

**Chemistry 100 – MWF 9 am
section Introduction to General
Chemistry Fall 2024**

<p>Instructor: Prof. Manal Swairjo Office hours: Fri 1:00-2:00 pm in MSLC, Love Library room 328.</p> <p>Mon 6-7 pm on Zoom https://SDSU.zoom.us/j/86339742616</p> <p>Additional office hours during exam weeks will be announced on Canvas.</p>	<p>Lab Coordinator: Prof. Clare. Office: CSL 313</p> <p>For issues concerning waitlisting, exam grades, student disability accommodation, OWL Homework and Quizzes, email Prof Clare at this address: lclare+chem100@sdsu.edu</p>
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<u>Lecture Location & Time</u>	ENS 280, MWF 9-9:50 am
<u>Lab rooms:</u>	CSL 522, 524 or 528 (5 th floor Chemical Sciences Laboratory building)
<u>Waitlist:</u>	Waitlist students should email the Chem 100 Lab Coordinator, Prof. Clare, lclare+chem100@sdsu.edu as soon as possible. Be sure to provide your name, Red ID and Lab Section you are attending. If you add after your lab class has already met, you must still contact Professor Clare to get caught up.
<u>Dropping the course:</u>	It is your responsibility to follow university policies regarding Cr/NC, drops, withdrawals, and incompletes. Your last opportunity to add/drop or change grading basis is September 9 at 11:59 pm.
<u>Textbook (required):</u>	Mark S. Cracolice, Edward I. Peters, Introductory Chemistry: An Active Learning Approach, 7 th edition, ISBN 9780357363935 (access through your Cengage account).
<u>Equitable Access:</u>	<p>All required course material (except for lab manual) for this class is available in digital format by the first day of classes and are free up until the drop date at 11:59 pm September 9. After this date, your SDSU student account will be charged a flat rate of \$21.50/unit. Please visit day1ready for additional information about pricing digital subscription duration, print add-ons, opting out and other frequently asked questions. Through day1ready Access you will have access to your textbook, the Cengage OWL Study System, and the purchase of lab manual. If you need to borrow a computer, contact SDSU Economic Crises Response Team for technology support at sdsu.edu/ecrt</p> <p>If you use Cengage materials in another course (such as Calculus) you can instead enroll in Cengage Unlimited. For \$119.00 per semester, you get access to ALL Cengage eBooks and ALL online learning materials (OWLv2, MindTap, WebAssign, etc). To use Cengage Unlimited do this:</p> <ol style="list-style-type: none">1) Go to day1ready, go to the opt out portal and complete the form to opt out

for each course BEFORE THE ADD/DROP DATE.

2) When you're prompted for a code for your course choose Cengage Unlimited and purchase it. Cengage Unlimited will then be applied to your account. Remember to enroll in all courses using the same login email address!

Lab Manual (required): Chem 100 Lab Manual, Chemistry Dept. Printed by Hayden MacNeil, Fall 2024 – Spring 2025. The lab manual is available through the bookstore. Go to the second-floor information desk and give the clerk your red ID number to receive your lab manual if you are enrolled in "day1ready".

Lab Equipment: Safety glasses, flame resistant lab coat (blue) or lab apron (yellow). Do NOT purchase the white lab coat in the bookstore, it is not flame resistant. Nitrile gloves can be purchased at the SDSU bookstore or available at drugstores such as CVS and Walgreens. Matches or butane lighter.

Additional items (Required): Calculator (e.g., TI-30Xa or Casio fx-300ms plus): needs to be scientific, non-graphing and non-programmable calculator. The recommended calculator for this course is the Casio fx-300ms-plus calculator. A computer and stable internet connection will be needed for OWL homework and exam review quizzes.

Modes of Instruction: Lectures, exams and lab sessions will be in-person. Attendance is required for lab sessions. Lab teaching assistants (TAs) will take attendance during the lab session. The learning management system (LMS) for both lecture and labs will be Canvas. In-class lecture will be recorded through Mediasite and embedded in Canvas.

Online Resources:

- Canvas: Canvas will be used in this course. Enrollment in Canvas is automatic if you are currently enrolled in this course. Canvas contains information such as the course syllabus, laboratory information, lecture videos, handouts, and other important course information.
- OWL Assignments (Homework and Exam Review Quizzes): Cengage OWL will be used extensively for online homework and quizzes. A link for Cengage OWL will be available on Canvas in the OWLv2 Homework and eBook module. **Any use of generative AI (like ChatGPT) to solve homework constitutes academic dishonesty and be subject to discipline under the terms of the [SDSU Student Code of Conduct](#).**
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USE CHROME AS YOUR BROWSER FOR THIS COURSE!!

