CHEM 2301 Syllabus

Fall 2023 **MWF 9:05 – 9:55 a.m.** **Smith 100**

Instructor Information

Dr. Janie Salmon (she/her)
djsalmon@umn.edu
Office: Smith Hall 3
Phone: 625-5066

Office Hours

Office hours are time periods where you can drop in (no appointment needed) to ask questions about the course content, your performance in the course, or other items you may want to discuss. Office hours are open to all enrolled in the class; if multiple students attend office hours, we'll take turns asking questions. Office hours will be held in person in Smith 3 on **Mondays 10:30–11:30 a.m.** and via Zoom **Thursdays 12:00–1:30 p.m.** *Office hours start Thursday September 7.* Appointments (set up by email) are also encouraged if office hours do not fit your schedule or if you would like a guaranteed one-on-one discussion.

Teaching Assistants (TAs) Information

Brandon Datuin (datui001@umn.edu) and Andy McCabe (mccab364@umn.edu)
Office hours: Brandon's are Thursdays 4:00 – 5:00 p.m.
(https://umn.zoom.us/j/2527363991)

Substitute TA/Tutor room: Alison Duckworth (duckw024@umn.edu) and Grace Emerson (emers274@umn.edu) will have tutor hours in Smith 124. Andy will also have tutor hours in Smith 124.

Class Background Information

Chemistry 2301 (3 credits) is designed to prepare a student for a major in science, including chemistry and engineering, and the health sciences. A student may ask, "Why is Organic Chemistry important?" Since organic compounds are all around us, studying the subject matter itself is important. However, more critically, problem-solving in Organic Chemistry differs from problem-solving in General Chemistry and other science courses. A liberally educated person is one who can understand complex issues, find credible information, analyze that information, problem-solve, and draw reasonable conclusions based on facts. This course will develop these skills and prepare you to be an informed citizen and life-long learner.

Prerequisites

To register/remain registered in this course, you must meet the following criteria:

- Completed CHEM 1062 or an equivalent course with a grade of C- or better

If you do not meet the criteria, you should report your situation to the staff at chemfaq@umn.edu immediately. They handle all registration issues pertaining to this course.

Required Textbooks & Materials

- *Organic Chemistry*, by Francis A. Carey and Robert M. Giuliano (McGraw-Hill, 11th edition) packaged with an online homework code (Connect) and Student Solutions Manual (S/m). **Inclusive Access for e-book + Connect homework access + Solutions manual will be charged to your student account on September 15 (contact the bookstore directly before this date if you wish to opt-out). If you wish to purchase a paper copy of the text in addition to the provided e-text, you may do so from the bookstore (or elsewhere). The loose-leaf copy of the text is $40 with the Inclusive Access.**
- OPTIONAL Molecular model kit (highly recommended)

Student Learning Outcomes

- Identify, define, and solve problems
- Master a body of knowledge and mode of inquiry
- Acquire skills for effective citizenship and life-long learning

Class Websites

There are 2 websites associated with this lecture course that you must visit frequently to keep up with the material. ***Communication will primarily occur in lecture and via Canvas Announcements; make sure your notifications for these announcements are turned on.***

Lecture Canvas Site

This site (CHEM 2301 – 001 – Fall 2023) is where you will find any information associated with this course. It will contain a lecture schedule, syllabus posting, and many resources to help you succeed in the course. You will find your exam and online homework grades posted here under "Grades".

Connect (online homework system)

There is a link from the Lecture Canvas site to the Connect homework system. Follow the instructions posted to set up your account correctly.

If you have Connect access from another course, you can use the same login, but need to access our specific homework from our lecture Canvas site. Doing homework for another course/section will not earn credit for this class.

Accessing Canvas

1. Connect to myu.umn.edu, log in, and click on "My Courses" tab and select the appropriate class link

OR…

2. Go directly to https://canvas.umn.edu/, log in, and select the appropriate class link.

Class Work

Attendance

Students are responsible for all information disseminated in class and on the course website, including deadlines, homework, and examinations. Students, faculty, and staff are welcome to wear face masks if they wish—your choice about masking is fully supported in our class.

