Chemistry Research Grades

Senior research grades encompass several different components, including your research efforts, the quality of your thesis and your participation in Senior Seminar. This document is designed to convey our expectations of you in your research experience and to help you interpret your grades.

Research
A 4.0 student will:
- demonstrate independent intellectual involvement in his or her project
- show evidence of productivity that is commensurate with the amount of credit assigned to 36x.
- make creative contributions to the design and analysis of experiments
- propose independent ideas to overcome research obstacles
- proactively use the primary literature as an integral resource
- interpret his or her own data and develop ideas for subsequent studies
- maintain a clear and complete laboratory notebook
- display critical thinking in lab meetings
- work to maximize research progress during the year

Thesis
A 4.0 student will:
- clearly describe the context of the project in the greater literature
- briefly summarize the history or related studies
- explain the novelty of the work described in the thesis

- detail experimental methodologies to the level of detail with which one could reproduce all experiments
- identify the strengths and limitations of each technique used

- summarize and interpret all results
- analyze the outcome of his or her experiments in the context of the greater literature, with particular emphasis on continued progress of the research project

- clearly display experimental data through the use of tables and figures, when appropriate
- fully and consistently cite literature precedence

Seminar
A 4.0 student will:
- clearly construct and deliver an oral and poster presentation in which the relevance, novelty and preliminary results are communicated clearly within the given constraints
- demonstrate the progress of his or her project between the oral and poster presentations
- answer post presentation questions completely
- be an active participant in other presentations (by both students and outside speakers) by asking questions
Note: CIP (Course in Progress) grades are often used in the first semester. A CIP implies that the senior research is being graded as a two-semester course and that grades for both semesters will be assigned at the end of the second semester. The decision to assign a CIP grade at the end of the first semester is made by your research advisor. If you wish to receive a numerical grade at the end of your first semester for any reason, you should discuss this with your research advisor.