

ORGANIC CHEMISTRY LABORATORY II

CH 339

FOR CHEMISTRY AND BIOCHEMISTRY MAJORS

Spring 2011

PORTLAND STATE UNIVERSITY
Department of Chemistry

SCHEDULE -- Organic Chemistry CH 339 Lab, Spring 2011

Text References:

1. "Organic Laboratory Techniques," 3rd edition, Fessenden & Fessenden & Feist (FFF) (purchase at PSU Bookstore)
2. "Organic Chemistry Laboratory II for Chemistry Majors, CH 339, PSU" (Lab Manual) (purchase at Smart Copy)

Lab Reports:

1. Experiments 1 and 4 will be reported in a journal-style write up.
2. Experiments 2, 3, 5 and 6 will be reported on the synthesis form found in the Lab Manual.
3. Experiments 8 and 9 will be reported on specific forms found in the Lab Manual.

DATE	EXPERIMENT	READING	DUE DATES
Week 1 Mon/Tue	Check in Experiment 1 Isolation of Cholesterol from Gallstones		
Week 1 Wed/Thu	Experiment 2 Synthesis of <i>trans</i> -Stilbene		
Week 2 Mon/Tue	Complete Experiments 1 and 2		
Week 2 Wed/Thu	Experiment 3 Acetylation of Ferrocene / Chromatography	FFF, p 38-53; 119-125;133-39	Expt. 1 Journal-style report
Week 3 Mon/Tue	Experiment 4 (continue Exp. 3, part II) Resolution of α -Phenylethylamine		Expt. 2 Synthesis form
Week 3 Wed/Thu	Complete Experiments 3 and 4		
Week 4 Mon/Tue	Experiment 5 Multistep Synthesis		Expt. 3 Synthesis form
Week 4 Wed/Thu	Continue Expt. 5 Multistep Synthesis	FFF, p 179-194	Expt. 4 Journal-style report
Week 5 Mon/Tue	Continue Expt. 5 Multistep Synthesis Tuesday lab will meet in Library 1-4:00 for Experiment 7 Literature Research	Lab Manual, p 53 FFF, p 197-201	
Week 5 Wed/Thu	Continue Expt. 5 Multistep Synthesis Wednesday labs will meet in Library 1-4:00 or 5:30-8:30 for Experiment 7 Literature Research	Lab Manual, p 53 FFF, p 197-201	
Week 6 Mon/Tue	Complete Expt. 5 Multistep Synthesis		
Week 6 Wed/Thu	Experiment 6 Nylon by Interfacial Polymerization		Expt. 5 Synthesis forms
Week 7 Mon/Tue	Experiment 8 Chemically Active Extraction	FFF, p 54-61	Expt. 6 Synthesis form
Week 7 Wed/Thu	Experiment 9 Qualitative Analysis	Unknowns Handouts	Expt. 8 Report form
Week 8 Mon/Tue	Continue Expt. 9 Qualitative Analysis		Expt. 7 Literature report
Week 8 Wed/Thu	Continue Expt. 9 Qualitative Analysis		
Week 9 Mon/Tue	Continue Expt. 9 Qualitative Analysis		
Week 9 Wed/Thu	Continue Expt. 9 Qualitative Analysis		
Week 10 Mon/Tue	Complete all work Monday labs do not meet this day.		
Week 10 Wed/Thu	Clean up and check out Review for final exam		Expt. 9 Report form
Exam	Wed, Jun 8, 8:00 - 9:50 am, Hoffmann Hall		

Note for students enrolled in CH 406 - This course supplements CH 338 to make it equivalent to CH 339. CH 406 students will perform only Experiments 4, 7, 8, and 9.

ORGANIC CHEMISTRY LABORATORY

Texts

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 "Organic Chemistry Laboratory II for Chemistry Majors, CH 339," PSU (purchase at Smart Copy)

Course Grading

Lab Reports	50%	Notebook	10%
Lab Technique	15%	Final Exam	25%

Lab reports should be typed. Reports must be written according to the guideline described in "Format for Organic Chemistry Lab Reports" (lab manual). Reports are due on the dates indicated on the Schedule. If you cannot turn in a report on time due to medical or family emergencies, consult with the instructor in advance to arrange a mutually agreeable alternative due date. Otherwise, 5 points/day will be deducted from the report.

Lab Technique will be evaluated by your lab instructor. The evaluation will include general understanding of the lab, ability to work independently, wearing safety goggles, careful use of chemicals, apparatus and instruments, cleaning up your bench and spilled chemicals, etc.

Notebook will also be evaluated by your lab instructor. See the discussion on Laboratory Notebook on how to record a good lab notebook.

This course has a minimal requirement of 50% on the final exam in order to receive a grade above C. There will be NO makeup final exam.

A	85 – 100	A–	83 - 84	B+	81 - 82	B	72 - 80
B–	70 - 71	C+	68 - 69	C	58 - 67	C–	55 - 57
D	45 - 55	F	< 45				

You must do ALL assigned experiments unless the laboratory instructor changes schedules for the whole section. There is a limited opportunity to make up work during other scheduled laboratory periods.

Incomplete grade is rarely given in laboratory courses where registration is required to reserve a space to work. If you have extreme medical or family emergencies and cannot complete this course, immediately contact the professor in charge of this course to discuss alternatives.

Lab Organization

Materials. You will need the following items for this lab:

Safety goggles. This department requires a type of safety goggles that shield the eyes from all sides and has no vents. They are available at the PSU bookstore, or from the chemistry stockroom in an economical package that includes anti-fog tissue and two pairs of rubber gloves.

Notebook. A bound notebook with numbered pages is required for the lab record book (for example: Vernon Royal No. 11208 composition book, 120 pages, 9 1/2" x 7 1/2".) The same notebook may be used for both terms of organic lab. Your notebook will be placed in the lab for a month after the final exam. After that, all notebooks will be trashed. The notebook used in CH 337M may be used for this course.