

I= Introduced

Knowledge, skill, or behavior students can demonstrate upon program completion	Courses Mapped to Outcomes					
	Chem 311 Biochemistry I	Chem 314 Biochemistry II	Chem 315 Biochemistry Lab	Bio 366 Molecular Bio and Lab	Chem 343 Physical Chemistry I	Chem 345 Physical Chem Lab I
<p>Fundamental Knowledge: Students will demonstrate knowledge in all major fields of chemistry (analytical, biochemistry, inorganic, organic, and physical) and in broad biological topics (organismal, cellular, molecular and genetic levels of biological organization).</p>	R	M	M	R	R	R
<p>Practical Skills and Safety: Students will show understanding in the theory and practice of laboratory techniques and major instrumentation, and will use safe procedures in a biology, chemistry and biochemistry laboratory.</p>	R	R	M	M	R	M
<p>Analytical Skills: Students will demonstrate problem-solving skills, biological and chemical</p>						

will express confidence in their abilities to engage in scientific inquiry.						
Scientific Communication Skills: Students will show proficiency in scientific communication including laboratory notebooks, laboratory reports, research proposals, journal articles, oral and poster presentations, and working in groups.	R	R	R	R	R	M
Professional outcomes: Students will demonstrate an understanding of the connections between biochemistry and other science disciplines. Students will have a successful transition to their post-college activities.	I	R	M	R	R	R

Program Learning Outcomes: Assessment Tools

Program Name: Biochemistry & Molecular Biology

Date: 5/12/2020

Program Learning Outcomes Knowledge, skill, or behavior students can demonstrate upon program completion	Measurement Tool	Timeline/Frequency of Assessment	Target	Review
<p>Fundamental Knowledge: Students will demonstrate knowledge in all major fields of chemistry (analytical, biochemistry, inorganic, organic, and physical) and in broad biological topics (organismal, cellular, molecular and genetic levels of biological organization).</p>	<p>a. ACS (American Chem Society) Exams: Chem 125/6 and 131 (gen chem), Organic 255, Biochemistry 314, Phys Chem 343. Elective upper courses (322-Inorg, 331-Analyt).</p> <p>b. American Society of Biochemistry and Molecular Biology (ASBMB) Final exam (national)</p>	<p>a. Every year</p> <p>Bi Students take ASBMB exam Ser Every year</p>	<p>Chem 125/6: average above 50th percentile</p> <p>314: average above 65th percentile</p> <p>Bio: Cohort we 6e am wviv .6 (w)irov 49.76 402.6 Tmn2.6 Tmp0 97 (4)2 (:)1.3 (a)12.3 (</p>	

Scientific Inquiry Skills: