Chem 112A – Organic Chemistry I

San José State University

Spring 2022 course information:

Instructor Information:

John Kim, PhD [He/Him/His]
[John.Kim@sjsu.edu]
Office: SCI 140
Office Hours: TuTh 10:30 – 12:00; or via appointment.
All office hours will be held online via Zoom.

Lecture information:

Tu Th 9:00 – 10:15 AM Classes held online via Zoom (link will be provided in the course canvas site)

Course website:

San Jose State University Canvas (access via SJSU One)

Course prerequisite:

Chem 1B (with a grade of "C" or better; "C-" not accepted).
Chem 1B **may not** be taken concurrently with Chem 112A

Introduction:

Welcome to your first semester of organic chemistry! You may have heard rumors that organic chemistry is the hardest science class and a "weeder" class for pre-health students. Yes, organic is not easy, but it is not impossible! In our first semester of organic, I will help you develop your foundational knowledge of organic chemistry and guide you in learning how to use organic chemistry as a tool that you can use in your future ambitions.

Course Description:

Chemistry 112A is intended for students who are interested in a profession in science, engineering, forensics, and related fields. This one-year course sequence (along with Chemistry 112B) will introduce you to the concepts that will lead to a comprehensive understanding of organic chemistry. This course will stress an understanding of these concepts as well as their applications to solve problems. While some memorization of the course material will be required, you will also be expected to apply the underlying principles in the context of problem solving. An emphasis will be placed on a thorough *conceptual* and *mechanistic* understanding of organic reactions. Note that all exams are cumulative for prior material, thus in lecture and exams it is important to recall information that was covered earlier. The final exam will be comprehensive for all material covered this semester. The Course and Program Learning Objectives below give a comprehensive list of topics covered in Chem 112A. [https://catalog.sjsu.edu/]

Course materials and tools:

Organic Chemistry (**Required** to have **access** to book)
9th Editions by McMurry, John., Cengage
Study Guide and Solution Manual for Organic Chemistry (**Recommended**)
9th Edition, by McMurry, Susan., Cengage.
Organic Chemistry model kit (**recommended**)
Model kits come in many shapes, sizes, and prices. Regardless of how it looks, it will still greatly help
Online course classroom (via SJSU One)
This will be my main method of sharing documents and communicating with the class

Course learning objectives:

By the end of the quarter, students will be able to:

- Appreciation for the nature and scope of organic chemistry.
- Application of key concepts from general chemistry including electronegativity, bonding (ionic and covalent), hybridization of atomic orbitals, and molecular orbital theory to organic systems.
- Draw valence bond and Lewis dot structures for organic species, including formal charges.
- Draw skeletal structures for organic compounds, show stereochemistry clearly
- Apply acid-base concepts to organic systems; predict ordering of acid or base strength.
- Name alkanes, alkenes, polyenes, alkynes, alkyl halides, aromatic compounds and their various derivatives using systematic (IUPAC) nomenclature.
- Learn common names for some key chemicals.
- Use bond dissociation energies (BDE's) to calculate reaction energetics.
- Determine oxidation states of organic chemicals.
- Draw reaction mechanisms for polar and radical processes.
- Recognize stereochemistry and be able to apply the Cahn-Ingold-Prelog system to designation of stereochemistry (E/Z or R/S).
- Apply stereochemistry to determination of reaction mechanism.
- Understand the fundamentals of reaction kinetics and be able to apply to the determination of reaction mechanism.
- Learn many of the reactions of alkanes, alkenes, polyenes, alkynes, aromatic compounds, and closely related species. Be able to both predict products and, in many cases, provide probable reaction mechanisms.
- Employ the reactions learned in designing multistep organic synthesis.
- Learn and be able to apply the material presented in Chapters 1-11 and 14-16 in the text (McMurry, 9th edition) as well as additional topics introduced in lecture.

Program Learning Outcomes (PLOs):

Chemistry 112A satisfies the following Program Learning Outcomes for the Chemistry Department:

PLO 1.1 - Students will be able to identify, formulate, and solve a range of chemistry problems (fundamental to complex) through application of mathematical, scientific, and chemical principles.