OWL WEBSITE WILL NOT WORK PROPERLY WITH OTHER BROWSERS.

Email Policy: Students are provided with an SDSU Gmail account, and this [SDSU email address](#) will be used for all communications. Per University Senate policy, students are responsible for checking their official university email once per day during the academic term. For more information, please see [Student Official Email Address Use Policy here](#)

All communication regarding this course should occur through official SDSU email accounts. The course instructor and lab coordinator will be available via email to answer questions or to schedule

office hour appointments. Please allow at least 24 hours for a response, longer over weekends and holidays. To ensure a prompt response include CHEM 100 in the subject line of your emails and make sure to provide your full name and lab section. You will not receive a response from either the instructor or lab coordinator if you do not use your sdsu.edu address.

Use your SDSU Gmail account and your red ID to sign up for OWL. If you do not do so then your homework and quiz scores will NOT transfer from OWL to Canvas, and you will receive a zero score.

This course: Fulfills the GE Natural Sciences and Quantitative Reasoning requirement

Prerequisites: A working ability with high school level algebra.

Course enrollment: You must be enrolled in one laboratory section as well as lecture. It is crucial that you attend the first three laboratory periods. Failure to do so may result in your spot in the lab section being given to another student. Notify the laboratory coordinators (lclare+chem100@sdsu.edu) as soon as possible if you must miss a laboratory period in the first two weeks of the semester for a legitimate reason. You must be able to attend the laboratory section of CHEM 100 for which you are enrolled; otherwise, you must drop the course and attempt to waitlist a different section that you can attend. If you decide to drop the course, inform the laboratory coordinator by email as soon as possible so your place can be given to a waitlister.

Never attend a lab session that is not on your class schedule, the TA will not let you in.

Expected learning outcomes: Chemistry 100 is an introduction to general chemistry. By the end of this course a successful student will be able to:

- i) execute basic chemistry calculations such as unit conversions and stoichiometry.
- ii) explain the basic principles of atomic theory and chemical bonding.
- iii) quantitatively and qualitatively describe physical and chemical properties of matter.
- iv) illustrate the concept of dynamic equilibrium with acid-base chemistry.
- v) safely and confidently conduct protocols in a laboratory environment.
- vi) List a few examples of historical inequities in the field of chemistry.

How to succeed in Chem 100: Prepare to spend a considerable amount of time (approximately 12 hours per week) outside of class, reading, studying and working on OWL assignments. You will have an assignment to tend to every week. **If you know you do not do well in exams, you should not miss any OWL assignments. If you miss 5 OWL assignments or more (whether OWL Homework or OWL Exam Review Quiz), you have entered the F zone for the final course grade.** You are encouraged to apply the following approach:

- 1) Read the relevant chapter in the book prior to coming to class. Be OK with not understanding everything you read at that time. Things will become clearer during class, and you will feel more confident about asking questions.
- 2) Attend all the lectures, pay attention and do not distract yourself with note taking.
- 3) During class, the professor will frequently ask if you have questions or need to go over something again. Stop them and ask. All questions are excellent; the only dumb questions are the ones that are not asked.
- 4) If you miss a class, make sure you watch its recording on Canvas the same day. Do not postpone, otherwise it will be hard to understand what we cover in the next class.
- 5) Right after class, read the book again before doing the OWL homework. Try to tackle the homework problems related to what we covered in class on the same day.
- 6) Bring your questions with you to the Math, Science Learning Center (MSLC) to get help from your

professor, a TA or a tutor (see below).

- 7) Repeat, until you are comfortable with the concepts and ready to show your mastery of them on the graded Exam Review Quiz on OWL.
- 8) After each exam, visit MSLC and figure out why you missed each problem. This will help you learn what to focus on for the next exam.

