SYLLABUS **TA:**_____

Organic Chemistry Laboratory B
Chemistry 226: Fall 2010
LSB 115

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)
200 points	Two Written Exams (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 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 and the pre-lab portion of the laboratory notebook. Students who do not complete the quiz before class will not be allowed to perform the experiment. Quizzes may be repeated once 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 on 4 OCT 2010. The writing assignment is due at the beginning of your lab period on 29 NOV 2010. 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. 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, you will be allowed to perform a make-up experiment at the end of the semester to replace the missing experiment score. However, you are still responsible for completing the pre-lab quiz and for all of the material on the exams. A maximum of one and only one excused absence will be allowed for each student for each semester. 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 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.

Lab Drawers: The lab drawer is a shared space. At least one other section will be using it. Therefore, you should not leave any personal items in your drawer. You must also leave the drawer in a good condition at the end of the lab period. The Teaching Assistant will not accept your notebook pages until she/he has inspected your lab drawer. The Teaching Assistant may deduct Technique points if the drawer or other areas of the lab—such as balances, sinks, etc.—are not left in a satisfactory condition at the end of the lab period.

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	LSB 124
	(773) 508-8115	email: TTHOMA1@LUC.EDU

Office Hours: M 3:30-5 PM
W 10-11:30 AM
or by appointment.

Schedule: Organic Chemistry Laboratory B, Chemistry 226, Fall 2010

August 30	Syllabus and Safety Training
September 6	LABOR DAY
September 13	Bromination Demo and Spectroscopy Review
September 20	Reduction
September 27	Structural Effects on Acidity
October 4	Diels-Alder[†]
October 11	FALL BREAK
October 18	Exam 1
October 25	Nitration
November 1	Ketone Derivatives
November 8	Grignard
November 15	Esters
November 22	Soap/ Nylon
November 29	Aldol[‡]
December 6	Exam 2

[†]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.