

Biochemistry Program Curriculum Map

Title of Course	SLO1	SLO2	SLO3	SLO4
Biol 111: Fund. Bio. I Lect/Lab	×	×	×	
Biol 112: Fund. Bio. I Lect/Lab	×	×	×	
Chem 116: General Chem. I Lect/Lab	×	×	×	
Chem 117: General Chem. II Lect/Lab	×	×	×	
Phys 116: Physics I w/ Calc. Lect/Lab	×	×	×	
Phys 117: Physics II w/ Calc. Lect/Lab	×	×	×	
Chem 211: Organic Chem. I Lect/Lab	×	×	×	
Chem 213: Organic Chem. II Lect/Lab	×	×	×	
Biol 332: Genetics Lect/Lab	×	×	×	
Chem 324: Quant. Chem. Analyt. Lect/Lab	×	×	×	×
Biol 407: Cell & Mol. Bio. Lect/Lab	×	×	×	×
Chem 350: Phys. Chem. I Lect/Lab	×	×	×	
Chem 425: Biochem. I Lect	×			
Chem 446: Biochem. II Lect	×			×
Chem 430: Experimental Biochem. Lab	×	×	×	
Srsh 301/302/401/402: TAS Research Honors**			×	

Student Learning Goals & Outcomes

After successfully completing the biochemistry program, the students will be able to:

Goal 1. Demonstrate a broad chemical knowledge base that stresses scientific reasoning and analytical problem solving.

Outcome 1. Demonstrate a comprehensive knowledge of chemical, biological and biochemical sciences.

Goal 2. Effectively communicate scientific information.

Outcome 2. Write comprehensive laboratory reports that follow ACS guidelines for publishing academic material.

Outcome 4. Demonstrate their ability to search for, comprehend and critically evaluate scientific literature through writing assignments and classroom presentations.

Goal 3. Demonstrate competency in the laboratory skills necessary to acquire, analyze and interpret experimental results.

Outcome 3. Use laboratory techniques to perform experimental procedures and have a working knowledge of modern instrumentation in the area of biochemical research.

*Learning Outcomes 2 and 4 involve information literacy.

Chem 425, Chem 446 and Chem 430 (shaded in gray) are the main courses that will be assessed independently for the biochemistry program. The findings from the assessment measures will be analyzed together with assessment findings from the chemistry and biology programs, as necessary, to generate a complete assessment analysis for the biochemistry program.

**Srsh 301/302/401/402 are recommended elective courses offered by the TAS undergraduate research program. Since they are not requirement courses for biochemistry majors, not all of the students majoring in biochemistry will take these courses. The assessment data will be collected

for biochemistry students who take these courses and will be utilized as selected sample assessment data to improve the TAS undergraduate research program (TAS Research Honors), which is significantly beneficial for biochemistry majors.