

Rubric for Assessing OSH&E Program Outcomes

Objective 1: Apply knowledge and principles of mathematics, science, technology, and management in industry, business, or other related areas of employment as occupational safety, health, and environment professionals.

Expected Outcomes: Students completing the Baccalaureate degree in OSH&E will demonstrate the ability to apply basic mathematical and scientific knowledge in the safety, health, and environment field.

Performance Criteria	Below Expectations 1	Progressing to Criteria 2	Meets Criteria 3	Exceeds Criteria 4	Score¹
1. Students are able to apply basic mathematical and statistical knowledge in the safety, health, and environment field.	Student fails to solve typical OSH&E problems using basic mathematical and statistical knowledge.	Student identifies typical OSH&E problems, but struggles to select proper mathematical and statistical tools needed to solve the problems.	Student correctly identifies typical OSH&E problems and applies basic mathematical and statistical knowledge, but makes minor mistakes during problem solving.	Student clearly identifies typical OSH&E problems and correctly applies basic mathematical and statistical knowledge to solve the problems.	
2. Students are able to demonstrate knowledge of principles in chemistry, physics, and biology as it pertains to the practice of safety, health, and environment.	Student is unable to demonstrate knowledge of principles in chemistry, physics, and biology that are applied to the OSH&E field.	Student demonstrates knowledge of principles in chemistry, physics, and biology that are applied to the OSH&E field, but struggles to apply those principles properly to solve specific problems.	Student demonstrates knowledge of and applies principles in chemistry, physics, and biology that are applied to the OSH&E field, but makes minor mistakes and/or demonstrates a lack of clarity during problem solving.	Student clearly and correctly demonstrates knowledge of and applies principles in chemistry, physics, and biology that are applied to the OSH&E field to solve specific problems.	

<p>3. Students are able to demonstrate knowledge of principles in business management as it pertains to the practice of safety, health, and environment.</p>	<p>Student is unable to demonstrate knowledge of principles in business management that are applied to the OSH&E field.</p>	<p>Student demonstrates knowledge of principles in business management that are applied to the OSH&E field, but struggles to apply those principles properly to solve specific problems.</p>	<p>Student demonstrates knowledge of and applies principles in business management that are applied to the OSH&E field, but demonstrates a lack of clarity during problem solving.</p>	<p>Student clearly and correctly demonstrates knowledge of and applies principles in business management that are applied to the OSH&E field to solve specific problems.</p>	
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¹Score is presented as the percentage of samples that meets and/or exceeds criteria. 75% is used as the success rate based on the OSH&E Major Field Assessment plan.

Objective 2: Apply practical-oriented knowledge and skills in safety, health, and environment to anticipate, identify and evaluate hazardous conditions and practices, to develop hazard control designs, methods, procedures and programs, and to implement and manage effective safety and health programs.

Expected Outcomes 2A: Students completing the Baccalaureate degree in OSH&E will demonstrate the understanding of safety, health, and environment knowledge.

Performance Criteria	Below Expectations 1	Progressing to Criteria 2	Meets Criteria 3	Exceeds Criteria 4	Score¹
2A1. Students demonstrate knowledge of occupational safety, health, and environment fundamentals.	Student fails to demonstrate knowledge of occupational safety, health, and environment fundamentals.	Student demonstrates knowledge of the basics of occupational safety, health, and environment, but struggles to differentiate between concepts.	Student demonstrates knowledge of the basics of occupational safety, health, and environment and how they are interrelated, but demonstrates a lack of clarity.	Student clearly and correctly demonstrates knowledge of occupational safety, health, and environment fundamentals.	
2A2. Students demonstrate knowledge of legal aspects of safety, health, and environmental practices.	Student fails to demonstrate knowledge of the legal framework within the OSH&E field.	Student demonstrates knowledge of the legal framework within the OSH&E field, but struggles to differentiate between agency/organization responsibilities.	Student demonstrates knowledge of the legal framework within the OSH&E field and how different agencies/organizations are interrelated, but demonstrates a lack of clarity.	Student clearly and correctly demonstrates knowledge of the legal framework within the OSH&E field.	
2A3. Students demonstrate knowledge of the interactions of physical, chemical, biological, and ergonomic agents, factors, and/or stressors on the human body.	Student fails to demonstrate knowledge of the interactions of physical, chemical, biological, and ergonomic agents, factors, and/or stressors.	Student demonstrates knowledge of the interactions of physical, chemical, biological, and ergonomic agents, factors, and/or stressors on the human body, but struggles to	Student demonstrates knowledge of the interactions of physical, chemical, biological, and ergonomic agents, factors, and/or stressors on the human body, but	Student clearly and correctly demonstrates knowledge of the interactions of physical, chemical, biological, and ergonomic agents, factors, and/or stressors on the human body.	

