

## Program Level Assessment: Annual Report

Program Name (no acronyms)	Chemical Biology & Pharmacology	Department:	Chemistry
Degree or Certificate Level:	BS	College/School:	College of Arts & Sciences
Date (Month/Year)	August 2023	Assessment Contact:	Chris Arnatt
In what year was the data upon which this report is based collected?	2022-2023		
In what year was the program's assessment plan most recently reviewed?	New program approved in 2018		
Program assessment feedback	2023		

### 1. Student Learning Outcomes

Which of the program's student learning outcomes were assessed in this annual assessment cycle? (Please list the full, complete learning outcome statements and not just numbers, e.g., Outcomes 1 and 2.)

SLU graduates with a BS degree in Chemical Biology & Pharmacology will be able to:

1. Explain major principles in organic chemistry, biochemistry, and pharmacology
2. Conduct laboratory techniques and experiments safely
3. Analyze quantitative data
4. Apply chemistry principles to biology
5. Articulate scientific results in both oral and written forms

Learning outcomes highlighted in BOLD font were assessed in this annual cycle.

This is the fourth year for the program. In Year 1, learning outcomes 1 and 2 were evaluated. In Year 2, outcomes 3 and 4 were evaluated.

Data was collected by course instructors and is summarized on the attached spreadsheet

Data was analyzed by the Chemical Biology Program Coordinator and reported to department faculty for feedback

#### 4. Data/Results

What were the results of the assessment of learning outcome(s)? Please be specific on achievement difference by teaching modality (e.g., online vs. face-to-face) or on-ground location (e.g., STL campus, Madrid campus, other off campus site)

For Outcome 1: 3 out of 4 students exceeded expectations and 1 out of 4 students met expectations. For Outcome 2: 2 out of 5 students exceeded expectations, 2 out of 5 students met expectations.

Generally speaking, there are no major concerns given ~95% of our students are meeting or exceeding expectations.

7. Closing the Loop: Review of Previous Assessment Findings and Changes

A. What is at least one change your program has implemented in recent years as a result of assessment data?

No specific changes to the program have been made as this is only the first year of the program

B. How has this change been assessed?

n/a

**Course Performance - BS Students****Academic Year 2022-2023****Program Year 4****Assessment Cycle: Year 3**

Year 1: Learning outcomes 1 and 2

Year 2: Learning outcomes 3 and 4

Year 3: Learning outcome 5

Year 4: Learning outcomes 1 and 2

Outcome 1: Explain major principles in organic chemistry, biochemistry, and pharmacology							
Data Source	>90% - Exceeds Expectations	70 - 89% - Meets Expectations	65 - 69% - Approaching Expectations	<65% - Not meeting expectations	Total	Assesment	Notes
CHEM 2440 Organic Chem	3	1			4		Taken from Spring 2023
CHEM 4620 Biochemistry	2	2		1	5		Taken from Spring 2023
CHEM 4470 Med Chem	1	5			6		Taken from Spring 2023
PPY 4410 Molec Pharm	4	1			5		Taken from Spring 2023

Outcome 2: Conduct laboratory techniques and experiments safely							
Data Source	>90% - Exceeds Expectations	70 - 89% - Meets Expectations	65 - 69% - Approaching Expectations	<65% - Not meeting expectations	Total		Notes
CHEM 2445 Org Chem 2 Lab	1	4			5		Taken from Spring 2023
CHEM 4625 Biochem 2 Lab	2	2			4		Taken from Spring 2023
CHEB 3970 Undergrad Research	12	1	1		14		Taken from Fall 2022 and Spring 2023