

Chemistry 100 – Introduction to General Chemistry Fall 2021

Instructors:

Professor: Gregory Holland, PhD (Aug 23 – Oct 8)

Lecture Room: ENS 280

Office: GMCS 213C

Office Hours: Monday 10:00 – 12:00 pm; **on zoom:** <https://sdsu.zoom.us/j/83009845161>

Professor: David Kretchmar, PhD. (Oct 11 – Dec 13)

Lecture Room: ENS 280

Office: CSL 505

Office Hours: MWF 10:00 – 11:00 am or by appointment.

Email: dkretchmar@sdsu.edu

Email (for everything course related): Lclare+chem100@sdsu.edu

Crasher's Website: <http://www.chemistry.sdsu.edu/courses/CHEM100>

Lab Coordinator: Laurie Clare, M.S.

Office: CSL 313, email: Lclare+chem100@sdsu.edu

Modes of Instruction:

Lecture is held 9:00 – 9:50 am, Monday, Wednesday, and Friday; lecture classes will be in-person (ENS-280). Lab rooms are CSL 522, 524, 525 and 528. 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**.

Prerequisites: Strong working ability with high school level algebra.

CHEM 100 Student help will be available in the Math & Stats Learning Center (MSLC) located on the third floor of Love Library in room LL328. The MSLC will have chemistry tutors as well as TA help hours. A schedule of chemistry tutors is available through <https://mlc.sdsu.edu/>. A schedule for TA office hours at the MSLC will be made available in Canvas at the end of the first week of the semester.

I **highly** recommend that you take advantage of the tutoring services as well getting help from any of the Chem 100 TAs. 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. Take advantage of these services, they are there to help you. The weekly schedule for TA hours will be available on Canvas at the end of the first week. Again, I urge you to take advantage of these free tutorials, discussions of lecture/lab material, and homework help.

Textbook (Required):

Blei and Odian, *Introduction to General Chemistry 2nd edition*, ISBN 9780738080710 (Use Immediate Access link available on Canvas)

Study aides Optional: Study Guide for General, Organic, and Biochemistry, Second Edition (2006) M.L. Gillette & W. Gloffke

Lab Manual (Required): Chem 100 Lab Manual, Chemistry Dept. Printed by Hayden MacNeil, Fall, 2021. The lab manual is available through the SDSU bookstore.
In the event of an increase in COVID cases where it becomes mandatory to suspend face-to-face instruction, we will pivot to online lab simulations using Hayden McNeil Simulations. Access to these simulations will be available using a code on the inside cover of your CHEM 100 Lab Manual via online:
courses.haydenmcneil.com

OWLv2 HW (Required): Cengage OWLv2 will be used extensively for online homework. There will be two types of homework: Chapter Problem Set and Chapter Assessment. A link for Cengage OWLv2 will be available on Canvas in the Chem 100 Important Information and Links module.

Lab Equipment (Required): Safety glasses, lab coat or lab apron and nitrile gloves.

Additional items (Required):

Calculator (e.g., TI-30Xa or Casio fx-300ms plus): needs to be a scientific but non-graphing and non-programmable. The recommended calculator for this course is the Casio fx-300ms-plus calculator.

Immediate Access Course: Some of the required materials for this class are provided in digital format within Canvas. The materials are available by the first day of classes and are free through the add/drop date. The SDSU add/drop deadline is **September 3, 2021, at 7:59 p.m. PDT**, but you have until 11:59 p.m. PDT to opt out of Immediate Access. Unless you opt out of Immediate Access by 11:59 p.m. PDT on the add/drop date, your SDSU student account will then be charged the special reduced price for the use of the materials for the remainder of the semester. Please visit www.ahopaztecs.com/immediateaccess for additional information about Immediate Access pricing, digital subscription duration, print add-ons, opting out and other frequently asked question.

Enrolled students: *It is important that you attend all of your laboratory sessions.*

You must 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 ((Lclare+chem100@sdsu.edu) as soon as possible so your place can be given to a waitlisted student. If you attend a lab session for which you are not enrolled after the drop/add date, you will receive a zero on that week's lab assignment.

