Chemistry 36: Organic Chemistry Lab
Spring 2007

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  
Director, Organic Chemistry Labs  
Office: 218 Whitmore  
Phone: 863-3319  
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Dr. Jackie Bortiatynski  
Director of Instrumentation  
Office: 211D Whitmore  
Phone: 865-2772  
Email: jackie@chem.psu.edu

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></td>
<td>5 Final Reports/100 pts each (only 4 count)</td>
<td>400 pts</td>
</tr>
<tr>
<td>5 Synthetic Experiments:</td>
<td>5 PreLabs/30 pts each</td>
<td>150 pts</td>
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<tr>
<td></td>
<td>5 Final Reports/100 pts each</td>
<td>500 pts</td>
</tr>
<tr>
<td>Spectral Unknown Expmt</td>
<td>1 Final Report/100 pts</td>
<td>100 pts</td>
</tr>
<tr>
<td>6 Quizzes</td>
<td>50 pts each</td>
<td>300 pts</td>
</tr>
<tr>
<td>Final Exam</td>
<td></td>
<td>100 pts</td>
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<tr>
<td>TA Evaluation</td>
<td></td>
<td>100 pts</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>1770 pts</td>
</tr>
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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.

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. Think of the final exam as a lab practical exam. 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: Ends January 30th
Late Drop Deadline: Ends April 13th (Sections 2 & 3)

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.

Academic Dishonesty
Academic dishonesty includes, but is not limited to, the following situations:
- Giving your electronic file of your final report to another current student or future student via e-mail, flash drive, CD, etc.
- Using someone else’s data unless instructed to do so.
- Not citing other students when instructed to collect other student’s data.
- Fabricating data.
- Using phrases or sentences directly from the lab guide or any other source (book, journal, or website) and not referencing that source or not using quotes.
- Using phrases or sentences directly from this lab guide or any other source (book, journal, or website), referencing that source, but not using quotes.

If you are found to be involved with academic dishonesty on a final report, you will be given a zero for that report. The second offense will involve receiving an F or an XF for the course. Please see Chapter 1, Section 1.6 for a detailed discussion on academic dishonesty.