

TIM

Description: A one-semester-hour laboratory course designed to accompany organic chemistry lecture.

Pre- and Co-requisites: Grade of 'C-' or better in Chem 223 and 225; Chem 224

Materials: Making the Connections² by Anne B. Padias (ISBN: 978-073804135-3)
Permanently-Bound Composition Notebook

Safety goggles are provided during safety training and must be brought to every lab. A full-length lab coat is also required.

Course Homepage: Announcements, assessments, 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:

9 Pre-lab Quizzes via Sakai, 5 pts each	45 pts
9 Products/Results Sheets, 10 pts each	90 pts
9 Post-lab Homeworks via Sakai, 10 pts each	90 pts
ChemDraw Assignment	25 pts
Written Exams	<u>200 pts</u>
	450 pts 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 and the assigned background reading listed on Sakai. Outlining the experiment and including a Table of Reagents in your laboratory notebook is strongly suggested. 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 complete the pre-lab quiz via Sakai. NO ONE WILL BE ALLOWED TO PERFORM AN EXPERIMENT WITHOUT FIRST COMPLETING THE PRE-LAB QUIZ.

Technique/ Product Scores: At the end of each experiment, your TA will evaluate the quantity and quality of the product you produce. **Be sure to show your product to your TA before you leave lab.** Safety violations, poor laboratory technique, etc. will result in deductions from the product points.

Post-Lab Quizzes: Short questions pertaining to the experiment you have just completed will be posted on Sakai. These should be completed after lab ends and are due at the beginning of the next lab period.

Sakai Assessments: Students are allowed unlimited attempts for the pre-lab and post-lab quizzes on Sakai until the due date. The highest submitted score is kept. Assessments must be submitted to count. Work that is saved but not submitted before the deadline will be ignored. Late Sakai assignments will not be accepted. It is the student's responsibility to submit your work early so that there is time to resubmit in the event of technical difficulties. Deadlines for assessments on Sakai will not be extended under any circumstances. Spelling, grammar and significant figures count.

Exams: The exams will cover all portions of the course—the assigned readings, laboratory procedures, topics discussed in class, pre-requisite material, etc. Points will be deducted for not following the instructions.

Re-grades: All requests to have items re-graded must be submitted in writing within one week after the graded materials are 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 the product/results sheet. However, with appropriate documentation—doctor's note, jury summons, etc.—the exam covering the missed material may be weighed more heavily to account for the missing points. The pre-lab and post-lab quizzes should still be submitting according to the existing deadlines. Missing more than 2 lab periods will result in automatic failure of the course.

There will be an attendance sheet that students must sign upon entering the lab to ensure on-time arrival. 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 receive point deductions and may not be allowed to remain in the laboratory. You will be provided a pair of safety goggles at the beginning of the course. You must bring your eye protection and lab coat with you to every class, as well as dress in appropriate clothing and footwear.

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.

Late Policy: Written materials that are submitted late but on the same day as they were due will receive a 10% deduction. There will be an additional 25% deduction for each day or portion of a day, including weekends, they are late after that.

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 225-section number and TAs name.

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Experiments

1. Sodium Borohydride Reduction of Benzophenone
2. Potassium Permanganate Oxidation of Benzyl Alcohol
3. Structural Effects on Acidity
4. Diels-Alder Reaction of Anthracene and Maleic Anhydride
5. Nitration of *N*-acetyl-*p*-toluidine
6. Ketone Derivatives
7. Acylation of an Aromatic Amine
8. Fischer Esterification
9. Polymerization