Control Assignment (Physics)	Seniors	Winter	80%
4. Ability to identify and describe the fundamental aspects of safety and health management.	1.1.1 Students will achieve programmatic learning outcomes.	SHM 301 Exam	Juniors	Fall	80%
5. Ability to identify and describe the fundamental aspects of industrial hygiene.	1.1.1 Students will achieve programmatic learning outcomes.	SHM 471 Exams	Seniors	Fall	85%
6. Ability to identify and describe the fundamental aspects of environmental management.	1.1.1 Students will achieve programmatic learning outcomes.	SHM 477 Environmental Requirement Exercises	Seniors	Fall	85%
7. Ability to identify and describe the fundamental aspects of fire safety.	1.1.1 Students will achieve programmatic learning outcomes.	SHM 379 Life Safety Inspection Assignment	Senior	Winter	85%
8. Ability to identify and describe the fundamental aspects of ergonomics.	1.1.1 Students will achieve programmatic learning outcomes.	SHM 472 Ergonomics Exercise	BS SHM students in all courses	Quarterly	75% positive response

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9. Ability to identify and describe the fundamental aspects of hazardous materials.	1.1.1 Students will achieve programmatic learning outcomes.	SHM 377 Hazardous Materials Exam	Seniors	Fall	85%
10. Ability to identify and describe the fundamental aspects of emergency management.	1.1.1 Students will achieve programmatic learning outcomes.	SHM 371 Emergency Management Plan Project	Juniors	Winter	80%
11. Ability to identify and describe the fundamental aspects of systems safety.	1.1.1 Students will achieve programmatic learning outcomes.	SHM 352 System Safety Exam SHM 352 Failure Mode and Effects Analysis Exercise	Juniors	Spring	80%
12. Ability to identify and describe the fundamental aspects of fleet safety.	1.1.1 Students will achieve programmatic learning outcomes.	SHM 375 Research Project/Exam	Juniors	Spring	80%
13. Ability to identify and describe the fundamental aspects of construction (or) manufacturing safety.	1.1.1 Students will achieve programmatic learning outcomes.	SHM 323 Construction Safety Comprehensive Exam (or) SHM 325 Manufacturing Safety Comprehensive Exam	Juniors	Winter Spring	80%
14. Ability to anticipate, recognize, evaluate, and develop control strategies for hazardous conditions and work practices.	1.1.1 Students will achieve programmatic learning outcomes.	SHM 323 Pre-task Plan Assignment (or) SHM 325 Job Hazard Analysis (JHA) assignment SHM 379 Life Safety Inspection Assignment	Juniors Juniors Seniors	Spring Spring Fall	80% 80% 85%

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15. Ability to apply business and risk management concepts as part of a comprehensive safety and health management program.	1.1.1 Students will achieve programmatic learning outcomes.	SHM 353 Business Risk Management Plan SHM 353 Risk Assessment Matrix Assignment	Juniors	Winter	80%
16. Ability to identify and apply applicable standards, regulations, and codes in the safety and health discipline.	1.1.1 Students will achieve programmatic learning outcomes.	SHM 301 OSHA regulation HW Assignment (identify) SHM 323 Hazardous Condition Assignment (identify & apply) (or) SHM 325 Hazardous Condition Assignment (identify & apply) SHM 477 Environmental Audit Assignment (identify & apply)	Juniors Juniors Juniors Seniors	Fall Winter Spring Spring	80% 80% 80% 85%
17. Ability to design and evaluate a comprehensive safety and health program.	1.1.1 Students will achieve programmatic learning outcomes.	SHM 474 Design and Evaluation of a SHM Program Project	Seniors	Winter	85%
18. Ability to complete worker safety and health training by applying adult learning theories.	1.1.1 Students will achieve programmatic learning outcomes.	SHM 474 Training Exercise	Seniors	Winter	85%
19. Ability to conduct an incident investigation and analysis.	1.1.1 Students will achieve programmatic learning outcomes.	SHM 351 Accident Investigation Report	Juniors	Spring	80%

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20. Ability to apply the principles of safety and health in a non-academic setting through an internship, cooperative, or supervised experience.	1.1.1 Students will achieve programmatic learning outcomes.	SHM 490 Site Supervisor Evaluation SHM 490 Internship Reports	Juniors Seniors	Summer Summer	80% 85%
21. Ability to use the techniques, skills, and modern scientific and technical tools necessary for professional practice in the safety and health discipline.	1.1.1 Students will achieve programmatic learning outcomes.	SHM 480 Industrial Equipment Lab Exercise SHM 379 Fire Extinguisher Trainer Exercise and Exam	Seniors	Winter Fall	85%
22. Ability to function effectively on multidisciplinary teams.	1.1.1 Students will achieve programmatic learning outcomes.	SHM 485 Group Projects Evaluation SHM 490 Site Supervisor Evaluation (teamwork)	Seniors Juniors	Spring Summer	85% 80%
23. Ability to communicate effectively, both oral and written.	1.1.1 Students will achieve programmatic learning outcomes.	SHM 490 Site Supervisor Evaluation (Oral) SHM 490 Site Supervisor Evaluation (Written) SHM 485 Capstone Course Corrective Action Plan (CAP) Project (Written) SHM 474 Training Exercise (Oral)	Juniors Juniors Seniors Seniors	Summer Summer Spring Winter	80% 80% 85% 85%

Student Learning Outcomes At the time of graduation, students will demonstrate their:	Related CWU Strategic Outcome(s) http://www.cwu.edu/strategic-planning/	Method(s) of Assessment (What is the assessment?)*	Who Assessed (Students from what courses - population)**	When Assessed (term, dates)***	Standard of Mastery/ Criterion of Achievement (How good does performance have to be?)
24. Ability to engage in life-long learning in chosen professional career.	1.1.1 Students will achieve programmatic learning outcomes.	SHM 485 Life-long Learning Paper	Seniors	Spring	85%
25. Ability to identify the contemporary safety and health issues, their impacts and solutions within a global and societal context, through a broad education.	1.1.1 Students will achieve programmatic learning outcomes.	SHM 481 Contemporary Issues Assignment	Seniors	Spring	85%

*Method(s) of assessment should include those that are both direct (tests, essays, presentations, projects) and indirect (surveys, interviews) in nature.

**Data needs to be collected and differentiated by location (Ellensburg campus vs University Centers) and modality (e.g. online, face-to-face, hybrid)

***Timing of assessment should ideally be at different transition points of program (i.e., admission, mid-point, end-of-program, post-program)

rev. 12/14

Assessment Cycle

Analysis and Interpretation: December

Improvement Actions: Completed by June

Dissemination: Completed by June

All Safety and Health Management outcomes are assessed and reported annually.

Assessment Oversight

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