		differentiate between substances.	demonstrates a lack of clarity.		
2A4. Students demonstrate knowledge of the application of laws, regulations, standards, and codes to safety, health and environmental conditions.	Student fails to demonstrate knowledge of the application of laws, regulations, standards, and codes to safety, health and environmental conditions.	Student demonstrates knowledge of how to apply laws, regulations, standards, and codes to safety, health and environmental conditions, but struggles to differentiate between substances.	Student demonstrates knowledge of the application of laws, regulations, standards, and codes to safety, health and environmental conditions, but demonstrates a lack of clarity.	Student clearly demonstrates knowledge of and correctly applies laws, regulations, standards, and codes to safety, health and environmental conditions.	
2A5. Students demonstrate and use basic principles of fire prevention and protection in the workplace.	Student fails to demonstrate basic principles of fire prevention and protection in the workplace.	Student demonstrates basic principles of fire prevention and protection in the workplace, but struggles to use the principles properly.	Student demonstrates and uses basic principles of fire prevention and protection in the workplace, but demonstrates a lack of clarity.	Student clearly demonstrates and correctly uses basic principles of fire prevention and protection in the workplace.	
2A6. Students demonstrate knowledge of industrial and construction safety throughout the work processes.	Student fails to demonstrate knowledge of industrial and construction safety throughout the work processes.	Student demonstrates knowledge of industrial and construction safety throughout the work processes, but struggles to differentiate between concepts and substances.	Student demonstrates knowledge of industrial and construction safety throughout the work processes, but demonstrates a lack of clarity.	Student clearly and correctly demonstrates knowledge of industrial and construction safety throughout the work processes.	

Expected Outcomes 2B: Students completing the Baccalaureate degree in OSH&E will demonstrate the ability to obtain the necessary skills to anticipate, identify and evaluate safety, health, and environment hazards, and to develop and implement hazard control methods, programs, and system designs.

Performance Criteria	Below Expectations 1	Progressing to Criteria 2	Meets Criteria 3	Exceeds Criteria 4	Score¹
2B1. Students are able to utilize basic laboratory instrumentations associated with safety, health, and environment to develop and conduct experiments or test hypotheses, analyze and interpret data and use scientific judgment to draw conclusions.	Student fails to utilize basic laboratory techniques associated with safety, health, and environment to develop and conduct experiments or test hypotheses, analyze and interpret data and use scientific judgment to draw conclusions.	Student demonstrates the application of basic laboratory techniques associated with safety, health, and environment to develop and conduct experiments or test hypotheses, analyze and interpret data and use scientific judgment to draw conclusions, but struggles to differentiate between concepts and methods.	Student demonstrates the application of basic laboratory techniques associated with safety, health, and environment to develop and conduct experiments or test hypotheses, analyze and interpret data and use scientific judgment to draw conclusions, but demonstrates a lack of clarity.	Student clearly demonstrates and correctly applies basic laboratory techniques associated with safety, health, and environment to develop and conduct experiments or test hypotheses, analyze and interpret data and use scientific judgment to draw conclusions.	
2B2. Students are able to anticipate, identify and evaluate hazardous agents, conditions, and practices.	Student fails to demonstrate how to anticipate, identify and evaluate hazardous agents, conditions, and practices.	Student demonstrates how to anticipate, identify and evaluate hazardous agents, conditions, and practices, but struggles to differentiate between methods.	Student demonstrates different methods to anticipate, identify and evaluate hazardous agents, conditions, and practices, but demonstrates a lack of clarity.	Student clearly demonstrates and correctly applies different methods to anticipate, identify and evaluate hazardous agents, conditions.	
2B3. Students demonstrate knowledge and skills of fundamental exposure assessment and environmental sampling techniques.	Student fails to demonstrate knowledge and skills of fundamental exposure assessment	Student demonstrates the basics of exposure assessment and environmental sampling techniques,	Student demonstrates different fundamental exposure assessment and environmental sampling techniques,	Student clearly demonstrates fundamental exposure assessment and	

