
SCIENCE OF CONTEMPORARY ISSUES 1 – LABORATORY SYLLABUS

University of Denver – CHEM 1001 Laboratories – Autumn Quarter 2021

Professor: Dr. Emily Barter

E-mail: Emily.Barter@du.edu

Teaching Assistant	E-Mail Address	Office Hours	Location
Tanden Hovey	Tanden.Hovey@du.edu	Thursday 5:30pm – 7:30pm	SEC
Claire Jiang	Susyan.Jiang@du.edu	Wednesday 9:00am – 11:00am	SEC
Lena Kallweit	Lena.Kallweit@du.edu	Tuesday 2:00pm – 3:00pm Thursday 12:00pm – 1:00pm	SEC
Emma Oldani	Emily.Oldani@du.edu	Monday 2:00pm – 4:00pm	SEC – or Zoom, by Request
Liam Russell	Liam.Russell@du.edu	Wednesday 1:30pm – 3:30pm	SEC
Desiree Sarmiento	DesireeJoyce.Sarmiento@du.edu	Tuesday 5:00pm – 7:00pm	Zoom

LABORATORY SCHEDULE				
Section	Day	Time	TA	Location
04	Mon	9:00 am – 11:50 am	Emma Oldani	Boettcher West 015
05	Mon	2:00 pm – 4:50 pm	Liam Russell	Boettcher West 015
06	Mon	6:00 pm – 8:50 pm	Emma Oldani	Boettcher West 015
07	Tues	9:00 am – 11:50 am	Lena Kallweit	Boettcher West 015
08	Tues	2:00 pm – 4:50 pm	Desiree Sarmiento	Boettcher West 015
09	Tues	6:00 pm – 8:50 pm	Claire Jiang	Boettcher West 015
10	Weds	9:00 am – 11:50 am	Desiree Sarmiento	Boettcher West 015
11	Weds	2:00 pm – 4:50 pm	Tanden Hovey	Boettcher West 015
12	Weds	6:00 pm – 8:50 pm	Tanden Hovey	Boettcher West 015
13	Thurs	9:00 am – 11:50 am	Lena Kallweit	Boettcher West 015
14	Thurs	2:00 pm – 4:50 pm	Liam Russell	Boettcher West 015
15	Thurs	6:00 pm – 8:50 pm	Claire Jiang	Boettcher West 015

MY PLEDGE TO YOU

I was fortunate to have amazing professors and classmates during my time in both college and graduate school. My goal is to provide all of you with that same experience. I want this class to be a valuable, meaningful, and memorable experience for all of you. Our classroom is going to be one of inquiry and inclusiveness; I want everyone to feel welcome and encouraged to ask any questions that they may have. If you have a question it is likely that someone else in class has the same question, so go ahead and ask it! I will do everything I can to make this the best class and experience it can be. If you have comments or suggestions, you can send them to me at any time via email. I will do my best to incorporate your feedback into how I teach the class. I am thrilled to have each of you in class and am looking forward to a great quarter.

SCIENCE AND ENGINEERING CENTER (SEC) – [HTTP://PORTFOLIO.DU.EDU/SEC](http://portfolio.du.edu/sec)

The SEC is a collaborative space that is staffed by undergraduate and graduate TAs who are trained to assist students with first and second year chemistry, physics, and engineering courses. Their goal is to help students grow as problem solvers by assisting with homework, lab reports, and exam preparations. The SEC is not a one-on-one tutoring center, it is a place where students can get guidance from TAs as well as their peers, and where students can work together to learn and create community. **The SEC is free and open to all DU students.** The SEC is located in the NW corner of the first floor of the Anderson Academic Commons.

As noted on the first page of this syllabus, the CHEM 1001 TAs have a mix of in-person and zoom office hours available. The TAs are available to you for assistance with both the lecture and laboratory portions of the course.

- *If the location says (SEC), that TA is holding their scheduled office hours in the Science and Engineering Center. If the location says Zoom, you can find the TA Zoom Room links below.*

Note: Please **do not** click on a TA zoom room link unless you are attending scheduled office hours with Desiree or requested to meet on Zoom with Emma. I am posting all of the TA zoom rooms now, so we are prepared if we need to pivot online at any point this quarter.

