

CHEMISTRY 2310 Tentative Schedule – Fall 2019
(Subject to moderate change)
Classes held on Mondays and Wednesdays, 5:15 – 7:45 p.m.

Date	Watch or Read this Before Class:	In Class We'll Work On:	Other Stuff (exams held in testing centers):
8/26	Welcome Video	Group Assignment & Intro Survey	Intro Survey: 8/26 – 9/16
8/28	Chapter 1: entire chapter Chapter 2: sections 2.1 – 2.3	Quiz 1/2 (at the start of class) Pr. Set 1/2 (Ch. 2) – due by 9/10	Entrance Exam: 9/2 – 9/28
9/2	No Class: Labor Day		
9/4	Chapter 2: sections 2.4 – 2.6	Pr. Set 1/2 (Ch. 2)	
9/9	Chapter 2: sections 2.7 – 2.9	Pr. Set 1/2 (Ch. 2)	
9/11	Chapter 3: sections 3.1 – 3.3	Quiz 3 (at the start of class) Pr. Set 3 (Ch. 3) – due by 9/19	
9/16	Chapter 3: sections 3.4 – 3.6	Pr. Set 3 (Ch. 3)	
9/18	Chapter 3: sections 3.7 – 3.9	Pr. Set 3 (Ch. 3), Exam 1 Review	
9/23	Chapter 4: sections 4.1 – 4.3	Quiz 4 (at the start of class) Pr. Set 4 (Ch. 4) – due by 10/1	Exam 1 (Ch. 2-3): 9/19 – 9/26
9/25	Chapter 4: sections 4.4 – 4.6	Pr. Set 4 (Ch. 4)	
9/30	Chapter 4: sections 4.7 – 4.9	Pr. Set 4 (Ch. 4)	
10/2	Chapter 5: sections 5.1 – 5.4	Quiz 5 (at the start of class) Pr. Set 5 (Ch. 5) – due by 10/10	Anonymous Extra-Credit Online Survey (10/1 – 10/13)
10/7	Chapter 5: sections 5.5 – 5.7	Pr. Set 5 (Ch. 5)	
10/9	Chapter 5: sections 5.7 – 5.8	Pr. Set 5 (Ch. 5), Exam 2 Review	
10/14	Chapter 6: sections 6.1 – 6.4	Quiz 6 (at the start of class) Pr. Set 6 (Ch. 6) – due by 10/22	Exam 2 (Ch. 4-5): 10/10 – 10/17
10/16	Chapter 6: sections 6.5 – 6.7	Pr. Set 6 (Ch. 6)	
10/21	Chapter 6: sections 6.8 – 6.10	Pr. Set 6 (Ch. 6)	
10/23	Chapter 7: sections 7.1 – 7.2	Quiz 7 (at the start of class) Pr. Set 7 (Ch. 7) – due by 10/31	
10/28	Chapter 7: sections 7.3 – 7.4	Pr. Set 7 (Ch. 7)	
10/30	Chapter 7: sections 7.5 – 7.6	Pr. Set 7 (Ch. 7), Exam 3 Review	
11/4	Chapter 8: sections 8.1 – 8.2	Quiz 8 (at the start of class) Pr. Set 8 (Ch. 8) – due by 11/7	Exam 3 (Ch. 6-7): 10/31 – 11/7
11/6	Chapter 8: sections 8.3 – 8.4	Pr. Set 8 (Ch. 8)	
11/11	Chapter 9: sections 9.1 – 9.2	Quiz 9 (at the start of class) Pr. Set 9 (Ch. 9) – due by 11/19	
11/13	Chapter 9: sections 9.3 – 9.4	Pr. Set 9 (Ch. 9)	
11/18	Chapter 9: sections 9.5 – 9.6	Pr. Set 9 (Ch. 9), Exam 4 Review	
11/20	Chapter 10: sections 10.1 – 10.2	Quiz 10 (at the start of class) Pr. Set 10 (Ch. 10) – due by 11/26	Exam 4 (Ch. 8-9): 11/19 – 11/26
11/25	Chapter 10: section 10.3	Pr. Set 10 (Ch. 10)	
11/27	NO CLASS – Thanksgiving Holiday		
12/2	Nothing	Comprehensive Review (please bring questions)	Anonymous Extra-Credit Online Survey (12/1 – 12/8)
12/4	Nothing		
12/9 – 12/13		Comprehensive Final	

CHEMISTRY 2310 – Fall 2019
Organic Chemistry I
Mondays and Wednesdays, 5:15 – 7:45 p.m.

