



Associate Professor Brad Steinmetz  
Chair, Arts and Sciences Curriculum Committee

April 18, 2023

Dear Professor Steinmetz and Members of the Arts and Sciences Curriculum Committee:

On April 12, 2023, the Natural and Mathematical Sciences Panel reviewed a request from the Department of Chemistry & Biochemistry to revise the Chemistry Masters of Science (M.S.) degree to create a new graduation track, and to update the program to align with current practices and standards. The revisions are as follows:

- 1) To remove the statement “The Department of Chemistry does not award a non-thesis M.S. degree” and to define a graduation path for a non-thesis M.S. degree based on completion of candidacy.

Students who have completed their Ph.D. candidacy exam in the Chemistry Graduate Program have completed their coursework requirements and have been evaluated on their research accomplishments and knowledge of their research area. The requirement to write and defend an additional M.S. thesis creates a barrier and delay to graduation. This leads to some students leaving the program with no degree at all.

Defining a non-thesis M.S. degree path based on completion of candidacy removes this barrier for this subset of students. It also brings Chemistry in line with peer graduate programs within the university (interdisciplinary graduate programs whose students share laboratories with Chemistry students) that have candidacy-based M.S. options.

- 2) Alter the listed course numbers for departmental seminar requirements to reflect the current course offerings for seminar courses in disciplinary tracks.
- 3) Remove the requirement for first year placement exams prior to course enrollment; these were discontinued in 2020 as they did not correlate well with success in coursework or the program.
- 4) Remove the option for selecting a primary research advisor outside of the department with a departmental co-advisor; in practice, this has not happened in over 15 years.
- 5) Revise and clarify the timeline for finding a new research advisor if a student leaves a research group or an advisor resigns from that relationship, to allow students 7 weeks to find a new advisor, and to specify the term of financial support. The old language was ambiguous, and caused practical problems with graduate appointments when separation occurs in the middle of a semester.

- 6) Withdraw the requirement for students to take first year oral examinations (FYOE) in their first year of study for students who have committed to the thesis M.S. pathway. Since FYOE have the goal of evaluating progress towards requirements for the Ph.D. program, they are not appropriate for students who have the goal of a thesis-based M.S. degree.
- 7) Previously, there were no formal learning outcomes for the thesis-based M.S. degree; learning outcomes are now included.

The NMS Panel voted unanimously to approve the request and the proposal is now advanced to the ASCC with a motion to approve.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jennifer Ottesen', with a long horizontal flourish extending to the right.

Jennifer Ottesen  
Associate Professor  
Department of Chemistry & Biochemistry  
Chair, ASCC Natural & Mathematical Sciences Panel