

Organic Chemistry II Fall 2023

Instructor: Prof. Ryan DeLuca
Office HEB 3254
r.deluca@utah.edu

Class time (Lecture): MWF 11:50-12:40, HEB 2004

*Note: This is an in-person course. Lectures will not be recorded.

Discussion Times:

Thursday 10:45-11:35 AM (section 006), JTB 140

Thursday 12:55-1:45 PM (section 005), CSC 208

Office Hours: TBD

Location: Thatcher building, 2nd floor lobby (down the hall from study center) or by appointment

Feel free to contact me by email for questions at r.deluca@utah.edu. I will do my best to answer emails promptly. I would like to encourage you to email me only if it is something personal that requires individual attention, if instead you have questions about logistics of the class, course material and assignments, and anything else your classmates may wonder as well, please post a question on the Discussions Board instead. This way the information is shared quickly to the entire class, and each of you can benefit from seeing other classmates' questions.

Course Materials: All course materials, such as lecture slides, assignments, solutions, grades, etc. will be posted on Canvas. All class announcements will be done via email through the Canvas server or posted on Canvas as an "announcement". You will be responsible for any information contained in them.

Text:

"Organic Chemistry" by David Klein (3rd edition, eTextbook)

*The Klein eTextbook (3rd edition) will be used through Inclusive Access. However, you may OPT-OUT during the first two weeks of class. Additional information can be found on the campus store website: <https://www.campusstore.utah.edu/utah/InclusiveAccess>

If you choose to OPT-OUT you may buy a different edition of Klein or you may purchase

"Organic Chemistry" by Janice Smith (3rd, or 4th, or 5th edition will all suffice).

I find the Smith book contains concise descriptions (less detail) while the Klein book has more in-depth discussion (and longer chapters). If you would like the Smith book, I recommend purchasing a used hardcopy of the textbook or purchasing an electronic version (pdf) online.

Recommended: "Organic Chemistry II as a Second Language" David Klein. Many students have commented that the overlap between Klein and the second semester material is not as good as the first semester. I see Klein as an excellent introduction to the important basics (electronegativity, resonance, acid/base chemistry). However, you should expect to see higher-level questions on the exams and therefore using Klein exclusively is not recommended.

In-Person Discussion Sessions: The discussion session will be an essential aspect of the course and is designed for group involvement in problem solving. A **worksheet** will be posted on Canvas before each discussion section. It is your responsibility to print it before the session or bring a computer/tablet/phone to access the problems during the discussion. During discussion sections, you will work with your nearest neighbors as a group of 4. Students that attend the discussion session will upload their work to Canvas at the end of discussion (*even if you don't finish*). **NOTE: To receive credit, you must show up on time and be actively engaged in the discussion. You may not submit the worksheet for credit if you do not attend discussion.**

Technology Requirements: Students are expected to be computer literate and Canvas navigation skills are expected. Knowledge and navigation of Canvas is critical to access all features and resources of this course. Students must have strong internet connection and adequate bandwidth to access Canvas (for worksheets etc.).

Prerequisites: *No student should take Chem 2320 without a C or better in Chem 2310.* Please consider retaking Chem 2310 to improve your background.

Philosophy: Organic chemistry is a science that is central to chemistry, materials science, and biology in that it deals with molecular interactions. Much of what you will learn in this class will serve as a fundamental basis for your chosen discipline (organic chemistry, medicinal chemistry, materials, pharmaceuticals, medicine, etc.). It will be very difficult to learn this science by “simply” memorizing different reactions without an understanding of the fundamental concepts that are the basis for these reactions.

Learning Outcomes: Students will gain an understanding of:

- the use of nuclear magnetic resonance spectroscopy, and infrared spectroscopy for organic structure elucidation
- the fundamentals of electronic structure and bonding in conjugated and aromatic systems
- reactivity patterns of conjugated and aromatic molecules
- the fundamental electronic structure and bonding in carbonyl compounds
- An understanding of nucleophiles, electrophiles, electronegativity, and resonance
- substituent effects on pK_a (in the case of carboxylic acids)
- the reactivity of carbonyl compounds with both hard and soft nucleophiles (carboxylic acids, aldehydes and ketones)
- the kinetics and thermodynamics of carbonyl condensation reactions

The learning outcomes expected of the successful students in this course include: thorough inquiry of course materials; thoughtful analysis of data obtained from chemical experiments; skillful use of acquired knowledge to critically think through and creatively solve chemical problems including the application of basic principles to more complicated situations. Successful students are required to communicate their answers correctly and thoroughly to demonstrate quantitative literacy in the chemical sciences.