	and environmental sampling techniques.	but struggles to differentiate between methods.	but demonstrates a lack of clarity.	environmental sampling techniques.	
2B4. Students are able to develop control designs, methods, procedures, and programs to eliminate or mitigate safety, health, and environmental hazards.	Student fails to demonstrate how to develop hazard control designs, methods, procedures, and programs.	Student demonstrates how to develop hazard control designs, methods, procedures, and programs, but struggles to differentiate between concepts and methods.	Student demonstrates different means to develop hazard control designs, methods, procedures, and programs, but demonstrates a lack of clarity.	Student clearly demonstrates and correctly develops hazard control designs, methods, procedures, and programs.	
2B5. Students are able to conduct accident/incident investigation and analysis.	Student fails to demonstrate how to conduct accident/incident investigation and analysis.	Student demonstrates how to conduct accident/incident investigation and analysis, but struggles to differentiate between theories, models and methods.	Student demonstrates different theories, models and methods to conduct accident/incident investigation and analysis, but demonstrates a lack of clarity.	Student clearly demonstrates and correctly conducts accident/incident investigation and analysis.	
2B6. Students are able to implement and manage effective safety, health, and environment programs.	Student fails to demonstrate how to implement and manage effective safety, health, and environment programs.	Student demonstrates how to implement and manage effective safety, health, and environment programs, but struggles to differentiate between elements.	Student demonstrates different elements to implement and manage effective safety, health, and environment programs, but demonstrates a lack of clarity.	Student clearly demonstrates and correctly implements and manages effective safety, health, and environment programs.	

Objective 3: Become effective communicators and ethical facilitators within the practice of safety, health, and environment.

Expected Outcomes: Students completing the Baccalaureate degree in OSH&E will demonstrate the ability to express thoughts effectively in oral and written communications, and to demonstrate ethical behaviors and professional responsibility.

Performance Criteria	Below Expectations 1	Progressing to Criteria 2	Meets Criteria 3	Exceeds Criteria 4	Score¹
1. Students are able to effectively express thoughts in oral and written communications.	Student fails to effectively express thoughts in oral and written communications.	Student expresses thoughts in oral and written communications, but struggles to demonstrate the effectiveness.	Student generally effectively expresses thoughts in oral and written communications, but demonstrates a lack of consistency.	Student consistently and effectively expresses thoughts in oral and written communications.	
2. Students demonstrate knowledge of the techniques, skills, and modern behavioral tools necessary for the practice of safety, health, and environment.	Student fails to demonstrate knowledge of the techniques, skills, and modern behavioral tools necessary for the practice of safety, health, and environment.	Student demonstrates knowledge of the techniques, skills, and modern behavioral tools necessary for the practice of safety, health, and environment, but struggles to differentiate between concepts and methods.	Student demonstrates knowledge of the techniques, skills, and modern behavioral tools necessary for the practice of safety, health, and environment, but demonstrates a lack of clarity.	Student clearly demonstrates knowledge of the techniques, skills, and modern behavioral tools necessary for the practice of safety, health, and environment.	
3. Students are able to effectively function as a part of multi-disciplinary teams that establish goals, plan tasks, meet deadlines, and analyze risk and uncertainty.	Student fails to effectively function as a part of multi-disciplinary teams that establish goals, plan tasks, meet deadlines, and analyze risk and uncertainty.	Student functions as a part of multi-disciplinary teams that establish goals, plan tasks, meet deadlines, and analyze risk and uncertainty, but struggles to demonstrate the effectiveness.	Student generally effectively functions as a part of multi-disciplinary teams that establish goals, plan tasks, meet deadlines, and analyze risk and uncertainty, but demonstrates a lack of consistency.	Student consistently and effectively functions as a part of multi-disciplinary teams that establish goals, plan tasks, meet deadlines, and analyze risk and uncertainty.	

