

# Program Level Assessment: Annual Report

College/School SSE

Date (Month/Year) September 2022

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In what year was the data upon which this report is based collected? 2018-present

In what year was the program's assessment plan most recently reviewed? 2022

Is this program accredited by an external program/disciplinary/specialized accrediting organization? No

## 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.)

Year 2 assessment focuses on components of lab courses that are used as a measure of student learning. The following program student learning outcomes were assessed in this assessment cycle (Year 2):

#2 – Demonstrate proficiency of basic (general, organic, and analytical, and biochemistry) laboratory techniques and conduct laboratory experiments safely (in assessment plan).

#3 – Collect, interpret, and analyze quantitative data (c and e in assessment plan).

#4 – Communicate scientific results effectively

## 2. Assessment Methods: Artifacts of Student Learning

Which artifacts of student learning were used to determine if students achieved the outcome(s)? Please describe and identify the course(s) in which these artifacts were collected. Clarify if any such courses were offered a) online b) at the Madrid campus or c) at any other off-campus location.

Data collected includes:

Outcome #2 – Score on safety exam in Gen Chem Lab 1&2, scoring rubric for Gen Chem 2 lab Boiling Point Elevation, scoring rubric (technique points section) for Org Lab (Lab 7: E1/E2 elimination), score on safety exam in Orgo Lab 1&2, semester score in Analytical 1 Lab, and scoring rubric (results section) for Biochem 1 Lab (unknown amino acid identification using acid-base titrations and TLC)

Outcome #3 – Semester score in Analytical 1 Lab and scoring rubric (results, discussion, and conclusions sections) for Biochem 1 Lab (unknown amino acid identification using acid-base titrations and TLC)

Outcome #4 – End of semester presentation in Orgo 1 Lab (rubric) and scoring rubric for Biochem 1 Lab (unknown



areas of expertise (general chemistry, organic, inorganic, analytical, physical, and biochem). Additional information may result from these discussions.

B. How specifically have you decided to use these findings to improve teaching and learning in your program? For example, perhaps you've initiated one or more of the following

Changes to the  
Curriculum or  
Pedagogies

Course content  
Teaching techniques  
Improvements

Assessment Plan