

Chemistry 0345: Organic Chemistry Laboratory

Syllabus and Course Schedule

Fall 2025 (Term 2261)

Faculty Coordinators: Jackie Powell and Will Conroy, 107 Chevron, orgcoord@pitt.edu

Required Resources for All Students in Chem 0345

- **Labflow Online Laboratory Platform:** Access can be purchased at either the bookstore (ISBN: 978-0-9600627-0-6) or at labflow.com.
- **Computer, Laptop, or Device (cell phone, tablet, etc)** Must be capable of sustaining a stable Wi-Fi connection during class/laboratory meetings to take assessments, enter data, and take photos for upload to Labflow
- **LockDown Browser** (for taking Canvas quizzes) must be installed on the device that you will utilize to take lab lecture Canvas quizzes. You will be prompted to download LockDown Browser when you initiate Canvas Quiz 1.
- **Ability to Make Legible PDF Documents of Handwritten Work:** May be done using a smartphone or tablet camera and an app or scanner (to upload hand-written lab notebook pages at end of each lab activity to Labflow
- **Student Notebook:** Paper Notebook (bound/spiral) or notebook based upon your lab instructor's directions. If the notebook is not pre-numbered, do so by hand.
- **Splash Goggles and Flame-Resistant Lab Coat:** Must have been purchased at bookstore to ensure safety policy compliance.
- **Appropriate Lab Attire:** Will be addressed during first lab meeting (Activity 1)
- **Canvas:** Used to access various course materials

Grading Breakdown

Lab Lecture Work (50%)

Quizzes (lowest score dropped)	20%
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Midterm Exam	15%
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Final Exam	15%
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Laboratory Work (50%)

Pre-Lab Assessments	10%
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In-Lab Assessments	15%
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Post-Lab Assessments	20%
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Safety, Citizenship, and Technique	5%
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Course Policies

Make-Up Lab Policy: You are allowed one (and only one) make-up lab a semester for mitigating circumstances. To schedule a make-up lab, go to “How to Schedule A Make-Up Lab” on Canvas and follow the directions. Email the lab coordinators (Dr. Jackie Powell and Will Conroy, orgcoord@pitt.edu) AND your lab instructor as soon as you are able. Notifications sent 24 hours after a missed lab will lead to a zero for that lab. Any additional missed laboratories (without approval of the lab coordinators within 24 hours of the missed lab) will result in no credit for the course.

University Mandated Quarantine or Isolation: If Covid-19 policies require you to miss lab, you must notify the course coordinators within 24 hours so accommodations can be planned.

Assignment Policy: Make-up quizzes and exams will only be given before Friday at 12 PM of the same week as they are given to the lab lectures. You must contact your lab lecturer before your absence or within 24 hours to schedule a make-up quiz or exam. Only one make-up quiz per term is permitted.

All work is due at the designated deadline on Canvas or Labflow. Late work will only be accepted in the case of mitigating circumstances and at the lab instructor’s discretion. You must discuss your circumstances with your lab instructor for an extension to be granted.

Safety, Citizenship, and Technique (SCT) Grade:

The standard grade for SCT is 7 out of 10. Students who consistently meet the expectations for SCT based on the guidelines posted on Canvas will receive a 7 out of 10. Students who distinguish themselves, positively or negatively, are eligible for a higher or lower score. It is a core expectation of this course that ALL students meet the SCT guidelines. A higher score will only be considered if a student independently initiates consistent, strong efforts beyond the typical student to enhance the lab learning environment.

Statement on Academic Integrity: Students will be expected to comply with the University of Pittsburgh’s Policy on Academic Integrity. *Aside from in-lab assessments, any work you submit is expected to be your own individual work, including post-lab assessments.* Any student suspected of violating the university’s policy will be required to participate in the procedural process, initiated at the instructor level. For more information, please visit: <https://www.provost.pitt.edu/academic-integrity-guidelines>.

Classroom Recording: To ensure the free and open discussion of ideas, students may not record classroom lecture, discussion, and/or activities without the advance written permission of the instructor. Any such recording can only be used for the student’s own private use.

Students with Disabilities: If you have a disability for which you are or may be requesting accommodation, you are encouraged to contact the Office of Disability Resources and Services, 216 William Pitt Union, (412) 648-7890 as early as possible. You should also contact your instructor prior to when the accommodations are needed (preferably more than 24 hours in advance). For more information, please visit: www.drs.pitt.edu.