Course content. Units 14-23 will be covered CHEM 2320:

You are responsible for *everything* mentioned in lecture, whether the recommended textbook covers that material or not.

Unit 14- Conjugation and Dienes

- Electrophilic addition (1,2 vs 1,4)
- MO Theory
- Diels Alder
- Electrocyclizations

Unit 15- Aromaticity

Unit 16- Electrophilic Aromatic Substitution

- Aromaticity and reactivity
- Catalysis, thermos/kinetics
- Structure (*o,p,m*), resonance
- halogenation, nitration, sulfonation
- Friedel crafts, rearrangements
- Activating/deactivating/directing groups
- Uses of EAS products
 - Reduction of aryl ketone (Zn, HCl, Fe/Sn HCl, Wolff-Kishner)
 - Benzylic bromination and elimination
 - Reduction of nitro group to amine

Unit 17- Intro to Organometallics

- Cross-Coupling Reactions (Intro to Suzuki)

Unit 18- Intro to Carbonyl Chemistry and Organometallic Reagents

- Reduction of aldehydes and ketones
- Reactions of organometallic reagents with aldehydes and ketones

Unit 19- Nucleophilic Addition to Aldehydes and Ketones

- Wittig
- Acetals
- Imines/Enamines

Unit 20- Nucleophilic Acyl Substitution

- Carboxylic Acids, amides, esters, acid chlorides, nitriles
- Fischer Esterification/hydrolysis
- DCC
- Reduction of carboxylic acid derivatives
 - LAH and DIBAH
- Reactions of organometallic reagents with carboxylic acid derivatives

Unit 21- Substitution at the α carbon

- Enols and enolates
- Halogenation
- Kinetic vs thermodynamic enolates
- Malonic Ester/Acetoacetic Ester Synthesis
- Decarboxylation

Unit 22- Carbonyl Condensations

- Aldol
- Claisen
- Michael

- Robinson

Unit 23- Special Topics

- Enantioselective Reactions (% ee, CBS Reduction, Evans Aux.)
- Radicals (Bu₃SnH cascades, Barton McCombie, radical clock)
- Metathesis

Important Dates:	Labor Day	Monday, September 4 th
	Fall Break	October 9 th – October 13 th
	Thanksgiving Break	November 23 rd – November 24 th
	Last Day to Withdraw	Friday, October 20 th
	Last Day of Class:	Thursday, December 7 th
	Final Exam	Thursday, Dec. 14 th , 10:30 -12:30

Quiz Schedule:	Quiz:	Wednesday, August 30 th
	Quiz:	Wednesday, November 15 th

In addition to these two quizzes, there will also be two unannounced quizzes in either lecture or discussion.

Exam Schedule:	Exam 1:	Wednesday, Sept. 27 th 11:50-12:40
	Exam 2:	Wednesday, Nov. 1 st 11:50-12:40
	Exam 3:	Friday, Dec. 1 st 11:50-12:40
	Final Exam:	Thursday, Dec. 14 th , 10:30 -12:30

Grading:

1. **Problem of the Week (POW):** A POW will be posted on Canvas each week and will be due each Friday at 11:59 PM (**Assignments must be converted to a single pdf and uploaded to Canvas**). You may work with your peers on the POWs. To handle these more advanced questions, it is highly advantageous to have already read the chapter and executed the in-chapter problems. There will be 11 POW problems (at 5-points each) totaling **55 points**. The grading scale for the POWs will be as follows:

5 points: Mostly correct, demonstrates a thorough understanding of fundamental concepts

3 points: Multiple issues, reasonable effort, shows confusion/misunderstanding of concepts

1 point: Poor effort and/or left several problems blank, fundamental understanding of concepts needs improvement

0 points: Extremely poor effort and/or few problems completed

NOTE: Working together on POWs is both allowed and encouraged, but each student must upload their own work in their own writing. Plagiarism – either from a peer or from an internet source – for any POW will result in a letter-grade reduction for the course. If you're not able to do one of these on time, it's much better to own the 0 than to cheat.