Section	Location	Room
BB1	Brigham City Campus	TBA
LB1	Logan Campus	TBA
PB1	USU Eastern Campus	TBA
UB1 (Uintah Basin)	Vernal	BEERC B133
	Roosevelt	TBA

General Information

Instructor: Dr. Mike Christiansen (you can call me Dr. C or just Mike)

Email: m.christiansen@usu.edu (please do NOT email me through Canvas; I don't check it)

Office: 221G Bingham Building

Phone: 435-722-1761

Home: 435-781-0749

Cell: 435-828-0140

Office hours: Mondays and Wednesdays, 4 – 5 p.m.

Required: *Organic Chemistry Unleashed, by Mike Christiansen*, ISBN #978-0-9866151-0-8. I'll post a video about this on our course's Canvas homepage soon.

Optional: Molecular Structure Model Kit (strongly recommended, available for check-out cost-free)

Prerequisites: CHEM 1220

Course Description: This course is the first of a two-semester sequence (CHEM 2310 and 2320) covering the basic principles of organic chemistry, which include: nomenclature, basic reaction predictions and mechanisms, and properties of functional groups. At the end of the course, you should have a better understanding of organic chemistry, its application to daily life, and the ability to design simple organic syntheses.

Course Objectives:

By the end of the semester you should:

1. Understand the basic principles of organic chemistry, as described above under **Course Description**.^{*,‡}
2. Be able to devise organic syntheses of simple molecules.[†]
3. Be able to predict the outcome(s) of chemical reactions discussed in class.^{*,‡}
4. Be able to determine compounds' structures using IR, MS, and NMR data.[‡]

*IDEA objectives 1-2

†IDEA objective 3

‡IDEA objective 7

‡IDEA objectives 5 and 13

(For more on using the IDEA course evaluation system, I've posted a document about IDEA evaluations on Canvas.¹)

¹ <https://login.usu.edu/cas/login?service=https%3A%2F%2Fmy.usu.edu%2Fpaf%2Fauthorize>

Course Structure: This course is not an ONLINE class! In fact, I DO expect you to attend every class, though I will not grade on attendance (see **Attendance** below).

This class will NOT follow a traditional lecture format. Instead, lecture videos are pre-recorded and posted on Canvas. **You are required to watch or read each of the chapter sections before class, according to the schedule on the first page of this syllabus.** We will spend in-class time doing problem sets in groups (see **Problem Sets** below). The groups, which I will assign, may be modified once or twice during the semester, at my discretion. (If you have serious problems with your group, please tell me through email.)

This type of course structure, where you watch lecture videos online outside of class and then do homework in class, is called **flipped learning**. I flip my classes for the following reasons:

- Once students get used to it, most strongly prefer it to traditional lecture.
- It generally produces higher grades than traditional lecture.
- I get to know my students better, which means (when applicable) I can write better letters of recommendation for you later on.
- You can re-watch my videos as many times as you want, which can better help you prepare for our exams and (if applicable) entrance exams to professional schools later on.
- Because you do your problem sets in class, with me present, I am here to help answer your questions, right when you need me most.

To take the greatest advantage of the **flipped learning** videos outside of class, you must:

- Watch or read the assigned videos for each chapter section BEFORE CLASS!
- Take notes while you watch or read.
- Do NOT do other activities (Facebook, listen to music, do your dishes) while watching or reading.
- Come to class. (Don't skip, except in unavoidable emergencies.)

Peer Grades: To encourage participation and to discourage freeloading, at the end of the semester, I will have you anonymously assign a peer grade to each member of your group (including yourself), based on how much each person contributed to your group problem sets. Your individual problem set score will then be readjusted to reflect the combined-average grade you receive from you and your fellow group members, according to the following equation:

Individual Problem Set Grade = (Group's Total Problem Set Grade) × (Y)
(Y) = the numerical average of Peer Grades, by the following conversion:

F	D-	D	D+	C-	C	C+	B-	B	B+	A-	A
0.5	0.575	0.65	0.6833	0.7167	0.75	0.7833	0.8166	0.85	0.8833	0.9167	1

Attendance: **I require facilitators to track attendance and email me the final attendance record at the end of the semester.** Attendance is not mandatory, but in-class problem sets are integral to the class. Also, if you skip class, you will miss our in-class quizzes. Furthermore, your **Peer Grade** will probably be low if you don't come. Thus, your grade will correlate strongly with your attendance. Additionally, if you ask me for letters of recommendation later on, I will take your attendance into serious consideration.