Statement on Cheating and Plagiarism: DO NOT cheat! Cheating is the actual or attempted practice of fraudulent or deceptive acts for the purpose of improving one's grade or obtaining course credit. Such acts also include assisting another student to do so. The penalty for cheating and plagiarism is an F for the course and possible expulsion from the University. For more information on the University's policy regarding cheating and plagiarism, refer to the Schedule of Courses ('Legal Notices on Cheating and Plagiarism') or the University Catalog ('Policies and Regulations'). You will need to learn the material in this course and, more importantly, develop the problem-solving skills required of this course to be prepared for upper division coursework and eventually a career.

CHEM 100 Student Help Getting Help Students are encouraged to make use of The Math & Science Learning Center (MSLC) for **free drop-in STEM tutoring**, located in the Love Library, Room 328. During Fall 2024, the MSLC will be open M - Th 10AM - 5PM and F 10AM - 2PM. For a full list of courses tutored, please visit the MSLC website: <https://mslc.sdsu.edu/>.

The MSLC is supported by your student success fee. We strongly encourage you to use this wonderful, **free resource**. [Here is how it works!](#) Some students believe that they shouldn't need to ask for help, but research has shown that **the average grade for students who attend tutoring is higher** than those who don't seek such support.

TA Office Hours for select courses will also be held in the MSLC. Please check <https://mslc.sdsu.edu/> to see TA hours for your course.

Supplemental Instruction: Supplemental Instruction (SI) Sessions, are free study sessions and will be offered each week, throughout the sixteen-week course. SI is open to all students enrolled in this course.

SI Sessions are facilitated by an SI Leader, a current student who just took the course and received a good grade and has been trained to lead active-learning-based group sessions where students can improve their understanding of course material, review and discuss important concepts, develop study strategies, and prepare for exams. Students who participate in SI Sessions typically earn higher final course and exam grades than students who do not participate, sometimes by a half to a full letter grade.

Attend SI so you can get extra practice, meet other students in the course, and learn how to effectively study. To get the most out of SI, attend early and often.

SI Program: https://bit.ly/SDSU_SI

Meet the SI Leaders: <https://studentsuccess.sdsu.edu/supplemental-instruction/leaders/chem100>

Session Calendar: <https://studentsuccess.sdsu.edu/supplemental-instruction/session-schedules>

OWL Assignments (Homework and Exam Review Quizzes): Before you begin, there will be two introductory OWL assignments at semester start: “Introductions to OWL” and “Math Review.” These intro assignments are to help guide you into using the program and freshen up on basic math. Attempting to use OWL without understanding how the program works can lead to issues later. You will earn bonus points for these assignments, up to 2% of the final course grade.

OWL Homework will have hard deadlines and no individual extensions will be granted. There will be 11 homework assignments, and the one with the lowest score will be dropped when determining your course grade. They are denoted in OWL by the week in which they are due and the chapters they cover, e.g. “Week 2 Homework (Ch 1 & 2).”

- It is in your best interest to complete all problems in each homework to ensure that you are fully prepared for the exams.
- If you know that you do not do well in exams, you should not miss any assignments. If you miss 5 assignments or more, you have entered the F zone for the final course grade.
- Work on the problems several days before they are due, so you have time to go to the professor’s office hours, or to go the MSLC for tutoring or find any Chem 100 TA at the MSLC to ask for help. Never wait until the last day to work on the homework; otherwise, you will be rushing through the assignment instead of learning how to break down problems and theories to better equip yourself for the exams.
- It is highly recommended that you buy a composition book to work on the problem sets to keep good notes and to make your studying more efficient.
- Each homework may have a different point total in OWL. Your score will be based on the percent correct answers, to receive the max of 20 points per homework.
- Scores for homework will be uploaded from OWL to Canvas within one day of each due date.

OWL Exam Review Quizzes are to assess your learning of the material and help you prepare for the exams. They are denoted in OWL by the exam number for which the quiz helps you prepare and the book chapter the quiz covers. For example, “Exam 1 Review Quiz - Required” is a quiz that helps you prepare for Exam 1. There will be one such Review Quiz before each exam. You must do them all. There is no time limit to the quiz but you must complete it in one single log-in session. You cannot save it, log out and return to it later. This is designed to help mimic a testing environment but you have as much time as you need. **You have five tries at each question but can retake the whole quiz an unlimited amount of times to raise your score.** Your overall best attempt will be used.

OWL Assignments Due dates: All homework will be due at 11:55 pm on Sunday on a mostly weekly basis. Exam Review Quizzes will be due at 8:00 am the morning of the exam. Check the schedule below for exact due dates/times. Announcements on Canvas will remind you to complete the work on time.