2. **In-Person Discussion Sessions:** The discussion session will be an essential aspect of the course and is designed for group involvement in problem solving. A **worksheet** will be posted on Canvas before each discussion section. It is your responsibility to print it before the session (or bring a computer/tablet/phone to access the problems during the discussion). During discussion sections you will work with your nearest neighbors as a group of 4. Students that attend the discussion session will upload their work to Canvas at the end of discussion (*even if you don't finish*). **NOTE: To receive credit, you must show up on time and be actively engaged in the discussion. You may not submit the worksheet for credit if you do not attend discussion.** There will be 11 discussion sessions (at 3-points each). The top 10 of 11 discussions will be counted, so you may be absent once with no penalty leading to a total of 30 points.

NOTE: Students caught submitting discussion worksheets without attending discussion will result in a letter-grade reduction for the course.

3. **Quizzes:** Four quizzes will be given throughout the semester (20 points each). Two quizzes will be given at the beginning of class (see quiz schedule above) and two quizzes will be unannounced and administered during either the lecture or discussion section. The top 3 of 4 quizzes will be counted, so you may be absent once with no penalty leading to a total of 60 points.
4. **Molecule of the Semester (Extra Credit):** Write a 2-page paper (typed, Arial 12 pt font, single-spaced, 1 inch margins) on any organic molecule of interest (10 pts extra credit).
5. **Exams:** Three exams will be given (100 pts each) and a final (200 pts).
6. **Final grades** will be assigned based on the 645 points possible. Students will be assessed by examinations and assignments as detailed below. These assessment methods will use quantitative point-based values to gauge the student's progress toward the learning outcomes. The total points possible may change slightly if the number of POWs change.

POWs	55 points
<i>Discussions</i>	30 points
Quizzes	60 points
Exam 1	100 points
Exam 2	100 points
Exam 3	100 points
Final Exam	200 points
<i>Molecule of Semester</i>	<i>(+10 EC points)</i>
<i>Exam Reflections</i>	<i>(+15 EC points)</i>
Total	645 points

*I will replace your lowest midterm score with your final examination percentage (# correct / 200) if your final examination percentage is higher. Scores of 0 resulting from academic dishonesty cannot be replaced.

A 93.00–100%	B+ 85.00–87.99%	C+ 75.00–77.99%	D 60.00–64.99%
A- 88.00–92.99%	B 81.00–84.99%	C 71.00–74.99%	E 0.00–59.99%
	B- 78.00–80.99%	C- 65.00–70.99%	

I reserve the right to adjust the grade cutoffs depending on the course distribution.

Please take advantage of all assignments and extra credit opportunities throughout the semester. Additional assignments/points will not be created at the end of the semester. **Final grades will be determined based on the grading scale shown above. All inquiries regarding extra points or modification of letter grades will be referred to this section of the syllabus.**

COVID Accommodations: Please fill out the following form for COVID-related accommodations:

<https://chem.utah.edu/forms/secure/covid-accommodations.php>.

If you test positive for COVID-19, please self-report here:

<https://uofu.service->

[now.com/it?id=uu_catalog_item&sys_id=e51376e2dbe74090a0ed7dfdae96195a](https://uofu.service-now.com/it?id=uu_catalog_item&sys_id=e51376e2dbe74090a0ed7dfdae96195a)

Additional information can be found at <https://coronavirus.utah.edu> or call 801- 213-287.

Makeup/Late Work policy: Late work will not be accepted. There will be no makeup examinations or makeup assignments for this class. Exceptions to this policy must be cleared in advance (only valid University related absences) or must be due to certifiable emergencies.

Exam and Quiz Policy: The dates for the exams/quizzes are outlined under Quiz Schedule/Exam Schedule (shown above). **NO MAKEUP EXAMS/QUIZZES** will be given. **Do not make commitments that conflict with these dates.**

NOTE: Exams and quizzes will NOT be rescheduled because of conflicts with work schedules or vacations.

Re-grading: Legitimate questions about the grading of an exam can be submitted up to **one week** after the exam is handed back. The procedure for turning in an exam for regrading is to attach the re-grade request form (posted on Canvas) explain and a brief justification for the regrade. However, the exam will not be accepted if any writing is on the exam. The entire exam will be re-graded in all cases.

Legitimate questions about the grading of assignments can also be submitted up to **one week** after the assignment is graded. In this case, email Professor DeLuca a brief justification for the regrade. The entire assignment will be re-graded in all cases.