For resources on accessing vaccines, masks, and protocols if you experience COVID-19 symptoms, follow the information on https://safe-campus.umn.edu/personal-wellbeing/covid-19-response. ***If you are unwell, please do not attend class in person.***

Expectations for Online Learning Environment
https://communitystandards.umn.edu/know-code/online-learning-expectations
Online "study sites" (examples: Chegg, Coursehero, etc.) have become increasingly popular and present challenges for faculty and other instructors in securing their proprietary lectures, exams, assignments, slide decks, notes, etc. Upload of instructional materials to these sites is a violation of the student conduct code. Additionally, utilizing information and/or copying work from these sites to aid them in any graded assignment (such as homework, quizzes, or exams) is likely a violation of the student conduct code.

Practice Problems
Successfully completing practice problems is very important in this course. If you feel like you need more practice than the online homework problems give you, please see the list of problems from the end of each text chapter on the last page of this syllabus. The solutions to these problems are in the Solutions Manual provided with your e-book. You can also access the optional SmartBook practice problems in the publisher's Connect site where you do the graded online homework. You are welcome to work with classmates on the Connect homework, Friday prep quizzes, and other ungraded assignments. The Chemist Reflection and Climate Survey are to be done individually. Keep in mind that, because exams are completed individually, it is important that you know how to solve the problems (not just copy someone else's answers). ***The ability to complete problems independently is critical for your ability to succeed in this class.***

Lectures
Monday & Wednesday lectures
Content will be delivered during scheduled class time. It is recommended you skim the textbook sections prior to coming to class (see the Lecture Schedule). These sessions will be held in-person and, technology permitting, also streamed synchronously on Zoom (recording posted after to Canvas) if you are unable to attend in-person. If we fall behind schedule in lecture, you may also be asked to watch lecture recordings. You are also responsible for material covered in the textbook, whether we cover it in class or not.

Lectures are also pre-recorded and available "on demand" on Canvas. These recordings will be used for educational purposes, and the instructor will make these available to students currently enrolled in CHEM 2301 Section 001 for Fall 2023. Students must seek instructor permission in order to share either course recordings or course content/materials. Similarly, instructors who wish to share zoom recordings with other sections or classes must seek and document permission from students whose image or voice are in these recordings.

Friday "flipped classroom"
To facilitate class interaction and encourage you to work on the class material on a regular basis, our Friday meetings (**starting September 15**) will be active problem-solving sessions.

You will be expected to watch lecture videos prior to coming to class on these Fridays. Our time together will be spent working on practice problems.

Friday Prep Quizzes
Starting on ***Friday September 15***, we will have problem-solving sessions during our Friday class meeting. You will be responsible for watching lecture videos before coming to class on these days. To ensure you have watched the lecture content and are coming to class prepared to work practice problems, you will have a short online quiz due each Friday. These quizzes are available for ~24 hours and will be due no later than Friday at 9:05 a.m. Each quiz is worth a maximum of 3 points and is available for unlimited attempts. There is no penalty for using multiple attempts on quizzes prior to the deadline. While we will have 12 quizzes available, only 10 quizzes count toward your course grade, to account for weeks when you may forget or have technical issues. There are no make-up quizzes.

Chemist of the Week Profile Reflection
Each Friday problem-solving session will start with a brief presentation of a chemist. Often these chemists will have an identity from one or more groups underrepresented in STEM fields. You will write a brief reflection (~150 words) on one of these chemists (your choice), commenting on the impact of their work in the context of topics we are learning, as well as in the larger historical scope, and how one or more of their identities aligns with and/or challenges your prior ideas of what a chemist looks like or does. This reflection is worth 5 points and is due December 13 at 11:59 p.m. (last day of classes).