Please use the support links you see in Canvas for **technical support for OWLv2**. Live help is available from noon to 2 pm until Sept 20th as well as regular 24/7 tech support. https://www.cengage.com/coursepages/FA24_OH.

If you need additional assistance with registration or other technical difficulties, contact Prof Clare at the following email: lclare+chem100@sdsu.edu

Exams: There are 3 mid-term exams. All mid-term exams are cumulative but will focus mainly on content within the assigned chapters. Each exam is worth 100 points. Check the class schedule below for exact exam days and log them in your calendar. All exams are held in the classroom and are to be taken in person. Use of cell phones, computers, or any other electronic device other than a non-

graphing and non-programmable calculator is strictly forbidden during exam. **You must bring a non-graphing and non-programmable calculator to the exam. No such calculators will be provided if you forget yours. No exceptions. Bring your Red ID to each exam to be checked by a proctor.**

Final Exam: The final exam is cumulative, i.e. it will cover all chapters of the course and must be taken in person. Final exam is worth 100 points. The final exam will be given on Friday Dec 15 from 1 pm to 3 pm. Use of cell phones, computers, or any other electronic device other than a non-graphing and non-programmable calculator is strictly forbidden during exam. **You must bring a non-graphing and non-programmable calculator to the final exam. No such calculators will be provided if you forget yours. No exceptions. Bring your Red ID to the exam to be checked by a proctor.**

Make-up Exams: There will be no make-up exams, except in the case of appropriately documented medical absences. In the event you miss an exam or know that you will be missing an exam, contact the coordinator by email, (lclare+chem100@sdsu.edu) as soon as possible. Without verifiable medical documentation you will not be allowed to make up an exam. If there is an emergency in your immediate family, contact the lab coordinator as soon as possible. Be prepared to provide proof of the emergency. If you are an SDSU athlete, you must submit your schedule of competition during the first two weeks of semester so that arrangements around exam conflicts can be made. The use of any disallowed materials/references or communication with anyone other than the instructors and coordinator during an exam will be considered dishonest academic conduct. The instructors and coordinator reserve the right to make exceptions to this policy at their discretion.

Lab Assignments (Haydn McNeil): Chemistry is an experimental science. As such, its principles are best illustrated in the laboratory setting. As a student in this course, you will have the opportunity to learn many basic principles of chemistry in a modern, well-equipped laboratory environment. Learn the name of your laboratory teaching assistant (TA) and your lab section number. You will need to include this information on your lab assignments and exams.

- When conducting experiments, all persons present in a chemistry laboratory must wear approved eye protection, BLUE flame-resistant lab coat (white lab coats sold in bookstore are not flame-resistant) or flame-resistant yellow apron. Long pants or skirts that fall below mid-calf must be worn, and shoulders must be covered. Long hair must be confined securely. Anyone not in compliance will be asked to leave and will not be allowed to return until properly attired. Do not wear shorts or tank tops to any lab session. In addition, closed toe/heel shoes are mandatory for every lab session. This includes lab sessions when completing worksheets only. Store a pair of shoes in your locker if you think you will forget to wear proper shoes. No food or drink at any time is allowed.
- If you have forgotten your safety glasses then you must either borrow a pair from a friend, buy new ones at the SDSU Bookstore, or go home and take a zero on that lab.
- Lab work for Chem 100 must be performed in CSL 522, 524, 525 and 528 during the lab hours for which the student is registered. Do Not attend any other lab session other than the lab you are registered for, or you will receive a zero score for that lab.
- Because of logistical constraints, you will not be allowed to make up missed lab experiments; however, your lowest lab report score will be dropped when determining your course grade. This drop pass is intended to be used when you are sick, so use this free pass wisely. No matter the reason for missing a lab, the lowest lab score is dropped. If you miss a second lab contact the lab coordinator; be prepared to show a Dr's note for each lab absence that you were sick for an excused second absence, otherwise only one lab score is dropped. If you are under mandated quarantine because of being sick with COVID, contact the lab coordinator (lclare+chem100@sdsu.edu) and accommodations will be made. Be prepared to provide proof from the SDSU HealtheConnect. This will be a one-time accommodation.

