

Chemistry 226 Syllabus
Summer II 2013

Organic Chemistry Laboratory B

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 is also required.

Course Homepage: Announcements, exams, extra copies of the handouts, the grade book, etc. are posted on Sakai.luc.edu. You are responsible for this material, so you should check Sakai frequently.

Grading: Course grades consist of the following components:

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|------------------|--|
| 180 points | Best 9 out of 10 Notebook scores, 20 points each |
| 180 points | Best 9 out of 10 Discussion Questions, 20 pts each |
| 90 points | Best 9 out of 10 Technique Scores, 10 pts each |
| 100 points | 2 Online Exams, 50 pts each |
| <u>50 points</u> | <u>In-Class Exam</u> |
| 600 Points | Total |

A>94%, A->90%, B+>88%, B>84%, B->80%, C+>78%, C>74%, 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. The TAs will collect the pre-lab portion of the lab notebook at the beginning of class. No late work will be accepted.

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

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.

Exams: The exams will cover all portions of the course—the assigned readings, laboratory procedures, topics discussed in class, etc. Two of the exams will be taken via Sakai. The first will be available from the end of class, July 18, 2013, until the beginning of class, July 23, 2013. The second will be available from the end of class, August 6, 2013, until 5:00 PM, August 9, 2013. Online exams must be submitted while they are still available. The in-class exam will be

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

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.

Students must be present for the pre-lab lecture because important safety-related information is covered. **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.

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 the instructor for this course. Emails from outside sources are often blocked automatically. In the subject line of your email, 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. For several reasons—especially hygiene—you also may not borrow eye protection from your TA or the chemistry stockroom.

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Electronic Devices: For safety's sake and in order to prevent contamination, the use of cell phones, laptop computers, MP3 players, etc. is not permitted in the lab. Use of these devices in lab will result in the student not being allowed to perform the experiment.

Zero-Tolerance Policy on Safety: Safely working with organic chemicals requires your complete attention. One important part of lab safety is the pre-lab lecture at the beginning of class-- when the TAs and the lab coordinator discuss the chemicals that are going to be used that day. You must pay careful attention during the pre-lab. Activities that indicate that you are not paying full attention will result in you not being allowed to perform the experiment. Such activities include talking to classmates, using one's phone or other electronic devices (which are not allowed in lab), sleeping, doing homework, etc.

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

Schedule: Organic Chemistry Laboratory A, Chemistry 226, Summer II 2013

July

| Monday | Tuesday | Wednesday | Thursday | Friday |
|-----------|---------------------------------------|-----------|--------------------------------|------------------|
| 1 | 2 Syllabus, Safety Training | 3 | 4 HOLIDAY | 5 Acidity |
| 8 | 9 Reduction | 10 | 11 Oxidation | 12 |
| 15 | 16 Diels-Alder | 17 | 18 Nitration/ Exam 1 | 19 |
| 22 | 23 Ketones | 24 | 25 Acylation | 26 |
| 29 | 30 Grignard | 31 | | |

August

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|----------|-------------------|----------|--------------------|----------|
| | | | 1 Esters | 2 |
| 5 | 6 Polymers | 7 | 8 Check Out | 9 |

Make-up Day

The officially designated make-up for the Independence Day holiday is Friday, July 5, 2013. So as not to conflict with your lecture sections, there will be multiple sections of lab available on Friday. Come to the section that does not conflict with your other courses. The available sections will be 8:30 AM to 11:20 AM in LSB 115, 12:30 PM to 3:20 PM in LSB 115 and 11 AM to 1:50 PM in Flanner 204.