PLO 1.2 - Students will be able to recognize, relate, and/or apply chemistry terms and concepts to propose and solve interdisciplinary and multidisciplinary real world problems.

Tentative Course Calendar:

A tentative schedule for the semester appears at the end of this document. **The dates for the quizzes, Exams and the Final Exam are firm**, but the exact dates of the lecture topics may change based on the pace of the class, which varies considerably from year to year. You must keep up with the lectures to know where we are at any moment!

All lectures, office hours and exams will be given in-person (unless otherwise stated). Lectures and office hours will be given using Zoom during the lecture times; recordings of lectures will be posted on Canvas typically 24 hours after the lecture.

Quizzes will be given on Canvas and will require the use of Respondus Lockdown Browser.
All exams will be given in-person during the scheduled exam time unless otherwise stated in class.

SJSU classes are designed such that in order to be successful, it is expected that students will spend a minimum of forty-five hours for **each** unit of credit (normally three hours per unit per week), including preparing for class, participating in course activities, completing assignments, and so on. More details about student workload can be found in University Policy S12-3 at http://www.sjsu.edu/senate/docs/S12-3.pdf.

Course format:

Lecture

Lecture format will be a hybrid-active classroom that incorporates both lecturing from the professor as well as poll and group work with peers. Lectures will be recorded and the recordings will be posted on canvas by the end of the day.

Course attendance Policy

The key to doing well in Chem 112A is to keep up with the course material as it is covered.

Dates for all exams are firm - enter these dates on your calendars now. In particular, note the final exam date: **Monday May 23rd from 7:15AM to 9:30AM** – do not make any other plans that prevent you from being present on that day and time (e.g. do not purchase tickets to be away on this date).

University policy F69-24: "Students should attend all meetings of their classes, not only because they are responsible for material discussed therein, but because active participation is frequently essential to insure maximum benefit for all members of the class. Attendance per se shall not be used as a criterion for grading."

Quizzes and Exams

Dates for all quizzes and exams can be found on this syllabus and on canvas.
All quizzes will be taken online on canvas.
All exams will be taken in-person and must bring a valid student ID for student verification.

Extra practice resources:

Outside of lecture and discussion, there are many other resources we will provide to help you practice organic chemistry. At the end of this document, there is a list of recommended book problems for you to use as practice. They will be a good place to start to practice organic chemistry. I will also post extra problems that are tied to each chapter. These extra problems will give you a feel for my writing style and the format you can expect for the exams.

Grading information:

Assignment	Points	Weight	Description
Quizzes	5 x 10 = 50 (10 pts each)	10%	There will be a total of seven quizzes during the semester. Of the eight, the **three lowest scores** will be dropped. See grading policy for more information and schedule to find the dates.
Exams	250 pts (125 pts each)	50% (25% each)	There will be a total of three exams during the semester. Of the three, the **lowest score will be dropped**. See grading policy for more information and schedule to find the dates.
Final	200 points	40%	The final must be taken to obtain a letter grade at the end of the semester. This exam is cumulative. See grading policy for more information and schedule to find the dates.
Total	500 points	100%	

Grading policy

Three exams will be given throughout the semester, each with a maximum score of 250 points. The Final exam will be worth a total of 200 points. Exam formats will include multiple choice, fill in the blank, short answer as well as longer mechanism and synthesis problems.

You are required to take any <u>two</u> Exams. If you take all 3 Exams, the two highest scores will be used in the calculation of your grade. If you do not take one of the exams, ***<u>for any reason</u>***, this will be the score which will not be used in the grade calculation. Canvas exams have strict start and end times, so for the maximum time, be present at the starting time.

You are required to take any <u>five</u> quizzes. If you take all 7 quizzes, the five highest scores will be used in the calculation of your grade. If you do not take one of the quizzes, ***<u>for any reason</u>***, this will be the score which will not be used in the grade calculation. Canvas exams have strict start and end times, so for the maximum time, be present at the starting time.