- Lab worksheets/reports are due at the end of the lab period. All reports consist of completed pages for each experiment out of your lab manual. **Late reports will receive no credit.** No credit will be given for a lab report if the experiment was not actually done by that student. No credit will be given if worksheets or data is not from the lab manual.
- The lab report consists of recording data into pages, calculations and answering questions in the lab manual. Where computations are involved, numerical set-ups known as sample calculations must be shown. The final answer must include units and the correct number of significant figures. Reports must be legible. If your TA cannot read your writing, point will be taken off.
- Two Chem 100 students will be checking into a locker and sharing the locker. Both will be responsible for the equipment in it. At the end of the semester or if you drop the class, you need to check out of your locker. If you fail to check out by the scheduled date, there will be a \$25 fee.
- There are 30 lab participation points available. These will be assigned at the discretion of the lab TA at the end of the semester. Arriving on time, being prepared for laboratory, adhering to lab safety protocols, and helping with clean-up will ensure that you receive these points. Your TA will take points away if you store hydro flasks or any other personal liquid containers or food on the lab or in the cubby. All liquid containers should be stored inside your backpack. No food is allowed in any of the chemistry labs. Points will also be taken away for not wearing safety glasses when warranted. Your TA will let you know when you must wear your safety glasses.

Grading: Your letter grade will be determined by your individual points total for the course. There will be no curving of the course grades. Below is a tentative grade range breakdown for each letter grade. The instructor reserves the right to modify this grade scale prior to assigning final letter grades.

CHEM 100 Grading Scheme						
Item	Submission	How many	Value (each)	Total	Percentage of final grade	
Homework	OWL	Best 10/11	20	200	20%	
Exam Review Quizzes	OWL	4 (one before each exam)	50	200	20%	
Midterm Exams	In class	3	100	300	30%	
Final Exam	In class	1	100	100	10%	
Lab safety training	Submit work to TA	1	20	20	2%	
Lab Assignments	Submit work to TA	Best 10/11	15	150	15%	
Lab Participation/conduct	Canvas	1	30	30	3%	
				Total	1000	100.0%

BONUS Points: If you do the Week 1 OWL assignments “Intro: Getting Started” and “Math Review” you get 20 bonus points = 2% of final grade. Yay!

Score	Grade
≥ 93.33	A
90 to < 93.33	A-
86.66 to < 90	B+
83.33 to < 86.66	B
80 to < 83.33	B-
76.66 to < 80	C+
73.33 to < 76.66	C
70 to < 73.33	C-
66.66 to < 70	D+
60 to < 66.66	D
< 60	F

Students With Disabilities - At San Diego State we have excellent resources for all our students. If you are a student with a disability and believe you need special accommodations for this class, it is your responsibility to contact the [Student Disability Services](#) or call (619) 594-6473 to schedule an appointment. Do this as soon as possible to avoid any delay in the receipt of your accommodations. Please note that testing accommodations based on disability are not retroactive and cannot be provided by the instructor without the student first obtaining an accommodation letter from SASC. Please also be aware that SASC has deadlines for submitting forms, if you do not meet their deadlines, no further accommodation will be offered.

