Chemistry 36: Organic Chemistry Lab  
Spring 2006

Course Times:  
Section 1: Mon/Wed 1:25 – 4:25 pm  
Section 2: Tues/Thurs 1:25 – 4:25 pm  
Section 3: Tues/Thurs 6:30 – 9:30 pm

Course Location:  
205/215 Whitmore Lab

Faculty in charge:  
Dr. Katie Masters  
Dr. Jackie Bortiatynski  
Director, Organic Chemistry Labs  
Director of Instrumentation  
Office: 218 Whitmore  
211D Whitmore  
Phone: 863-3319  
865-2772  
Email: kmasters@psu.edu  
jackie@chem.psu.edu  
Office Hours: Wed 10 am to 12 pm

Course Website: http://courses.chem.psu.edu/chem36

Required Materials:
3. Eye Protection - Eye Protection is required at all times in the Organic Laboratory! See Information on Eye Protection in Chapter 2  
4. Organic Lab Equipment Kit of expendable items including 2 NMR tubes, 15 TLC plates, 12 vials, etc. This kit is available at the Penn State Bookstore.  
5. Combination or key lock

If you wear shorts or a top that exposes your midriff, you must purchase and wear a plastic lab apron to protect your midriff and legs. You CANNOT wear open-toe shoes in the lab!

Course Objective: To learn and master fundamental organic chemistry laboratory techniques, to perform synthetic reactions, work-ups, and purifications, to learn how to operate instrumentation and analyze spectral data, and to write original lab reports in a professional manner.

Assignments/Grading:
Each student has the ability to acquire a total of 1770 points for the semester. The breakdown is as follows:

<table>
<thead>
<tr>
<th>Activities</th>
<th>Assignments/Pts</th>
<th>Total Points Towards Final Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 Technique Experiments:</td>
<td>5 PreLabs/30 pts each (only 4 count)</td>
<td>120 pts</td>
</tr>
<tr>
<td>5 Synthetic Experiments:</td>
<td>5 Final Reports/100 pts each (only 4 count)</td>
<td>400 pts</td>
</tr>
<tr>
<td>Spectral Unknown Expmt</td>
<td>5 PreLabs/30 pts each</td>
<td>150 pts</td>
</tr>
<tr>
<td>6 Quizzes</td>
<td>5 Final Reports/100 pts each</td>
<td>500 pts</td>
</tr>
<tr>
<td></td>
<td>1 Final Report/100 pts</td>
<td>100 pts</td>
</tr>
<tr>
<td>Final Exam</td>
<td>50 pts each</td>
<td>300 pts</td>
</tr>
<tr>
<td>TA Evaluation</td>
<td></td>
<td>100 pts</td>
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Total 1770 pts

PreLabs & Final Reports
There will be five (5) techniques experiments (Chapter 4 will not count towards your final grade, but will serve as practice), one (1) spectral unknown experiment, and five (5) synthetic experiments. Each technique and synthetic experiment will have one PreLab and Final Report due. The spectral unknown only has a Final Report due.
Graded PreLabs can be taken home, but must be returned at the end of the semester. Graded Final Reports cannot leave the lab. Please be sure to note TA comments to ensure improvement on subsequent reports.

**Please be aware that modifications have been made to the PreLab format that is described in the lab guide. You are no longer required to include Procedure Outlines for the PreLabs, but are welcome to do them in order to prepare for the quizzes. Due to this change in format, you will need to download new grade sheets for all of the PreLabs; they are posted on the course website.**

Quizzes
You will have six (6) quizzes throughout the semester (see schedule for dates); each is worth 50 points. The quizzes are designed to test your preparedness for the chapter’s experiment. It will contain questions on theory and on procedural detail. The only way to prepare for the quizzes is to read the chapters very thoroughly.

Quiz 1: Chapter 4 information
Quiz 2: Chapter 5 information
Quiz 3: Chapter 6 information
Quiz 4: Chapter 7 information
Quiz 5: Chapter 8 information
Quiz 6: Chapter 9 information and spectroscopy/spectral interpretation (Chapter 10)

Your graded quizzes cannot be taken out of lab.

Final Exam
The Final Exam will test you on all lab techniques that you learned during the semester and how/when they are applied; it is worth 100 points. The questions will be short-answer and be phrased as to ask you how you would deal with certain situations with procedures/experiments.

TA Evaluation Points
Your TA will also evaluate your laboratory performance; this evaluation is worth 100 points. The TAs are asked to consider your attitude towards work and others, work ethic, technical skill, independence, and overall ability.

Final Grades & Graded Reports
The average final grade per section is typically in the B range. Sections will be normalized in order to compensate for variations in TA grading. Your TA should provide the class with averages for each report and quiz; use this average as a reference point to gauge your progress. Your TA should also hand back your reports no later than one week after the due date. If this is not being done, please see Dr. Masters immediately.

Registrar Dates:
Late Registration & Drop/Add: January 24th (Section 1) & January 25th (Sections 2 & 3)
Late Drop Deadline: April 7th (Section 1) & April 10th (Sections 2 & 3)
Withdrawal Deadline: April 28th

Catch-Up Day Policy: If you are not able to attend a lab for an excusable reason (e.g. sickness, family emergency), you can use the Catch-Up day (two are offered this semester) to make up any missed lab work. If you finish your lab work on a Catch-Up day, the final report will be due one week after that Catch-Up day.

Course Schedule of Assignments: Listed on back.