Waitlist: First things first: *Waitlist students should email Lclare+chem100@sdsu.edu with their name and RedID info ASAP to gain access to materials on Canvas.* In consultation with the coordinator, you should attend one lab section a week and keep track of which lab you attended. Use the chem 100 website to find information regarding resources for you to not miss any assignments (<http://www.chemistry.sdsu.edu/courses/CHEM100/>). Remember, you are 100% responsible for all assignments that are due and for keeping up with the work.

COVID-19 Policy for Fall '21: Effective Fall 2021, students who register for face-to-face classes are expected to attend as indicated in the course schedule. Faculty teaching face-to-face courses will not be required to create a new, alternative on-line class as an accommodation for any student.

Students with medical conditions that would present a COVID-related risk in a face-to-face instructional setting should contact the Student Ability Success Center (<https://sdsu.edu/sasc>) to begin the process of getting support. Students who do not adhere to the [Covid19 Student Policies](#) or the directives of their faculty will be directed to leave the classroom and will be referred to the Center for Student Rights and Responsibilities.

Do not come to campus if you do not feel well. Remain home and monitor your symptoms and seek medical attention as needed.

Dropping the course: It is your responsibility to follow university policies regarding Cr/NC, drops, withdrawals, and incompletes. Your last opportunity to withdraw from the course without a grade appearing on your report card is **September 3, 2021, at 7:59 p.m.**

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](#). Scroll to the bottom of the page

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.

Preferred Names & Pronouns: Any student who wishes to be addressed by a name other than what is presented in Canvas is encouraged to contact Lclare+chem100@sdsu.edu with the name you wish to use. Similarly, if you have preferred pronouns that you wish to be addressed by please contact the coordinator. The coordinator will communicate your desires to the TAs and all instructional staff will gladly honor your request.

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.

- **Cengage OWLv2** : will be used extensively for online Chapter Problems, Chapter Assessments and exams.
- **Lab Simulations (Hayden McNeil)**: **Only in the event of high COVID infections will we pivot to using lab simulations.** Completed worksheets from lab simulations will be submitted to **Turnitin**
- **(Only if needed) Turnitin** is a program that will allow you to submit a PDF file of your Hayden McNeil experiment and Data Analysis Lab Report. If needed, Turnitin accounts will be provided through the course Canvas page. If after the pivot to online labs you fail to submit your assignments **before** your assignments are due, it will be an automatic zero. Assignments that are plagiarized will be an automatic zero and will be reported. *Make sure you turn in the proper assignment into the correct Turnitin folder. Failure to do so will result in a point penalty at the discretion of the lab coordinator. **Note: If you have upload issues, email the lab coordinator with a PDF file of your assignment with your section number before the deadline. Once again, both the lab simulations and Turnitin online platforms will be used only in the event of San Diego State University pivoting to online courses due to a high number of COVID cases.***

USE CHROME AS YOUR BROWSER FOR THIS COURSE!!!

If you are using an Ipad be sure to download Chrome as a browser.

Organization of the Course:

This fall we return to live, in-person lectures and labs. Lecture will be held in ENS 280 which is a large auditorium. In this setting, it is important to be considerate of other students in the room and not talk or make loud noises during lecture. Exams will be given in ENS 280 and another auditorium to be determined, in order to accommodate student spacing during exam. You will need to bring your fully charged computer or I-pad to class on exam day along with your non-graphing calculator. All exams and the final are online.

Students are encouraged to apply the following approach:

- 1) Read from the textbook for an introduction to concepts before going to lecture
- 2) View additional videos to gain additional clarification, illustration, and practice with the concepts
- 3) Attempt the online practice problems that correspond to the chapter concepts
- 4) Bring your questions with you to tutoring, TA Office Hour and/or Zoom Help Room*
- 5) Repeat, until you are comfortable with the concepts and ready to show your mastery of them on a graded, online assessment

*It is highly recommended that you take advantage of the tutoring services at the Math & Stats Learning Center (MSLC). All TAs will hold their office hours at the MSLC and will be available for one Zoom Help Room session which is one hour in duration. A TA schedule will be made available on Canvas at the end of the first week. Your TA will make available their zoom link at the first lab meeting. It is also a good idea to ask your TA for help while in lab and working on the lab assignment. TAs are instructed to help you with concepts, not give out answers. Any

student may attend any of the TA Help hours at the MSLC and you may attend as many as you like.

