

CHE 276 - Organic Chemistry Laboratory I
Syracuse University - Department of Chemistry

COURSE SYLLABUS

Instructor:	Ata Pinto, Ph.D.	Office Hours:	T: 3:30 – 4:30 pm
Office:	3-008 CST	Term:	Fall 2017
Phone:	315-443-2127	Number of Credits:	2
Email:	atpinto@syr.edu	Web Page:	https://blackboard.syracuse.edu/

Organic Chemistry Laboratory Supervisor

Ms. Anne Dovciak <aldovcia@syr.edu>

Lab Teaching Assistants

Ms. Tasha Davis <trdav100@syr.edu>
Mr. Md. Abid Hasan <mdhasan@syr.edu>
Mr. Wenhong Lin <wlin11@syr.edu>
Mr. Nilamber Mate <namate@syr.edu>
Mr. Shea Thomas Meyer <smeyer@syr.edu>

Mr. Jacob Moose <jamoose@syr.edu>
Mr. Bhaskar Joshi <bdjoshi@syr.edu>
Ms. Katelyn Ann Leets <kaleets@syr.edu>
Ms. Michelle Takacs <mtakacs@syr.edu>

Grading Teaching Assistants

Mr. Sudhat Ashok <suashok@syr.edu>
Mr. Fortune Ononiwu <foononiw@syr.edu>

Mr. Martin Dolan <madolan@syr.edu>
Mr. Yuchen Jin <yjin101@syr.edu>

Course Description

Laboratory to accompany CHE 275. This course consists of a one-hour lecture section (M001) on Wednesday, and 12 laboratory sections (M002 to M013) in smaller groups distributed throughout the week. Experiments illustrate modern laboratory techniques in organic chemistry as well as an introduction to organic synthesis, with an emphasis on basic separations, purifications, and analysis of experimental data.

Prerequisites

- CHE 117/CHE 139 - General Chemistry Laboratory (a passing grade is required)
- CHE 275 - Organic Chemistry I Lecture (may be taken concurrently)

Textbooks (required)

- Student Lab Notebook, LAD, 100 pg sets (original + copy)
- J. R. Mohrig, C. N. Hammond, P. F. Schatz, "Techniques in Organic Chemistry", 3rd or 4th Ed.

Lecture (Grant Auditorium)

M001 W 3:45 - 4:40 pm

Lab Sections (All lab sections meet in 303 LSC).

M002	Th	12:30 pm - 3:20 pm	M008	M	6:45 pm - 9:35 pm
M003	Th	7:00 pm - 9:50 pm	M009	T	9:00 am – 11:50 am
M004	F	11:00 am - 1:50 pm	M010	T	12:30 pm - 3:20 pm
M005	F	3:00 pm - 5:50 pm	M011	T	7:00 pm - 9:50 pm
M006	M	11:00 am - 1:50 pm	M012	W	12:45 pm - 3:35 pm
M007	M	3:00 pm - 5:50 pm	M013	W	6:45 pm - 9:35 pm

Laboratories will begin and end promptly at the times stated. If you arrive late you will miss important information, lose points, and compromise your ability to complete the experiment. Late arrivals will not be given extra time. Arrive prepared and on time.

Attendance

You are expected to attend all lecture and laboratory sessions. If you choose not to come to lecture, you remain responsible for all the material presented.

You are expected to attend the lab section for which you have registered. Students are allowed to switch lab sections ONCE per semester WITH approval from Dr. Pinto and all involved TAs. Email Dr. Pinto, your own TAs, and TAs of the

section you wish to switch to, with the reasons and date for your request of switching.

There are no scheduled makeup labs/examinations. Illness or other excuse for a missed lab/examination will only be accepted with written verification. For absences due to a religious observance, you are required to notify the instructor before the end of the second week of classes. An online notification process is available through MySlice.

