

Program-Level Assessment: Annual Report

Program: MA

Department: Chemistry

Degree or Certificate Level: Graduate

College/School: Arts and Sciences

Date (Month/Year): 6/2020

Primary Assessment Contact: Scott Martin and Dana Baum

In what year was the data upon which this report is based collected? 2019 – 2020 Academic Year

In what year was the program's assessment plan most recently reviewed/updated? 2018

1. Student Learning Outcomes

Which of the program's student learning outcomes were assessed in this annual assessment cycle?

Outcome 3: Communicate scientific findings from literature in writing and oral presentation.

Outcome 5: Adhere to accepted ethical and professional standards in chemistry.

2. Assessment Methods: Student Artifacts

Which student artifacts were used to determine if students achieved this outcome? Please 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.

For Outcome 3, performance on a class project/presentation was collected. Assessment data was typically in the form of a rubric from the course instructor. For this outcome, only 1 course for the year had MA students enrolled, CHEM 5470 Medicinal Chemistry. However, due to course modifications due to moving online with the COVID-19 situation, this outcome was not assessed.

For Outcome 5, we intend to develop an online ethics module. However, this work has not yet been completed and thus was not assessed.

Madrid does not have a graduate program in Chemistry.

3. Assessment Methods: Evaluation Process

What process was used to evaluate the student artifacts, and by whom? Please identify the tools(s) (e.g., a rubric) used in the process and include them in/with this report.

Due to COVID-19, it was not possible to collect the required data for planned assessment.

Data was provided to Department's Assessment Committee.

4. Data/Results

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

No assessment data was collected.

It should be noted that the size of the MA program is small (typically less than 5 students), which may skew any possible findings for the program.

5. Findings: Interpretations & Conclusions

What have you learned from these results? What does the data tell you?

Due to the rapid switch to online teaching in Spring 2020, we were unable to adjust the presentation aspect of courses that would have been used for assessment. As we work to develop courses for online delivery in the fall, we recommend faculty adjust their rubrics to allow for alternative methods of communication.

6. Closing the Loop: Dissemination and Use of Current Assessment Findings

A. When and how did your program faculty share and discuss these results and findings from this cycle of assessment?

The results of the assessment will be shared with the full faculty during our annual department retreat later this summer.

B. How specifically have you decided to use 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 in technology
- Prerequisites

- Course sequence
- New courses
- Deletion of courses
- Changes in frequency or scheduling of course offerings

Changes to the Assessment Plan

- Student learning outcomes
- Student artifacts collected
- Evaluation process

- Evaluation tools (e.g., rubrics)
- Data collection methods
- Frequency of data collection

Please describe the actions you are taking as a result of the findings.

None at this time.

If no changes are being made, please explain why.

Data will be shared with all of our faculty during our annual retreat, which is held after the submission of this report. Actions may be proposed at that time.

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?

This is the first year assessing these outcomes using these metrics, so we have not implemented changes based on them at this time.

B. How has this change/have these changes been assessed?

N/A

C. What were the findings of the assessment?

N/A

D. How do you plan to (continue to) use this information moving forward?

N/A

IMPORTANT: Please submit any assessment tools and/or revised/updated assessment plans along with this report.