CHEM 100: Introduction to General Chemistry – Spring 2024

COURSE INFORMATION

Lecture time/location: 9 am to 9:50 am Mondays, Wednesdays & Fridays in AL201

Lab times/locations: Your schedule lists your lab section time and location; labs meet in Chemical Sciences Laboratory (CSL) rooms 522 and 524

Modes of instruction: In-person lectures and laboratories. 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. Exams and homework will be administered online.

Instructor: Mrs. Laurie Clare (Iclare@sdsu.edu)

When emailing, please include CHEM 100 in the subject and include your lab section number. I will try to respond within 24 hours, but may not be monitoring my email on weekends and campus breaks.

Instructor Help Hours: Mondays 3-5pm & Tuesdays 4–5 pm, Mrs Clare will hold help hours in the Love Library, Room 328 at the Math & Science Learning Center (MSLC: <u>https://mslc.sdsu.edu/</u>) Individual appointments can be arranged at other times by emailing Mrs. Clare.

Laboratory Coordinator:	OWL Online Homework Coordinator:
Professor Laurie Clare	Professor Matthew Campbell
Email: <u>lclare+chem100@sdsu.edu</u>	Email: cos-Chem100@sdsu.edu
Office: CLS 313, by appointment only	_
Contact for issues related to waitlisting,	Contact for issues related to the OWL
labs, and other course logistics.	online homework system.

- Waitlist: Waitlist students should email the Chem 100 Lab Coordinator, Prof. Clare, <u>Iclare+chem100@sdsu.edu</u> as soon as possible and provide your name and ID number. Continue to go to lecture until you are added, you can ask to be added to the Canvas course. You cannot attend lab until you have been removed from the waitlist.
- **Dropping the course:** 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 January 30 at 11:59 pm.
- **Technology Requirements:** A computer and stable internet connection will be needed for OWL online homework and online exams in Canvas. A computer/tablet/phone is needed for Top Hat in-class participation. If you need to borrow a computer, contact SDSU Economic Crisis Response Team for technology support at sdsu.edu/ecrt

COURSE MATERIALS – REQUIRED

Equitable Access: All required materials (except for the lab manual) for this class are available in digital format by the first day of classes and are free up until **the drop date at 11:59 pm January 30**. After this date, your SDSU student account will be charged a flat rate of \$19.75/unit. Please visit <u>Equitable Access</u> for additional information about pricing digital subscription duration, print addons, opting out, and other frequently asked questions. Through Equitable Access you will have access to the textbook, Cengage OWL Study System, Top Hat, and purchase of the lab manual.

If you use Cengage materials in another course (such as Calculus) you can instead enroll in Cengage Unlimited. For \$124.99 per semester you get access to ALL Cengage eBooks and ALL online learning materials (OWLv2, MindTap, WebAssign, etc). To use Cengage Unlimited do this:

> Go to <u>www.shopaztecs.com/optout</u> and complete the form to opt out for each course BEFORE THE ADD/DROP DATE
> When 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!

- **Textbook:** Mark S. Cracolice, Edward I. Peters, Introductory Chemistry: An Active Learning Approach, 7th edition, ISBN 9780357363935 (access through your Cengage account).
- Lab Manual: <u>Chem 100 Lab Manual</u>, Chemistry Dept. Printed by Hayden MacNeil, Fall 2023 – Spring 2024. Available through the bookstore. Go to the second floor desk and present the clerk with your SDSU student ID.
- Lab Equipment: Safety glasses, nitrile gloves (can be purchased at the SDSU bookstore or available at drugstores such as CVS and Walgreens), matches or butane lighter, and a flame-resistant lab coat (blue) or lab apron (yellow). Do NOT purchase the white lab coat in the bookstore, it is not flame resistant.
- Additional items: Calculator (e.g., TI-30Xa or Casio fx-300ms plus): needs to be scientific but non-graphing and non-programmable. The recommended calculator for this course is the Casio fx-300ms-plus.