The Final exam will be comprehensive for all material covered in Chem 112A, and will count for 200 points. The Final exam is **<u>required for everyone</u>**.

Late or missing assignments:

There will be **<u>NO</u>** make-up quizzes or exams given.
If there is a serious emergency that was beyond your control, please email or talk to me directly about your circumstances and we devise a method of working around the missing assignment.
For any other accommodations, please refer to academic policies

Grading scale (subject to change):

Grades will be assigned on a "+/-" system. The course grades will be assigned according the following ranges:

A+ = 100-97%	A = 96-93%	A- = 92-90%
B+ = 89-87%	B = 86-83%	B- = 82-80%
C+ = 79-77%	C = 76-73%	C- = 72-70%
D+ = 69-67%	D = 66-63%	D- = 62-60%
F = <u>≤</u>59% Unsatisfactory		

The grades will not be "curved." You will **<u>NOT</u>** be competing against the class average, instead you will be competing against yourself.
In order to estimate your current grade in this course and progress towards your course grade, keep track of your scores as the semester progresses. Note that the "class average" for a given exam is *not necessarily a "C" grade. Grades are assigned by these grade ranges, not by "curves."* <u>Be aware that I cannot give any indication or guarantee of a course grade before the end of the semester</u>.

Any modifications from the grade ranges above will be in your favor, but you should not expect significant variance from the ranges given above. <u>In assigning course grades, only one set of criteria are applied equally to all students in the class - everyone has the same opportunity as everyone else to earn their grade.</u> It's not fair if I give one student a "break," but not others.

Note that "incomplete" grades will only be considered if you have an unexpected situation or emergency that prevents you from finishing the semester. It is required that you have completed most of the course work with a passing grade until that point. A typical situation is a medical emergency that prevents you from taking the final exam - to be considered you must provide documentation and a means to verify the emergency. Poor performance in the class or inability to keep up with the material is not an acceptable reason for an incomplete or to drop the class.

Exam Policies:

•The exams will be in-person on the date specified on the calendar during the scheduled class time.

•If there needs to be any changes to exam dates, they will be posted on Canvas and announced in class.

•Roll will be randomly taken during exams.

•IDs may be randomly checked so always have a picture ID (SJSU ID or driver's license)

•Except for the device you will use to take the exam, other calculators, computers, cellphones, or any other electronic devices that can retrieve information, communicate, record, and/or transmit images of any kind are NOT allowed at your desk during exams. No notes, books or other sources of information are allowed. Anyone found violating these rules will receive, at minimum, an automatic score of "0 points" for the exam and this exam will be counted as one of the 2 hour exam scores (the second highest score will be dropped). A violation on the Final exam will result in zero points for the Final. Additional judicial sanctions will apply. See Academic Integrity section below for more details.

Other class policies

No make up exams or quizzes will be given (see late or missing assignments above). If at any point in the semester you need to miss an exam or quiz, please make sure to contact me as soon as possible so that we can discuss how we may be able to take action.

Absence due to personal or work-related issues is not a reason to miss an exam or quiz. The dates are already posted for these dates. Please make sure you make accommodations to be present for these assignments.

The final exam key and markings will not be posted. But you may view your final exam in the following semester during office hours. Please feel free to contact me to view your final exam in the following semester.

Tips to be successful in Organic Chemistry:

0. Attend lectures
1. After lecture and discussions, always review your notes and make sure they make sense to you.
2. Practice, practice, practice
    a. Once you've understood the notes, try the suggested practice problems in the book
    b. There are also extra practice problems posted on canvas
3. Use organic model kits
    a. These are amazing tools to help you to visualize molecules. Use them as much as possible
4. Use tutoring resources to your advantage
    a. CoSAC, academic workshops and peer connections (See below)
5. There are several other organic books that you can use for more practice problems or guides
    a. Pushing electrons: A guide for students in organic chemistry by Daniel P. Weeks
    b. Organic chemistry as a second language by David Klein
    c. SJSU library has many organic textbooks available for reference and checkout
6. Work together in study groups to teach each other problems

Course Expectations:

What we expect of you	What you can expect of me
Be attuned and willing to learn Organic chemistry takes time to learn and requires practice to perfect. The practice problems, quizzes and exams are here to help provide feedback on how we can all improve. If you every have questions, please ask so that we can help you with your learning.	**Passion & Enthusiasm** I am here because I want you to learn about how organic chemistry can impact your life. I will always bring lots of energy to the classroom and be prepared for each class and office hours. My goal is help you understand and use organic chemistry outside the classroom.
Inclusive You will be working with your peers in class and discussion. We expect you to maintain a good attitude and be honest and ethical towards me and your classmates. Please read SJSU's Principles of Community.	**Inclusive** I will do my best to create an atmosphere that fosters active learning, creativity, critical thinking, and honest collaboration. During lecture and office hours, I will do our best to help everyone feel as a part of the class.
Be open about questions I believe in the statement that "there is no such thing as a stupid question." If you are confused, please ask question at any point.	**Timely feedback** To make every effort to return graded assignments within a few days of the submission date and to post solutions as soon as is reasonably possible after the submission date. I will also respond to emails within 24 hours.
Integrity An honest, fair, responsible, respectful, trustworthy, and courageous effort on all academic work and collaboration. Please read SJSU's Policy on Academic Integrity.	**Integrity** I will assign an honest, and fair grade on all academic work and grading.

MY BEST ADVICE TO YOU:

If you feel at any point in the semester that you are "lost" or not doing as well as you like, come see me or take advantage of the available Resources listed below immediately for assistance. If you wait until right before an exam or until the last few weeks of classes, it will be very difficult to catch up due to the volume of material. Keeping up with the material and working the problems is very important to succeed in Chem 112A. *However, it is also true that spending many hours studying does not necessarily equate to doing well on the exam - what is important that you understand the underlying principles and know how to apply them, not just memorize information or know how to answer specific problems from the textbook or sample exams.*

Office Hours and Email Questions:

Office hours are posted on this syllabus, and will be in person. If office hours need to be online, arrangement and zoom links will be posted on canvas. My office hours are times dedicated to assist you and students in all of my courses.

If you have a private matter to discuss, I will handle this individually. Please also realize that office hours are for all of the courses I teach, not only Chem 112A.

San Jose State University Academic Policies:

Academic Integrity

Your commitment as a student to learning is evidenced by your enrollment at San Jose State University. The University Academic Integrity Policy S07-2 at http://www.sjsu.edu/senate/docs/S07-2.pdf requires you to be honest in all your academic course work. Faculty members are required to report all infractions to the office of Student Conduct and Ethical Development. The Student Conduct and Ethical Development website is available at http://www.sjsu.edu/studentconduct/.

Instances of academic dishonesty will not be tolerated. Cheating on exams or plagiarism (presenting the work of another as your own, or the use of another person's ideas without giving proper credit) will result in a failing grade and sanctions by the University. For this class, all assignments are to be completed by the individual student unless otherwise specified. If you would like to include your assignment or any material you have submitted, or plan to submit for another class, please note that SJSU's Academic Integrity Policy S07-2 requires approval of instructors.

For Chem 112A, any form of cheating or unfair advantage will be dealt with seriously in this course, and will result in an appropriate penalty. At minimum, an infraction will result in "0" points for that exam and it will count as one of two Hour Exam Scores (meaning the second highest exam score will be dropped); a grade of "F" for the course may also be given. The SJSU "Policy on Academic Dishonesty" as described in detail in the SJSU Catalog will be the guideline for any action taken, and the case will be referred to the SJSU Office of Judicial Affairs. The instructor or the SJSU Office of Judicial Affairs may apply more serious penalties. An infraction may also result in a student's name being placed in a Chemistry Department file and other sanctions.

