

6/12/09

Applied Science Programmatic Student Learning Outcomes	Assessed Courses	Assessment Tool	Performance Goal	Timetable
Communicate effectively within the scientific community	CHEM 101  BIOL 103L  NASC 499	<ul style="list-style-type: none"> <li>• Public school presentation rubric</li> <li>• Scientific publication format lab report rubric</li> <li>• Poster, oral, and written report rubrics</li> <li>• Exit survey item</li> </ul>	<ul style="list-style-type: none"> <li>• 80% will score a 4 or better on a 5 point scale</li> <li>• 80% will achieve a 70% or better</li> <li>• 80% will score a 4 or better on a 5 point scale</li> <li>• 70% will rate this item 4 or above on a 5 point scale</li> </ul>	Fall and spring  Fall  Spring
Demonstrate comprehension of the fundamental principles of chemistry, biology, physics, and mathematics	BIOL 101,102 CHEM 101,102  PHYS 201/223L  PHYS 202/224L  NASC 499	<ul style="list-style-type: none"> <li>• Post test</li> <li>• Force Concepts Inventory</li> <li>• Final comprehensive exam</li> <li>• Exit survey item</li> </ul>	<ul style="list-style-type: none"> <li>• 80% will achieve a 70% or better</li> <li>• 80% will achieve 15% of max gain</li> <li>• 80% will score 70% or better</li> <li>• 70% will rate this item 4 or above on a 5 point scale</li> </ul>	Fall (BIOL/ CHEM 101) Spring(BIOL/ CHEM 102)  Fall  Spring  Spring
Demonstrate proficiency in the use of common scientific instruments and/or protocols	BIOL 103L  BIOL 204L  NASC 499	<ul style="list-style-type: none"> <li>• Scientific publication format lab report rubric</li> <li>• Practical technique exams</li> <li>• Exit survey item</li> </ul>	<ul style="list-style-type: none"> <li>• 80% will achieve a 70% or better</li> <li>• 80% will score a 70% or better</li> <li>• 70% will rate this item 4 or above on a 5 point scale</li> </ul>	Fall  Spring  Spring
Demonstrate the ability to find and use scientific information	BIOL 103L  NASC 499	<ul style="list-style-type: none"> <li>• Scientific publication format lab report rubric</li> <li>• Poster, oral, and written report rubrics</li> <li>• Exit survey item</li> </ul>	<ul style="list-style-type: none"> <li>• 80% will achieve a 70% or better</li> <li>• 80% will score a 4 or better on a 5 point scale</li> <li>• 70% will rate this item 4 or above on a 5 point scale</li> </ul>	Fall  Spring
Design and execute a research project	NASC 499	<ul style="list-style-type: none"> <li>• Research mentor rubric</li> <li>• Exit survey item</li> </ul>	<ul style="list-style-type: none"> <li>• 80% will score a 4 or better on a 5 point scale</li> <li>• 70% will rate this item 4 or above on a 5 point scale</li> </ul>	Spring
Solve problems using logic, reasoning, and critical thinking skills	CHEM 103L  PHYS 201/223L  NASC 499	<ul style="list-style-type: none"> <li>• Lab exercise problems</li> <li>• Final comprehensive exam</li> <li>• Exit survey item</li> </ul>	<ul style="list-style-type: none"> <li>• 80% will score a 70% or better</li> <li>• 75% will score a 70% or better</li> <li>• 70% will rate this item 4 or above on a 5 point scale</li> </ul>	Fall  Fall  Spring

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Exhibit ethical and professional behavior	NASC 499	<ul style="list-style-type: none"><li>• Embedded items on the poster, oral, mentor, and written report rubrics</li><li>• Score on Turn It In (citations and quotations excluded)</li><li>• Exit survey item</li></ul>	<ul style="list-style-type: none"><li>• 100% will score a 4 or better on a 5 point scale</li><li>• 100% will have a similarity score of 20% or less</li><li>• 70% will rate this item 4 or above on a 5 point scale</li></ul>	Spring