# **Guidelines for Chemistry Honors Thesis**

Chemistry Honors Thesis work generally occurs during a student's last two semesters, but students will only be registered for Honors Thesis (32-474, 3 credits) during their last semester. Although students will not register for the two semesters of Chemistry Seminar (32-490) they are required to attend seminar and complete all of the seminar assignments (worth 1 credit) in addition to doing their research (should be equivalent to 2 credits of independent study). Honors thesis students may have different deadlines than seminar students.

The Honors Program requires students to start by submitting a *prospectus* (describing plans and goals for the project) and finish by submitting a *thesis* (describing what was accomplished).

## Prospectus:

The Honors Program provides direction on what should be in the Prospectus. For a Chemistry thesis the prospectus is typically a 15+ page paper describing the background and significance of the research project; any experimental procedures already implemented; results of those experiments; and activities that will be pursued to complete the thesis project. The bulk of the Prospectus may be folded into the final thesis.

## Thesis:

- This thesis will be more substantial than a seminar paper, with a length in the range of 30 pages or more. The analysis of the work is expected to be more substantial than a typical seminar discussion as well. The implications of results and issues for further study should be thoroughly discussed.
- 2. Honors students will present a professional quality seminar on their thesis work to the Chemistry Seminar class. They will also give a presentation, suitable for a general audience, for the Honors Program.

The honors thesis student is referred to the Chemistry Seminar Syllabus for descriptions of seminar paper and presentation requirements, as well as other assignments (such as resume, cover letter and MFAT). The Honors Thesis should exceed expectations in all areas.

# Recommended timeline:

# 2 semesters before Honors Thesis:

An Honors student should find a faculty mentor who will help the student select a research project. The student will begin reading chemical literature and outlining the thesis prospectus. If appropriate, the student should also begin working on the research project or learning techniques that will be used for the project.

### 1 semester before Honors Thesis:

The honors student works on the research project; writes the prospectus; begins drafting the thesis (experimental procedures); attends seminar. Preparation of the prospectus should roughly follow the timeline for students writing seminar papers. Once the Prospectus has been approved by the adviser, the department chair, and the Honors Program, the student will be registered for Honors Thesis for the following semester.

### Honors Thesis semester:

The honors student continues work on the project and finishes writing the thesis. The student and adviser will agree on deadlines for drafts and final thesis that meet the requirements of the Honors program. They may roughly track the timeline for seminar paper writing. The student also attends seminar, and presents the thesis work during seminar and during an Honors program symposium.