Chemistry 112A Organic Chemistry, Section 1 (Okuda)
Fall 2022

Contact Information

Instructor:	Roy K. Okuda, PhD
Office Location:	Duncan Hall 9A (basement). Office hours will be held in the hallway outside of DH 9 by the whiteboard or in other locations announced in class.
Telephone:	(408) (924-2525)
Email:	roy.okuda@sjsu.edu
Office Hours:	Tues 3:00 to 4:30pm; Wed 10:30am to Noon (fixed times). In addition, "floating hours" at other days and times will be held – times and places to be announced.
Lecture:	Lecture TR 9:00am - 10:15am
Classroom:	Sci 142
Prerequisites:	CHEM 1B (with a grade of "C" or better; "C-" not accepted) must be completed and appear on your grade transcript. Chem 1B may not be taken concurrently with Chem 112A.

CLASS MEETINGS & COMMUNICATIONS:

All lectures and exams for this section of Chem 112A will be given in-person (live) in Science 142. Office / problem sessions will be given in Duncan Hall, or other locations to be announced. Lectures will not be recorded and posted; you must be present for all class meetings. Supplemental course material will be posted on Canvas for this course. If you do not have access to Canvas, visit sjsu.edu and search for instructions to access and use platform. I make extensive use of email messages, and these will be sent to the email listed on your mySJSU profile – be sure that this is an email address you check regularly.

In the event that I am affected by COVID – I will arrange for another faculty member to give the class in Sci 142 or I may hold class sessions by ZOOM (live or recorded).

COVID-19 & Monkeypox Policies
COVID-19 and Monkeypox are still active in our community and it is our collective responsibility to deal with these serious health issues. See the section below regarding current COVID policies for SJSU and the College of Science. Masks must be worn at all times inside SJSU Buildings and you must follow the CSU Policy on vaccination for COVID-19. **(see SJSU Phase Adapt banner on www.sjsu.edu)**

One aspect to note is that the CDC recommends N95 or KN95 masks, and not cloth masks or bandanas, for crowded situations, as our class will be. You should get these masks for our class and other classes you will be taking, for your protection and that of others.

Course Description

Chemistry 112A is intended for students who are interested in a profession in science, engineering, forensics, and related fields. This two-semester 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 the outcomes and of topics covered in Chem 112A.

Program Learning Outcomes (PLO) – SJSU Department of Chemistry

I.Core Chemistry Ideas (Fundamentals)

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.

II. Experimentation/Lab Practice

PLO 2.1. Students will be able to develop an experiment to address a hypothesis using literature and execute the planned experiment using standard chemistry techniques.

PLO 2.2 Students will be able to *a*cquire, record, and critically evaluate data through use of instrumentation and software, appropriate record keeping practices, figure preparation, and scrutiny of experimental results.

PLO 2.3 Students will be able to recognize and assess laboratory hazards, practice risk minimization, and conduct safe laboratory practices.

III. Community, Social, Societal Implications

PLO 3.1 Students will be able to explore, critique, and reflect on how chemistry relates to society, culture, and issues of equity and ethics that shape their scientific beliefs and identities.

PLO 3.2 Students will be able to identify as scientists within the scientific community through constructing peer reviews, engaging in collaborations, and participating in mentorship.

IV. Communication Skills

PLO 4.1 Students will be able to design and deliver engaging presentations on diverse chemistry topics in a professional manner and with clear, concise organization that demonstrates mastery of the topic.

PLO 4.2 Students will be able to integrate research findings into a concise original written report that either analyzes collected data and obtained results or reviews and reflects on published scientific work.

PLO 4.3 Students will be able to identify an audience and construct a message tailored to that audience and act as a science ambassador by conveying the importance of the research or topic of study.

PLO 4.4 Students will be able to prepare professional documents, such as résumés and cover letters, that accurately represent the students' skills and knowledge for graduate/professional school or potential future employers.

Chem 112A Course-Specific Learning Objectives

Listed below are many of the topics we will cover this semester. You can see where we will be headed as we proceed. This list gives a good framework of Chem 112A, and will be a useful guide for the Final Exam.

•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.

Library Liaison

The Chemistry Library Liaison is Anne Marie Engelsen
Email: annemarie.engelsen@sjsu.edu

Required* Texts and Accessories

UPDATE AUG 18, 2022
Cengage and the SJSU Bookstore have just informed me that due to a worldwide paper shortage and transportation issues, the Bookstore has a limited number of paper copies and may run out of thesef McMurry soon, and it is unknown when it will be available. Your options are:

-find another bookseller for the text (make sure its McMurry, 9th edition)
*-get an eBook version**
*-get a "rental" version**

**note these versions are for limited-time use only. If you plan to take Chem 112B, make sure the use is through the end of the May 2023. You can find sources by checking the web.*

*McMurry, John. *Organic Chemistry,* 9th ed., Cengage - The SJSU Bookstore carries a custom SJSU edition bundled with OWL, the online reference tool; this bundle will save you from the commercial version of this combination if purchased separately. You are welcome to obtain the 9th edition of McMurry from another bookseller, but I recommend that it comes with access to OWL (I cannot arrange free access to McMurry or to OWL). Earlier editions of McMurry are not recommended, since there have been significant changes. If you take Chem 112B from me, this same textbook will continue to be used (different instructors may use different textbooks).

You are free to obtain McMurry from whatever source you can find.

Optional: A set of molecular models for organic chemistry (a kit by Maruzen is sold by the SJSU Bookstore; other versions may be available from other sources).

I will post the lecture Powerpoints before each lecture in Canvas Files so you can preview them. During lecture I will provide additional information and examples/problems – in lecture you should be ready to take notes, as some information may not be posted in Canvas.

Tentative Course Calendar:
A tentative Schedule and list of Chapter topics for the semester appears at the end of this greensheet. **The dates for the Hour 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 can vary from year to year. You must attend and keep up with the lectures to know where we are at any moment. The schedule of lecture topics may change as the semester progresses.

All lectures and exams will be given in person (live) in Science 142s (see Schedule for tentative dates & topics). Office hours will be given as group problem sessions – this is a very efficient way to cover problems for a large class as ours. There will be a minimum of 3 office hours/week given by me. In addition, our Chem 112A Peer Helpers will hold problem sessions at days/times to be announced.

*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 Attendance Policy and Exam Dates

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

The content in Chem 112A is very "do-able," but to be perfectly honest, most students find that a significant amount of time is required to do reasonably well in this course. If your personal circumstances, such as a heavy course load, work, family responsibilities, extracurricular activity (e.g. sports teams), etc limit your time to attend class and to study outside of class, I **strongly** recommend you take this course in a later semester when you have time to devote to 112A. Students often mention to me that they did not expect that Chem 112A would require so much time and effort. ***If you cannot attend (or choose to not attend) all of the lectures and don't have significant time every week to devote to this course, it is unlikely you will attain a passing grade.***

On the first day of class, I will introduce a variety of "modalities," that I will use to improve your chances to do well in 112A. However, most of these require you to be physically present in class and to do work outside of class to have any beneficial effect.

Dates for all exams are firm (see the Schedule at the end of this Greensheet) - enter these dates on your calendars NOW. In particular, note the final exam date:

Wednesday, Dec 14, 2022 @ 0715-0930.

DO NOT make any other plans that prevent you from being present on that day and time (e.g. ***DO NOT purchase tickets for any travel so you will not be present 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."

Grading Policy

Three "Hour" exams (each 60min) will be given throughout the semester, each with a maximum score of 150 points. The Final exam will be worth a total of 200 points. Exams will be given on paper in Science 142 (unless otherwise stated).

You are required to take any two Hour Exams (all 3 Hour Exams are not required). If you take all 3 Hour Exams, the TWO highest scores will be used in the calculation of your grade. If you do not take one of the Hour exams, *for any reason*, this will be the score which will not be used in the grade calculation. Two Hour Exams 150pts each x 2 = 300pts possible.

See below for Exam Policies. I will provide additional details on exam formats before the first exam.