Cengage OWL will be used for online homework and exam review problem sets (access through your Cengage account).

Top Hat (<u>www.tophat.com</u>) will be used to facilitate in-class participation during the lecture period through engaging with the course material in real time with a smartphone, iPad/tablet, or laptop. See <u>Top Hat's Getting Started Guide</u> and information posted on Canvas by your instructor.

STUDENT LEARNING OUTCOMES

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

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

DIVERSITY AND INCLUSION

It is important that all students in this class feel welcome and have an equal opportunity to learn. Throughout the course we will incorporate real-world examples of chemistry and discuss the social and historical contexts in which chemistry developed as a scientific field. Students are encouraged to reflect on how chemistry impacts them and their communities while being respectful of the unique experiences of other students. Suggestions about how to improve the value of diversity and inclusion in this course are encouraged and appreciated.

LAND ACKNOWLEDGMENT

For millennia, the Kumeyaay people have been a part of this land. This land has nourished, healed, protected and embraced them for many generations in a relationship of balance and harmony. As members of the San Diego State University community, we acknowledge this legacy. We promote this balance and harmony. We find inspiration from this land, the land of the Kumeyaay.

ESSENTIAL STUDENT INFORMATION

For essential information about student academic success, please see the <u>SDSU</u> <u>Student Academic Success Handbook.</u>

- This course fulfills the GE for Natural Sciences and Quantitative Reasoning.
- Course prerequisites: Strong working ability with high school level algebra.
- Students are provided with an SDSU Gmail account, and this SDSU email address will be used for all communications. Per <u>University Senate policy</u>, students are responsible for checking their official university email regularly.
 - All communication regarding this course should occur through official SDSU email accounts. The course instructor and coordinators will be available via email to answer questions or to schedule meetings. 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 and make sure to provide your full name and lab section. You will not receive a response if you do not use your sdsu.edu address.
- Religious observances: Please notify the lab coordinator within the first two weeks of class of any planned absences from exams, quizzes, or labs due to religious observances so that we can arrange some reasonable accommodation.
- Class rosters are provided to the instructor with the student's legal name. Please let me know if you would prefer an alternate name and/or gender pronoun.

- SDSU provides disability-related accommodations via Student Disability Services (<u>sds@sdsu.edu</u> <u>https://sds.sdsu.edu/</u>). Please allow 10-14 business days.
- This course requires the use and handling of hazardous materials. You must complete the Environmental Health and Safety module and survey in our Canvas course by January 26 at 5pm. You will also take a safety quiz in the Week 3 lab. These activities are worth a total of 15 points.
- You must be enrolled in one laboratory section as well as lecture. You must attend the laboratory section in CHEM 100 for which you are enrolled. Never attend a lab session that is not on your class schedule, the TA will not let you in.
- Academic dishonesty: 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. Any use of generative AI (like ChatGPT) not assigned by the instructor may constitute academic dishonesty and be subject to discipline under the terms of the <u>SDSU Student Code of Conduct</u>. It is important to do your own work as 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.

COURSE DESIGN: MAJOR ASSIGNMENTS AND ASSESSMENTS

Online Assignments (OWL Homework and Exam Review Quizzes): Before you begin, there will be two introductory Bonus OWL assignments at semester start: "Intro and Getting Started" 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 1% of the final course grade.

OWL Homework has hard deadlines, and no individual extensions will be granted. There are 11 homework assignments. The one with the **lowest score will be dropped**. They are denoted in OWL by the week 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.
- Work on the problems several days before they are due, so you have time to go to the professor's help hours, 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 prepare for the exams.
- It is highly recommended that you buy a notebook to write out your work on the problem sets to keep good notes and to make your studying more efficient.
- Each homework may have a different point totals. Your score will be based on the percent correct answers, to receive the max of 15 points per homework.
- Use your SDSU Gmail account and your red ID to sign up for OWL. Scores for homework will be uploaded from OWL to Canvas during and at the end of the semester. If your grades are not appearing in Canvas, contact Professor Matthew Campbell (<u>cos-Chem100@sdsu.edu</u>) immediately.