Online Homework (Connect)
Homework will be given using the publisher's online homework system, Connect, and will count toward your course grade. There are 13 assignments, with each being worth 5 points. The lowest homework score is automatically dropped, so only 60 points count toward your overall course grade. Each assignment will cover recently completed material, by chapter. The Connect assignments are more traditional homework assignments that allow you to integrate the topics. The optional (not graded) SmartBook modules can also be accessed through the Connect platform and aid more in fundamental knowledge and keeping you on track. Read the instructions posted in our lecture Canvas site to set up your Connect account correctly. Without doing so, you will not get credit for your online homework. Homework deadlines are posted on each assignment and in the syllabus. Late homework is not accepted. Only in rare cases (where documentation of required accommodation is provided) are homework extensions allowed; documentation for the accommodation must be provided within 24 hours of the homework due date. No adjustments to homework scores will be provided after this time. All homework is due by the last homework deadline; no extensions will be offered after this time.

Classroom Climate Survey
In collaboration with the University's Center for Educational Innovation (CEI), we will collect your insights about the classroom climate, with the goal of better supporting student learning and success in Organic Chemistry. Each student in the class will receive an email in early December with a link to a classroom climate survey. The survey is worth 5 points and a response is due by Wednesday December 13 at 11:59 p.m. (last day of classes), so you will

have approximately 10 days to complete it. Note that the 5 points is based on completion only—not which individual responses you select (which are anonymous to anyone outside of CEI).

Exams

There will be four (4) midterm exams held ***in-person*** during regular class time (**9:05 – 9:55 a.m.**) on **Wednesdays September 27, October 18, November 8, and December 6**. The final exam time is **Tuesday December 19, 1:30 p.m. – 3:30 p.m**. All exams are closed note/book and to be done independently. You may use a non-graphing/non-programmable one- or two-line calculator and select portion of the model kit (see details below in Exam Format) on exams if you wish.

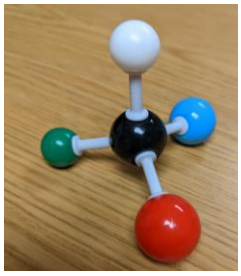
The final exam will be comprehensive and cover all lecture material, including that presented after the last midterm exam. Failure to take the final exam (without an Excused Absence) will result in an F in the class. **No exam, including the final exam, may be taken on a day other than that which has been scheduled.** You must take the exam of the section in which you are officially enrolled; taking another section's exam will result in no credit. **If you have conflicts with any of the scheduled times, you should resolve them now or drop the course. The *only* exception is if you are registered in another UM course that conflicts with the exam time. If you have a course conflict of this type, see me on or before Friday September 15.**

Drop Exam

Each student will automatically have their lowest midterm exam score (from Exams 1-4) dropped.

Exam Format

You will record your answers directly on the exam paper in pencil or blue/black ink. **Only the answers recorded correctly on the exam (handed in at the end of the exam time) will be graded.** Exams are graded by humans and computers using the Gradescope software; an electronic copy of your exam will be returned to you. Exams are primarily short answer/drawing of structures and mechanisms. All exams will be closed book and closed notes; no notes, references, books, etc. are allowed during exams. If you have notes/papers/other materials out during exams, exam proctors will assume you are cheating. *You MAY use a non-graphing, non-programmable one- or two-line calculator, as well as a single tetrahedral chirality center (defined in class; no more than 5 atoms permitted; any bond must be constrained by 2 atoms) from your model kit.* A permitted example is shown.



Using the entire model kit or any more than 5 atoms is not permitted. No writing or other materials may be appended to the model. Calculators and/or models may not be shared during exams. Exams are individual work; keep your eyes on your own exam paper. To prevent copying, exam proctors may occasionally ask students to move their seat, or to better conceal papers. You must bring your student I.D. to each of the exams and the final. I.D. checks may be made at any time.

