



Academic Learning Compact

Degree Program: **Chemistry (BS) (CIP Code 40.0501)**

Intended Program Student Learning Outcomes	Academic Learning Compact(s)	Direct and Indirect Measures	
		Direct Method of Assessment	Indirect Method of Assessment
Graduate students will demonstrate: Chemical Literature/Information Management Skills: By their ability to retrieve information efficiently and effectively, search the chemical literature with a wide variety of chemical data bases, evaluate technical articles critically and manage many types of chemical information.	Discipline Specific Knowledge	Direct - Grading with Criteria or Rubric Direct - Senior Thesis or Major Capstone Project	Indirect - Student Satisfaction Survey

<p>Graduating students will demonstrate:</p> <p>Communication Skills: By their ability to present scientific information in a clear, simple and organized manner; write well-organized, current and concise reports/research thesis in a scientifically appropriate style, and use relevant technology to communicate.</p>	<p>Communication</p>	<p>Direct - Grading with Criteria or Rubric</p>	<p>Indirect - Student Satisfaction Survey</p>
<p>Graduate students will demonstrate:</p> <p>Ethics Skills: By a proper understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary scientific information.</p>	<p>Discipline Specific Knowledge</p>	<p>Direct - Grading with Criteria or Rubric</p>	<p>Indirect - Student Satisfaction Survey</p>
<p>Graduate students will demonstrate:</p> <p>Laboratory Safety Skills: By applying the concepts of safe laboratory best practices in their laboratory and research work.</p>	<p>Discipline Specific Knowledge</p>	<p>Direct - Grading with Criteria or Rubric</p>	<p>Indirect - Student Satisfaction Survey</p>
<p>Graduating students will demonstrate Problem Solving Skills:</p> <p>By applying their understanding of sub-disciplines in chemistry (analytical chemistry,</p>	<p>Critical Thinking</p>	<p>Direct - Grading with Criteria or Rubric</p>	<p>Indirect - Student Satisfaction Survey</p>

<p>biochemistry, inorganic chemistry, organic chemistry, physical chemistry) and using appropriate laboratory skills and instrumentation to solve problems</p>			
<p>Graduate students will demonstrate: Team Skills: By their ability to interact effectively and professionally in a group to solve scientific problems and work productively with a diverse group of peers.</p>	<p>Communication, Discipline Specific Knowledge</p>	<p>Direct - Grading with Criteria or Rubric</p>	<p>Indirect - Student Satisfaction Survey</p>