Course Information

Instructor: Professor Nancy Totah  
Office: 3-004 CST  
Phone: 443-2657  
Email: ntotah@syr.edu

Office Hours:  
T: 11:00 am - 12:30 pm  
Th: 3:30 - 5:00 pm

Teaching Assistants:  
Mr. Arijit Adhikari  
Ms. Lauren Kaminsky  
Mr. Craig Sherwood  
Mr. Christopher Blanton  
Ms. Valerie Lopez-Diaz  
Mr. Nischal Singh  
Ms. Susan Flynn  
Mr. Yi Luo  
Ms. Nisha Varghese  
Ms. Soumya Gangopadhyay  
Mr. Luke Nye  
Mr. Daniel Wallach  
Ms. Kelly Henry  
Mr. Mike Robinson

Office: 217 LSC; office hours/contact info to be announced.

Web Page:  
http://chemistry.syr.edu/totah/CHE276/

Lecture:  
M001 Wednesday 3:45 - 4:40 pm  
Grant Auditorium

Lab Sections:  
M002 M 11:00 am - 1:50 pm  
M002 W 7:00 pm - 9:50 pm  
M003 M 3:00 pm - 5:50 pm  
M003 Th 9:00 am – 11:50 am  
M004 M 7:00 pm - 9:50 pm  
M004 Th 12:30 pm - 3:20 pm  
M005 T 12:30 pm - 3:20 pm  
M005 Th 7:00 pm - 9:50 pm  
M006 T 7:00 pm - 9:50 pm  
M006 F 12:45 pm - 3:35 pm  
M007 W 12:45 pm - 3:35 pm

All lab sections meet in 303 LSC. Laboratories will begin and end promptly at the times stated. If you arrive late you will miss important information, lose points, and compromise your ability to complete the experiment. Late arrivals will not be given extra time. Arrive prepared and on time.

Prerequisites:  
CHE 117/CHE 139 - General Chemistry Laboratory (a passing grade is required)  
CHE 275 - Organic Chemistry I Lecture (may be taken concurrently).

Objectives:  
This course is designed to introduce some of the standard laboratory techniques and important reactions in organic chemistry. Students will learn to collect and evaluate experimental data and to convey their results in written format.

Text Books:  
Course Pack: "Organic Chemistry Laboratory" N. Totah, Syracuse University, Department of Chemistry, Fall 2011 (required)  
Student Lab Notebook, Hayden McNeil, 100 pg sets (original + copy) (required)

Attendance:  
You are expected to attend all lecture and laboratory sessions. If you choose not to come to lecture, you are still responsible for the material presented. You may only attend the lab section for which you are registered. There are no scheduled makeup labs. Illness or other excuse for a missed lab will only be accepted with written verification. For absences due to a religious observance, you are required to notify the instructor before the end of the second week of classes. An online notification process is available through MySlice.
Grades: Final grades will be based on the following point scale (850 total points):

- Lab Reports #1-8 (60 pts each; lowest score is dropped) .................. 420 pts
- Unknown Lab Report #9 (required) .............................................. 120 pts
- Exams (Lab Practical & Final) .................................................. 200 pts
- Laboratory Performance ....................................................... 100 pts
- Checkout .................................................................................. 10 pts

Lab Reports: Reports must be typed (double spaced), and follow the format specified. Unless otherwise noted, reports are due to your TA at the beginning of your scheduled lab period the week following completion of the experiment. The lowest report score of experiments 1-8 will be dropped. If you miss a lab for any reason or choose not to submit a report, the missed score will count as your low score for grading purposes. Reports must be done individually, and must reflect the work of the student.

Late reports must be submitted to Prof. Totah and will be downgraded at a rate of 10 points/day (or part day thereof, weekends included). Reports will not be accepted more than 3 days after the due date. Any report submitted to Prof. Totah's mailbox must be initialed and dated by chemistry department office staff. Lab reports are not accepted by email.

Exams: Lab Practical: October 31 - November 4, 2011 (in lab)
- Final Exam: Friday, December 16, 2011 10:15 am - 12:15 pm

The Lab Practical will be held during the regularly scheduled laboratory period. This exam will consist of a series of laboratory activities. Grades will be based on your facility with required tasks as well as on your experimental results. The final exam will be comprehensive and will consist of problems and essay type questions. Answers must be written in blue or black ink.

Reasonable accommodation will be made for students with disabilities. If you require such an accommodation, please let me know as soon as possible, but no later than 1 week prior to the exam. After that time, I will consider existing exam conditions to be satisfactory.

Regrades: Reports to be regraded should be turned in to Professor Totah's mailbox in 1-014 CST not later than 1 week after the initial date of return. Items for regrade must be written in ink, and have the point(s) in question clearly identified on the front page. Items submitted for regrade will be considered in their entirety.

Laboratory Performance: This portion of the grade reflects how you functions in the lab. Are you prepared?
- Do you know what you're doing? Can you execute techniques properly? Do you work safely? Do you help keep the lab clean? Timeliness and courtesy count too!