Canvas: Beyond videos, I will also post problem sets, lecture slides, overhead notes, answer keys, study guides, announcements, grades, and schedule changes on Canvas. Please check Canvas regularly!

Kaltura: In-class proceedings will be recorded by using an app called Kaltura. You can find Kaltura on our Canvas homepage, which will let you to re-watch anything you miss in class. However, do NOT use this as an excuse to regularly skip class!

Time Expectations: Your primary homework is to watch or read the assigned chapter sections before class, study for exams, and prepare for in-class problem sets. If you want more practice, you can do additional problems from each chapter, beyond the assigned ones. These are recommended, but not required. Please note that chemistry is a subject that requires a large time commitment to master.

Problem Sets: Problem sets are posted on Canvas in advance. Most take more multiple class periods to finish. The due date is shown at the top of each problem set and on our course schedule. Everyone in your group receives the same score (later adjusted by your **Peer Grade**, described above), so it's in your best interest to contribute. Your lowest problem set score gets dropped. As a group, you may use any resource you want on problems sets: notes, the text, the internet, me, and each other. However, I warn you against mindlessly copying answers, because it will disadvantage you and lower your exam performance. Problem set answer keys are posted the morning after each one is due.

Quizzes: For each new chapter, there will be a five-point in-class quiz, based on the material covered in the assigned sections from that chapter before class. These quizzes are given to encourage you to watch or read the assigned chapter sections before class. Your lowest quiz score will be dropped. No makeup quizzes will be given.

Entrance Exam: You are required to take an entrance exam worth 20 points, for which you get full credit, regardless of how you do on it. Its purpose is to provide a baseline measure of your chemistry knowledge, for later comparison.

Exams: Most of your grade comes from exams (four midterms and one comprehensive final), which are based largely on problem sets. Exams will be taken in your testing centers and are NOT done in groups. Exams will cover information from our video lectures and/or class and will include modified problems from the text or problem sets. The comprehensive final will have questions from old exams and quizzes, as well as new questions. Exams will be given on the days indicated on the class schedule. If you know ahead of time that you will miss an exam, and if the reason is valid (determined at my discretion), arrangements will be made. No after-the-fact excuses/absences will be considered!

Grade Breakdown:

Your course grade will be calculated, based on the following point amounts:

Intro Survey		5 points (~1%)
Entrance Exam	(Full credit for taking it, irrespective of grade)	20 points (3.7%)
9 quizzes	(5 points each – lowest score dropped)	40 points (7.3%)
9 problem sets	(10 points each – lowest score dropped)	80 points (14.7%)
4 Midterm Exams	(100 points each – lowest score dropped)	300 points (55.0%)
Comprehensive Final	(100 points, MANDATORY)	100 points (18.3%)
Total		545 points

Of the four midterm exams, **only three will be counted** toward your final grade. If you take all four midterms, your lowest score will be dropped. The comprehensive final is mandatory and will not be dropped. Your final course grade will be based on the following scale:

A: 100-93% A–: 92-90% B+: 89-87% B: 86-83% B–: 82-80%
C+: 79-77% C: 76-73% C–: 72-70% D: 69-60% F: 59% and below

University Policies

Academic Freedom and Professional Responsibilities: Academic freedom is the right to teach, study, discuss, investigate, discover, create, and publish freely. Academic freedom protects the rights of faculty members in teaching and of students in learning. Freedom in research is fundamental to the advancement of truth. Faculty members are entitled to full freedom in teaching, research, and creative activities, subject to the limitations imposed by professional responsibility. USU Policy 403 (<http://www.usu.edu/hr/files/uploads/Policies/403.pdf>) further defines academic freedom and professional responsibilities.

Withdrawal Policy and “I” Grade Policy: Students are required to complete all courses for which they are registered by the end of the semester. In some cases, a student may be unable to complete all of the coursework because of extenuating circumstances not due to poor performance or to retain financial aid. The term 'extenuating' circumstances includes: (1) incapacitating illness which prevents a student from attending classes for a minimum period of two weeks, (2) a death in the immediate family, (3) financial responsibilities requiring a student to alter a work schedule to secure employment, (4) change in work schedule as required by an employer, or (5) other emergencies deemed appropriate by the instructor.

