

Chemistry 2100 Syllabus Spring 2021

Organic Chemistry Lab I

Instructor: Dr. Jeremiah Harden jharden@gsu.edu

Class Meeting Time:

Synchronous Meeting Times: Tuesday 4:00 PM – 5:00 PM & Wednesday 10:00 – 11:00 AM
Via WebEx for additional individual office hours see iCollege for times

Please allow 24 hours for a response via email Monday through Friday, emails on the weekend will not be checked until Monday. Any email concerning technology issues needs to be accompanied with a help ticket from the appropriate source (iCollege or labflow).

Please send emails with your GSU email and put the course title in the subject line.

Course Description

This is a first semester organic chemistry lab which will introduce the student to techniques and instruments commonly used in an organic chemistry lab. The bulk of this course will be administered through Labflow in which you will watch videos of labs and concepts and then answer follow up questions. You will receive instruction on iCollege on how to set up your Labflow account **at no cost to you.**

Course Outcomes

At the conclusion of this course you will be familiar with basic organic lab techniques, such as liquid-liquid extraction, distillation, and recrystallization. You will also be familiar with IR spectroscopy and will be able to interpret an IR spectrum.

Text and Materials

Textbook : Organic Chemistry Lab Techniques by Lisa Nichols free download
<https://organiclabtechniques.weebly.com/download.html>

You will need a device capable of using the Respondus Lockdown Browser and the Respondus Monitor if you do not have a device you can obtain one here:

<https://cetl.gsu.edu/resources/resources-for-learning-remotely/internet-options/>

A spreadsheet program capable of graphing Microsoft excel is recommended and can be downloaded through the Microsoft Office Suite free of charge here:

<https://technology.gsu.edu/technology-services/it-services/software-computer-purchase/software-download-and-purchase/>

Grading

You will complete 13 quizzes via Labflow each valued at 5 points, the lowest one will be dropped. You will have 13 reports due on Labflow valued at 20 points each, the lowest one will be dropped. You will have homework that is worth 20 points. You will have a final exam that is worth 80 points.

12 highest quizzes x 5 points (60 points) + 11 reports x 20 points (220 points) + Homework (20points) + Final Exam (80 points) = 400 points

Divide your total points by 4 to get your percent grade.

A+: 97% **A:** 93%; **A-:** 90%; **B+:** 87% **B:** 83% **B-:** 80%, **C+:** 77% **C:** 73% **C-:** 70% **D:** 60% **F:**<60%

Course Overview

This course will be administered through Labflow and you will be responsible for completing 1 lab modules every week. The reading and preparation material for the modules will always be available to you so you can plan as far ahead as you like. The lab reports for each module will only be available for 12 hours. The reports will open on at 8 AM close at 8 PM on the Monday of their respective week. Be aware that I will most likely not respond to emails on the weekend so if you would like to ask questions about a lab it is best to start the reading before Friday. Each module will take several hours to complete, so read plan ahead. This lab normally meets for 5 hours every Monday, so plan on spending about that much time on this course.

I will upload supplemental pre-lab lectures to iCollege and I will hold open office hours on Mondays from 12:30 - 1:45 PM to answer any question you have about the lab report.

Make up Policy

There is no lab make ups, you are given 12 hours to complete each lab module and you are expected to finish the module in that time. It is very important that you do the experiments promptly and not wait until the last moment.

Below is a tentative schedule for the course. Changes may be necessary and will be announced in iCollege.