Technology Issues: It is the student's responsibility to maintain your computer and related equipment to participate in this course. Equipment failures will not be an acceptable excuse for late or absent assignments.

NOTE: It is the student's responsibly to make sure the correct file is submitted to Canvas before the due date. Once an assignment/exam file is submitted, I recommend double checking the file to determine it uploaded correctly. Credit will not be given after the deadline unless the issue is reported immediately to Professor DeLuca.

Academic Misconduct Policy: The Department of Chemistry takes academic integrity very seriously. Violations of the student code of conduct erode the equitable learning environment that we strive for in all our courses.

All students are expected to adhere to policies set forth by instructors on assignments, exams, homeworks, etc. Students may work collaboratively on projects or assignments only if specifically permitted by the instructor of the course. Any activity that falls outside of the instructor-permitted exceptions is considered inappropriate and may constitute academic misconduct. Incidents of academic misconduct (including cheating, plagiarizing, research misconduct, misrepresenting one's work, and/or inappropriately collaborating on an assignment) will be dealt with in accordance with the Student Code (Policy 6-400, Section V). Instances of academic misconduct could result in a failing grade for the course; probation, suspension, or dismissal from a program; suspension or dismissal from the university; or revocation of a degree or certificate. Inappropriate behavior includes, for example, submitting assignment problems to online tutoring resources or searching for solutions on such websites and submitting the result as your own work.

All study materials in this course are considered intellectual property of the instructor and the University of Utah (this includes lecture slides, problem sets, exams, answer keys etc.). Unauthorized uploading or distribution of the aforementioned materials to any website, either during or after the semester, is prohibited and may be addressed both as a violation of the behavioral standards as well and an act of academic misconduct. The Department will actively monitor websites for unauthorized distribution and refer all instances of the violation to VP for Student affairs and the College of Science Academic Affairs Committee for investigation. You need written permission from the instructor permitting you to upload the material.

Website: Canvas will be used. Login with your id number and password, and then find Chem 2320, sec. 004. Outlined lecture notes, important information and grades will be posted at appropriate times.

Withdrawal and Incomplete Policy: Students may withdraw from the course until the midpoint of the term (**October 20**), but full tuition and fees will not be reimbursed. Note that you do not need instructor permission to drop. After the midpoint, withdrawal is allowed only in emergencies and by submitting a petition to the dean of your college; I would encourage you to meet with your academic advisor to assist you with this process. **Incompletes** are rarely given and only when extenuating circumstances prevent the student from taking the final exam. Additionally, to receive an I the student must have taken the three midterm exams and be passing the course.

Tentative Schedule of Lectures:

Lecture	Day	Date	Unit
1	M	Aug 21	Introduction; Review of key reactions from CHEM 2310
2	W	Aug 23	Review of key reactions from CHEM 2310
3	F	Aug 25	Review of key reactions from CHEM 2310 (POW 1 Due)
4	M	Aug 28	Review of key reactions from CHEM 2310
5	W	Aug 30	14: Conjugation, Resonance and Dienes (Quiz)
6	F	Sept 1	14: Conjugation, Resonance and Dienes (POW 2 Due)
No Class	M	Sept 4	Labor Day
7	W	Sept 6	14: Conjugation, Resonance and Dienes
8	F	Sept 8	15: Aromaticity (POW 3 Due)
9	M	Sept 11	15: Aromaticity and 16: Reactions of Aromatic Compounds
10	W	Sept 13	16: Reactions of Aromatic Compounds
11	F	Sept 15	16: Reactions of Aromatic Compounds (POW 4 Due)
12	M	Sept 18	16: Reactions of Aromatic Compounds
13	W	Sept 20	16: Reactions of Aromatic Compounds
14	F	Sept 22	16: Reactions of Aromatic Compounds (POW 5 Due)
15	M	Sept 25	¹ H NMR Review
Exam I	W	Sept 27	Focus: Units 14-16
16	F	Sept 29	18: Intro to Carbonyls and Organometallic Reagents
17	M	Oct 2	18: Intro to Carbonyls and Organometallic Reagents
18	W	Oct 4	18 and 19: Nucleophilic Additions to Aldehydes and Ketones
19	F	Oct 6	19: Nucleophilic Additions to Aldehydes and Ketones (POW 6 Due)
No Class	M	Oct 9	Fall Break
No Class	W	Oct 11	Fall Break
No Class	F	Oct 13	Fall Break
20	M	Oct 16	19: Nucleophilic Additions to Aldehydes and Ketones
21	W	Oct 18	19: Nucleophilic Additions to Aldehydes and Ketones
22	F	Oct 20	19: Nucleophilic Additions to Aldehydes and Ketones (POW 7 Due)
23	M	Oct 23	Acid/Base Review (Focus on Carboxylic Acids)