Each midterm is worth a maximum of 100 points. The final exam is similar in structure to the midterm exams and is worth a maximum of 175 points.

Missed Exams
In the case of a true emergency, serious illness, or University-related trip that prevents a student from taking a midterm exam, an **excused absence may be granted** in strict accordance with University policy (see link below). *An excused absence may not be granted after a student takes the exam.* To obtain an excused absence, students must contact the instructor in advance OR as soon as circumstances allow to discuss the nature of the emergency. Documentation will be required within one week of the missed exam date. The unweighted average score of all the student's other exams, including the final exam but not including the drop exam, will replace the zero from the excused midterm exam. Only one missed midterm exam will be replaced in this fashion. If circumstances prevent a student from taking more than one midterm exam, a meeting must be scheduled immediately with the instructor to discuss any options available. Students on University teams playing out of town may be able to take the exam there with an approved proctor; please see the instructor about this early so arrangements can be made.
https://policy.umn.edu/education/makeupwork
For information on missing the final exam, see "Incompletes".

Extra Credit
Extra credit is not available in this class.

Grades & Grading Policies

Your final course grade will be based on the following breakdown. The maximum possible score in the class is 100%.

	Point Value
Midterm exams (best 3 of 4)	300
Connect	60
Classroom Climate Survey	5
Chemist reflection	5
Friday quizzes	30
Final Exam	175
Total	**575 points**

*Letter grades will be assigned based on the overall cumulative points earned, based approximately on the following ranges. Letter grade ranges may be lowered (to the benefit of the student) slightly at the end of the semester, if class performance warrants, but the C-range will not be adjusted lower than 50%.

Letter grade range	Percentage of the 575 points earned	At least ___ points
A	>86.00%	494.5
A-	81.00-85.99%	465.75
B+	77.00-80.99%	442.75
B	74.00-76.99%	425.5
B-	70.00-73.99%	402.5

C+	65.00-69.99%	373.75
C	60.00-64.99%	345
C-	55.00-59.99%	316.25
D	45.00-54.99%	258.75
F	<45.00%	<258.75

University grading policies and guidelines can be found at: https://policy.umn.edu/education/gradingtranscripts

Other Grade Issues

Late Registration
Please be advised that joining the course after the start of classes does not excuse you from attendance or any work collected and/or graded. You should give careful consideration to this prior to late addition of our course.

Regrades
Follow the instructions on the Regrade Request Instructions module on Canvas when submitting your Regrade Request; your entire exam may be subject to regrade. Requests must be made by the indicated deadline; late regrade requests will not be considered. **You are responsible for making sure you have correctly and clearly recorded and formatted your answers on the exam paper.** *Altering an exam or assignment in any way and submitting it for a regrade is an act of scholastic dishonesty and will result in a zero for the entire exam/assignment.*

S/N Grading
If you are registered for this course on an S/N basis, a grade equivalent to C- on the A-F scale will be required to receive an "S". A D+ or below will receive an "N". Many programs or transfer courses do not like S/N grades or will assume that they are the minimum possible grade. **Requests to change grading basis after the University deadline will not be approved.**

Incompletes
Students who have an EXCUSED ABSENCE from the Final Exam, and have taken all the midterm exams, may be eligible to receive a grade of "I" in the course. Incompletes will not be granted if a student has missed earlier exams, or is not passing based on the work up to the final. You need to fill out an incomplete request form (available from me via email) and have it signed. See me for details. This grade is NOT routinely assigned! Any incomplete must be made up in the following semester. After that time all incompletes will turn into F grades.

Withdrawals
If you are considering withdrawing from the class for academic reasons, I urge you to speak with me. Your situation may not be as bad as you think it is. If you do decide to drop the class, you should officially withdraw from the course following the rules for your college

and know that students withdrawing from the course will not have any records retained for use upon re-taking the class.