Teaching Assistant	Zoom Room
Tanden Hovey	https://udenver.zoom.us/my/tandenhovey
Claire Jiang	https://udenver.zoom.us/my/clairejiang
Lena Kallweit	https://udenver.zoom.us/my/lenakallweit
Emma Oldani	https://udenver.zoom.us/my/eoldani
Liam Russell	https://udenver.zoom.us/my/liamrussell
Desiree Sarmiento	https://udenver.zoom.us/my/desireesarmiento

INCLUSIVE LEARNING ENVIRONMENTS

In this class, we will work together to develop a learning community that is both inclusive and respectful. Our diversity may be reflected by differences in race, culture, age, religion, sexual orientation, socioeconomic background, and a myriad of other identities and life experiences. The goal of inclusiveness, in a diverse community, encourages and appreciates expressions of different ideas, opinions, and beliefs, so that conversations and interactions that could potentially turn divisive turn instead into opportunities for intellectual and personal enrichment.

A dedication to inclusiveness requires respecting what others say, their right to say it, and the thoughtful consideration of others' communication. Both speaking and listening are valuable tools for furthering thoughtful, enlightening dialogue. Respecting one another's individual differences is critical in transforming a collection of diverse individuals into an inclusive, collaborative, and excellent learning community. Our core commitment shapes our core expectation for behavior inside and outside of the classroom.

STUDENT LEARNING OUTCOMES (SLOs)

Upon completion of this one-year course sequence, students should become proficient in these areas and/or develop these skills:

Scientific Inquiry – Natural and Physical World SLOs:

1. Apply knowledge of scientific practice to evaluate evidence for scientific claims.
2. Demonstrate an understanding of science as an iterative process of knowledge generation with inherent strengths and limitations.
3. Demonstrate skills for using and interpreting qualitative and quantitative information.

Course-Specific SLOs:

4. Use graphs to display numerical data and interpret graphical data.
5. When presented with a science-related question, find relevant information to help answer the question.
6. Evaluate sources of information – especially information gleaned from the Internet – to determine their usefulness.
7. Use the skills described above to evaluate scientific claims in the news; learn to identify bogus science and overblown claims.
8. Have the skills and knowledge to make informed choices that impact your health, the environment, and community well-being; view science as a source of power and not fear.
9. Always ask why. Become empowered to take time to do any necessary research to make your own informed decisions; building both confidence and critical thinking skills.

ABSENCES

Excused absences – If you are missing class because of an emergency, illness, COVID requirement, or a religious activity, communicate with me ASAP. I know this is a challenging situation and I will do my best to help everyone with excused absences or emergencies. Please also recognize the immense challenges for myself and the TAs as we navigate this, together – as a community.

If you already know that you will be absent for any required course activities during the quarter, tell us about it as far in advance as possible, preferably by the end of the first week of classes. You still must complete all of the course assignments, but may be able to do so at a different time. Speak with Dr. Barter *before* your absence to discuss details. If you anticipate missing multiple days, schedule a meeting with Dr. Barter to discuss your needs.

ACADEMIC HONESTY

I encourage you to do your CHEM 1001 coursework in groups. Some of your best learning can happen when you explain what you know to someone who doesn't understand. **However, all work that you turn in must be your own.** If two identical assignments are turned in, both students will receive grades of zero.

Integrity: acting in an honest and ethical manner

Respect: honoring differences in people, ideas, and opinions

Responsibility: accepting ownership for one's own conduct

For more information, consult these resources:

DU Honor Code Statement: <http://www.du.edu/studentlife/studentconduct/index.html>

DU Policies for Student Conduct: <http://www.du.edu/studentlife/studentconduct/policies/>

DESCRIPTION OF LABORATORY ASSIGNMENTS

- Unless otherwise noted, labs will always be held in Boettcher West 015.
- Lab points will be based on your preparedness, safety and courtesy in lab, and performance on lab assignments.
 - What the laboratory assignments look like will change throughout the quarter.
- **Laboratory safety:** All students must properly wear safety goggles and face masks at all times in the laboratory. NSM requires face masks to be worn in the laboratory, regardless of the campus COVID alert level. You must also wear lab appropriate clothing: shoes must cover the entire foot, no bare legs, and no bare shoulders or midriffs. If you do not follow these guidelines, you will be asked to leave and given a 0 for that assignment.
- **We take academic integrity very seriously.** There is no reason students should turn in identical work. Outside of any shared collected data, all work turned in must be your own and individual of your lab partner.
- **Pre-lab assignments** are due at the beginning of the laboratory and should be handed to your TA as you enter the laboratory. These assignments will help you to prepare and engage during lab.
- **Laboratory worksheets (post-labs)** are due at the beginning of your next lab period. To complete worksheets/post-labs you will analyze your data, reflect on what you learned, and/or perform calculations.
- **Lab tardiness:** If you are late to lab by more than 10 minutes, you will miss the weekly safety lecture, and you will not be allowed to perform the experiment.
- **Lab attendance:** You should plan to attend all of your labs, as scheduled. To eliminate the need to reschedule labs, navigate the required contact tracing, and manage COVID protocols, I will be dropping your lowest laboratory score for Laboratories #1 - #7. Your Laboratory #8 score will not be dropped.
 - This policy allows any student to have one missed laboratory without any grade penalty or drop their lowest laboratory score of the quarter.