Religious Accommodation

It is the policy of the university to make reasonable efforts to accommodate students having bona fide religious conflicts with scheduled examinations by providing alternative times or methods to take such examinations. If a student anticipates that a scheduled examination will occur at a time at which his or her religious beliefs prohibit participation in the examination, the student must submit to the instructor a statement describing the nature of the religious conflict and specifying the days and times of conflict.
For final examinations, the statement must be submitted no later than the end of the second week of instruction of the quarter. For all other examinations, the statement must be submitted to the instructor as soon as possible after a particular examination date is scheduled.
If a conflict with the student's religious beliefs does exist, the instructor will attempt to provide an alternative, equitable examination that does not create undue hardship for the instructor or for the other students in the class.

Discrimination and harassment

The CSU, in accordance with applicable federal and state laws and university policies, does not discriminate on the basis of race, color, national origin, religion, sex, gender, gender identity, gender expression, pregnancy (including pregnancy, childbirth, and medical conditions related to pregnancy or childbirth), physical or mental disability, medical condition, genetic information, ancestry, marital status, age, sexual orientation, citizenship, or service in the uniformed services (including membership, application for membership, performance of service, application for service, or obligation for service in the uniformed services). The university also prohibits harassment based on these protected categories, including sexual harassment, as well as sexual assault, domestic violence, dating violence, and stalking. The nondiscrimination policy covers admission, access, and treatment in university programs and activities.
If students have questions about student-related nondiscrimination policies or concerns about possible discrimination or harassment, they should contact the Office President Title IX office at (408) 924-7289, or use the Online report form.
Campus policies provide for a prompt and effective response to student complaints. This response may include alternative resolution procedures or formal investigation. Students will be informed about complaint resolution options.
A student who chooses not to report may still contact SJSU's counseling & psychological services (CAPS) for more information, emotional support, individual and group counseling, and/or assistance with obtaining a medical exam. For off-campus support services, a student may contact the TWCA Golden Gate Silicon Valley. Other confidential resources on campus include Counseling and Psychological Services, Office of the Ombuds, and Student Health Services.
Counseling & Psychological Services (CAPS)
408.924.5910 | counseling.services@sjsu.edu | https://www.sjsu.edu/counseling/
YWCA Golden Gate Silicon Valley
https://yourywca.org/

Compliance with the American Disabilities

If you need course adaptations or accommodations because of a disability, or if you need to make special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Presidential Directive 97-03 at http://www.sjsu.edu/president/docs/directives/PD_1997-03.pdf requires that students with disabilities requesting accommodations must register with the Accessible Education Center (AEC) at http://www.sjsu.edu/aec/ to establish a record of their disability.

Note that accommodations for exams should be made well in advance of the exam date, since both I and the AEC need to make arrangements. Exams taken with AEC accommodations must overlap with the date and exam time when the rest of the class takes that exam.

Emergencies and building evacuations

If you hear a continuously sounding alarm, or are told to evacuate the building by an Emergency Coordinator, walk quickly to the nearest exit (facing Tower Lawn). Take your personal belongings as you may not be allowed to return. Follow the instructions of the Emergency Coordinators. Be quiet so you can hear instructions. Once outside, move away from the building. Do not return to the building unless the Police or the Emergency Coordinator announces that this is permissible.

Other University Policies

Per University Policy S16-9, university-wide policy information relevant to all courses, such as academic integrity, accommodations, etc. will be available on Office of Graduate and Undergraduate Programs' Syllabus Information web page at http://www.sjsu.edu/gup/syllabusinfo/" Make sure to review these university and resources.

General Expectations, Rights and Responsibilities of the Student
Dropping and Adding
Consent for Recording of Class and Public Sharing of Instructor Material
Academic integrity
Campus Policy in Compliance with the American Disabilities Act
Student Technology Resources
SJSU Peer Connections
SJSU Writing Center
SJSU Counseling and Psychological Services

SJSU Campus Resources:

Library Help

For questions about eReserves and research tools:

https://library.sjsu.edu/ask-librarian/ask-librarian

The King Library Liaison for Chemistry is Anne Marie Engelsen (annemarie.engelsen@sjsu.edu).