Help

Instructor
Asking questions during office hours is a first line of defense toward overcoming conceptual problems with the course material. Get help early on so that problems do not compound! I hope to see you so that I can help you if you are having any difficulty.

Organic Lecture Support TAs
We will have 1 (or more) specific TAs (TBA) working with our class. They will help answer questions during Friday problem-solving, respond to Discussion Board posts, and hold office hours. They are very knowledgeable Chemistry graduate and/or advanced undergraduate students who are interested in teaching and learning. They are here to help support your learning too!

Free Tutor Room
Organic tutor hours will be held throughout the semester beginning **September 11**; the schedule will be posted on Canvas when it is available. It is important to me that your time is well spent in this room. Please inform me or the LSN TA (Allysha O'Donnell; odonn269@umn.edu) if tutors are not present or helpful at their scheduled time. A reminder that the purpose of a tutor is to help you learn, **not simply give you answers to questions or problems**. The tutors are instructed, in fact, to ask YOU questions that will help you understand what concept you are missing that is preventing you from solving a particular problem. Self-discovery will enhance the depth and retention of your knowledge.

OChemConnections Program: This program involves the volunteer efforts of advanced undergraduate/graduate students (the **OChemConnections Leader**s) who enjoy teaching and helping students to succeed in organic chemistry. Each OChemConnections leader will hold a weekly session at a designated time **in person or via Zoom** to work problems and review difficult concepts being taught in our CHEM 2301 and 2302 courses. These one-hour ***active-learning sessions*** are not meant to be lectures, office hours, or private tutoring sessions, rather facilitated group learning opportunities for maximum engagement and retention of knowledge. Attendees will be expected to participate in discussions and problem-solving activities. You are free to try out different leaders and select one or more that best fits your learning style. Session information will be given the first week of classes and the OChemConnections program will run from **September 11 to December 13**. For questions or problems, please contact Allysha O'Donnell (odonn269@umn.edu) or Professor Janie Salmon (djsalmon@umn.edu).

Issues with your Instructor
On occasion you may have a concern or problem regarding this course. You will find your instructor quite willing to discuss this with you. If, however, you wish to discuss it with someone other than your instructor, please contact Prof. Ian Tonks, Associate Department Head (itonks@umn.edu). He will serve as a mediator in helping to resolve the issue.

Policy Statements

Overlapping & Back-to-Back Courses

Enrolling in overlapping or back-to-back courses that does not allow enough travel time to arrive at our class meetings on time is prohibited. For more information, please see: https://policy.umn.edu/education/overlappingclasses

Use of Personal Electronic Devices in the Classroom

Using personal electronic devices in the classroom setting can hinder instruction and learning, not only for the student using the device but also for other students in the class. To this end, the University establishes the right of each faculty member to determine if and how personal electronic devices are allowed to be used in the classroom. For complete information, please reference: http://policy.umn.edu/education/studentresp.

Student Conduct Code

The University seeks an environment that promotes academic achievement and integrity, that is protective of free inquiry, and that serves the educational mission of the University. Similarly, the University seeks a community that is free from violence, threats, and intimidation; that is respectful of the rights, opportunities, and welfare of students, faculty, staff, and guests of the University; and that does not threaten the physical or mental health or safety of members of the University community.

As a student at the University you are expected adhere to Board of Regents Policy: *Student Conduct Code*. To review the Student Conduct Code, please see: http://regents.umn.edu/sites/regents.umn.edu/files/policies/Student_Conduct_Code.pdf.

Note that the conduct code specifically addresses disruptive classroom conduct, which means "engaging in behavior that substantially or repeatedly interrupts either the instructor's ability to teach or student learning. The classroom extends to any setting where a student is engaged in work toward academic credit or satisfaction of program-based requirements or related activities."

