

SYLLABUS

Organic Chemistry Laboratory B
Chemistry 226: Summer II 2010
LSB 115

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

Description: A one-semester-hour laboratory course designed to illustrate via experiment some of the topics covered in organic chemistry lecture courses.

Prerequisites: Prior completion of and a grade of 'C-' or better in Chem 223/225.

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

In addition to the text, you will need several pieces of equipment—safety glasses and rubber gloves are required; a lab coat or apron is recommended.

Course Homepage: Important announcements, extra copies of the syllabus, the grade book, etc. are available on Blackboard (blackboard.luc.edu). You are responsible for this information, so you should check Blackboard frequently.

Grading: Your grade will be based on the following components:

100 points	10 notebook scores (10 points each)
100 points	10 online quizzes (10 points each)
60 points	Technique and Safety
40 points	Two written assignments (20 points each)
<u>200 points</u>	<u>Two Written Exams</u> (100 points each)
500 Points	Total

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 Instructor 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. At the beginning of the lab period, you must submit the duplicate pages for the pre-lab portion of the notebook. **NO ONE WILL BE ALLOWED TO PERFORM AN EXPERIMENT WITHOUT FIRST COMPLETING THE PRE-LAB PORTION OF THE NOTEBOOK.** Think of your completed pre-lab as your admission ticket to lab!

Just as a reminder and as described in the handout, the longest, most detailed part of the notebook is the PROCEDURE section which is written as you do the experiment. Do not copy the procedure into your notebook before class!

Quizzes: An online quiz must be completed via Blackboard BEFORE EACH EXPERIMENT. This quiz will cover the assigned reading, the material on Blackboard, the pre-lab portion of the laboratory notebook, and relevant lecture material. Students who do not complete the quiz before class will not be allowed to perform the experiment. Quizzes may be taken up to three times as long as they are still open.

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. (For more detailed instructions on the content of the notebook, see the description in "Keeping a Laboratory Notebook"). No late work will be accepted. Your TA will grade your notebook pages according to the grading scheme posted on Blackboard.

Written Assignments: There are two written assignments for the course that count 20 points each. Both will be posted on Blackboard. The first is a spectroscopy unknown. The second is a writing exercise. The spectroscopy assignment is due at the beginning of your lab period during the week of 19 JUL 2010. The writing assignment is due at the beginning of your lab period on the last day of class. No late work will be accepted.

Written Exams: There will be two written exams spaced evenly throughout the semester. The written exams will be **CLOSED NOTEBOOK AND CLOSED BOOK**. You may use your own calculator during the exams. However, you may not share someone else's calculator and you may not use your cell phone.

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.

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. However, if you present written documentation for your absence, your grade can be calculated based on one less experiment. Any additional missed work will receive a zero.

You should also come to lab on time. 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.

Registration: You must attend the section for which you are officially registered. Any change of section must be accomplished through the Registrar.

Equipment: In addition to the glassware in the drawer, some experiments require the use of additional equipment (hot plates, heating mantles, voltage controllers, etc.). When you are using this equipment, you are responsible for it and you may be charged if items are missing or damaged.

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. Anyone caught in an act of academic dishonesty will receive a zero on the assignment in question and will have her/his final grade in the course lowered by a letter. Any subsequent incidents will result in an 'F' in the course. The incident will also be reported to the Chair of the chemistry department and, at the Chair's discretion, to the Office of the Dean—where additional sanctions, including expulsion from the university, may also be imposed. Consult the current Undergraduate Studies catalog for a complete description of University policies regarding academic dishonesty.

Grade Corrections: Throughout the semester, all graded materials will be returned during the next lab period. Scores will be posted on Blackboard. All grading corrections must be submitted in writing WITHIN ONE WEEK.

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
(773) 508-8115

LSB 124
email: TTHOMA1@LUC.EDU
Office Hours by appointment

Schedule: Organic Chemistry Laboratory B, Chemistry 226, Summer II 2010

July

Monday	Tuesday	Wednesday	Thursday	Friday
5 Independence Day	6 Syllabus, Safety, Bromination Demo, Spectroscopy Review	7 Syllabus, Safety, Bromination Demo, Spectroscopy Review	8 Reduction	9 Reduction
12 Structure/ Acidity	13 Structure/ Acidity	14 Diels-Alder	15 Diels-Alder	16
19 Nitration [†]	20 Nitration [†]	21 Ketones/ Exam One	22 Ketones/ Exam One	23
26 Acylation	27 Acylation	28 Grignard	29 Grignard	30

August

Monday	Tuesday	Wednesday	Thursday	Friday
2 Esters	3 Esters	4 Soap/ Nylon	5 Soap/ Nylon	6
9 Aldol	10 Aldol	11 Exam 2 [‡]	12 Exam 2 [‡]	13

[†]The spectroscopy assignment is due at the beginning of your lab section this week.

[‡]The writing assignment is due at the beginning of your lab section this week.