Fraternity and Sorority Student Engagement Considerations

The directors of Fraternity and Sorority Affairs and Student Activities have confirmed that the activities of the groups under their prevue should not take priority over academic schedules. Based on the aforementioned policy, **any request for ongoing class exemptions or exchanges due to initiation to or membership in these groups will not be granted.**

Grading System

Lab	Lab Write-ups (7 total, lowest score is dropped)	48%
	Lab Practical	12%
	Lab Report (ID of Unknown)	10%
	Lab Performance/Checkout	5%
Lecture	Midterm	10%
	Final Exam	15%
Total		100%

Grading Scale

A	100 - 90%	C+	69.9 - 65%
A-	89.9 - 85%	C	64.9 - 60%
B+	84.9 - 80%	C-	59.9 - 50%
B	79.9 - 75%	D	49.9 - 35%
B-	74.9 - 70%	F	35 - 0%

Lab Write-Ups

Write-ups must be done individually, and must reflect the work of the student. Students must hand in typed write-ups by filling in a template of the lab report, which will be available for download from the course webpage on blackboard. Unless otherwise noted, **write-ups are due to your TA at the beginning of your scheduled lab period the week following completion of the experiment.** The lowest report score of experiments 1-7 will be dropped. If you miss a lab for any reason or choose not to submit a report, the missed score will count as your low score for grading purposes. Reports must be done individually, and must reflect the work of the student.

Late lab write-ups must be submitted to Dr. Pinto's mailbox and will be downgraded at a rate of 10 points/day (or part day thereof, weekends included). Reports will not be accepted more than 3 days after the due date. **Any late lab write-up submitted to Dr. Pinto's mailbox must be initialed and dated by chemistry department office staff.** Write-ups without an initial/date by the chemistry office staff will not be graded.

For write-ups to be regraded, students should first contact the grader within 1 week after the initial date of return. The grader's name will be on the lab write-up cover page; their emails are on the first page of the syllabus. Items for regrade must be written in ink, and have the point(s) in question clearly identified on the front page. This information will be used if further inquiry is needed for Dr. Pinto.

The due dates for the write-ups and final report are as follows:

- Write-up Experiment 1 Hand in on week Sept. 21st - Sept. 27th
- Write-up Experiment 2 Hand in on week Sept. 28th - Oct. 4th
- Write-up Experiment 3 Hand in on week Oct. 5th - Oct. 11th
- Write-up Experiment 4 Hand in on week Oct. 12th - Oct. 18th
- Write-up Experiment 5 Hand in on week Oct. 19th - Oct. 25th
- Write-up Experiment 6 Hand in on week Nov. 2nd - Nov. 8th
- Write-up Experiment 7 Hand in on week Nov. 9th - Nov. 15th
- Written Report Experiment 8 Hand in on week Nov. 30th - Dec. 6th

Lab Practical

The Lab Practical will be held during the regularly scheduled laboratory period. This practical examination will consist of a series of laboratory activities. Grades will be based on your facility with required tasks as well as on your results.

Lab Report (Identification of an Unknown)

For the final experiment of the semester (*Identification of an Unknown*), students will generate a typed report (Font = Arial; Font Size = 11; Margins = 1 inch; double-spaced), and be exactly 5 pages long (not including the cover page) and follow the format specified.

Lab Performance/Checkout

Performance score will be judged on tardiness, preparedness, courtesy, and abiding of the safety regulations. Do you know what you're doing? Can you execute techniques properly? Do you work safely? Do you help keep the lab clean? Your participation in lab checkout is required, and a component of your laboratory performance score.

At the beginning of the course you begin with a perfect performance score (20 points). The performance score will be deducted ONLY when you fall deficient and/or do not fulfill any requirements. The TAs will have records of the reason for each deduction. These deductions will be as follows:

Lab Performance	Deductions
Did not clean work station	-3
Left solvent/reagents outside hood	-1
Safety glasses not worn properly	-3
15 minutes late	-1
30 or more minutes late	-5
Did not help in general cleanup	-4
Forgot to turn in carbon copies	-3
Not dressed appropriately	-4
Asks numerous procedural questions	-2
Using phone	-4

Lecture Examinations

- Midterm Oct. 18th 3:45-4:40 PM Venue: Grant Auditorium
- Final Exam Dec. 6th 3:45-4:40 PM Venue: TBA

Midterm

The Midterm will consist of problems and short answers with material drawn directly from lectures. It is therefore highly recommended for you to avoid missing lectures as examples and topical discussions will surely be included in the midterm. Answers must be written in blue or black ink only.