The Final exam will be comprehensive for all material covered in Chem 112A, and will have a value of 200 points. The Final exam is required to receive a letter grade for Chem 112A.

Your final grade will be based on:

300 points for two Hour exams (2 x 150 points) - 30% each hour exam
200 points for the Final (you can't drop the final) - 40% final exam

TOTAL **500 points**

In addition to the two Hour Exams and Final, I may provide other ways to earn bonus points in various. As they are bonus points, they are optional and not required. I will discuss these in class.

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 = ≤59% Unsatisfactory		

In order to estimate progress towards your course grade, keep track of your hour exam scores as the semester progresses. Add the points you obtained and divide by the total points scored up until that time to determine your % of points to that date. Compare the % to the table to estimate your current grade standing. Remember that your two highest hour exam scores will be used in your final course grade calculation. For example, after the 3rd Hour Exam ("HE") add the two highest HE scores and divide by 300pts – this is your % before the Final Exam.

I will post the point distribution for the class for each individual, but note that the midpoint for any one exam is not necessarily a "C" grade since I don't use "curves" to assign course grades. This is because for different students the one exam that is not counted will differ, so the average score for any one exam has little meaning. The grade ranges are a more useful way to estimate your grades before the Final Exam.

When I have the Final Exam scores, I will review how the class as a whole performs. Any modifications from the grade ranges above will be in your favor and for the class as a whole, but you should not expect significant variance from the ranges given above. **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.** It's not fair if I give one student a special "break," that is not given to the rest of the class.

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.

If you apply for a "late drop" petition, my signature only indicates that I have seen the petition, but I do not decide whether or not to approve the petition. Approval is done by the Student Services office, which requires a justification and/or documentation. Until you hear if your petition is approved, you will remain enrolled in Chem 112A.

Exam Policies

•Seats will be assigned and randomized for each exam
•Roll will be taken during exams.
•IDs may be randomly checked so always have a picture ID (SJSU ID or driver's license)
•At your desk, you may only have pens or pencils.
•NO electronic devices may be used during exams and must be left in the front of the classroom. These include: 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:

• Exam Makeup and Regrade Policy:

You are required to take any 2 of the 3 Hour Exams. ("HE") given. If any HE is not taken *for any reason*, that exam will be the one exam score that is not used in grade calculation. This is to accommodate situations such as illness or other emergencies which prevent you from attending class on the day of an exam.

A makeup will only be considered if you miss a second Hour Exam due to an unexpected emergency* and provide a documented and verifiable reason. In all cases, you must contact me as soon as reasonably possible. Before any action will be taken, you will be required to provide a verifiable document describing your emergency with the doctor's name and contact phone number. *Note this only applies if you miss a second hour exam due to an emergency. Non-emergency situations, such as travel or other reasons, will not be a reason for a makeup exam.

Absence due to travel, personal or work related issues is not a reason to miss an exam. See the course attendance policy.

The Final Exam is not returned and the key will not be posted, but your exam may be viewed in the Spring semester during my office hours. Contact me to make arrangements (exams are stored and will have to individually retrieved). By University policy exams are stored for one year, then will be shredded and disposed. The raw Final Exam score will be posted on Canvas, and your grade will appear on mySJSU when they are ready.

The following are University policies that are required on greensheets by SJSU:

•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.

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.

The topics include the following:

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

In addition to the university policies above, I have additional policies that apply specifically to Chem 112A. Please note the following:

Academic Integrity (read this!)

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.

Campus Policy in Compliance with the American Disabilities Act

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 contact me as soon as possible with the details, 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. For Chem 112A, exams taken with AEC accommodations must overlap with the date and exam time when the rest of the class takes that

exam (HEs and the Final Exam). Exams with AEC accommodation will be taken at the AEC Testing Center (advanced reservations required).

