

Assessment 6: This assessment measures a candidate's ability to plan and organize a safe learning environment for science students. This is one of two measures designed to meet NSTA Standard 9 Safety and Welfare.

Candidates complete the safety unit while enrolled in BIO/CHE 435 Methods of Science Teaching. The instructor will evaluate the unit using the following rubric. In order to earn recommendation, a candidate must not score an unacceptable rating in any one category. For the purpose of scoring the scores will be multiplied by 3. The maximum number of points a student can earn is 132. In order to pass this assignment, candidates must earn 96 point out of a possible 132 points and have no unacceptable ratings in any one category. In order to earn a passing score in the course Methods of Science Teaching, a student must earn an acceptable rating on this assignment.

Requirement	Unacceptable (0 Points)	Exemplary (3-4 Points)	Score	Score x 3
Guidelines for students to have for working safely in the science classroom	Guidelines not present or incomplete	Guidelines are complete and thorough		
Safety quiz for students	Not present	Safety quiz is present		
Design/plan	Not Present or incomplete	A design/plan of a typical science classroom/lab that pinpoints safety issues, such as chemical storage, projected traffic of students in the classroom, living organism placement, emergency exit information, eyewash, shower, fire extinguishers, fire blanket and similar information. In addition candidate describes how to maintain electrical equipment and treat or respond to emergencies.		
Safety contract	Not Present or incomplete	A safety contract that explains the basic safety procedures and features of the science classroom. This contract should be constructed for the signature of parents and students.		
Safe and humane treatments of animals in classroom	Not Present or incomplete	Describes in a summary, the legal and ethical treatment of living organisms. In addition, describes legal restrictions on the collection of living things both domestic and wild.		
Safety plan for storing, handling and disposal of chemicals	Not Present or incomplete	A safety plan explaining safe storage, handling and disposal of chemicals is present. A list of typical chemicals for an appropriate grade level should be generated with copies of MSDS sheets for 5 common chemicals used at this level. Explain the safe storage, handling and disposal of these chemicals. List three sources (other than MSDS		

		sheets) that contain information on how to safely store, handle and dispose of chemicals.		
Behavior management plan	Not Present or incomplete	Include special precautions, special rules for handling chemicals and lab equipment, proper behavior in lab conditions and working with living or non-living organisms, positive/negative consequences for behavior, use of safety equipment and other pertinent information. This is a pro-active plan to prevent behavior that would be unsafe.		
Videos on safety	Not Present or incomplete			
Principles of liability and negligence.	Not Present or incomplete	Describes the principles of liability and negligence. In addition, candidate describes methods for meeting these obligations. These include but are not limited to proper supervision of students, ensuring student knowledge of safe procedures, managing student behaviors, responding to student injuries, and ensuring the safety of students with handicaps and/or medical conditions.		
Fire extinguisher	Not Present or incomplete	Explain how to use a fire extinguisher from this label. Describe the types of fire extinguishers. What type is most likely to be found in a science classroom? How often should it be inspected?		
	<u>Unacceptable (0points)</u>	<u>Acceptable (1-2 points)</u>	<u>Exemplary (3-4 points)</u>	
Safety exam	Score below 70%	Scores Between 70 and 89 %	Scores above 90%	
score				

In order to pass this assignment, you must earn 96 point out of a possible 132 points and have no unacceptable ratings in any one category.

Assessment 6

Safety Unit

Name

Date

Overall score

Requirement	Score	Score x 3	comments
Guidelines for students to have for working safely in the science classroom			
Safety quiz for students			
Design/plan			
Safety contract			
Safe and humane treatments of animals in classroom			
Safety plan for storing, handling and disposal of chemicals			
Behavior management plan			
Videos on safety			
Principles of liability and negligence.			
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score			