<p>4. Students demonstrate knowledge of professional and ethical responsibility.</p>	<p>Student fails to demonstrate knowledge of professional and ethical responsibility.</p>	<p>Student demonstrates knowledge of professional and ethical responsibility, but struggles to differentiate between concepts.</p>	<p>Student demonstrates knowledge of professional and ethical responsibility, but demonstrates a lack of clarity.</p>	<p>Student clearly demonstrates knowledge of professional and ethical responsibility.</p>	
<p>5. Students demonstrate knowledge of contemporary issues.</p>	<p>Student fails to demonstrate knowledge of contemporary issues.</p>	<p>Student demonstrates knowledge of contemporary issues, but struggles to differentiate between concepts.</p>	<p>Student demonstrates knowledge of contemporary issues, but demonstrates a lack of clarity.</p>	<p>Student clearly demonstrates knowledge of contemporary issues.</p>	

Objective 4: Continue professional development to address the need of applying principles of safety, health, and environment within a constantly changing and increasingly diverse environment.

Expected Outcomes: Students completing the Baccalaureate degree in OSH&E will demonstrate the ability to broaden education and life-long learning necessary to understand safety, health, and environment issues within a global and social context.

Performance Criteria	Below Expectations 1	Progressing to Criteria 2	Meets Criteria 3	Exceeds Criteria 4	Score¹
1. Students are encouraged to become members of ASSP (American Society of Safety Professionals) Southeastern Louisiana University Student Section and be actively involved in the events and activities organized by the Student Section. At least 50% of upper-level students are ASSP members.	Student shows no interest in becoming a member of ASSP Southeastern Louisiana University Student Section and is not involved in the events and activities organized by the Student Section. Lower than 50% of upper-level students are ASSP members.	Student is interested in becoming a member of ASSP Southeastern Louisiana University Student Section and is involved in the events and activities organized by the Student Section, but does not become a member eventually. Close to 50% of upper-level students are ASSP members.	Student becomes a member of ASSP Southeastern Louisiana University Student Section and is generally actively involved in the events and activities organized by the Student Section. At least 50% of upper-level students are ASSP members.	Student becomes a member of ASSP Southeastern Louisiana University Student Section and is consistently actively involved in the events and activities organized by the Student Section. 75% of upper-level students are ASSP members.	
2. Students are encouraged to continue professional growth and improvement by pursuing the widely recognized certifications including, but not limited to: Certified Safety Professional (CSP) and Certified Industrial Hygienist (CIH); and/or by pursuing master's/doctoral degrees in environmental, health, and safety and similarly named programs. As measured on the Southeastern Alumni Survey,	Student shows no interest in continuing professional growth and improvement by pursuing the widely recognized certifications including CSP and CIH; and/or by pursuing master's/doctoral degrees in environmental, health, and safety and	Student is interested in continuing professional growth and improvement by pursuing the widely recognized certifications including CSP and CIH; and/or by pursuing master's/doctoral degrees in environmental, health, and safety and	Student takes early steps to continue professional growth and improvement by pursuing the widely recognized certifications including CSP and CIH; and/or by pursuing master's/doctoral degrees in environmental, health, and safety and	Student consistently continues professional growth and improvement by pursuing the widely recognized certifications including CSP and CIH; and/or by pursuing master's/doctoral degrees in environmental, health, and safety and	

at least 50% of the OSH&E graduates will become CSPs and/or CIHs.	similarly named programs. As measured on the Southeastern Alumni Survey, lower than 50% of the OSH&E graduates will become CSPs and/or CIHs.	similarly named programs. As measured on the Southeastern Alumni Survey, close to 50% of the OSH&E graduates will become CSPs and/or CIHs.	similarly named programs. As measured on the Southeastern Alumni Survey, 50% of the OSH&E graduates will become CSPs and/or CIHs.	similarly named programs. As measured on the Southeastern Alumni Survey, 75% of the OSH&E graduates will become CSPs and/or CIHs.	
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