COVID-19 & Monkeypox SAFETY INFORMATION & POLICIES
Required of ALL students attending classes/labs on the SJSU campus

Students registered for a College of Science (CoS) class with an in-person component should view the CoS COVID-19 and Monkeypox Training slides for updated CoS, SJSU, county, state and federal information and guidelines, and more information can be found on the SJSU Health Advisories website. By working together to follow these safety practices, we can keep our college safer. Failure to follow safety practice(s) outlined in the training, the SJSU Health Advisories website, or instructions from instructors, TAs or CoS Safety Staff may result in dismissal from CoS buildings, facilities or field sites. Updates will be implemented as changes occur (and posted to the same links). Please review this training as needed throughout the semester, as updates will be implemented as changes occur (and posted to the same links).

As you are aware, the COVID-19 pandemic (and more recently, Monkeypox) have led to many restrictions on our daily lives. The rules you have become familiar with extend into working situations and conduct in the teaching environments such as our lecture room. Your instructor will go over some steps to follows, but here is a summary:

1) Before your first in-class meeting, you must review the College of Science COVID-19 and Monkeypox training slides. You can see the slides in Canvas-Files-Chem 112A Safety Information. After reviewing these slides, go to your Canvas Quizzes and answer the one question where you will acknowledge that you have read and will comply with the rules for COVID-19 & Monkeypox safety. Everyone must submit a "TRUE" answer to this question to this acknowledgment in order to continue in Chem 112A. Also note the vaccination requirement and reporting on the SJSU Phase Adapt Plan (the banner on www.sjsu.edu)

2). Masks, as described in the Safety Training, must be worn at all times when in the Science Building– this is mandated by SJSU whenever inside all campus buildings. The current CDC recommendation is for a N95 or KN95 type mask; cloth masks are no longer considered safe for use to reduce transmission of the omicron variant. This policy is for everyone's safety and will be strictly enforced. Masks must cover the nose and mouth completely - anyone who does not comply with this policy will be asked to leave the building and may be disenrolled from Chem 112A. If you forget to bring a mask to lab, basic masks (but not N95 or KN95) are available for you to use.

3) Wash your hands frequently: in the hallway of the Science Building are alcohol-based soap dispensers; soap for handwashing is available in the Science labs and the bathrooms, and alcohol disinfectant outside the bathrooms and near the Stockroom.

4) As described in the COVID-19 Safety Training, you should NOT come to class if you feel ill or if you come in close contact with someone who has an active case of COVID-19. Get tested as soon as possible. If you test positive for COVID-19, inform your instructor immediately. I will send you a set of directions to follow.

Prior to the first in class meeting, you are required to review the SJSU Phase Adapt Plan and the College of Science COVID-19 & Monkeypox Safety documents. Then go to the Canvas

Quizzes for you 113A section and answer "TRUE" to the one-question "quiz" for COVID training. This is required to continue in Chem 113A and will be recorded.

Strategies for Success in Chem 112A

On the first lecture, I will go over a variety of approaches I will arrange to help you get through Chem 112A. However, this class will also require that you participate and consistently keep up throughout the semester. Most students find this class requires a significant amount of time every week, so if you can't (or don't want to) devote time to 112A, you should not take this class until you are able to do so. For example, if your tendency is to not attend lecture, or to wait to study the week before an exam, it is unlikely you will do well in this class.

Among the approaches I have arranged for you, we will have 5 "Chem 112A Peer Helpers" who will be available during the in-class problem sessions to assist you as we work on problems. I will hold 3 Office/problem sessions each week at set times. The Peer Helpers will hold additional Problem Sessions at variable times each week, so there will be multiple opportunities for you to get help each week. These Peer Helpers have taken Chem 112A and 112B recently, and know how to succeed in these classes. They will also assist with in-class problem sessions. Problem solving is an essential part of Chem 112B – take advantage of all of the ways we will organize to help you during the semester. BUT you must keep up with the class and not fall behind!