Week	Lecture	Date	Lecture Schedule	Weekly Lab Schedule	Assignments & Due Dates
1	1	Aug 26, 2024	Introductions, syllabus.	No Lab for Week 1	Must complete Safety Quiz and Safety Survey BEFORE Sep 15. Week 1 OWL Bonus (Intro to OWL & Math Review, up to 2% added to final course grade) due Sunday 9/1/2024 11:55pm
	2	Aug 28, 2024	Chapter 1 What is Chemistry? The scientific method		
	3	Aug 30, 2024	Chapter 2 Pure substances vs. mixtures. Physical vs. chemical properties. Separation of mixtures.		
2	-	Sept 2, 2024 Labor Day	No class	No Lab for Week 2	Week 2 OWL Homework (Ch 1 & 2), due Sunday 9/8/2024 11:55pm
	4	Sept 4, 2024	Chapter 2 Elements vs. compounds. Energy in chemical change. Laws of conservation.		
	5	Sept 6, 2024	Chapter 5 Atomic Theory. Subatomic particles.		
3	6	Sept 9, 2024 Schedule Adjustment Deadline. Last day to add, drop, or change grading basis. (11:59 pm deadline)	Chapter 5 Structure of the atom. Organization of the periodic table. Stable isotopes. Ch 20.3 & 20.7: Radioactive isotopes	Lab Check-in Introduction to Lab and Lab Safety with Safety Quiz.	Week 3 OWL Homework (Ch 5, 20.3 & 20.7), due Sunday 9/15/2024 11:55pm
	7	Sept 11, 2024	Chapter 6 Nomenclature Writing names and formulas of diatomic elements & binary molecular compounds.		
	8	Sept 13, 2024	Chapter 6 Writing names and formulas of ions and ionic compounds.		
4	9	Sept 16, 2024	Chapter 6 Names and formulas of ionic compounds containing polyatomic ions.	Lab 6 - Separation of an Unknown Mixture. (Prelab assignment) Results, Calcs, & Questions due at the end of lab session.	Week 4 OWL Homework (Ch 6 & 8), due Sunday 9/22/2024 11:55pm
	10	Sept 18, 2024	Chapter 8 Chemical reactions. Balancing and interpreting chemical equations.		
	11	Sept 20, 2024	Chapter 8 Classes of chemical reactions		
5	12	Sept 23, 2024	Chapter 9 Skip 9.2, 9.5 Redox reactions. Ch 19.4, 19.5: Reducing and oxidizing agents.	Lab - 4 Chemical Nomenclature Worksheet due at the end of lab session	Exam 1 Review Quiz (Ch 1, 2, 5, 20.3, 20.7, 6 & 8), due Friday 9/27/2024 8:00am
	-	Sept 25, 2024	In-class Review		

	-	Sept 27, 2024	Exam 1 (Chapters 1, 2, 5, 6, 8, 20.3 & 20.7)		
6	13	Sept 30, 2024	Chapter 9 Solutions of ionic compounds. Strong vs. weak acids.	Lab - 3 Constructing a Periodic Table Worksheet due at the end of lab session	Week 6 OWL Homework (Ch 9, 19.4, 19.5), due Sunday 10/6/2024 11:55pm
	14	Oct 2, 2024	Chapter 11 Emission spectra of atoms. Bohr model of the atom. Valence electrons, Lewis structures of elements, electronic configuration.		
	15	Oct 4, 2024	Chapter 11 Trends in the periodic table, chemical families.		
7	16	Oct 7, 2024	Chapter 12 Skip 12.9 Ionic vs. covalent bonds. Electronegativity of elements, polar vs. nonpolar bonds.	Lab 12 - Chemical Reactions Only the following sections of the worksheet will be due at the end of lab session: "Kind of reactions" on page 91 and "Words to Reactions Formulas" on page 92.	Week 7 OWL Homework (Ch 11 & 12), due Sunday 10/13/2024 11:55pm
	17	Oct 9, 2024	Chapter 13 Skip 13.5, 13.7 Lewis structures of compounds, VSEPR theory		
	18	Oct 11, 2024	Chapter 13 Cont./VSEPR theory		
8	19	Oct 14, 2024	Chapter 3 Measuring quantities (mass, volume, temperature, density), units, significant figures, scientific notation.	Lab 5 - Valence- Shell Electron- Pair Repulsion (VSEPR) Theory. Worksheet due at end of lab session.	Week 8 OWL Homework (Ch 13, 3 & 7), due Sunday 10/20/2024 11:55pm
	20	Oct 16, 2024	Chapter 7 What is a mole? Avogadro's number. Gram-mole-number of particles conversions.		
	21	Oct 18, 2024	Chapter 7 Mass relationships among elements in a compound. Percentage composition by mass		
9	22	Oct 21, 2024	Chapter 10 Skip 10.5-10.7 & 10.9-10.10 Stoichiometry in chemical reactions.	Lab 2 – Mass & Density Lab. Results, Calcs & Questions due at the end of lab session.	Exam 2 Review Quiz (Ch 9, 19.4, 19.5, 11, 12, 13, 3 & 7), due Friday 10/25/2024 8:00am
	-	Oct 23, 2024	In-class Review		
	-	Oct 25, 2024	Exam 2 (Chapters 9, 19.4, 19.5, 11, 12, 13, 3 & 7)		
10	23	Oct 28, 2024	Chapter 10 Yields of chemical reactions. Energy and its units.	Lab 7 - Identification of an Unknown Metal Carbonate. (Prelab assignment) Results, Calcs, &	Week 10 OWL Homework (Ch 10 & 4), due Sunday 11/3/2024 11:55pm
	24	Oct 30, 2024	Chapter 4 Behavior of gases (Gas laws). Standard Temperature and Pressure.		