Learning Resources/Tutoring

Tutoring

CoSAC https://www.sjsu.edu/cosac/

Peer Connections https://www.sjsu.edu/peerconnections/index.php

Academic workshops

Peer lead workshops (Sci 01) – more information to be given in class

Extra credit opportunity

For extra credit on the first exam, find your way to our canvas website. Under the pages section, look for the instructor info page. The extra credit towards your first exam score will be found on this page.

Counseling Services (Free for SJSU Students!)

https://www.sjsu.edu/counseling/

Community Centers

Learn about the different ways SJSU, supports and celebrates the many cultures that make up our diverse community. https://www.sjsu.edu/diversity/resources/community-resources/community-centers/index.html

Accessibility

Students requesting accommodations for this course due to a disability must provide a current plan issued by the Accessible Education Center (AEC) which is located in Admin 110 or can be accessed online using the AEC website. Students are required to alert the Faculty member to the needed accommodation (please make arrangements to contact me privately) and to the AEC Liaison in the department in advance so that accommodations may be arranged.

Contact the AEC for further information: https://www.sjsu.edu/aec/

aec-info@sjsu.edu| 408. 924.6000

Office of Equity, Diversity, and Inclusion:

408.924.8168 | diversityoffice@sjsu.edu| https://www.sjsu.edu/diversity/office/index.php
https://www.sjsu.edu/belong/index.php
https://www.sjsu.edu/diversity/resources/community-resources/index.php
https://www.sjsu.edu/campus-life/

Basic Needs

Any student who has difficulty accessing sufficient food to eat every day, or who lacks a safe and stable place to live, and believes this may affect their performance in this course, is encouraged to contact:
sjsucares@sjsu.edu| https://www.sjsu.edu/sjsucares/| 408.924.1234

Technical Support

For help with accounts, network, and technical issues:

https://www.sjsu.edu/it/support/service-desk/

For help connecting to electronic library resources such as eReserves and e-journals:

https://library.sjsu.edu/campus-access/access-library-campus

Course Schedule: (subject to change)*

Week #	Date	Topic*	Reading in Text McMurry 9th Ed	Recommended problems McMurry 9th Ed
0	Jan 27	Introduction Structure & Bonding (Chapter 1)	Preface Chapter 1.1 to 1.5	Problems 1.1 to 1.7 AP: 1.23, 1.26 to 1.28
1	Feb 1	Structure & Bonding (Chapter 1)	Chapter 1.5 to 1.12	Problems 1.9 to 1.21 AP: 1.29 to 1.34, 1.36, 1.42, 1.44, 1.49 to 1.51, 1.57
	Feb 3	Polar Covalent: Acids & Bases (Chapter 2)	Chapter 2.1 to 2.6	Problems 2.1 to 2.10 AP: 2.26, 2.28 to 2.30, 2.33 to 2.38, 2.56
2	Feb 8	Polar Covalent: Acids & Bases (Chapter 2)	Chapter 2.7 to 2.12	Problems 2.11 to 2.16 AP: 2.24, 2.40, 2.41, 2.43 to 2.48, 2.55
	Feb 10	Polar Covalent: Acids & Bases (Chapter 2) Alkanes & Their Stereochemistry (Chapter 3)	See chapter 2 material above Chapter 3.1	See chapter 2 material above Problems 3.1 to 3.3 AP: 3.19, 3.22 to 3.26
3	Feb 15	Alkanes & Their Stereochemistry (Chapter 3)	Chapter 3.2 to 3.5	Problems 3.4 to 3.14 AP: 3.20, 3.27 to 3.31, 3.35 to 3.40
	Feb 17	Alkanes & Their Stereochemistry (Chapter 3)	Chapter 3.6 to 3.7	Problems 3.15 to 3.18 AP: 3.21, 3.42 to 3.45
4	Feb 22	Exam 1 (During class time)		
	Feb 24	Cycloalkanes & their Stereochemistry (Chapter 4)	Chapter 4.1 to 4.5	Problems 4.1 to 4.7, 4.9, 4.11 AP: 4.22, 4.27 to 4.31
5	Mar 1	Cycloalkanes & their Stereochemistry (Chapter 4)	Chapter 4.6 to 4.9	Problems 4.12 to 4.16, 4.18 to 4.21 AP: 4.24, 4.25, 4.35 to 4.39, 4.42 to 4.46, 4.58
	Mar 3	Stereochemistry (Chapter 5)	Chapter 5.1 to 5.5	Problems 5.2 to 5.4, 5.7 to 5.12 AP: 5.26, 5.32 to 5.36
6	Mar 8	Stereochemistry (Chapter 5)	Chapter 5.6 to 5.12	Problems 5.14 to 5.19 AP: 5.27, 5.37, 5.42 to 5.49
	Mar 10	Stereochemistry (Chapter 5)	Chapter 5.7 to 5.12	Problems 5.21 to 5.23 AP: 5.28, 5.51 to 5.55, 5.66
7	Mar 15	Overview of Organic Reactions (Chapter 6)	Chapter 6.7 to 6.11	Problems 6.10 to 6.13 AP: 6.17, 6.18, 6.24, 6.25
	Mar 17	Overview of Organic Reactions (Chapter 6) Alkenes: Structure/Reactivity (Chapter 7)	Chapter 6.1 to 6.6 Chapter 7.1 to 7.3	Problems 6.1, 6.2, 6.4 to 6.9 AP: 6.27, 6.28, 6.32 to 6.36, 6.39 Problems 7.1 to 7.7 AP: 7.22, 7.34 to 7.38