Final Exam

The Final Exam will be comprehensive and will consist of problems, short answers, and essay type questions. Answers must be only written in blue or black ink.

Reasonable accommodations will be made for students with disabilities. If you require such an accommodation, please let me know as soon as possible, but **no later than 1 week prior to the exam**. After that time, I will consider existing exam conditions to be satisfactory.

For lecture examinations to be regraded (Midterm/Final), students should first contact the grader within 1 week after the initial date of return. The grader's name will be on the exam cover page, their emails are on the first page of the syllabus. Items for regrade must be written in ink, and have the point(s) in question clearly identified on the front page. This information will be used if further inquiry is needed for Dr. Pinto.

Academic Integrity

Students enrolled in the course are expected to exhibit honesty in all academic endeavors. Cheating in any form will not be tolerated. **Any incidence of academic dishonesty will result in both formal notification of the College of Arts & Sciences and a failing grade (F) in the course.** See <http://class.syr.edu/academic-integrity/policy/> for the complete Syracuse University Academic Integrity Policy. More specific guidelines on academic integrity issues as they pertain to this class can be found on the course website and will be distributed in class. Students will be asked to confirm their understanding of and willingness to abide by these policies.

Preparation for the Lab

Your success in this course will depend upon your preparation before lab. Attending the lecture and thinking through the experiments step-by-step before you arrive in the lab is imperative. Be prepared to work safely and efficiently. Not only will your grade depend on this, but also the safety of you and your classmates. Your TA will check your Prelab for each experiment at the beginning of each lab session. You will not be allowed to proceed with the experiment if your Prelab

has not been completed, and TAs reserve the right to ask you to leave if you are not adequately prepared. Late Prelabs will not be graded.

Safety

You are expected to read chapters 1 and 2 in your text during the first week of the semester. Before you may begin the first experiment, you will be asked to sign a safety agreement verifying your understanding of lab safety, and your willingness to follow safe laboratory practices.

1. **Safety glasses must be worn at all times!**
2. Come to lab prepared.
3. You may not wear open-toed shoes. This includes sandals, thongs, and any shoe with perforations.
4. Dress appropriately. Legs must be covered. Shorts, skirts and short dresses are not acceptable. Bare midriffs are not allowed. If you do not wear suitable attire, you will not be allowed to enter the lab.
5. Long hair must be tied back.
6. Students are allowed in the labs only during the assigned times and with proper supervision. Do not enter the lab if your TA, instructor or lab supervisor is not present!
7. Eating, drinking, and smoking are prohibited in the laboratory.
8. No open flames are permitted in the laboratory.
9. You may not use cell phones or other personal electronic devices in the lab. Cell phones, MP3 players, blackberries, etc. must be turned off.
10. Solvents, solids, and sharps must be disposed of properly. If you are not sure how to dispose of something, ask your TA. Nothing goes down the sink! No glass waste in the trash.
11. Many organic chemicals pose potential hazards. Though toxicity & reactivity of compounds vary tremendously, always treat every compound with respect. Wear gloves when using caustic substances.
12. Know the location of exits, fire extinguishers, fire blankets, eye wash stations, and safety showers.
13. No pranks or roughhousing allowed. You will be asked to leave immediately.
14. Wash your hands before you leave the lab each day.
15. Report any injury to your TA or instructor immediately.

Clean Up

Students are responsible for seeing that the lab is left clean. At the end of each day, please return shared equipment to its proper location and clean up your work area. In addition, your TA will prepare a schedule that designates students for a general clean up at the end of every lab period. Your participation in lab clean up is required, and is a component of your laboratory performance score.

Equipment Policy

You are expected to maintain all glassware and equipment in good working order. At the start of the semester, you will be assigned a lab drawer and work area. It is your responsibility to see that these areas are kept clean, and that all items are cleaned and returned to your drawer at the end of each laboratory session.

