

SYLLABUS

Organic Chemistry Laboratory B
Chemistry 226: Spring 2011

Teaching Assistant: _____
TA's Room & Phone: _____
TA's Office Hours: _____

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.

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:

100 points	10 online quizzes (10 points each)
100 points	Quantity and quality of products produced (10 points each)
20 points	Spectroscopy Assignment
80 points	Technique
<u>200 points</u>	<u>Two Summary Quizzes</u> (100 points each)
500 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.**

Quizzes: An online 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 summary quizzes.

Spectroscopy Assignment: The spectroscopy assignment will be posted on Blackboard and is due at the beginning of your lab period during the week of 8 FEB 2011. No late work will be accepted.

Summary Quizzes: There will be two written summary quizzes. While completing these assessments, you may use the sheets from your notebook that you have deposited with your TA each week.

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. Safety violations will be addressed immediately and are described in a different section.

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. Missing a lab period will result in a zero for all work related to that experiment. If you miss an experiment for a justifiable reason—court summons, death in the immediate family, serious illness, etc.—you must notify the lab instructor in writing within 24 hours. Documentation will be required. If your absence is approved, your grade will be based on the experiments for which you were present. However, you are still responsible for all of the material on assessments. If you miss a second experiment, you have missed a significant portion of the course and should either drop or request an incomplete. A maximum of one and only one excused absence will be allowed for each student.

For safety reasons and fairness to your lab partner, you must arrive in time to hear the pre-lab safety lecture. Any student who is late by 10 minutes or more 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.

Lab Coordinator: Timothy Thomas, LSB 124, (773) 508-8115, tthoma1@luc.edu

Schedule: Organic Chemistry Laboratory A, Chemistry 226, Spring 2011

January

Monday	Tuesday	Wednesday	Thursday	Friday
17 MLK DAY	18 NO LAB	19 NO LAB	20 NO LAB	21 NO LAB
24 Introduction	25 Introduction	26 Introduction	27 Introduction	28 Introduction
31 Reduction				

February

	1 Reduction	2 Reduction	3 Reduction	4 Reduction
7 Diels-Alder	8 Diels-Alder	9 Diels-Alder	10 Diels-Alder	11 Diels-Alder
14 Acidity	15 Acidity	16 Acidity	17 Acidity	18 Acidity
21 Nitration	22 Nitration	23 Nitration	24 Nitration	25 Nitration
28 SQ One				

March

	1 SQ One	2 SQ One	3 SQ One	4 SQ One
7 BREAK	8 BREAK	9 BREAK	10 BREAK	11 BREAK
14 Ketones	15 Ketones	16 Ketones	17 Ketones	18 Ketones
21 Acylation	22 Acylation	23 Acylation	24 Acylation	25 Acylation
28 Oxidation	29 Oxidation	30 Oxidation	31 Oxidation	

April

				1 Oxidation
4 Esters	5 Esters	6 Esters	7 Esters	8 Esters
11 Soap/ Nylon and Aldol	12 Soap/ Nylon	13 Soap/ Nylon	14 Soap/ Nylon	15 Soap/ Nylon and Aldol
18 SQ Two	19 Aldol	20 Aldol	21 Aldol	22 EASTER
25 EASTER	26 SQ Two	27 SQ Two	28 SQ Two	29 SQ Two