SUN	MON	TUES	WED	THUR	FRI	SAT
10-Jan	11-Jan	12-Jan Lab Safety Quiz Open 3 PM Excel Plotting Report Open Tues. – Fri.	13-Jan Quiz Closes 3 PM	14-Jan	15-Jan	16-Jan
17-Jan	18-Jan	19-Jan Melting Point Quiz Open 3-4 PM Prelab 10 AM, Report Opens 4 PM	20-Jan Melting Point Report Closes 4 PM	21-Jan	22-Jan	23-Jan
24-Jan	25-Jan	26-Jan Recrystallization Quiz Open 3-4 PM Prelab 10 AM, Report Opens 4 PM	27-Jan Recrystallization Report Closes 4 PM	28-Jan	29-Jan	30-Jan
31-Jan	1-Feb	2-Feb Separation Quiz Open 3-4 PM Prelab 10 AM, Report Opens 4 PM	3-Feb Separation Report Closes 4 PM	4-Feb	5-Feb	6-Feb
7-Feb	8-Feb	9-Feb Extraction Quiz Open 3-4 PM Prelab 10 AM, Report Opens 4 PM	10-Feb Extraction Report Closes 4 PM	11-Feb	12-Feb	13-Feb
14-Feb	15-Feb	16-Feb Esters Quiz Open Open 3-4 PM Prelab 10 AM, Report Opens 4 PM	17-Feb Esters Report Closes 4 PM	18-Feb	19-Feb	20-Feb
21-Feb	22-Feb	23-Feb Simple Distillation Quiz Open 3-4 PM Prelab 10 AM, Report Opens 4 PM	24-Feb Simple Dist. Report Closes 4 PM	25-Feb	26-Feb	27-Feb
28-Feb	1-Mar	2-Mar Frac. Distillation Quiz Open 3-4 PM Prelab 10 AM, Report Opens 4 PM	3-Mar Frac. Dist. Report Closes 4 PM	4-Mar	5-Mar	6-Mar
7-Mar	8-Mar	9-Mar Aldehydes and Ketones Quiz Open 3-4 PM Prelab 10 AM, Report Opens 4 PM	10-Mar Ald. And Ket. Report Closes 4 PM	11-Mar	12-Mar	13-Mar
14-Mar	15-Mar	16-Mar	17-Mar	18-Mar	19-Mar	20-Mar
Spring Break						
21-Mar	22-Mar	23-Mar Alcohol Quiz Open Open 3-4 PM Prelab 10 AM, Report Opens 4 PM	24-Mar Alcohol Report Closes 4 PM	25-Mar	26-Mar	27-Mar
28-Mar	29-Mar	30-Mar IR Identification Quiz Open 3-4 PM Prelab 10 AM, Report Opens 4 PM	31-Mar IR ID Report Closes 4 PM	1-Apr	2-Apr	3-Apr
4-Apr	5-Apr	6-Apr Dehydration of Alcohol Quiz Open 3-4 PM Prelab 10 AM, Report Opens 4 PM	7-Apr Dehydration Report Closes 4 PM	8-Apr	9-Apr	10-Apr
11-Apr	12-Apr	13-Apr SN2 Nerolin Quiz Open 3-4 PM Prelab 10 AM, Report Opens 4 PM	14-Apr SN2 Nerolin Report Closes 4 PMT	15-Apr	16-Apr	17-Apr
18-Apr	19-Apr	20-Apr Final Exam Opens 9 AM	21-Apr Final Exam Closes 12 PM	22-Apr	23-Apr	24-Apr
25-Apr	26-Apr	27-Apr	28-Apr	29-Apr	30-Apr	1-May
2-May	3-May	4-May	5-May	6-May	7-May	8-May

This schedule is tentative, and deviations may be necessary.

Regrades

If you wish to request a regrade you must request it within one week of the assignment being graded.

DEPARTMENT OF CHEMISTRY POLICY STATEMENT REGARDING STUDENT INTEGRITY:

The Department of Chemistry follows the university policy on academic honesty published in the "Faculty Affairs handbook" and the "On Campus: The Undergraduate Co-Curricular Affairs handbook." Any suspected offenses may be referred to the Department Chair for appropriate action.

All tests taken must represent your individual, unaided efforts. To receive or offer information during an examination is cheating. The use of unauthorized supplementary materials during tests is also cheating. All laboratory work performed during this course must reflect your individual effort. Only original data obtained by your own laboratory experimentation are to be used, except when specifically authorized by your laboratory professor. Data from supplementary sources (handbooks, reference literature, etc.) must be clearly referenced (title, author, volume, page(s), etc.). Falsification or destruction of data constitutes cheating.

Accommodations

Students who wish to request accommodation for a disability may do so by registering with the Access and Accommodation Center. Students may only be accommodated upon issuance by the Access and Accommodation Center of a signed Accommodation Plan and are responsible for providing a copy of that plan to instructors of all classes in which accommodations are sought

Your constructive assessment of this course plays an indispensable role in shaping education at Georgia State. Upon completing the course, please take time to fill out the online course evaluation.