Week #	Date	Topic*	Reading in Text McMurry 9th Ed	Recommended problems McMurry 9th Ed
8	Mar 22	Exam 2 (During class time)		
	Mar 24	Alkenes: Structure/Reactivity (Chapter 7)	Chapter 7.4 to 7.11	Problems 7.8 to 7.21 AP: 7.26 to 7.28, 7.31, 7.32, 7.46 to 7.51, 7.54 to 7.59
9	Mar 29 Mar 31	Spring Break Holiday		
10	Apr 5	Alkenes: Reactions/Synthesis (Chapter 8)	Chapter 8.1 to 8.6	Problems 8.1 to 8.12 AP: 8.23 to 8.29, 8.32
	Apr 7	Alkenes: Reactions/Synthesis (Chapter 8)	Chapter 8.7 to 8.13	Problems 8.13 to 8.17, 8.20, 8.21 AP: 8.40 to 8.45, 8.48 to 8.53, 8.57 to 8.61
11	Apr 12	Alkynes & Organic Synthesis (Chapter 9)	Chapter 9.1 to 9.5	Problems 9.1 to 9.8 AP: 9.14 to 9.19, 9.26 to 9.30
	Apr 14	Alkynes & Organic Synthesis (Chapter 9)	Chapter 9.6 to 9.9	Problems 9.9 to 9.13 AP: 9.20 to 9.24, 9.31 to 9.34, 9.36 to 9.38, 9.40 to 9.43, 9.47 to 9.50
12	Apr 19	Organohalides (Chapter 10)	Chapter 10.1 to 10.5	Problems 10.1 to 10.8 AP: 10.17, 10.22 to 10.25
	Apr 21	Organohalides (Chapter 10)	Chapter 10.6 to 10.8	Problems 10.9 to 10.13 AP: 10.18, 10.26 to 10.28, 10.33 to 10.37, 10.44
13	Apr 26	Exam 3 (During class time)		
	Apr 28	Alkyl Halides: Nucleophilic Reactions (Chapter 11)	Chapter 11.1 to 11.5	Problems 11.1 to 11.8, 11.10 to 11.12 AP: 11.39, 11.41 to 11.43, 11.45 to 11.48
14	May 3	Alkyl Halides: Nucleophilic Reactions (Chapter 11)	Chapter 11.6 to 11.9	Problems 11.14 to 11.19 AP: 11.49 to 11.52
	May 5	Alkyl Halides: Nucleophilic Reactions (Chapter 11)	Chapter 11.10 to 11.12	Problems 11.20, 11.25 to 11.30 AP: 11.55 to 11.57, 11.64 to 11.67, 11.67 to 11.71
15	May10	Conjugated Dienes (Chapter 14)	Chapter 14.1 to 14.4	Problems 14.1 to 14.6 AP: 14.16, 14.17, 14.24 to 14.30
	May 12	Conjugated Dienes (Chapter 14)	Chapter 14.5 to 14.6	Problems 14.7 to 14.12 AP: 14.20 to 14.22, 14.31 to 14.39, 14.64

Final Exam is on Monday May 23rd from 7:15AM to 9:30AM.