Course Schedule

- No activities on Sept. 4th (Labor Day) and Thanksgiving week (Nov. 20th - Nov. 24th)
- Each **Lab Week** is defined from Thursday to Wednesday
- The **Check In** week starts from Sept. 7th (Thursday) through Sept. 13th (Wednesday)
- The **Check Out** week starts from Nov. 30th (Thursday) through Dec. 6th (Wednesday)

LABORATORY						LECTURE
#	Thursday	Friday	Monday	Tuesday	Wednesday	Wednesday
			Aug. 28 No LAB	Aug. 29 No LAB	Aug. 30 No LAB	Aug. 30 No LECTURE
	Aug. 31 No LAB	Sept. 1 No LAB	Sept. 4 No LAB	Sept. 5 No LAB	Sept. 6 No LAB	Sept. 6 INTRODUCTION
	Sept. 7 CHECK IN	Sept. 8 CHECK IN	Sept. 11 CHECK IN	Sept. 12 CHECK IN	Sept. 13 CHECK IN	Sept. 13 TLC
1	Sept. 14 TLC	Sept. 15 TLC	Sept. 18 TLC	Sept. 19 TLC	Sept. 20 TLC	Sept. 20 RECRYSTAL.
2	Sept. 21 RECRYSTAL.	Sept. 22 RECRYSTAL.	Sept. 25 RECRYSTAL.	Sept. 26 RECRYSTAL.	Sept. 27 RECRYSTAL.	Sept. 27 DISTILLATION
3	Sept. 28 DISTILLATION	Sept. 29 DISTILLATION	Oct. 2 DISTILLATION	Oct. 3 DISTILLATION	Oct. 4 DISTILLATION	Oct. 4 EXTRACTION
4	Oct. 5 EXTRACTION	Oct. 6 EXTRACTION	Oct. 9 EXTRACTION	Oct. 10 EXTRACTION	Oct. 11 EXTRACTION	Oct. 11 COLUMN
5	Oct. 12 COLUMN	Oct. 13 COLUMN	Oct. 16 COLUMN	Oct. 17 COLUMN	Oct. 18 COLUMN	Oct. 18 MIDTERM
	Oct. 19 PRACTICAL	Oct. 20 PRACTICAL	Oct. 23 PRACTICAL	Oct. 24 PRACTICAL	Oct. 25 PRACTICAL	Oct. 25 DEHYDRATION
6	Oct. 26 DEHYDRATION	Oct. 27 DEHYDRATION	Oct. 30 DEHYDRATION	Oct. 31 DEHYDRATION	Nov. 1 DEHYDRATION	Nov. 1 ALKYNE
7	Nov. 2 ALKYNE	Nov. 3 ALKYNE	Nov. 6 ALKYNE	Nov. 7 ALKYNE	Nov. 8 ALKYNE	Nov. 8 UNKNOWN
8a	Nov. 9 UNKNOWN	Nov. 10 UNKNOWN	Nov. 13 UNKNOWN	Nov. 14 UNKNOWN	Nov. 15 UNKNOWN	Nov. 15 UNKNOWN
8b	Nov. 16 UNKNOWN	Nov. 17 UNKNOWN	Nov. 20 No LAB	Nov. 21 No LAB	Nov. 22 No LAB	Nov. 22 No LECTURE
8b	Nov. 23 No LAB	Nov. 24 No LAB	Nov. 27 UNKNOWN	Nov. 28 UNKNOWN	Nov. 29 UNKNOWN	Nov. 29 REVIEW
	Nov. 30 CHECK OUT	Dec. 1 CHECK OUT	Dec. 4 CHECK OUT	Dec. 5 CHECK OUT	Dec. 6 CHECK OUT	Dec. 6 FINAL EXAM
	Dec. 7 No LAB	Dec. 8 No LAB				