Scholastic Dishonesty

You are expected to do your own academic work and cite sources as necessary. Failing to do so is scholastic dishonesty. Scholastic dishonesty means plagiarizing; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; altering, forging, or misusing a University academic record; or fabricating or falsifying data, research procedures, or data analysis. (Student Conduct Code: http://regents.umn.edu/sites/regents.umn.edu/files/policies/Student_Conduct_Code.pdf) If it is determined that a student has cheated, the student may be given an "F" or an "N" for the course, and may face additional sanctions from the University. For additional information, please see: http://policy.umn.edu/education/instructorresp. Beware of websites (such as Chegg) that advertise themselves a “tutoring sites. It is not permissible to upload any instructor materials (such as videos, notes, homework assignments, practice questions, exam questions) to these sites without the instructor’s

written permission. In addition, using these sites to complete homework or answer exam questions is consider academic dishonesty and will result in an F for the course.
The Office for Community Standards has compiled a useful list of Frequently Asked Questions pertaining to scholastic dishonesty: https://communitystandards.umn.edu/avoid-violations/avoiding-scholastic-.... If you have additional questions, please clarify with your instructor for the course. Your instructor can respond to your specific questions regarding what would constitute scholastic dishonesty in the context of a particular class-e.g., whether collaboration on assignments is permitted, requirements and methods for citing sources, if electronic aids are permitted or prohibited during an exam.

Makeup Work for Legitimate Absences
Students will not be penalized for absence during the semester due to unavoidable or legitimate circumstances. Such circumstances include verified illness, participation in intercollegiate athletic events, subpoenas, jury duty, military service, bereavement, and religious observances. Such circumstances do not include voting in local, state, or national elections. For complete information, please see: http://policy.umn.edu/education/makeupwork.

Appropriate Student Use of Class Notes and Course Materials
Taking notes is a means of recording information but more importantly of personally absorbing and integrating the educational experience. However, broadly disseminating class notes beyond the classroom community or accepting compensation for taking and distributing classroom notes undermines instructor interests in their intellectual work product while not substantially furthering instructor and student interests in effective learning. Such actions violate shared norms and standards of the academic community. You are not permitted to distribute/post any materials for this class without the instructor's express written permission. For additional information, please see: http://policy.umn.edu/education/studentresp.

Grading and Transcripts
The University utilizes plus and minus grading on a 4.000 cumulative grade point scale. For additional information, please refer to: http://policy.umn.edu/education/gradingtranscripts.

Mental Health and Stress Management
As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance and may reduce your ability to participate in daily activities. University of Minnesota services are available to assist you. You can learn more about the broad range of confidential mental health services available on campus via the Student Mental Health Website: http://www.mentalhealth.umn.edu.

Sexual Harassment
"Sexual harassment" means unwelcome sexual advances, requests for sexual favors, and/or other verbal or physical conduct of a sexual nature. Such conduct has the purpose or effect of unreasonably interfering with an individual's work or academic performance or creating an intimidating, hostile, or offensive working or academic environment in any University activity or program. Such behavior is not acceptable in the University setting. For additional information, please consult Board of Regents Policy: https://policy.umn.edu/hr/sexharassassault

Department of Chemistry Diversity and Inclusion Committee
Collaboration among people of all cultures and backgrounds enhances our experiences and contributes to excellence in teaching, learning, and research. We strive for a climate that celebrates our differences and strengthens our department by embracing and working to increase diversity, equity, and inclusion. For more information about our departmental efforts and upcoming activities: http://z.umn.edu/ChemDiversity. For a list of diversity related resources from the College of Science & Engineering: https://cse.umn.edu/college/diversity-and-inclusion-opportunities.

Equity, Diversity, Equal Opportunity, and Affirmative Action
The University provides equal access to and opportunity in its programs and facilities, without regard to race, color, creed, religion, national origin, gender, age, marital status, disability, public assistance status, veteran status, sexual orientation, gender identity, or gender expression. For more information, please consult Board of Regents Policy: http://regents.umn.edu/sites/regents.umn.edu/files/policies/Equity_Diversity_EOAA.pdf.

