Course Credit: 1 Semester Hour of Credit (2 hours of seminar per week).

Catalogue Description: Chemistry 6981. Seminar I. Preparation of a formal written research proposal and oral presentation of the proposal. Under the guidance of a research supervisor, the student will investigate the background literature and rationale for a project. Required of all first-year students in the M.S. program in Chemistry. Hours arranged. Prereq.: Chemistry 6980 (CHEM 980) and permission of the department chair. 1 s.h.

Coordinator: Dr. Allen D. Hunter (Office 5015, X-Ray Lab 5025/5029, Senior Computer Lab 5035A, and/or the NanoStars Research Lab 5005A)
Phone: 330-941-7176 (Office)
E-mail: adhunter@ysu.edu
Dr. Hunter’s Home Page: http://www.as.ysu.edu/~adhunter/index.html
YSU Seminar Page: http://www.as.ysu.edu/~adhunter/Seminar/index.html
Chem. 6981: http://www.as.ysu.edu/~adhunter/Teaching/Chem6981/index.html

Office Hours: Monday and Wednesday 10:00 to 12:00 & Tuesday 11:00 to 12:00. If you find me in a meeting, please interrupt!

Round Table: Tuesday 3:15 to 5:00 in WB 6007.

Meet the Speaker: Friday 1:00 - 1:50 in WB 6007.

Pre-Seminar Discussion Group: Friday 2:00 - 2:50 in WB 6007.

Departmental Seminar: Friday 3:15 - 4:40 in WB 6030.

Attendance: Attendance at all scheduled activities is mandatory.

Photograph: If your photograph is not on the Seminar WEB page then you must get me a digital photo by Wednesday February 1st (Matt in the Diffraction Lab can do these for you).

Research Proposal: Each student will prepare a written and an oral research proposal outlining the background literature for their thesis project and summarizing the expected scope, goals, and outcomes of that project under the guidance of their research director. Topics related to writing such a document (which typically will form the introductory chapter of your thesis) and preparing and delivering such an oral presentation will be covered in the Discussion Group using specific sources materials and case studies. All of the written and oral research proposals must be submitted in an electronic format (e.g., .doc files for the written assignments & proposal and .ppt files for the oral presentation materials) for dissemination to your colleagues in the class.

Proposal Development Schedule (Tentative): Each Assignment is the combined work on one section of your proposal. The first stage of each assignment will be due in to Dr. Hunter’s EMail box (adhunter@ysu.edu) by 3:15 on the indicated Wednesday (i.e., in Bold above). These will be disseminated to the class and the Friday that week will be used for discussing them. The Tuesday afternoon Round Table time slots will be available on an as needed basis for the proposal and seminar review, discussion, and preparation.

- 2006/01/27 - 6981 Assignments & Projects.
• 2006/02/01 & 2006/02/03 - What is Your Project Topic?
• 2006/02/10 - Case Studies.
• 2006/02/15 & 2006/02/17 - What is the Background to Your Project?
• 2006/02/24 - Case Studies.
• 2006/03/01 & 2006/03/03 - What are Your Project Goals?
• 2006/03/10 - Case Studies
• 2006/03/22 & 2006/03/24 - What are Your Project Methods?
• 2006/03/31 - Case Studies
• 2006/04/05 & 2006/04/07 - What is the Justification for Your Project?
• 2006/04/14 - Student Presentations
• 2006/04/21 - Student Presentations
• 2006/04/28 - Student Presentations
• 2006/05/05 - Student Presentations

Proposal Assignments: For each of the five Proposal Sections of the proposal (e.g., Summary, Literature Survey, Experimental Methods, Goals, & Justification) the initial due date is on the indicated Wednesday. These documents will be revised over the remainder of the class with the assistance of peer-led review. The grade for each assignment will have components for the original and final drafts.

Seminar Participation: Mandatory reading assignments are required so that you will be prepared for the seminars. On the seminar WEB site, I am posting leading references before each seminar. You are required to get these leading references from the site, OhioLink, etc., and, in addition, to look up additional papers on the topic (by the speaker and/or others in the field) for a minimum of three papers in total. By 3:15 PM on the day before the seminar, you must send me an ACS formatted list of the references you have used as well as at least 3 questions you have prepared for the speaker (i.e., by email attachment of the completed Pre-Seminar Report [http://www.as.ysu.edu/~adhunter/Teaching/Chem6981/Chemistry6981.PreSeminarReport.doc]). By 3:15 on the day of the first class after the seminar, you must send me by email attachment a list of the specific question(s) that you asked and a summary of the answer(s) via the Post-Seminar Report [http://www.as.ysu.edu/~adhunter/Teaching/Chem6981/Chemistry6981.PostSeminarReport.doc]. We have 16 scheduled speakers this semester. As one component of a full participation grade, you must have asked a minimum of 10 questions of the speakers as indicated by your reports.

Grading:

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposal Assignments</td>
<td>50</td>
</tr>
<tr>
<td>Seminar and Class Participation.</td>
<td>10</td>
</tr>
<tr>
<td>Final Research Proposal</td>
<td>20</td>
</tr>
<tr>
<td>Final Seminar Presentation</td>
<td>20</td>
</tr>
<tr>
<td>Total Points</td>
<td>100</td>
</tr>
</tbody>
</table>

90-100% - A; 75-89% - B; 60-74% - C; 50-59% - D; <50% - F

Academic Honesty: In accordance with university policy and professional standards, the highest levels of academic integrity are expected in this lecture and lab. The code of student conduct will be strictly enforced. Academic dishonesty will result in reductions in grades and/or expulsion from this class and/or the university.