TA Lab Schedules

Thursday	Friday	Monday	Tuesday	Wednesday
			M009 9:00-11:50AM Katelyn Leets Bhaskar Joshi	
M002 12:30-3:20pm Abid Hasan Michelle Takacs	M004 11:00-1:50pm Nilamber Mate Jacob Moose	M006 11:00-1:50 pm Nilamber Mate Katelyn Leets	M010 12:30-3:20pm Tasha Davis Bhaskar Joshi	M012 12:45-3:35pm Shea Thomas Tasha Davis
	M005 3:00-5:50pm Nilamber Mate Michelle Takacs	M007 3:00-5:50pm Shea Thomas Tasha Davis		
M003 7:00-9:50pm Wenhong Lin Michelle Takacs		M008 6:45-9:35PM Katelyn Leets Bhaskar Joshi	M011 7:00– 9:50 pm Wenhong Lin Jacob Moose	M013 6:45-9:35pm Abid Hasan Jacob Moose

TA Grader Schedules**Grader #1:** Mr. Martin Dolan <madolan@syr.edu>**Grader #2:** Mr. Yuchen Jin <yjin101@syr.edu>**Grader #3:** Mr. Sudhat Ashok <suashok@syr.edu>**Grader #4:** Mr. Fortune Ononiwu <foononiw@syr.edu>

Labs	M002	M003	M004	M005	M006	M007	M008	M009	M010	M011	M012	M013
1	1	1	1	2	2	2	3	3	3	4	4	4
2	2	2	2	3	3	3	4	4	4	1	1	1
3	3	3	3	4	4	4	1	1	1	2	2	2
4	4	4	4	1	1	1	2	2	2	3	3	3
5	1	1	1	2	2	2	3	3	3	4	4	4
6	2	2	2	3	3	3	4	4	4	1	1	1
7	3	3	3	4	4	4	1	1	1	2	2	2
8	4	4	4	1	1	1	2	2	2	3	3	3

Write-ups and Report Due Dates

Labs	M002	M003	M004	M005	M006	M007	M008	M009	M010	M011	M012	M013
1	9/21	9/21	9/22	9/22	9/25	9/25	9/25	9/26	9/26	9/26	9/27	9/27
2	9/28	9/28	9/29	9/29	10/2	10/2	10/2	10/3	10/3	10/3	10/4	10/4
3	10/5	10/5	10/6	10/6	10/9	10/9	10/9	10/10	10/10	10/10	10/11	10/11
4	10/12	10/12	10/13	10/13	10/16	10/16	10/16	10/17	10/17	10/17	10/18	10/18
5	10/19	10/19	10/20	10/20	10/23	10/23	10/23	10/24	10/24	10/24	10/25	10/25
6	11/2	11/2	11/3	11/3	11/6	11/6	11/6	11/7	11/7	11/7	11/8	11/8
7	11/9	11/9	11/10	11/10	11/13	11/13	11/13	11/14	11/14	11/14	11/15	11/15
8	11/30	11/30	12/1	12/1	12/4	12/4	12/4	12/5	12/5	12/5	12/6	12/6

TA/Faculty Office Hours

- Office hours for CHE 276 are scheduled at the times indicated below
- Teaching assistants will hold office hours in room 217 LSC
- Dr. Pinto will hold office hours in room 3-008 CST

	Monday	Tuesday	Wednesday	Thursday	Friday
8 am	Bhaskar Joshi 8:00-10:00 am				Yuchen Jin 8:00-10:00 am
9			Tasha Davis 9:00-11:00 am	Abid Hasan 8:30-10:30 am	
10		Michelle Takacs 10:00-12:00 pm			
11				Sudhat Ashok 11:00-1:00 pm	
12 pm	Shea Thomas 12:00-2:00 pm		Jacob Moose 1:00-3:00 pm		
1		Wenhong Lin 1:00-3:00 pm			
2					Fortune Ononiwu 2:00-4:00 pm
3					
4	Nilamber Mate 4:00-6:00 pm	Dr. Pinto 3:30-4:30 pm	CHE 276 M001 3:45-4:40 pm	Martin Dolan 4:00-6:00 pm	
5					
6					

Office hours will begin September 11th and continue through December 5th, 2017.