

SYLLABUS

Teaching Assistant: _____

Organic Chemistry Laboratory B
Chemistry 226: Spring 2013

Description: A one-semester-hour laboratory course designed to accompany organic chemistry lecture courses.

Pre- and Co-requisites: Chem 223/225 and Chem 224, respectively.

Materials: Catalyst: Custom Laboratory Program; Tim Thomas
CHEM 226 Edition; Pearson/ Prentice Hall.

Safety glasses are provided on the first day of class and must be brought to every lab. A full-length lab coat must be worn at all times.

Course Homepage: Announcements, extra copies of the handouts, the grade book, etc. are posted on Blackboard.luc.edu.

Grading: Course grades consist of the following components:

40 points	8 in-class pre-lab quizzes, 5 points each
80 points	8 online post-lab quizzes, 10 points each
80 points	Quantity and quality of products, 10 points each
10 points	Spectroscopy Assignment
40 points	8 Technique evaluations, 5 points each
<u>200 points</u>	<u>Two Exams, 100 points each</u>
450 Points	Total

To a first approximation, course grades will be assigned on the following scale. Based on class performance, the grade cutoffs may be lowered but they will not go up.

A>92%, A->90%, B+>88%, B>82%, B->80%, C+>78%, C>72%, C->70, D+>68%, D≥60%, F<60%

Pre-Lab Preparation: Success in organic lab depends on advance preparation. Therefore, there are several things you must do before coming to lab. One major component of your pre-lab assignment is to thoroughly read and understand the experimental procedure. If you have questions, consult your Teaching Assistant or the Lab Coordinator well before your lab section. Do not wait until the few minutes before class.

Before coming to class, you must also complete the pre-lab portion of your lab notebook. As described in the handout, "Keeping a Laboratory Notebook," this includes the Title, Objective, Outline, Table of Reagents and Initial Calculations.

NO ONE WILL BE ALLOWED TO PERFORM AN EXPERIMENT WITHOUT FIRST COMPLETING THE PRE-LAB PORTION OF THE NOTEBOOK.

Pre-lab Quizzes: A brief quiz (≤ 10 minutes) will be given at the beginning of each experiment. Students who arrive late will not be given extra time.

Pre-lab lecture: Students must be present for the pre-lab lecture because important safety-related information is covered. A student may not complete the experiment if any portion of the pre-lab lecture is missed.

Quizzes: An online, post-lab quiz must be completed via Blackboard within one week after each experiment.

Notebook: During the experiment, you will complete the remaining sections of the notebook. At the end of each experiment and before you leave lab, you must hand in the duplicate sheets from the rest of your notebook. Your TA will compile your notebook pages for your use on the exams.

Spectroscopy Assignment: The spectroscopy assignment will be posted on Blackboard and is due at the beginning of your lab period during the week of 4 FEB 2013. No late work will be accepted.

Technique: Your success in lab goes beyond what appears on paper. Attention to safety, housekeeping, level of preparation, ability to work with others, ability to follow directions, and ability to work independently are also important.

Exams: There will be two written exams. While completing these, you may use the duplicate sheets from your notebook that you have deposited with your TA each week. A student may use her/his own calculator on exams. However, sharing of calculators and using one's phone during an exam are not allowed. It is extremely important to read and follow the instructions carefully during exams. There will be point deductions for not following the instructions on exams.

Attendance: You are expected to attend every lab session. Due to safety constraints and size limitations, YOU WILL NOT BE ALLOWED TO MAKE UP AN EXPERIMENT IN ANOTHER SECTION. If you must miss a lab for an unavoidable, serious reason, you must contact the lab coordinator within 24 hours of the missed section to arrange to complete the make-up experiment near the end of the semester. Documentation will be required.

For safety reasons and fairness to your lab partner, you must arrive in time to hear the pre-lab safety lecture. Any student who misses any portion of the pre-lab lecture will not be allowed to perform the experiment and will be marked absent.