Students with Disabilities: The Americans with Disabilities Act states: "Reasonable accommodation will be provided for all persons with disabilities in order to ensure equal participation within the program." If a student has a disability that will likely require some accommodation by the instructor, the student must contact the instructor and document the disability through the Disability Resource Center (435) 797-2444, preferably during the first week of the course. Any request for special consideration related to attendance, pedagogy, taking of examinations, etc., must be discussed with and approved by the instructor. In cooperation with the Disability Resource Center, course materials will be provided in alternative format (e.g. large print, audio, diskette, or Braille) upon request.

Academic Integrity – the “Honor System”: Each student has the right and duty to pursue his or her academic experience free of dishonesty. The Honor System is designed to establish the honest conduct expected and required of all Utah State University students. To enhance the learning environment at Utah State University and develop student academic integrity, each student agrees to the following Honor Pledge: "I pledge, on my honor, to conduct myself with the foremost level of academic integrity." A student who lives by the Honor Pledge is a student who does more than not cheat, falsify, or plagiarize. A student who lives by the Honor Pledge:

- espouses academic integrity as an underlying and essential principle of the Utah State University community,
- understands that each act of academic dishonesty devalues every degree that is awarded by this institution, and
- is a welcomed and valued member of Utah State University.

The Instructor will take appropriate actions in response to Academic Dishonesty, as defined in the Student Code (available at <http://www.usu.edu/student-services/studentcode/>). Acts of academic dishonesty include but are not limited to:

- **Cheating:** (1) using or attempting to use or providing others with any unauthorized assistance in taking quizzes, tests, examinations, or in any other academic exercise or activity, including working in a group when the instructor has designated that the quiz, test, examination, or any other academic exercise or activity be done “individually”; (2) depending on the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments; (3) substituting for another student, or permitting another student to substitute for oneself, in taking an examination or preparing academic work; (4) acquiring tests or other academic material belonging to a faculty member, staff member, or another student without express permission;

(5) continuing to write after time has been called on a quiz, test, examination, or any other academic exercise or activity; (6) submitting substantially the same work for credit in more than one class, except with prior approval of the instructor; or (7) engaging in any form of research fraud.

- **Falsification:** altering or fabricating any information or citation in an academic exercise or activity.
- **Plagiarism:** Plagiarism includes knowingly "representing by paraphrase or direct quotation, the published or unpublished work of another person as one's own in any academic exercise or activity without full and clear acknowledgment. It also includes the unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials." The penalties for plagiarism are severe. They include warning or reprimand, grade adjustment, probation, suspension, expulsion, withholding of transcripts, denial or revocation of degrees, and referral to psychological counseling.

Grievance Process: Students who feel they have been unfairly treated [in matters other than discipline, admission, residency, employment, traffic, and parking - which are addressed by procedures separate and independent from the Student Code] may file a grievance through the channels and procedures described in the Student Code: <https://studentconduct.usu.edu/studentcode/article7>.

Sexual Harassment: Sexual harassment is defined by the Affirmative Action/Equal Employment Opportunity Commission as any "unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature." If you feel you are a victim of sexual harassment, you may talk to or file a complaint with the Office of Equity located in Old Main, Room 161, or call the O of E Office at (435) 797-1266, or go to <https://equity.usu.edu/index>.

Student Civility Policy: A university is a community of scholars. We learn from one another. For a community to survive and function properly, its members must treat one another with a modicum of mutual respect. Optimally, respect includes simple human courtesy. University education is an opportunity, not a commodity. This opportunity should be fully exploited by everyone involved. Academic courtesy must be observed by all participants in a class. Faculty members are participants in mutually beneficial learning activities together with students, assistants, and tutors.

Etiquette in an academic setting is not merely intrinsically valued, nor are its customs established solely for the sake of a conventional sense of propriety. Classroom courtesy is essential to create an atmosphere in which quality teaching, effective learning, and the creative advancement of a discipline can take place. To that end, we ask all instructors, facilitators, TA's, and students to do the following:

1. Behave toward one another with appropriate respect.
2. Actively participate. Learning is not a passive enterprise. Attention should focus exclusively on class material. Advance preparation by all participants is presumed.
3. Give courtesy and respect when others are asking questions or making comments.
4. Arrive on time and remain for the entire class period. In cases of unavoidable absence, notify each other in advance.
5. Do not hold conversations or activities unrelated to class discussions during class.
6. Only use electronic devices approved by the instructor (such as calculators and laptops).
7. Do not use recording devices without advance permission.
8. Please treat everyone in the class with fairness. No one should expect exception treatment in terms of due dates, class attendance, grading, or university rules.

I have read and understood the course syllabus.

Printed Name

Signature

Date