Course Work and Departmental Expectations  
Chem 450: Senior Seminar

Topic Selection

The student is expected to choose an article from a modern peer reviewed journal that was published in the last five years. This includes but is not limited to: *Phys. Rev. Lett.*, *PRB*, *JACS*, *J. Org. Chem.*, *Organometallics*, *J. Chem. Phys.*, *J. Phys. Chem.*. This article will be the bases for the work that is done in this course. This article should have the instructor’s approval, by the date noted on the syllabus, for full credit. To receive full credit for this portion the students must submit a copy of the article to the instructor.

The student will meet with the instructor to discuss the topic and the background materials that are needed. The instructor will direct the students towards suitable topics and help to avoid topics that will not meet the course goals in the time allotted. The instructor will deny any topic that is not based on chemical concepts. It is suggested this be done as soon as possible. The day topic selection is due is too late for a meeting.

Keep in mind that the department expects the students to present a deep and complete review of a current research topic. This means that the students will need to become familiar with the topic by reading numerous article on the subject. These articles should not be limited to articles cited in the main article. The student should be prepared to do a comprehensive literature search on the chosen topic.

Partial Bibliography

The student is expected to submit a partial bibliography of sources which have been consulted in reviewing the topic by the date stated on the syllabus. This should include at least five articles. Copies of these articles are not necessary and these articles can be from any year. The student may submit books as references in addition to the required five papers. Students should provide a written statement as to what each article discusses.

The student will be required to meet with the instructor to discuss the background information that has been found. The more background information that has been collected the easier it will be to construct a complete seminar and to answer questions.

Seminar Outline

The student is expected to submit a detailed outline of the seminar to the instructor. A sufficient outline will be two or more pages in length. The outline should include an introduction to the topic, any necessary background that needs to be presented to your audience, any experimental information of set-up imperative to understanding the topic, and discussion of experimental results.

The detailed outline should be presented to the instructor and the students should be prepared to discuss and possible adjust the outline accordingly.
**Paper**

The student is expected to submit a 10-page or more paper on the topic on the students presentation date. The students are required to submit a rough draft of the paper 2 weeks prior to the final seminar. Students will then meet with the instructor to discuss revisions. Feel free to submit the paper for comment any time during the writing process this will decrease the amount of work needed to be done at the end of the semester.

**Presentation**

The week of each students seminar, the students will give a practice seminar on the Monday. The seminar should be 45 to 50 minutes in length. The use of overheads or Power Point is appropriate. After the presentation the audience will ask questions. The practice presentation will allow the students to identify area in which the presentation was not clear.

On Friday of that week the students will present the presentation for an open audience. The audience will be allowed to ask questions. Students enrolled in senior seminar are expected to be present for every seminar.