Safety Rules: Read the safety rules carefully and follow them throughout the course. **ANYONE WHO DOES NOT ADHERE TO THE SAFETY RULES WILL NOT BE ALLOWED TO REMAIN IN THE LABORATORY.** **Failure to adhere to the safety rules will also be reflected in the technique score.**

Academic Integrity: Each student is expected to do her/his own work. Although the lab is constructed so students may work in pairs during an experiment, all work submitted for a grade must be an individual effort. The penalty for academic dishonesty is a grade of 'F' for the course.

Email: You must use your Loyola email address when contacting the TAs or instructor for this course. Emails from outside sources are often blocked automatically. In the subject line of your email, please put Chem 226- section number and TAs name.

Eye Protection: You will be provided a pair of safety goggles at the beginning of the course. You must bring your eye protection with you to every class. You may not leave your eye protection in your drawer because it may become contaminated. For several reasons—especially hygiene—you also may not borrow eye protection from your TA or the chemistry stockroom.

Electronic Devices: For safety's sake and in order to prevent contamination of your electronic devices, the use of cell phones, laptop computers, MP3 players, etc. is not permitted during the pre-lab lecture or in the hood area of the lab. Electronic devices may be used in the center portion of the lab once the student has removed her/his gloves and has carefully washed her/his hands. Use of these devices during the pre-lab lecture will result in the student not being allowed to perform the experiment.

Lab Coordinators: At PhD-granting institutions like Loyola, labs are often taught by Teaching Assistants in order to maximize the amount of help and personal attention you receive. It is important for you to know, however, that there is someone to whom you can go if you have questions or concerns that the Teaching Assistant can't address—your lab coordinator. Mrs. Dygas-Holz and Mr. Thomas work behind the scenes to help make sure your organic chemistry lab experience is a good one. They do things like pick the experiments, order chemical reagents, post content to Blackboard and train the Teaching Assistants. They can also assist you if you have questions about absences, need special accommodations, etc.

Re-grades: All requests to have items re-graded must be submitted in writing within one week of the graded materials being returned to the student.

Contacts: Anna Dygas-Holz, FH 200A, (773)508-3283, adygasholz@luc.edu
Timothy Thomas, LSB 124, (773) 508-8115, tthoma1@luc.edu

Schedule: Organic Chemistry Laboratory A, Chemistry 226, Spring 2013

January

Monday	Tuesday	Wednesday	Thursday	Friday
14 Introduction	15 Introduction	16 Introduction	17 Introduction	18 Introduction
21 MLK DAY	22 Spectroscopy	23 Spectroscopy	24 Spectroscopy	25 Spectroscopy
28 Reduction	29 Reduction	30 Reduction	31 Reduction	

February

				1 Reduction
4 Acidity	5 Acidity	6 Acidity	7 Acidity	8 Acidity
11 Diels-Alder	12 Diels-Alder	13 Diels-Alder	14 Diels-Alder	15 Diels-Alder
18 Nitration	19 Nitration	20 Nitration	21 Nitration	22 Nitration
25 Exam One	26 Exam One	27 Exam One	28 Exam One	

March

				1 Exam One
4 BREAK	5 BREAK	6 BREAK	7 BREAK	8 BREAK
11 Ketones	12 Ketones	13 Ketones	14 Ketones	15 Ketones
18 Acylation	19 Acylation	20 Acylation	21 Acylation	22 Acylation
25 Oxidation	26 NO LAB	27 NO LAB	28 EASTER	29 EASTER

April

1 EASTER	2 Oxidation	3 Oxidation	4 Oxidation	5 Oxidation
8 Esters	9 Esters	10 Esters	11 Esters	12 Esters
15 Exam Two	16 Exam Two	17 Exam Two	18 Exam Two	19 Exam Two
22 Check out	23 Check out	24 Check out	25 Check out	26 Check out