Academic Integrity: Students enrolled in the course are expected to exhibit honesty in all academic endeavors. Cheating in any form will not be tolerated. Any incidence of academic dishonesty will result in both formal notification of the College of Arts & Sciences and a failing grade (F) in the course. See http://academicintegrity.syr.edu for the complete Syracuse University Academic Integrity Policy. More specific guidelines on academic integrity issues as they pertain to this class can be found on the course website and will be distributed in class. Students will be asked to confirm their understanding of and willingness to abide by these policies.
Preparation for Lab:

Your success in this course will depend largely on your pre-lab preparation. Read the text, attend the lab lecture, think through each step of the experiment before you arrive. Be prepared to work safely and efficiently. A prelab write-up is required for each experiment. Your TA will verify that the prelab is complete at the beginning of each lab session. You will not be able to proceed with the experiment if your prelab is incomplete. Late prelabs will not be graded.

Safety:

You are expected to read chapters 1 and 2 in your text during the first week of the semester. Before you may begin the first experiment, you will be asked to sign a safety agreement verifying your understanding of lab safety, and your willingness to follow safe laboratory practices.

1. Safety glasses must be worn at all times!
2. You may not wear open-toed shoes. This includes sandals, thongs, and any shoe with perforations.
3. Dress appropriately. Legs must be covered. Shorts, skirts and short dresses are not acceptable. Bare midriffs are not allowed. If you do not wear suitable attire, you will not be allowed to enter the lab.
4. Long hair must be tied back.
5. Students are allowed in the labs only during the assigned times and with proper supervision. Do not enter the lab if your TA, instructor or lab coordinator is not present!
6. Eating, drinking, and smoking are prohibited in the laboratory.
7. No open flames are permitted in the laboratory.
8. You may not use cell phones or other personal electronic devices in the lab. Cell phones, MP3 players, blackberries, etc. must be turned off.
9. Solvents, solids, and sharps must be disposed of properly. If you are not sure how to dispose of something, ask your TA. Nothing goes down the sink! No glass waste in the trash.
11. Know the location of exits, fire extinguishers, fire blankets, eye wash stations, and safety showers.
12. Come to lab prepared.
13. No pranks or roughhousing allowed.
14. Wash your hands before you leave the lab each day.
15. Report any injury to your TA or instructor immediately.

Clean Up:

Students are responsible for seeing that the lab is left clean. At the end of each day, please return shared equipment to its proper location and clean up your work area. In addition, your TA will prepare a schedule that designates students for a general clean up at the end of every lab period. Your participation in lab clean-up is required, and is a component of your laboratory performance score.

Equipment Policy:

You are expected to maintain all glassware and equipment in good working order. At the start of the semester, you will be assigned a lab drawer and work area. It is your responsibility to see that these areas are kept clean, and that all items are cleaned and returned to your drawer at the end of each laboratory session.
# Course Outline & Reading Assignments

<table>
<thead>
<tr>
<th>Exp #</th>
<th>Dates</th>
<th>Experiment</th>
<th>Reading</th>
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<tbody>
<tr>
<td></td>
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<td>MHS: Ch. 1, pp. 3-13</td>
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<td>Ch. 2, pp. 20-21</td>
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<td>Ch. 4, pp. 34-38</td>
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<td>Ch. 5, pp. 38-47</td>
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<td>Aug.29-Sept. 2</td>
<td>Check-In</td>
<td>MHS: Ch. 17, pp. 219-235</td>
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<td>Sept. 5-9</td>
<td>no lab; lab lecture will not meet</td>
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<td>1</td>
<td>Sept. 12-16</td>
<td>Thin Layer</td>
<td>MHS: Ch. 15, pp. 183-197</td>
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<td>2</td>
<td>Sept. 19-23</td>
<td>Recrystallization &amp; Melting Point</td>
<td>MHS: Ch. 14, pp. 174-182</td>
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<td>3</td>
<td>Sept. 26-30</td>
<td>Distillation</td>
<td>MHS: Ch. 13, pp. 141-164; 166-173</td>
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<td>4</td>
<td>Oct. 3-7</td>
<td>Extraction</td>
<td>MHS: Ch. 11, 113-132</td>
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<td>5</td>
<td>Oct. 10-14</td>
<td>Column Chromatography</td>
<td>MHS: Ch. 18, pp 235-253</td>
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<td>6</td>
<td>Oct. 17-21</td>
<td>Dehydration &amp; Gas Chromatography</td>
<td>MHS: Ch. 19, pp. 256-273</td>
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<td>7 *</td>
<td>Oct. 24-28</td>
<td>Alkyne Synthesis *</td>
<td>C&amp;G: Ch. 9, pp. 368-372</td>
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<td>8 **</td>
<td>Nov. 7-11</td>
<td>Nucleophilic Substitution **</td>
<td>C&amp;G: Ch. 8, pp 322-350</td>
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<td>9</td>
<td>Nov. 14-18</td>
<td>Isolation &amp; Identification of an Unknown</td>
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<td>9</td>
<td>Nov. 21-25</td>
<td>Happy Thanksgiving! No lab.</td>
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<td>9</td>
<td>Nov. 28-Dec.</td>
<td>Unknown Experiment, continued. 2</td>
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<td>2</td>
<td>Dec. 5-9</td>
<td>Check Out</td>
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<td>9</td>
<td>Dec. 16</td>
<td>Final Exam (10:15am-12:15pm)</td>
<td>Special Instructions</td>
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* Experiment #8 in the lab manual
** Experiment #7 in the lab manual