SYLLABUS **Teaching Assistant:_____**
Organic Chemistry Laboratory B
Chemistry 226: Spring 2012

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:

45 points	10 in-class pre-lab quizzes, 5 points each, drop lowest
90 points	10 online post-lab quizzes, 10 points each, drop lowest
90 points	Quantity and quality of products, 10 points each, drop lowest
30 points	Spectroscopy Assignment
45 points	10 Technique evaluations, 5 points each, drop lowest
200 points	Two Summary Quizzes, 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.

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 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 6 FEB 2012. No late work will be accepted.

Summary Quizzes: There will be two written summary quizzes. While completing these, you may use the 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.

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, remember your lowest score in each category for the weekly experiments will be dropped.

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.

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Schedule: Organic Chemistry Laboratory A, Chemistry 226, Spring 2012

January

Monday	Tuesday	Wednesday	Thursday	Friday
16 MLK DAY	**17** Introduction	**18** Introduction	**19** Introduction	**20** Introduction
23 Introduction	**24** Reduction	**25** Reduction	**26** Reduction	**27** Reduction
30 Reduction	**31** Oxidation			

February

		1 Oxidation	**2** Oxidation	**3** Oxidation
6 Oxidation	**7** Diels-Alder	**8** Diels-Alder	**9** Diels-Alder	**10** Diels-Alder
13 Diels-Alder	**14** Nitration	**15** Nitration	**16** Nitration	**17** Nitration
20 Nitration	**21** Ketones	**22** Ketones	**23** Ketones	**24** Ketones
27 Ketones	**28** SQ One	**29** SQ One		

March

			1 SQ One	**2** SQ One
5 BREAK	**6 BREAK**	**7 BREAK**	**8 BREAK**	**9 BREAK**
12 SQ One	**13** Acylation	**14** Acylation	**15** Acylation	**16** Acylation
19 Acylation	**20** Grignard	**21** Grignard	**22** Grignard	**23** Grignard
26 Grignard	**27** Esters	**28** Esters	**29** Esters	**30** Esters

April

2 Esters	**3** Soap/ Nylon	**4** Soap/ Nylon	**5 EASTER**	**6 EASTER**
9 EASTER	**10** NO LAB	**11** NO LAB	**12** Soap/ Nylon	**13** Soap/ Nylon
16 Soap/ Nylon and Aldol	**17** Aldol	**18** Aldol	**19** Aldol	**20** Aldol
23 SQ Two	**24** SQ Two	**25** SQ Two	**26** SQ Two	**27** SQ Two