

CHEM 798C: Third Year Milestone

Meeting times: Not Applicable

Instructor of Record: Director of Graduate Studies (DGS)

Credit hours: 1

Course Description

CHEM 798C: Third Year Milestone is a required course that reflects learning and achievement related to the completion of three research pre-proposals alongside a research progress update. Pre-proposals are not full proposals or completely researched proposals. The pre-proposals provide an opportunity for scholars to develop skills related to hypothesis design, critical analysis of literature and finding innovative approaches to advancing their discipline. The goal is to help prepare scholars to successfully defend an original research proposal for the Fourth Year Milestone (CHEM 798D) for which this course is a pre-requisite.

CHEM 798B is a pre-requisite for this course.

Grading

This course is graded on an S / U scale.

Assessment of the pre-proposals will consider:

1. Importance of the problem and necessity for a new approach;
2. Novelty of the hypothesis;
3. Creativity and practicality of the scholar's approach to the problem;
4. Quality of the quad sheet presentation.

Assessment of research progress will consider the quality and quantity of results since the last committee presentation, understanding of the background literature, as well as the scholar's ability to address relevant questions related to the specific research and field. The expectation is that the scholar has shown evidence of growth in their research since completing the Second Year Milestone.

OVERALL GRADING CRITERIA

Satisfactory – Students who successfully complete the oral and written components of the Third Year Milestone, as well as the research update, will receive an “S” grade.

Unsatisfactory - Students who do not successfully complete any portion of the Third Year Milestone will receive a “U” grade.

Students should submit the [Third Year Milestone](#) grading form on the [Path to the PhD](#) page of to record their performance on the milestone.

Timeline

CHEM 798C does not meet and students are expected to set their own timeline for completing the required effort leading up to the following specific deadlines:

February 1: Students should submit a draft version of the pre-proposals to the research committee no later than this date.

February 15: Students should submit final versions of the pre-proposals to the committee no later than this date.

February 1 – April 30: Students should schedule an open presentation of the pre-proposals and their research progress in this window. The presentation must be advertised publicly to the chemistry community by [submitting an event to chemistry's online calendar](#). The evaluation portion will be closed-door. Students should also provide the research committee with a one-page written overview of research progress prior to the defense.

Prior to April 30: Students may revise or replace any individual pre-proposals that did not receive an "S" from the committee assessment to work towards earning three "S" grades. A new grade may require a second committee meeting, but this may be waived if each member of the committee individually approves a revised pre-proposal.

April 30: Three "S" grades on three pre-proposals must be achieved by this date in order to successfully complete CHEM 798C. The Third Year Milestone grading form must be submitted to the graduate program coordinator on or before this date.

Course Goals

By the end of this course, graduate students should be proficient at preparing and defending research ideas in the format of a "quad" sheet proposal. A [quad sheet format template](#) is available. Scholars should also be able to provide a thoughtful, concise update of research progress and results and address relevant questions from the research committee.

Requirements for Written Pre-Proposals

The written pre-proposals required for CHEM 798C must be presented in a quad sheet format. A [quad sheet format template](#) is available and covers the following four areas:

1. Objective and Motivation

Identify the gap in knowledge and its importance.

2. Hypothesis

What must be tested to achieve the objective?

3. Scientific/Technical Approach

Concisely describe a proof-of-principle experiment.

4. Impact

Describe the expected outcomes and new knowledge arising from the proposed research.

Note: Ideally, each quadrant will have a descriptive graphic and one (or a few) sentences of descriptive text.

One of the pre-proposals may describe the scholar's short-term proposed research activities specific to the research agenda of the primary research mentor's laboratory. The other two proposals must describe research ideas that are independent of the specific research aims of the primary research mentor's laboratory.

As described above, review of the proposals will focus on:

1. Importance of the problem, and necessity for a new approach;
2. Novelty of the hypothesis;
3. Creativity and practicality of the scholar's approach to the problem;
4. Quality of the quadrant chart presentation.

Requirements for Oral Presentation

The scholars should structure the oral presentation (with student-generated slides to guide discussion) as follows:

25 Minutes: Share highlights of research progress

15 Minutes (5 Minutes each): Short presentations of pre-proposals

15-20 Minutes: Closed discussion of the pre-proposals and research progress and assignment of S/U grade to each proposal

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.