24	W	Oct 25	Acid/Base Review (Focus on Carboxylic Acids)
25	F	Oct 27	20: Nucleophilic Acyl Substitution (POW 8 Due)
26	M	Oct 30	20: Nucleophilic Acyl Substitution
Exam II	W	Nov 1	Focus: 18-19 and Acid/Base
27	F	Nov 3	20: Nucleophilic Acyl Substitution
28	M	Nov 6	20: Nucleophilic Acyl Substitution
29	W	Nov 8	20: Nucleophilic Acyl Substitution
30	F	Nov 10	21: Substitution at the α carbon (POW 9 Due)
31	M	Nov 13	21: Substitution at the α carbon
32	W	Nov 15	21: Substitution at the α carbon (Quiz)
33	F	Nov 17	22: Carbonyl Condensations (POW 10 Due)
34	M	Nov 20	22: Carbonyl Condensations
35	W	Nov 22	22: Carbonyl Condensations
NO CLASS	F	Nov 24	Thanksgiving Break
36	M	Nov 27	Special Topics (POW 11 Due)
37	W	Nov 29	Special Topics
Exam III	F	Dec 1	Focus: 20-22
38	M	Dec 4	Special Topics
39	W	Dec 6	Final Exam Review
Final Exam	Th	Dec 14	(10:30 AM – 12:30 PM) Cumulative Final Exam

Disclaimer: This syllabus is meant to serve as an outline and guide for our course. Please note that I may modify it with reasonable notice to you. I may also modify the Course Schedule to accommodate the needs of our class. Any changes will be announced in class and posted on Canvas under Announcements.

Tentative Schedule of Discussions:

Discussion	Day	Date	
	Th	August 24	Benchmark Quiz
1	Th	August 31	
2	Th	Sept. 7	
3	Th	Sept. 14	
4	Th	Sept. 21	
No Discussion	Th	Sept. 28	No Discussion
5	Th	Oct. 5	
No Discussion	Th	Oct. 12	No Discussion
6	Th	Oct. 19	
7	Th	Oct. 26	
No Discussion	Th	Nov. 2	No Discussion
8	Th	Nov. 9	
9	Th	Nov. 16	
No Discussion	Th	Nov. 23	No Discussion
10	Th	Nov. 30	
11	Th	Dec 7	

Study Hints (How to succeed in Organic Chemistry!)

1. Prepare for lecture. Spend about 10-15 minutes before each lecture *skimming* the topics in the text to be covered that day. You will be able to comprehend more during lecture and it will seem more relevant and interesting if you have a basic familiarity with the assigned material before you walk into class. Lecture will focus on the most challenging and **important** concepts from the text and the application of these concepts. Use your lecture notes as a guide to the topics that are most important then go back and read more carefully these sections in the text.
2. Take careful notes during lecture. The outline of the lecture notes will be posted on our Canvas website at least 24 hours in advance of the lecture. Print the notes out (4 slides/page works well) or better yet – pull up the notes on your tablet during class so that you can fill in the important details/mechanisms, etc. *Re-visit your notes shortly after lecture.* Summarize the important points of each slide and make sure that you understand the important concepts and ask questions if you do not.
3. Do not get behind. THIS IS EXTREMELY IMPORTANT! We will be covering a substantial amount of complicated material in a short amount of time and each concept will build upon the knowledge you have already accumulated. *For these reasons, I encourage you to stay caught up and spend time daily reading the text, solving problems, and/or practicing mechanisms and*

synthesis. **Do NOT try to CRAM or MEMORIZE.** *Regular, rigorous* studying is required to begin to master this material. Students that have had the most success have committed many hours (~12) a week to the course. If you find you cannot make the necessary time commitment to get the grade you want, you might consider withdrawing from the course and taking it another semester when you can spend more time on it.