Unless there is a serious technical problem or calamity, **ALL EXAM DATES AND TIMES ARE FIRM. Mark these dates and times on your calendars NOW!

Course calendar: (subject to change)

All information on the course calendar can be found on the course schedule as well.
Refer to the syllabus for more information about all policies on quizzes and exams.
Problem sets for all chapters can be found on course schedule.

January 2022

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
23 Week 0	24	25	26 **First day of instruction**	27 Introduction & Structure & Bonding (Chapter 1)	28 Quiz #1 Open	29
30 Week 1	31 **Quiz #1 DUE**					

February 2022

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Week 1		1 Structure & Bonding (Chapter 1)	2	3 Polar Covalent: Acids & Bases (Chapter 2)	4	5
6 Week 2	7 Last day to DROP a course Without a W	8 Polar Covalent: Acids & Bases (Chapter 2)	9	10 Polar Covalent: Acids & Bases (Chapter 2)	11 Quiz #2 Open	12
13 Week 3	14 Last day to Add a course **Quiz #2 DUE**	15 Alkanes & Their Stereochemistry (Chapter 3)	16	17 Alkanes & Their Stereochemistry (Chapter 3)	18	19
20 Week 4	21	22 **Exam #1**	23	24 Cycloalkanes & their Stereochemistry (Chapter 4)	25	26
27 Week 5	28					

March 2022

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Week 5		1 Cycloalkanes & their Stereochemistry (Chapter 4)	2	3 Stereochemistry (Chapter 5)	4 Quiz #3 Open	5
6 Week 6	7 **Quiz #3 DUE**	8 Stereochemistry (Chapter 5)	9	10 Stereochemistry (Chapter 5)	11 Quiz #4 Open	12
13 Week 7	14 **Quiz #4 DUE**	15 Overview of Organic Reactions (Chapter 6)	16	17 Alkenes: Structure/Reactivity (Chapter 7)	18	19
20 Week 8	21	22 **Exam #2**	23	24 Alkenes: Structure/Reactivity (Chapter 7)	25	26
27 Week 9	28 Spring Recess No classes	29 Spring Recess No classes	30 Spring Recess No classes	31 Spring Recess No classes Cesar Chavez Day		

April 2022

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Week 9					1 Spring Recess No classes Quiz #5 Open	2
3 Week 10	4 **Quiz #5 DUE**	5 Alkenes: Reactions/Synthesis (Chapter 8)	6	7 Alkenes: Reactions/Synthesis (Chapter 8)	8 Quiz #6 Open	9
10 Week 11	11 **Quiz #6 DUE**	12 Alkynes & Organic Synthesis (Chapter 9)	13	14 Alkynes & Organic Synthesis (Chapter 9)	15	16
17 Week 12	18	19 Organohalides (Chapter 10)	20	21 Organohalides (Chapter 10)	22	23
24 Week 13	25	26 **Exam #3**	27	28 Alkyl Halides: Nucleophilic Reactions (Chapter 11)	29 Quiz #7 Open	30

May 2022

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1 Week 14	2 **Quiz #7 DUE**	3 Alkyl Halides: Nucleophilic Reactions (Chapter 11)	4	5 Alkyl Halides: Nucleophilic Reactions (Chapter 11)	6 Quiz #8 Open	7
8 Week 15	9 **Quiz #8 DUE**	10 Conjugated Dienes (Chapter 14)	11	12 Conjugated Dienes (Chapter 14)	13	14
15	16 Last day of Instruction	17 Study/Conference Day	18	19	20	21
22	23 FINAL EXAM 7:15AM to 9:30 AM	24	25	26	27	28
29	30	31				