OWL Exam Review Quizzes (30 points each) assess your understanding of material and help you prepare for exams. They are denoted in OWL by the exam and chapters the quiz covers. For example, "Exam 1 Review Quiz - Ch 1, 2, 5 & 11" is a quiz that helps you prepare for Exam 1 by reviewing concepts and solving problems from all chapters covered on the exam. You will have **unlimited attempts at each quiz**.

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. Announcements on Canvas will remind you to complete the work on time.

For problems with OWL registration and other technical difficulties contact the <u>OWL</u> <u>Virtual Office</u> or Prof Campbell, <u>cos-Chem100@sdsu.edu</u>.

Exams (Canvas): There are 3 mid-term exams that will be administered through Canvas. All exams are cumulative but will focus mainly on content within the assigned chapters. Each exam is worth 100 points. You have 90 minutes to complete each exam once you start it. Exam availability will start at 3:00 pm Pacific Time Friday and end 3:00 pm Pacific Time Saturday on dates noted in the course schedule. You will not come to class to take the exam, but you still need to make sure your computer is operational and that you have good Wi-Fi in order to complete the exam.

You should perform all work for exam problems on a piece of physical or electronic scratch paper that can be converted to a PDF and uploaded after each exam. Failure to upload your work will result in a score of zero for the exam.

No exam retakes will be allowed for technical issues. 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, <u>Lclare+chem100@sdsu.edu</u>, *as soon as possible*. Without verifiable medical documentation you will not be allowed to make up an exam. 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.

Learning Activities (Canvas): After each exam you will review missed exam questions by submitting a response that includes identifying the correct answer, a discussion of why the answer is correct and a description of the mistake made to arrive at the incorrect answer. Each of these Learning Activities is worth 10 points and must be uploaded to Canvas as a pdf file. One learning activity will occur at the start of the semester so you become familiar with the process.

Final Exam (Canvas): The final exam (130 points) is cumulative and will cover all course topics. The final exam will be given on Canvas on **Monday May 6, from 7:30 pm to 10:30 am.** There will be no make-up, except in the case of appropriately documented medical absences. If you miss the final exam or know that you will be missing the final, contact the coordinator by email, <u>Lclare+chem100@sdsu.edu</u>, *as soon as possible*.

The use of any disallowed materials/references or communication with anyone other than the instructor/coordinator during an exam will be considered

dishonest academic conduct. The instructor/coordinator reserves the right to make exceptions to this policy at their discretion.

Lecture Participation (Top Hat): Regular engagement with course material is important for your success. Top Hat will be used in lecture so you can answer questions in real time. A maximum of 90 points can be earned; up to three points per class period by being present and answering questions. Top Hat points will be visible within Top Hat and transferred to Canvas at the end of the semester.

Instructions and a link for accessing Top Hat will be provided on Canvas. Should you require assistance with Top Hat at any time please contact their Support Team via email (<u>support@tophat.com</u>), the in-app support button, or by calling 1-888-663-5491.

Lab Assignments (Hayden McNeil): Chemistry is an experimental science. As such, its principles are best illustrated in the laboratory setting. You will learn many basic principles of chemistry in a modern, well-equipped laboratory environment. Learn the <u>name</u> of your laboratory teaching assistant (TA) and your <u>lab section number</u>. 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 Bookstore, or go home and take a zero on that lab.
- Lab work for Chem 100 must be performed in CSL 522 and 524 during the lab hours for which the student is registered. **Do not** attend any lab session other than the lab you are registered for, or you will receive a zero 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. Use this free pass wisely. No matter the reason for missing a lab, the lowest lab score is dropped. If your second missed lab is due to medical issues, contact the lab coordinator; be prepared to show proof. If you are under mandated quarantine because of being sick with COVID, contact the lab coordinator (<u>lclare+chem100@sdsu.edu</u>). Be prepared to provide proof from the SDSU HealtheConnect. This will be a one-time accommodation.
- Lab reports are worth 15 points and 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.
- 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 20 lab participation points. These will be assigned at the discretion of the lab TA at the end of the semester. Arriving on time prepared for laboratory, adhering to lab safety protocols, and helping with clean-up will ensure that you receive these points.

