

CHEM 370 Schedule

This schedule is subject to change as needed.

For “In Class” work, cohort 1 meets on Mondays, cohort 2 meets on Wednesdays, and cohort 3 meets on Fridays. Please ask your instructor if you’re unsure which cohort you’re in. Unless otherwise specified, exams will be administered face-to-face.

Please see the lab schedule for details on weekly labs and lab due dates.

Overview Schedule

Week	Begins	Theme	In Class	Lecture 1	Lecture 2	Lab	HW
1	8/17	Intro	No Meeting	Analytical Perspective	Analyst’s Toolbox	Intro + Safety	Chemistry Review + MD Intro
2	8/24	Signals and Noise	Choosing a Method	Distributions	Errors and CIs	GC Lab 1	Errors & CIs
3	8/31	Data Analysis	Distributions in R	Reproducible Research	QA/QC + Standards	GC Data @ Home	Making Solutions
4	9/7	Quantitative Analysis	No Meeting	Standardization	Blanks	UV-vis (Labster)	
5	9/14	Instrumentation Survey	Exam 1	Survey 1 + 2	Survey 3 + 4	UV-vis Data @ Home	
6	9/21	Spectroscopy		Spectroscopy	Optics	Rotations	Instrument Quizzes
7	9/28	Spectroscopy		UV-vis: Theory	UV-vis: Instruments	Rotations	
8	10/5	Spectroscopy		Luminescence: Theory	Atomic: Theory	Rotations	
9	10/12	Spectroscopy		Atomic: Instruments	FT-IR	Rotations	
10	10/19	Spectrometry	Exam 2	MS	Structural Det.	Rotations	
11	10/26	Spectrometry		Structural Det.	Structural Det.	Rotations	
12	11/2	Separations	Structural Det.	Chromatography	LC	Rotations	
13	11/9	Separations		GC	TBA	Rotations	
14	11/16	Review	Exam 3	TBA	TBA	Rotations + Cleanup	
15	11/23	Thanksgiving	Remote	-	-	-	Exam 4
FINAL	11/30	Project	Remote	Presentations (Final)	Presentations (Final)	Final Paper	

Lab Schedule

This schedule is subject to change as needed.

Week	Week Beginning	Lab Activity	Due
1	8/17	Safety Lecture, Intro to R/Markdown	Markdown Tutorial, R Tutorial (honor system)
2	8/24	GC Lab	
3	8/31	GC Data Analysis	GC Notebook + Worksheet
4	9/7	UV-vis Lab	
5	9/14	UV-vis Data Analysis	UV-vis Notebook + Worksheet
6	9/21	Rotations	Instrument Quizzes Passed
7	9/28	Rotations <i>Writing Workshop</i>	
8	10/5	Rotations	
9	10/12	Rotations	Notebook 1 + 2
10	10/19	Rotations	Intro + Methods
11	10/26	Rotations	
12	11/2	Rotations	All 4 Notebooks, All 4 Analysis Worksheets
13	11/9	Rotations	Full Draft
14	11/16	Lab & Instrument Clean	Peer Review
15	11/23	<i>No Labs (Thanksgiving)</i>	
15	11/23	<i>No Labs (Final Exams)</i>	Final Report

Students will be required to attend instrumentation workshops outside of class to learn how to use each instrument. They will take a multiple-choice test to get a certification for that instrument. Each student must be certified before using an instrument. This certification contributes to your grade through SLO #1 on the syllabus.