4. Practice. It is highly recommended that you do all of the problems embedded in the text to get a feel for how well you grasp each section. For extra practice, work end of chapter problems and the discussion worksheets. If you find you have difficulty, go back and read that section more carefully. Problem of the week (POW) assignments are generally more advanced than textbook problems, so make sure you have a basic understanding of the concepts before you attempt them.

The worst thing you can do for yourself is to work on problems with a solutions guide open next to you. If the following sounds familiar, STOP! “While working through the problem, I was stuck. I glanced quickly at the answer key and suddenly the problem seemed straightforward and easy so I moved on to the next problem.”

During the exam you are ON YOUR OWN... it is to your advantage to work through the problems on your own as much as you can before consulting the solutions guide. *Struggling before the exam is better than struggling/panicking during the exam.* If you must consult the key or look anything up in the textbook or your lecture notes for guidance this means that some time before the exam will have to come back to this problem again (and again until you can finish it on your own).

5. Learn from your mistakes: Make sure you understand where you made your mistakes and how to correct them. Remember, everything in O-Chem builds upon the basics – chances are, if something was important enough to show up on a mid-term exam it will show up again in a slightly different form on a later exam.
6. Be realistic about your exam readiness. Sometime before the exam put yourself in a true test taking situation. You could do one of the old exams or put together a practice test of your own by working through the homework and recitation problems in a *random order*. Either way, the key is to do the problems without any additional assistance (from the solutions manual or classmate) **under time constraints.** When you are finished grade the exam, go back to review the concepts covered in the problems you missed. Repeat until you feel comfortable and confident.
7. Study with your peers! Not only will this make your experience more enjoyable, but you will learn the material better as well. You can compare class notes with a study partner and come up with an improved set of lecture notes, discuss homework problems and create additional problems for each other. Research shows that by teaching someone else you will gain a better understanding of the material and you will get a more realistic feel for how well you understand the concepts.
8. Use the following problem solving process:
The appropriate practice for working through problem sets is:
 1. Attempt the problem on your own without the aid of your book/notes.
 2. Use your book/notes to check your method and gain a deeper understanding of the concept being asked.
 3. Discuss the concept with your classmates. As mentioned above, one of the best ways to master a new concept is to engage in a detailed discussion with your peers and learn from each other.
 4. Reach out to your teaching assistants to make sure you understand the concept correctly.

5. Contact your professor and explain your thought process to make sure you understand the concept correctly.

The most important skill you will learn in this course is complex problem solving. Struggling through a difficult problem and following the process represented in steps 1-5 is critical for you to learn HOW to think about these problems.

9. *Come to office hours well prepared:* Please come prepared with a list of detailed questions in office hours. I can be much more effective at identifying any misconceptions you may have with the material if you can show me what you have tried and explain your thought process to me. If you have not spent any time thinking through the question, I will not be able to help you in an effective manner and will likely ask you to spend more time researching the topic before I can identify where you are struggling.

University Policies

We Aim to be Inclusive: I intend for all students from all backgrounds and perspectives to have their learning needs addressed in this class. I intend for all materials to be presented in a way that is respectful of diversity: gender, disability, race, age, sexuality, ethnicity, culture, and socioeconomic status. I am not perfect and appreciate any suggestions for improvement from all students.

The Americans with Disabilities Act:

The University of Utah seeks to provide equal access to its programs, services and activities for people with disabilities. If you will need accommodations in the class, reasonable prior notice needs to be given to the Center for Disability & Access, 162 Olpin Union Building, 801-581-5020. CDA will work with you and the instructor to make arrangements for accommodations. All written information in this course can be made available in alternative format with prior notification to the Center for Disability & Access.

Campus Safety: The University of Utah values the safety of all campus community members. To report suspicious activity or to request a courtesy escort, call campus police at 801-585-COPS (801-585-2677). You will receive important emergency alerts and safety messages regarding campus safety via text message. For more information regarding safety and to view available training resources, including helpful videos, visit safeu.utah.edu

Addressing Sexual Misconduct: Title IX makes it clear that violence and harassment based on sex and gender (which includes sexual orientation and gender identity/expression) is a Civil Rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, color, religion, age, status as a person with a disability, veteran's status or genetic information. If you or someone you know has been harassed or assaulted on the basis of your sex, including sexual orientation or gender identity/expression, you are encouraged to report it to the University's Title IX Coordinator; Director, Office of Equal Opportunity and Affirmative Action, 135 Park Building, 801-581-8365, or to the Office of the Dean of Students, 270 Union Building, 801-581-7066. For support and confidential consultation, contact the Center for Student Wellness, 426 SSB, 801-581-7776. To report to police, contact the Department of Public Safety, 801-585-2677(COPS).