COURSE SUPPORT: FREE RESOURCES

We <u>highly</u> recommend that you take advantage of the free resources provided by SDSU. These are opportunities to ask tutors and/or teaching assistants questions that arise during your studies. Any student may attend any of the Chem tutoring hours or any TA help hour and you may attend as many as you like.

<u>The Mathematics and Science Learning Center (MSLC):</u> Instructor and teaching assistant (TA) office (help room) hours for this course will be held in the MSLC (<u>https://mslc.sdsu.edu/chemistry-ta/</u>). Students are also encouraged to make use of MSLC for free drop-in STEM tutoring for other courses. The MSLC is available Sunday through Friday. Most services are in person in Love Library, Room 328, though the website will list any available virtual tutoring times. For a full list of courses tutored and the most recent schedule of TA and tutor help hours, please visit the MSLC website: <u>https://mslc.sdsu.edu/</u>.

The MSLC is supported by your student success fee. We strongly encourage you to use this wonderful, free resource. Some students believe that they shouldn't need to ask for help, but research has shown that **the average grade for students who use the MSLC is almost one full grade higher than those who don't seek support**.

Supplemental Instruction (SI): SI Sessions are free study sessions and will be offered each week, throughout the 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: <u>https://studentsuccess.sdsu.edu/supplemental-instruction/leaders/chem100</u>
- Calendar: <u>https://studentsuccess.sdsu.edu/supplemental-instruction/session-schedules</u>

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 <u>every week</u>. You are encouraged to apply the following approach:

- Read the relevant chapter in the book prior 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.
- Attend all the lectures, pay attention, and do not distract yourself with note taking.
- 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.
- If you miss a class, make sure you watch its recording on Canvas the same day. Do not postpone, or it will be hard to understand what we cover in the next class.
- 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.
- Bring your questions with you to the MSLC to get help.
- Repeat, until you are comfortable with the concepts and ready to show your mastery of them on the graded Exam Review Quiz on OWL.
- After each exam, visit MSLC and figure out why you missed each problem. This will help you complete the learning assignment and see what to focus on learning.

GRADING POLICIES

Your letter grade will be determined by your individual points total for the course. There will be no curving of the course grades. This is a tentative grade range breakdown for each letter grade. The instructor reserves the right to universally modify this grade scale prior to assigning final letter grades. Earning the respective percentage in the course listed here will result in the grade noted. It is possible that the percentages may be lowered, but they will not be raised for a given letter grade.

Percentage	Letter Grade
≥ 93.33	А
90 to < 93.33	A-
86.66 to < 90	B+
83.33 to < 86.66	В
80 to < 83.33	B-
76.66 to < 80	C+
73.33 to < 76.66	С
70 to < 73.33	C-
66.66 to < 70	D+
60 to < 66.66	D
< 60	F

ltem	Submission	Number	Value	Total	% of grade
Homework	OWL	Best 10/11	15	150	15.0%
Exam Review Quizzes	OWL	3	30	90	9.0%
Midterm Exams	Canvas (online)	3	100	300	30.0%
Final Exam	Canvas (online)	1	130	130	13.0%
Learning Activities	Canvas	4	10	40	4.0%
Lecture Participation	Top Hat	TBD (per class)	3	90	9.0%
Lab safety training	Canvas & Lab	1	15	15	1.5%
Lab Assignments	Submit work to TA	Best 11/12	15	165	16.5%
Lab Participation	Canvas	1	20	20	2.0%
			Total	1000	100.0%

COURSE SCHEDULE

All dates and time are Pacific. This syllabus and schedule are subject to change. I will make any changes clear with announcements in class and on the Canvas website using Announcements. The coordinator will also keep you updated using Announcements in Canvas. Please pay attention to announcements made in class and lab. It is your responsibility to check on announcements made in your absence.