Advice for Students Taking Chem 112A (FROM other students!):
Over the years, I have asked students who have done well in Chem 112A and 112B what their "secrets" are - here are the most common responses:

-keep up with the course, don't ever fall behind
-attend every lecture and take copious notes (listen for hints)
-read the text before and after each lecture
-copy (by hand) your lecture notes soon after the class
-work problems immediately after they are discussed in class (there is no way to catch up if you try to do this just before the exam); do ALL of the problems in the book, problem sets on Canvas, and problems given in class.
--don't memorize answers to specific problems; you need to understand how to determine the answer from principles since questions can be posed in different ways (you need to be able to answer questions that look different from ones in problem sets).
-DO NOT wait until just before the exam to start learning the material and work on problems!

The common theme to these tips is that they all require you to take responsibility and keep up with Chem 112A in a timely and consistent manner. You will likely hear much griping about how "difficult" O-chem is, but you typically don't hear from the students who follow the advice above and do well in the class. I can't promise success for everyone, but you will likely do much better if you follow all of these tips listed and take advantage of the ways I am arranging to help you succeed.

Throughout the semester I will post many tutorials, problem sets and other useful information on the Chem 112A Canvas site (see "Files") - check this site regularly.

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 speficic problems from the textbook or sample exams.*

Office Hours and Email Questions:
Office hours are posted on this greensheet, and will be given in person My office hours are times dedicated to assist you and students in all of my courses. Due to the large size of this class, office hours will be held as group problem sessions to maximize efficiency of the time. You can come prepared with questions, or it is also fine if you attend and learn from the questions and problems that others may ask. You can come and go during the office hour period, you don't have to be present the entire time. The Peer Helpers will also hold problem sessions at times to be announced.

If you have a private matter to discuss, I will handle this individually. Send me an email to arrange a time.

I am also open to email questions at any time, so you do not have to wait until the next office hour. Unless I'm traveling, I try to answer emails 7 days a week, and usually reply within a day (understand that I usually answer these emails on my personal time - I do my best to reply in a timely manner but may not be available every evening or weekend).

My email is roy.okuda@sjsu.edu (put "Chem 112A" in the subject line so I know it's not spam)

Some important points regarding email questions:

- If your question is related to a point in the textbook, include the page number or problem number. I don't carry the book with me at all times, so I may need some background to answer your question. You can also refer to a slide from lecture. It is helpful if you send me a picture of the point or problem you want explained.
-this service is intended for a reasonable number of questions (e.g. up to a handful). If you need many questions answered, I will ask you to come to office hours.
- with so many students in 112A (+ my other courses and responsibilities), I need time to prepare just prior to an exam, the cutoff for email questions will be 24 hours before each exam. It takes considerable time to prepare an exam for a large class You can try within this window, but I can't promise I can answer last minute emails.

-Email is only for questions about course material and problems. **I will not reply to emails regarding:**
-exam scores, course grades or personal matters (see me in person)
-questions on the specific topics to be covered in an exam (this information is given in lecture, which you are required to attend)

OTHER RESOURCES:

-COSAC (College of Science Student Advisory Center) has student tutors who are available for walk-in or scheduled assistance with questions - http://www.science.sjsu.edu/cosac/ NOTE: they get very busy just before our exams!
-Academic Workshops are primarily problem-solving sessions
-Peer Connections Resource Center (http://peerconnections.sjsu.edu/)

All SJSU faculty have the ability to refer students who may need assistance in a specific course to Peer Connections, which has additional means of support besides tutoring. If you receive a message from Peer Connections, I recommend you follow up, as they may be able to assist you!

CHEMISTRY 112A - ORGANIC CHEMISTRY (OKUDA)
Fall 2022
*Tentative Weekly Schedule & Activity List (subject to change)**
Changes will be announced ***only*** in class.

EXPLANATION: The activity for each Tues or Thurs class meeting is shown in the lower left corner of the cell in RED for that date. ***Note the dates for the Hour Exams (HE1, HE2, and HE3 and the Final Exam – these exam dates are firm***. You must be present to take each exam, do not make any plans to be away on these dates.
The other dates are for lectures or class problem sessions. The number is the Chapter in McMurry and the letter "A" or "B" designates the activity for that date. For example, "5A" will be a lecture session for Chapter 5, and "5B" is a class problem session for Chapter 5. This schedule is tentative, and may change depending on the pace of class.