	25	Nov 1, 2024	Chapter 14 Skip 14.7, 14.9 The ideal gas law. Dalton's law of partial pressures.	Questions due at end of lab session	
11	26	Nov 4 2024	Chapter 15 Skip 15.7 Intermolecular forces and the properties of liquids, gases and solids.	Lab 11 - Determination of the Molar Volume of a Gas and the Gas Constant. Data & Calcs due at end of lab session.	Week 11 OWL Homework (Ch 14 & 15), due Sunday 11/10/2024 11:55pm
	27	Nov 6, 2024	Chapter 15 Types of intermolecular forces, change of state, specific heat.		
	28	Nov 8, 2024	Chapter 16 Skip 16.8-16.9 & 16.13-16.15 Solutes & solutions. Percent concentration by mass.		
12	-	Nov 11, 2024 Veterans Day	No Class	Lab 9 - Determining the Specific Heat Capacity of a Metal by Calorimetry. Tues-Thurs labs only. Results, Calcs, Questions & Graph due at the end of lab session.	Week 12 OWL Homework (Ch 16) due Sunday 11/17/2024 11:55pm
	29	Nov 13, 2024	Chapter 16 Molarity, dilutions.		
	30	Nov 15, 2024	Chapter 17 Skip 17.4, 17.8 Brønsted-Lowry acids & bases. Conjugate acid/base.		
13	31	Nov 18, 2024 Prof. Huxford substituting	Chapter 17 pH, pOH	Lab 10 – Introduction to Acids and Bases Results & Questions due at end of lab session.	Exam 3 Review Quiz (Ch 10, 4, 14 & 15, 16), due Fri 11/22/2024 8:00am
	-	Nov 20, 2024 Prof. Huxford substituting	In-class Review		
	-	Nov 22, 2024	Exam 3 (Chapters 10, 4, 14 & 15, 16)		
14	-	Nov 25, 2024	No Class	Monday lab only: Determining the Specific Heat Capacity of a Metal by Calorimetry	Week 14 OWL Homework (Ch 17), due Sunday 12/01/2024 11:55pm
	-	Nov 27, 2024 No classes	No class		
	-	Nov 29, 2023 Thanksgiving	No class		
15	32	Dec 2, 2024	Chapter 18 Skip 18.10-18.13 Collision theory of chemical reactions, reaction progress, catalysis.	Lab 13 - Acid-Base Titration. Data and acid concentration due at end of lab session. Locker check-out.	Week 15 OWL Homework (Ch 18), due Sunday 12/08/2024 11:55pm
	33	Dec 4, 2024	Chapter 18 Chemical Equilibrium, equilibrium constant, Le Chatelier's principle.		
	34	Dec 6, 2024	Chapter 18 Chemical equilibrium in solutions		

			of weak acids/bases, pKa, buffers.		
16	-	Dec 9, 2024	In-class Review	No lab	Final Exam Review Quiz (All material including Ch 17 & 18), due Fri 12/13/2024 8:00am
	-	Dec 11, 2024 Last day of classes	In-class Review		

Final Exam: Monday, Dec 16, Time: 8 - 10 am. The final exam is on all material covered in class including chapters 17 & 18.

Religious observances: Notify lab coordinator within the first two weeks of class of any planned absences from exams or labs due to religious observances so that we can arrange some reasonable accommodation.

Changes to the syllabus: This syllabus and schedule are subject to change in the event of extenuating circumstances. We will do our best to make these clear with announcements in class and on the Canvas website. Please pay attention to announcements made in class and lab. It is your responsibility to check on announcements made in your absence.

This syllabus and the following schedule are subject to change if the instructor deems it necessary.

Finding Help on Campus:

Need help finding help -- an advisor, tutoring, counselling, or emergency economic assistance? The [SDSU Student Success Help Desk](#) is here for you. Student assistants are available via Zoom Monday through Friday, 9:00 AM to 4:30 PM to help you find the office or service that can best assist with your particular questions or concerns.