Disability Resource Center
The University of Minnesota views disability as an important aspect of diversity and is committed to providing equitable access to learning opportunities for all students. The Disability Resource Center (DRC) is the campus office that collaborates with students who have disabilities to provide and/or arrange reasonable accommodations.

- If you have, or think you have, a disability in any area such as, mental health, attention, learning, chronic health, sensory, or physical, please contact the DRC office on your campus (UM Twin Cities - 612.626.1333) to arrange a confidential discussion regarding equitable access and reasonable accommodations.
- NOTE ABOUT THE FINAL: The DRC has set deadlines for scheduling exams in the Testing Center during the University's official finals week (December 15-21):
  November 21: priority deadline, space guaranteed
  November 27: final deadline, dependent on space availability
- Students with short-term disabilities, such as a broken arm, can often work with instructors to minimize classroom barriers. In situations where additional assistance is needed, students should contact the DRC as noted above.
- If you are registered with the DRC and have a disability accommodation letter dated for this semester or this year, please contact your instructor early in the semester to review how the accommodations will be applied in the course.

- If you are registered with the DRC and have questions or concerns about your accommodations please contact your (access consultant/disability specialist).
- Additional information is available on the DRC website: (UM Twin Cities - https://diversity.umn.edu/disability/) or e-mail (UM Twin Cities – drc@umn.edu) with questions.

Academic Freedom and Responsibility
Academic freedom is a cornerstone of the University. Within the scope and content of the course as defined by the instructor, it includes the freedom to discuss relevant matters in the classroom. Along with this freedom comes responsibility. Students are encouraged to develop the capacity for critical judgment and to engage in a sustained and independent search for truth. Students are free to take reasoned exception to the views offered in any course of study and to reserve judgment about matters of opinion, but they are responsible for learning the content of any course of study for which they are enrolled.*
Reports of concerns about academic freedom are taken seriously, and there are individuals and offices available for help. Contact the instructor, the Department Chair, your adviser, the associate dean of the college, or the Vice Provost for Faculty and Academic Affairs in the Office of the Provost.
* Language adapted from the American Association of University Professors "Joint Statement on Rights and Freedoms of Students".

Class Lecture Schedule

Please check the Lecture Schedule on Canvas for the most up-to-date schedule.

These are the abbreviated chapter titles from Carey 11th edition

Ch. 1: Structure Determines Properties
Ch. 2: Alkanes and Cycloalkanes: Introduction to Hydrocarbons
Ch. 3: Alkanes and Cycloalkanes: Conformations and *cis-trans* Stereoisomers
Ch. 4: Chirality
Ch. 14: Spectroscopy (skip Sections 14.14-14.19 on ^{13}C NMR)
Ch. 5: Alcohols and Alkyl Halides: Introduction to Reaction Mechanisms
Ch. 6: Nucleophilic Substitution
Ch. 7: Structure and Preparation of Alkenes: Elimination Reactions
Ch. 8: Addition Reactions of Alkenes
Ch. 9: Alkynes
Ch. 10: Introduction to Free Radicals
Ch. 11: Conjugation in Alkadienes and Allylic Systems (skip Section 11.16)
Ch. 12: Arenes and Aromaticity (skip Sections 12.12-12.15)

Exam Dates:
Exam 1: Wednesday September 27, 9:05 – 9:55 a.m.
Exam 2: Wednesday October 18, 9:05 – 9:55 a.m.
Exam 3: Wednesday November 8, 9:05 – 9:55 a.m.
Exam 4: Wednesday December 6, 9:05 – 9:55 a.m.
Final Exam: Tuesday December 19, 1:30 p.m. – 3:30 p.m.