The labs are a required component of the class – you will automatically fail the class if you do not complete two or more labs. Please do not let this happen.

Make sure that you understand this policy. It is a chemistry department policy that we must follow. Please avoid missing labs!

REQUIRED LABORATORY MATERIALS

Face Mask: Due to the highly collaborative nature of the laboratory environment, NSM (Natural Sciences and Mathematics) has adopted the policy that **all faculty, TAs, and students must be masked at all times during instructional labs.** This is regardless of the number of persons in the lab, distancing, or DU alert level. We will wear masks in all portions of our course, so you will need to have your face mask with you at all times.

Safety Goggles: Everyone has to wear safety goggles during laboratory experiments. One pair of goggles will be provided to you and you will need to bring them with you to all of your laboratory classes.

CHEM 1001 Laboratory Schedule							
Week	Sun	Monday	Tuesday	Wednesday	Thursday	Friday	Sat
1		September 13	14	15	16	17	18
		First Week of Classes – No Labs This Week					
2	19	20	21	22	23	24	25
		Lab 1: Intro to Information Literacy AND Graphing Data with MS Excel Meet in BW015 for this and all subsequent labs **You will need to bring your laptop for this laboratory**					
3	26	27	28	29	30	October 1	2
		Lab 2: The Air We Breathe					
4	3	4	5	6	7	8	9
		Lab 3: Title TBD					
5	10	11	12	13	14	15	16
		Lab 4: Title TBD					
6	17	18	19	20	21	22	23
		Lab 5: Exploring Molecular Shapes					
7	24	25	26	27	28	29	30
		Lab 6: Rock and Mole The Lab 8 Research Project assignment will be handed out and discussed in lab this week					
8	31	November 1	2	3	4	5	6
		Lab 7: TBD **You will need to bring your laptop for this laboratory**					
9	7	8	9	10	11	12	13
		Lab 8: Research Project Presentations ** This laboratory may not be dropped **					
10	14	15	16	17	18	19	20
		THERE ARE NOT ANY LABS THIS WEEK! (Study For Exams)					

****Note:** Most of the laboratories are listed as “Title TBD”, as I want to have the flexibility to be able to adapt and write new laboratory content as we progress through this unique quarter.

DISABILITY SERVICES PROGRAM

Any student who feels that they may need an accommodation based on the impact of a disability should contact the Disability Services Program (DSP) in a timely manner to coordinate reasonable accommodations. Information is available online at <http://www.du.edu/disability/dsp>; see the *Handbook for Students with Disabilities*. DSP will provide me with an official notice of accommodations so I can provide support. I cannot provide accommodations without this step.

LEARNING EFFECTIVENESS PROGRAM

The Learning Effectiveness Program (LEP) provides academic support services beyond basic academic accommodations. <http://www.du.edu/studentlife/learningeffectiveness>

HEALTH AND COUNSELING CENTER

The Health & Counseling Center (HCC) provides many medical and mental health services. <http://www.du.edu/health-and-counseling-center/>

RESTRICTION OF AUDIO OR VISUAL RECORDING, REPRODUCTION, AND DISTRIBUTION OF CONTENT IN ONLINE COURSES

At the University of Denver, we protect the intellectual property of all our faculty, and safeguard the privacy of all our students in online learning environments. To this end, students may not record, reproduce, screenshot, photograph, or distribute any video, audio, written, or visual content from their online courses.

This restriction includes but is not limited to:

- Pre-recorded and live lectures or laboratories
- Live discussions
- Discussion boards
- Simulations
- Posted course materials
 - *Students who post to, or copy work from, **any** web environment (such as Chegg or Course Hero) will be reported to the Office of Student Rights & Responsibilities.*
- Faculty feedback forms
- Visual materials that accompany lectures/discussions, such as slides
- Virtual whiteboard notes/equations, etc.

As we engage in online learning as an academic community, it is imperative to be respectful of all. Keep in mind that if any student is identifiable in an online class recording, this may constitute a violation of the educational record protections provided under FERPA.

- **Students who violate this policy will be reported to The Office of Student Rights & Responsibilities and may be subject to both legal sanctions for violations of copyright law and disciplinary action under *Student Rights & Responsibilities Policies*.**