- College of Arts and Letters Student Success Center: <https://cal.sdsu.edu/academics/student-success>
- College of Education Student Success Center: <https://education.sdsu.edu/oss>
- Center for Student Success in Engineering: <https://csse.sdsu.edu/advising/advising>
- College of Sciences Student Success Center: <https://cossuccess.sdsu.edu/>
- Fowler College of Business Student Success Center: <https://business.sdsu.edu/undergrad/advising>
- College of Health and Human Services Advisors: <https://chhs.sdsu.edu/academics/advising>
- SDSU Imperial Valley Student Success and Retention: <https://imperialvalley.sdsu.edu/about/departments/student-affairs/retention>
- College of Professional Studies and Fine Arts Advisors: <https://psfa.sdsu.edu/>
- Math & Science Learning Center: <https://mslc.sdsu.edu/>

Preferred Names & Pronouns: Any student who wishes to be addressed by a name other than what is presented in Canvas is encouraged to contact the instructor or lab coordinator via email with the name you wish to use. Similarly, if you have preferred pronouns that you wish to be addressed by please contact your instructor or lab coordinator. We will communicate your desires to the TAs and all instructional staff will gladly honor your request.

Sexual violence / Title IX mandated reporting: As an instructor, one of my responsibilities is to help create a safe learning environment on our campus. I am a mandated reporter in my role as an SDSU employee. It is my goal that you feel able to share information related to your life experiences

in classroom discussions, in your written work, and in our one-on-one meetings. I will seek to keep the information you share private to the greatest extent possible. However, I am required to share information regarding sexual violence on SDSU's campus with the Title IX coordinator, Jessica Rentto 619-594-6017. She (or her designee) will contact you to let you know about accommodations and support services at SDSU and possibilities for holding accountable the person who harmed you. Know that you will not be forced to share information you do not wish to disclose, and your level of involvement will be your choice. If you do not want the Title IX Officer notified, instead of disclosing this information to your instructor, you can speak confidentially with the following people on campus and in the community. They can connect you with support services and discuss options for pursuing a University or criminal investigation. Sexual Violence Victim Advocate 619-594-0210 or Counseling and Psychological Services 619-594-5220, psycserv@sdsu.edu. For more information regarding your university rights and options as a survivor of sexual misconduct or sexual violence, please visit titleix.sdsu.edu or sdsutalks.sdsu.edu.

COVID-19 Protocols

Vaccination and testing protocols set by the CSU and SDSU will be enforced. Make sure to upload proof of your COVID-19 booster shot to [Healthconnect](https://healthconnect.sdsu.edu). For more information use the following link: <https://sacd.sdsu.edu/student-health-services/covid-19>. If you experience COVID symptoms seek immediate testing at Student Health Services or pick-up a rapid test at one of the on campus vending machines

SDSU Economic Crisis Response Team:

If you or a friend are experiencing food or housing insecurity, technology concerns, or any unforeseen financial crisis, it is easy to get help! Visit <https://sacd.sdsu.edu/ecrt> for more information or to submit a request for assistance. SDSU's Economic Crisis Response Team (ECRT) aims to bridge the gap in resources for students experiencing immediate food, housing, or unforeseen financial crises that impacts student success. Using a holistic approach to well-being, ECRT supports students through crisis by leveraging a campus-wide collaboration that utilizes on and off-campus partnerships and provides direct referrals based on each student's unique circumstances. ECRT empowers students to identify and access long term, sustainable solutions in an effort to successfully graduate from SDSU. Within 24 to 72 hours of submitting a referral, students are contacted by the ECRT Coordinator and are quickly connected to the appropriate resources and services.

For students who need assistance accessing technology for their classes, visit our ECRT website <https://sacd.sdsu.edu/ecrt> to be connected with the SDSU library's technology checkout program. The technology checkout program is available to both SDSU and Imperial Valley students.

Land Acknowledgement:

We stand upon a land that carries the footsteps of millennia of Kumeyaay people. They are a people whose traditional lifeways intertwine with a worldview of earth and sky in a community of living beings. This land is part of a relationship that has nourished, healed, protected and embraced the Kumeyaay people to the present day. It is part of a world view founded in the harmony of the cycles of the sky and balance in the forces of life. For the Kumeyaay, red and black represent the balance of those forces that provide for harmony within our bodies as well as the world around us.

As students, faculty, staff and alumni of San Diego State University we acknowledge this legacy from the Kumeyaay. We promote this balance in life as we pursue our goals of knowledge and understanding. We find inspiration in the Kumeyaay spirit to open our minds and hearts. It is the legacy of the red and black. It is the land of the Kumeyaay. 'eyay e'haan - My heart is good.