The California Faculty Association (the labor union of Lecturers, Professors, Coaches, Counselors, and Librarians across the 23 CSU campuses) is in a difficult contract dispute with California State University management. It is possible that we will call a strike or other work stoppage this term. I promise to promptly inform you of any schedule disruption. Our working conditions are your learning conditions; we seek to protect both. For further information go to www.CFAbargaining.org.

Week	Date	Lecture Schedule	Weekly Lab Schedule	Homework and Other Due Dates	
	January 17, 2024	Course Introduction/ Chapter 1		Learning Activity 1: Course Scavenger Hunt	
1	January 19, 2024	Chapter 1	No Lab	Week 1 OWL Bonus (Intro to OWL & Math Review) available till semester end, but suggested due date Jan 28 11:55pm	
	January 22, 2024	Chapter 2	No Lab	Week 2 OWL Homework (Ch 1 & 2), due Sun Jan 28 11:55pm	
2	January 24, 2024	Chapter 2	Complete Lab Safety Module in		
	January 26, 2024	Chapter 5	Canvas (Survey)		
	January 29, 2024	Chapter 5	Lab Check-in & Safety Quiz	Jan 30 - Last day to add/drop classes, 11:59 pm deadline	
3	January 31, 2024	Chapter 5	Lab 1 –	Week 3 OWL	
	February 2, 2024	Chapter 11	Separation of an Unknown Mixture	Homework (Ch 5), due Sun Feb 4 11:55pm	
	February 5, 2024	Chapter 11	Lab 2 – Periodic	OWL Exam 1 Review Quiz (Ch 1, 2, 5 & 11), due Fri Feb 9 8:00am Exam 1 available	
4	February 7, 2024	Chapter 12 (skip 12.8) & Chapter 9 (9.1 & 9.2)			
	February 9, 2024	Review for Exam 1 (Chapters 1, 2, 5 & 11)	Table Worksheet	starting 3pm Fri February 9 due 3pm Sat February 10	

Week	Date	Lecture Schedule	Weekly Lab Schedule	Homework and Other Due Dates	
	February 12, 2024	Chapter 12 (skip 12.8)		Learning Activity 2:	
5	February 14, 2024	Chapter 12 (skip 12.8)	Lab 3 – Chemical Nomenclature Worksheet	Exam 1 Reflection Week 5 OWL Homework (Ch 12), due Sun Feb 18 11:55pm	
	February 16, 2024	Chapter 6 (skip 6.12)			
	February 19, 2024	Chapter 6 (skip 6.12)		Week 6 OWL Homework (Ch 6 & 13), due Sun Feb 15	
6	February 21, 2024	Chapter 13 (skip 13.7)	Lab 4 – VSEPR Worksheet		
	February 23, 2024	Chapter 13		11:55pm	
	February 26, 2024	Chapter 8			
7	February 28, 2024	Chapter 9 (9.3 – 9.11, skip 9.10) Chapter 19.4 & 19.5	Lab 5 – Chemical Reactions	Week 7 OWL Homework (Ch 8, 9, 19.4 & 19.5), due Sun	
	March 1, 2024	Chapter 9 (9.3 – 9.11, skip 9.10) Chapter 19.4 & 19.5	Worksheet	March 3 11:55pm	
	March 4, 2024	Chapter 3		OWL Exam 2 Review Quiz (Ch 6, 8, 9, 12, 13,	
8	March 6, 20 <mark>24</mark>	Chapter 3	Lab 6 – Significant Figures, Scientific Notation, and	19.4 & 19.5), due Fri March 8 8:00am	
U	March 8, 2024	Review for Exam 2 (Chapters 6, 8, 9, 12, 13, 19.4 & 19.5)	Algebra Worksheet	Exam 2 available starting 3pm Fri March 8 due 3pm Sat March 9	
	March 11, 2024	Chapter 7		Learning Activity 3:	
	March 13, 2024	Chapter 7	Lab 7 – Density	Exam 2 Reflection	
9	March 15, 2024	Chapter 10 (skip 10.5 – 10.7)	Lab	Week 9 OWL Homework (Ch 3 & 7), due Sun March 17 11:55pm	
	March 18, 2024	Chapter 10 (skip 10.5 – 10.7)	Lab 8 –	Week 10 OWL Homework (Ch 10 & 4), due Sun March 24	
10	March 20, 2024	Chapter 4	Identification of an Unknown Metal		
	March 21, 2024	Chapter 14 (skip 14.9)	Carbonate	11:55pm	
	March 25, 2024	Chapter 14	Lab 9 – Determination of	Week 11 OWL Homework (Ch 14 & 15), due Sun March 31 11:55pm	
11	March 27, 2024	Chapter 15	the Molar Volume of a Gas and the		
	March 29, 2024	Chapter 15	Gas Constant	11.00pm	