Before each lecture, review the appropriate Chapter found in McMurry and the lecture slides that will be posted in Canvas Files for each Chapter. It is important that you do this before each lecture, since only an overview of major topics will be presented during the "A" sessions. In the "B" sessions, you will work through problems relevant for that chapter.

AUGUST 2022

SUN	MON	TUE	WED	THU	FRI	SAT
14	15	16	17	18	19 First classes	20
21	22	23 INTRO / 1	24	25 2	26	27
28	29	30 3	31			

SEPTEMBER 2022

SUN	MON	TUE	WED	THU	FRI	SAT

				1 4A	2	3
4	**5** Labor Day	6 4B	7	8 5A	9	10
11	12	13 5B	14	15 6A	16	17
18	19	20 6B	21	22 **HE1**	23	24
25	26	27 7A	28	29 7B	30	

OCTOBER 2022

SUN	MON	TUE	WED	THU	FRI	SAT
						1
2	3	4 8A1	5	6 8A2	7	8
9	**10**	11 8B	12	13 9A	14	15
16	17	18 9B	19	20 10A1	21	22
23	24	25 **HE2**	26	27 10A2	28	29

NOVEMBER 2022

SUN	MON	TUE	WED	THU	FRI	SAT
Oct 30	Oct 31	1 10B	2	3 11A	4	5
	7	8 11B	9	10 14A	**11** Veterans Day	12
13	14	15 14B	16	17 15A	18	19
20	21	22 **HE3**	23 Non-instructional	**24** Thanksgiving Day	25	26
27	28	29 15B	30			

DECEMBER 2022

SUN	MON	TUE	WED	THU	FRI	SAT
				1 16A	2	3

4	5	6 16B last class	7 Study day	8	9	10
11	12	13	14 **112A Final 7:15am**	15	16	17

ACTIVITY LIST

Following are the Chapters from McMurry, topics and suggested problems. Refer to the calendar above for the approximate dates when each will be covered during the semester.

Chapter and Sections from McMurry, 9th edition*	**Topics**	**Recommended problems (however. ALL problems are important!) In addition, more information and problems will be posted in Canvas Files**
1.1 to 1.12	Structure & Bonding	1.1 to 1.57
2.1 to 2.12	Polar Covalent Bonds: Acids and Bases	2.1 to 2.44; 2.49 to 2.57
3.1 to 3.7	Alkanes & Their Stereochemistry	3.1 to 3.88
4.1 to 4.9	Cycloalkanes & Their Stereochemistry	4.1 to 4.52
5.1 to 5.12	Stereochemistry	5.1 to 5.77
6.1 to 6.11	Overview of Organic Reactions	6.1 to 6.42:
7.1 to 7.11	Alkenes: Structure & Reactivity	7.11 to 7.63
8.1 to 8.13	Alkenes: Reactions & Synthesis	8,1 to 8.65
9.1 to 9.9	Alkynes & Organic Synthesis	9.1 to 9.42
10.1 to 10.8	Organohalides	10.1 to 10.43
11.1 to 11.12	Alkyl Halides: Nucleophilic Reactions	11.1 to 11.69
14.1 to 14.6	Conjugated Dienes	14.1 to 14.12; 14.16 to 14.38; 14.45 to 14.50
15.1 to 15.6	Benzene & Aromaticity	15.1 to 15.44
16.1 to 16.10	Chemistry of Benzene	16.1 to 16.74

Notes: Chemistry 112B will continue from the point that 112A ends.
Chapters 12 and 13 are not covered in Chem 112A or 112B, but the sections on IR and NMR spectroscopy will be included in Chem 113A lab. Refer to these sections when you take 113A!

*December 14, 2022 (Wed) FINAL EXAM 0715 to 0930***

*Readings and problems for this course are based on the 9th edition of McMurry. If you choose to use an earlier edition, you are responsible for any differences from the 9th edition.
In addition, material not found in McMurry will be included in the lectures.

The exact dates of coverage of topics may change, depending on the pace of lectures. Any changes from the schedule will only be announced in class. Plan to attend all class meetings!

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!**