

CHEM 599R: Research & Evaluation in Chemistry

Meeting times: Not Applicable

Instructor of Record: Director of Graduate Students

Credit hours: 1-12 hours; Refer to handbook for credit hour guidance

Course Description

CHEM599R is a variable credit course that reflects your research learning and progress each semester leading to the attainment of PhD candidacy. CHEM 599R is intended to reflect a student's overall participation and progress in their research in a given semester. This may encompass time spent in the lab and in group meetings and other relevant activities. Students enrolled in CHEM 599R should be in frequent communication with their primary research mentor and with other research colleagues.

Of Note: CHEM 599R does not reflect effort focused on the preparation of materials required for completion of the course CHEM798B: Second Year Qualifying Exam. However, these courses have significant overlap and shared relevance; students must enroll concurrently in CHEM 798B and CHEM 599R in the Spring of the second year.

Timeline

CHEM 599R specifically focuses on effort completed from the first day of classes through the last day of the exam period in a given semester. Students should attend to the time and attendance norms of their specific lab to determine how to spend their time.

Grading

Chem 504 is graded on an S / U scale. The primary research mentor evaluates research effort and works with the Director of Graduate students (the course Instructor of Record) to assign a mid-semester and final grade.

OVERALL GRADING CRITERIA

Satisfactory – Students who successfully complete all student responsibilities for CHEM 599R will receive an “S” grade. A mid-semester evaluation of “progressing well, no concerns” means the student is on track to receive an “S” grade at end of term.

Unsatisfactory - Students that do not complete all student responsibilities for CHEM 599R may receive a “U” grade. A mid-semester evaluation of “some concerns, will need improvement” or

“major concerns, needs significant improvement” means the student may not be on track to receive an “S” grade at end of term.

MIDSEMESTER EVALUATIONS

The primary research mentors will be asked to complete a mid-semester evaluation for each student enrolled in CHEM 599R. Students will be evaluated using the following scale:

- **Progressing Well, no concerns**
- **Some Concerns, will need improvement**
- **Major Concerns, needs significant improvement**

The Primary Research Mentor is encouraged to provide comments, directed to the student, that elaborate on the evaluation. Comments are required for an evaluation of “some concerns” or “major concerns” and, in this case, must offer feedback that addresses steps the student may take to address the concerns. Students are in turn required to carefully evaluate provided feedback and to work to address specific concerns.

Mid-semester evaluations will be shared with each student in a letter from the DGS. This letter will be placed the students’ electronic file shortly after the mid-point of the semester.

Attendance

Students are expected to work in the laboratory of their Primary Research Mentor and adhere to group attendance polices and norms.

The number of credit hours in which a student is enrolled provides a guideline for the minimum acceptable effort in CHEM 599R. One credit hour of CHEM 599R translates to approximately 3 hours per week of effort in research. However, students are advised that their research commitments in a given week may exceed this minimum and that additional effort in support of their professional development and the completion of the larger goals of the PhD – ultimately, the dissertation – will often demand more of their time than the effort reflected by CHEM 599R alone.

Semester	Credit Guidance	Approximate Effort
First year, first semester	0	0
First year, second semester	6	18 hrs/week
First year, summer semester	12	36 hrs/week
Second year, first semester	9	27 hrs/week
Second year, second semester	9	27 hrs/week
All other semesters*	12	12 hrs/week

**Students in candidacy should enroll in CHEM 799R*

Course Goals

The goal of CHEM 599R is for students to further develop and explore their research and research goals in pursuit of advanced training in chemistry, and, ultimately, the PhD. More broadly, the goal of CHEM 599R is to provide students with dedicated space for addressing the PhD program's Goals for Graduates and to work towards scientific leadership and research effort that forges new frontiers in chemistry. CHEM 599R is a repeatable course and a pre-requisite for CHEM 799R – these larger goals will build over time and students will see escalating proficiency and take on escalating responsibility as their enrollment continues.

Student Responsibilities

Students enrolled in CHEM 599R are expected to actively contribute to research in their lab and the development of their own research project(s). This includes, but is not limited to, working in designated laboratory spaces, attending group meetings, contributing to written work such as grants and papers as assigned, attending relevant seminars, reading relevant literature, and communicating regularly with the Primary Research Mentor and other stakeholders.

Students are expected to complete research learning in person except when granted explicit permission from the Primary Research Mentor to work off-site/remotely. Students are expected to adhere to all safety guidelines and laboratory policies.

More broadly, CHEM 599R is an opportunity for students to demonstrate escalating understanding of and responsibility for their own research project and their understanding of chemistry more broadly. Students should:

- Take ownership of their research project. This involves learning technical skills and know-how relating to the design and implementation of experiments, analysis of results, and communicating results and outcomes.
- Develop strong command of relevant literature from the broad community and also from the mentor's group.
- Learn how to communicate both in the form of scientific papers and also how to give scientific talks.
- Be organized and responsible in documenting research effort.
- Be a good citizen of the lab and the department.

Scholars are expected to carefully review any feedback from the Primary Research Mentor, especially in the form of the mid-semester evaluation.

Primary Research Mentor Responsibilities

The role of the Primary Research Mentor varies between each lab group as each mentor will have different mentorship styles and philosophies. However, all primary research mentors are expected to:

- Answer research questions and provide detailed and constructive feedback
- Help students develop their research questions and methods

- Provide a mid-semester evaluation of research effort in CHEM 599R
- Work with students, as needed, to develop realistic timelines for research goals

Other Requirements and Policies

TA Responsibilities and Research Efforts: TA responsibilities should be considered when evaluating research efforts of students. For example, students that have 20 hours of TA responsibilities a week, should be expected to complete more concentrated research effort that accounts for these responsibilities. Primary research mentors and students should discuss the impact of TA responsibilities on research and research expectations prior to taking on TA responsibilities.

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.