Sexual Misconduct, Discrimination, and Related Retaliation: The University of Utah is committed to fostering a positive and welcoming learning, working, and living environment. Sexual Misconduct, Discrimination and Retaliation are prohibited by University Policy. Faculty and staff have a

responsibility to inform the Office of Equal Opportunity and Affirmative Action (OEO/AA) when made aware of incidents of sexual misconduct, discrimination, and related retaliation, to ensure that individuals impacted receive information about options for reporting and supportive resources. Incidents may come to the attention of faculty and staff in any way, including through face-to-face conversations, admissions or scholarship applications or essays, a written class assignment or paper, class discussion, email, text, or social media post. This obligation applies regardless of where or when an incident occurred, including if it occurred off campus and/or before they were a member of the campus community. Additional information can be found on the OEO website or you may contact oeo@utah.edu or 801-581-8365. If you wish to seek support confidentially, please contact the Victim-Survivor Advocates 801.581.7776 or advocate@sa.utah.edu.

Important Contacts and Resources:

Chemistry Academic Advising: <https://chem.utah.edu/undergraduate/advising.php>

Academic advisors are available to meet with students by appointments or drop-ins to discuss course scheduling, graduation requirements, academic resources, permission code questions, campus & departmental opportunities, and drop & withdrawal policies. Chemistry advisors can be found in HEB 2108/2112 or CSC 240.

Hannah Leopold Undergraduate Academic Advisor

Hannah.Leopold@utah.edu

Student Wellness: Personal concerns such as stress, anxiety, relationship difficulties, depression, cross-cultural differences, etc., can interfere with a student's ability to succeed and thrive. For helpful resources contact the Center for Student Wellness at www.wellness.utah.edu or 801-581-7776 or the Counseling Center <https://counselingcenter.utah.edu> or 801-581-6826.

Student Wellness Centers:

- (Main Campus Location) wellness@sa.utah.edu ECCLES STUDENT LIFE CENTER 1836 STUDENT LIFE WAY SUITE 2100 SLC, UT 84112 801-581-7776
Health education information, presentations, prevention training on various topics. Direct services are also provided such as HIV/STD testing and well coaching. <https://wellness.utah.edu>
- Victim Advocacy Location advocate@sa.utah.edu 201 SOUTH 1460 EAST STUDENT SERVICES BUILDING ROOM 328 SLC, UT 84112 801-581-7779
Support for survivors of sexual and relationship violence.

Counseling Center: Meets with students on a variety of personal and academic issues.

201 S 1460 E, Rm 426 Student Services Building 801-581-6826

Hours: Monday-Friday 8 a.m. - 5 p.m. Emergencies: For after-hours emergencies, contact the 24/7 Crisis Line 801-587-3000 <https://counselingcenter.utah.edu>

Women's Resource Center: Individual, Group, and Couples Counseling using a feminist multicultural framework. Services offered on a sliding scale fee.

Hours: Monday-Friday 8 a.m. - 5 p.m. University Union. Room 411. 801-581-6402
<https://womenscenter.utah.edu>

The Office of the Dean of Students

Behavioral Misconduct and Intervention. If you feel unsafe on campus or threatened report incidents through using <https://deanofstudents.utah.edu/>. University Union | Room 270

For emergencies, call Campus Police 801-585-2677.

Basic Needs, Food & Housing Security: Any student who faces challenges securing food or housing and believes this may affect course performance is urged to contact a Student Success Advocate for support at studentsuccess@utah.edu and see University resources at <https://asuu.utah.edu/displaced-students> or <https://feedu.utah.edu/>

Tutoring: Tutoring is available through the University of Utah Tutoring Center in the Student Services Building, Room 330. Students are given a list of tutors to contact and schedule for day, evening, or weekend appointments. Low-income students may qualify for free tutoring. For more information call 581-5153 or visit www.sa.utah.edu/Tutoring/. The Chemistry Department also has a help center for organic chemistry classes, located in room 2619 TBBC. The help center is usually staffed throughout the day, with specific hours posted on the door.