Week	Date	Lecture Schedule	Weekly Lab Schedule	Homework and Other Due Dates
	April 1, 2024		No Labs – Spring Break	No Homework – Spring Break
12	April 3, 2024	No Class – Spring Break		
	April 5, 2024			
	April 8, 2024	Chapter 16 (skip 16.8, 16.9, 16.13, 16.14 & 16.15)	Lab 10 –	OWL Exam 3 Review Quiz (Ch 3, 4, 7, 10, 14 & 15), due Fri Feb April
13	April 10, 2024	Chapter 16 (skip 16.8, 16.9, 16.13, 16.14 & 16.15)	Determining the Specific Heat Capacity of a Metal by Calorimetry	12 8:00am Exam 3 available
	April 12, 2024	Review for Exam 3 (Chapters 3, 4, 7, 10, 14 & 15)		starting 3pm Fri April 12 due 3pm Sat April 13
	April 15, 2024	Chapter 17 (skip 17.4)	Lab 11 – Acid Base Titrations	Learning Activity 4: Exam 3 Reflection
14	April 17, 2024	Chapter 17 (skip 17.4)		Week 14 OWL
	April 19, 2024	Chapter 17 (skip 17.4)	(Part 1)	Homework (Ch 16), due Sun April 21 11:55pm
	April 22, 2024	Chapter 17 (skip 17.4)	Leb 12 Asid	
15	April 24, 2024	Chapter 18 (will cover buffers in 18.12, skip 18.10 & 18.13)	Lab 12 – Acid Base Titrations (Part 2)	Week 15 OWL Homework (Ch 17), due Sun April 28 11:55pm
	April 26, 2024	Chapter 18 (will cover buffers in 18.12, skip 18.10 & 18.13)	Lab Check Out	
16	April 29, 2024	Chapter 18 (will cover buffers in 18.12, skip 18.10 & 18.13)	No Labs – Last Week of Classes	Week 16 OWL Homework (Ch 18), due
	May 1, 2024	Review for Final Exam	WEER OI CIASSES	Sun May 5 11:55pm

Summary of Exam Topics and Dates				
	Topic: Exam Availability Dates			
Exam 1	Chapters 1, 2, 5 & 11	3:00 pm Feb 9 – 3:00 pm Feb 10		
Exam 2	Chapters 6, 8, 9, 12, 13, 19.4 & 19.5	3:00 pm March 8 — 3:00 pm March 9		
Exam 3	Chapters 3, 4, 7, 10, 14 & 15	3:00 pm April 12 — 3:00 pm April 13		
Final Exam	All Covered Chapters & Topics	7:30 am May 6 — 10:30 pm May 6		