September

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
3	4	5 *First Day of Classes*	6 Syllabus, Chpt 1.1-1.6	7	8 Chpt 1.6-1.12	9
10	11 Chpt 1.12-1.16	12 **HW A Due 11:59 PM**	13 Chpt 2.1-2.11	14	15 Videos through 2.18	16
17	18 Chpt 2.19-2.23; 3.1	19 **HW B Due 11:59 PM**	20 Chpt 3.1-3.6	21	22 Videos through 3.11	23
24	25 Chpt 3.12-3.16; 4.1	26 **HW C Due 11:59 PM**	27 **EXAM I** **(Chapters 1-3)**	28	29 Videos through 4.6	30

October

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2 Chpt 4.7-4.10	3	4 Chpt 4.10-4.15	5	6 Videos through 14.5	7
8	9 Chpt 14.6-14.9	10 **HW D Due 11:59 PM**	11 Chpt 14.10-14.13; 14.20-14.21	12	13 Videos through 14.26	14
15	16 Chpt 5.1-5.8	17 **HW E Due 11:59 PM**	18 **EXAM II** **(Chapters 4 & 14)**	19	20 Videos through 5.12	21
22	23 Chpt 5.13-5.16; 6.1	24 **HW F Due 11:59 PM**	25 Chpt 6.2-6.5	26	27 Videos through 6.8	28
29	30 Chpt 6.9-6.13	31 **HW G Due 11:59 PM**				

November

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1 Chpt 7.1-7.8	2	3 Videos through 7.13	4
5	6 Chpt 7.14-7.21	7 **HW H Due 11:59 PM**	8 **Exam III (Chapters 5-7)**	9	10 Videos through 8.5	11
12	13 Chpt 8.6-8.9	14	15 Chpt 8.10-8.11	16	17 Videos through 9.5	18
19	20 Chpt 9.6-9.11	21 **HW I Due 11:59 PM**	22 *asynchronous problem-solving activity*	23 **UNIVERSITY HOLIDAY**	24 **UNIVERSITY HOLIDAY**	25
26	27 Chpt 9.12-9.15; 10.1-10.3	28 **HW J Due 11:59 PM**	29 Chpt 10.4-10.7	30		

December

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1 Videos through 11.2	2
3	4 Chpt 11.3-11.12	5 **HW K Due 11:59 PM**	6 **Exam IV** **(Chapters 8-10)**	7	8 Videos through 12.9	9
10	11 Chpt 12.10-12.17	12 **HW L Due 11:59 PM**	13 *Last day of classes* Chpt 12.18-12.23 **Chemist Reflection Due 11:59 PM** **Climate Survey Due 11:59 PM**	14	15 **HW M Due 11:59 PM**	16
17	18	19 **FINAL EXAM (comprehensive; Chapters 1-12, 14)** **1:30 PM -3:30 PM**	20	21	22	23

Suggested Practice Problems

Carey "Organic Chemistry", 11th Edition

The problems at the end of each chapter are listed as "Chapter number.Problem number" (e.g, problem 42 in Chapter 1 is labeled 1.42). The worked-out solutions to these problems are found in the paper copies of the Student Solutions Manual (supplied as part of your Inclusive Access e-text).

If you are choosing to use an older edition of the textbook, you can compare your edition to the 11th edition copy (borrow from a friend, study group buddy, etc.; I am unaware of an online copy outside of the Inclusive Access 11th edition). Many problems will line up directly or within a problem or two.

These problems are designed as a supplement to the Connect homeworks. The Connect is part of your overall course grade, and the problems listed here are not graded or handed in. The problems listed here are also similar to some problems you'll see in Connect, SmartBook, and/or on the problem-solving sessions. **It will be difficult for you to do well on exams if you cannot solve the problems listed here independently.**

There are many more end-of-chapter problems than those suggested here—you are encouraged to work additional problems as needed. Make sure you are working enough practice problems so that you feel comfortable with the material.

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Chapter 2	24, 25, 26, 28, 29, 30, 32, 34, 35, 36, 37, 38, 39, 40, 47, 49, 50, 51
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Chapter 4	28, 29, 30, 31, 33, 34, 35, 36, 37, 38, 39, 40
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