# CHEM 798B: Second Year Milestone

Meeting times: Not Applicable
Instructor of Record: Director of Graduate Studies (DGS)
Credit hours: 3

# Course Description

CHEM 798B: Second Year Milestone is a required course that reflects learning and achievement related to the qualifying exam for candidacy in chemistry. The qualifying exam is an important checkpoint to demonstrate that students are on a promising research track towards the PhD.

Specifically, that means students will show their development of basic research skills, and knowledge of the literature. Progress and results in research thus far should be presented and reviewed as part of the exam. Committees may consider the realities of research progress – false starts, challenges, roadblocks – in conversation with the student's work ethic and motivation. That is, students whose research has not yet been an unqualified success may still be successful in the milestone when they are prepared to show how their work is contributing to increased understanding and how they are problem-solving on a path to eventual success.

Taken together, the research committee will rely on the written and oral components of the exam to consider whether the student is on track to enter candidacy and to eventually produce original scholarly work appropriate to the dissertation.

# Grading

This course is graded on an S / U scale. Holistically, the committee will seek to evaluate the student's scientific maturity, work ethic, perseverance, and promise.

**OVERALL GRADING CRITERIA**

**Satisfactory –** Students who successfully complete the oral and written components of the Second Year Milestone will receive an "S" grade.

**Unsatisfactory** - Students who do not successfully complete any portion of the Second Year Milestone will receive a "U" grade.

Student should refer to the SYQE grading form on the Path to the PhD page of the chemistry website for specifics.

# Timeline

CHEM 798B does not meet and students are expected to set their own timeline for completing the required effort. The written component is due to the committee at least one week before the oral presentation and no later than **February 1**. Students must schedule an oral defense of the proposal to their research committee no later than **March 1**. The oral presentation is a closed-door defense.

# Course Goals

By the end of this course, graduate students should have gained experience in summarizing and presenting their research progress in regard to:

- General Knowledge of the Field
- Progress
- Results
- Design
- Technical proficiency
- Problem solving

# Requirements for Written Component

The sections outlined in the attached chart are loose guidelines intended to help students and their advisor choose the best method for sharing their accomplishments. Appropriate figures, schemes, and/or references may exceed the suggested 10 to 12-page limit; students are required to include appropriate references and should consult with their primary research mentor on this aspect of the proposal. In some sub-areas of chemistry, it is appropriate to include supporting materials that describe detailed methods, as well as spectroscopic characterization, computational details, and diffraction data. Consult with your mentor to confirm if a supporting information document accompanying the written document is relevant for your work.

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| **Abstract** | 1 paragraph | Your abstract should address the question: "What is the significance of your experiments and what did you accomplish?"<br>• 1-2 sentence objective<br>• 3-4 sentence summary of results<br>• 1-2 sentences about conclusions |
| **Introduction** | 2-3 pages | • Introduction of the problem<br>• Background/precedents that your work builds on |
| **Results & Discussion** | 4-6 pages | • What you have accomplished<br>• What your experiments show<br>• How you drew your conclusions from your data |
| **Conclusion & Future Work** | 1 page | • Revisit the question of "what is the significance of your experiments and what did you accomplish?"<br>• Explore directions for future work, including your dissertation project |

# Requirements for Oral Presentation

The student should arrange a room and time for the presentation of the Second Year Qualifying Exam, no later than March 1st of the 2nd year. The student is responsible for coordinating scheduling with the committee. The prepared oral presentation should be 20 minutes long with accompanying PowerPoint. The total exam should last about 50 minutes, allowing for about 30 minutes of discussion.

# Course Policies

**Concerns and grievances:** Any student may schedule a meeting with any member of the graduate team to discuss a concern or grievance they may experience. Students may also submit a formal grievance to the graduate committee. Please visit Section VI, Article 2 of the Chemistry Graduate Program Handbook for more information.

**Accessibility:** As the instructor of this course, I endeavor to provide an inclusive learning environment. I want every student to succeed. The Department of Accessibility Services (DAS) works with students who have disabilities to provide reasonable accommodations. It is your responsibility to request accommodations. In order to receive consideration for reasonable accommodations, you must register with the DAS at https://accessibility.emory.edu/students/.

Accommodations cannot be retroactively applied so you need to contact DAS as early as possible and contact me as early as possible in the semester to discuss the plan for implementation of your accommodations. For additional information about accessibility and accommodations, please contact the DAS at (404) 727-9877 or accessibility@emory.edu.

**Academic Integrity:** You are expected to uphold and cooperate in maintaining academic integrity as a member of the Laney Graduate School. By taking this course, you affirm your commitment to the Laney Graduate School Honor Code, which you can find in the Laney Graduate School Handbook. You should ensure that you are familiar with the rights and responsibilities of members of our academic community and with policies that apply to students as members of our academic community. Any individual, when they suspect that an offense of academic misconduct has occurred, shall report this suspected breach to the appropriate Director of Graduate Studies, Program Director, or Dean of the Laney Graduate School. If an allegation is reported to a Director of Graduate Studies or a Program Director, they are in turn required to report the allegation to the Dean of Laney Graduate School.