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Chem 0345 Lab Lecture and Lab Activity Schedule

Laboratory Activity #	Laboratory Activity
1	Introduction to Organic Chemistry Laboratory, Laboratory Safety, and IR
2	¹ H NMR Workshop 1: Introductory Problem Solving
3	Extraction and Recrystallization of Benzoic Acid
4	Analysis of Medicinally Active Organic Compounds in Over-the-Counter Pain Relievers: Introduction to Thin-Layer Chromatography (TLC)
5	¹ H NMR Workshop 2: Structure and Reaction Analysis
	Midterm Exam
6	Dehydration of Cyclohexanol
7	Grignard Reactions: Synthesis of Triphenylmethanol
	Midterm Exam
8	Alkene Addition Reactions: Selective Markovnikov Hydrohalogenation of Carvone
9	Electrophilic Aromatic Substitution Reactions: Bromination of Aniline and <i>N</i> -Acetylaniline
10	Aldol Addition and Aldol Condensation Reactions: Crossed Aldol Reaction of 2-Acetylpyridine and 4-Nitrobenzaldehyde
11	Forensic Chemistry: Synthesis and Photophysical Properties of Luminol
	Final Exam

See next page for dates

Chem 0345 Meeting Times

Section	Lab Lecture		Laboratory Activity	
	Time	Lecture Room	Time	Lab Classroom*
1400	Monday 9 – 9:50 a.m.	135 Chevron	Tuesday 1 – 4:50 p.m.	135 Chevron
1200	Monday 5 – 5:50 p.m.	206 Eberly	Tuesday 6 – 9:50 p.m.	206 Eberly
1020	Monday 10 – 10:50 a.m.	135 Chevron	Wednesday 8 – 11:50 a.m.	206 Eberly
1040	Monday 1 – 1:50 p.m.	135 Chevron	Wednesday 1 – 4:50 p.m.	135 Chevron
1010	Monday 6 – 6:50 p.m.	206 Eberly	Wednesday 6 – 9:50 p.m.	206 Eberly
1030	Tuesday 10 – 10:50 a.m.	132 Chevron	Thursday 8 – 11:50 a.m.	206 Eberly
1100	Wednesday 5 – 5:50 p.m.	206 Eberly	Thursday 6 – 9:50 p.m.	206 Eberly
1050	Monday 2 – 2:50 p.m.	132 Chevron	Friday 1 – 4:50 p.m.	206 Eberly

* Some laboratory activities will be held in the listed classroom. All experiments will be held in labs on the 4th floor of Chevron Science Center.

Lab Lecture Schedule Mondays, Tuesdays & Wednesdays		
Dates	Lecture Topic	Quiz Topic
Aug 25 – Aug 27	1 & 3a*	1**
Sept 1 – Sept 3	x*	x*
Sept 8 – Sept 10	2*	x
Sept 15 – Sept 17	3b	2
Sept 22 – Sept 24	4	3
Sept 29 – Oct 1	5	4
Oct 6 – Oct 8	Midterm Review (1-5)	x
Oct 13 – Oct 15	6	5
Oct 20 – Oct 22	7	6
Oct 27 – Oct 29	8	7
Nov 3 – Nov 5	9	8
Nov 10 – Nov 12	10	9
Nov 17 – Nov 19	11	10
Nov 24 – Nov 26	x***	x***
Dec 1 – Dec 3	Final Exam Review (1-11)	x

Lab Activity Schedule Tuesdays to Fridays	
Dates	Lab Activity
Aug 26 – Aug 29	1
Sept 2 – Sept 5	x*
Sept 9 – Sept 12	2
Sept 16 – Sept 19	3
Sept 23 – Sept 26	4
Sept 30 – Oct 3	5
Oct 7 – Oct 9	Midterm Exam**
Oct 14 – Oct 17	6
Oct 21 – Oct 24	7
Oct 28 – Oct 31	8
Nov 4 – Nov 7	9
Nov 11 – Nov 14	10
Nov 18 – Nov 21	11
Nov 25 – Nov 28	x***
Dec 2 – Dec 5	Final Exam

* Lab Lecture 3a (Extraction) will be held during the first lab lecture.

** Quiz 1 will be taken anytime during this week on Canvas. Due by September 7th at 11:59 PM.

* No labs or lab lectures will meet the week of Labor Day (Sept 1). In lieu of attending lab the week of September 1, you must watch NMR Video Series 1, Videos 1-4. These videos can be found on Canvas and Labflow (Activity 2). The focus of lab lectures the week of Sept 8 will be on the content in NMR Video Series 1.

** No classes meet on Friday, October 10th. The midterm exam time/location for Friday lab students will be determined based on availability.

*** No lectures or labs meet the week of Thanksgiving.