General Student 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.

This course fulfills the GE Natural Sciences and Quantitative Reasoning requirement.

To be successful in this course, you will need to spend a considerable amount of time (estimated at approximately 12 hours per week) outside of class on reading, studying, and homework. Each chapter should be read prior to coming to lectures. Rereading the text after attending lecture will help in understanding the material and reinforcing lecture topics. Homework problems are best completed as they are being presented and discussed in work sessions with your instructor or office hours. Do not put off study and homework assignments until the night before the exam or you will fail. Attendance at labs is a must, unless you are seriously ill.

Supplemental Instruction (SI):

SI Sessions will be offered 14 times each week, throughout this sixteen-week course. SI is *free* and open to all students enrolled in this course. Participation is completely voluntary and near-peer-led, and the instructor will not know who participates.

SI Sessions are led by a recent student, known as an SI Leader, who will be attending the class again with you. The SI Leaders have 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.

SI Program: bit.ly/SIatSDSU

Meet the SI Leaders: <http://bit.ly/SILeadersSDSU>

Session Calendar: bit.ly/chem100sicalendar

To get the most out of SI, attend early and often.

Cengage (OWLv2) Homework:

Before you begin there will be several Introduction to OWLv2 Assignments. These Intro Assignments are to help guide you into using the program. Attempting to use OWLv2 without understanding how the program works can lead to issues later. Please take notes while you are doing these Intro assignments since the topics will be covered later.

Chapter Assessments (OWLv2) are hard deadlines and extensions will not be granted. **You will have two attempts at the chapter assessment.** The Chapter Assessments questions are to assess your learning of that Chapter and to help prepare you for the exam. Do not wait until the last minute to complete the prep.

Chapter Problem Sets (OWLv2) have the same hard deadlines and no extensions will be granted. There will be a chapter problem set from each of the 10 chapters covered in the text. Work on the problems several days before it's due so you have time to go to the MSLC for tutoring or find any Chem 100 TA at the MSLC and ask for more help. Never wait until the last day to work on the problem set; otherwise, you will be rushing through the assignment and instead of learning how to break down problems and theories to better equip you for the exams.

- Full points can be obtained for each chapter's problem set by scoring above 85% on the problems for the chapter. **Each chapter** will have different point total but if you score 85% and above you will receive the **max of 10 points**. If you score less than 85% your score will be normalized. For example, if you score 74%, you will receive 8.7 points.
 - A score of 74% = $(74\% \times \frac{10 \text{ points}}{85\%}) = 8.7 \text{ points}$
- It is in your best interest to complete all problem sets to ensure that you are fully prepared for the exams.
- The adjusted points will be calculated throughout the semester. Please watch your email for important announcements regarding the uploads. Errors occur due to incorrect RedID number, multiple OWLv2 accounts and/or your work is in the wrong section and is not recognized for a score.

Homework Due dates: Chapter Assessments and Chapter Problem sets will be due at 11:59 pm the Thursday before a Friday exam. Be advised that OWLv2 time management operates on 5 min intervals and thus does not recognize 11:59 pm, and so the deadline is set for 12:00 am Friday. This means that you get one more minute of time to submit your work. We will post an announcement reminding you of the deadlines; the deadlines will be in the lecture slides, on the Canvas Calendar, as well as on the OWLv2 program.

Note: I highly recommend you buy a composition book to work on the problem sets to keep good notes and to make your studying more efficient.

Exams, Lab Sessions and Lab Participation

- **Exams (Cengage):** All exams will be held in lecture hall, ENS 280. Each exam is taken online using Cengage. This means that your computer should be fully charged **before** you go to take each exam. If you need to borrow a computer, contact SDSU Economic Crises Response Team for technology support at sdsu.edu/ecrt

Each exam will occur on a Friday. Each exam will cover chapters and information as seen in the Fall 21' schedule below. Any absence from an exam which is not excused before the exam will result in an automatic zero for that exam. The use of any disallowed

materials/references or communication with anyone other than the instructor or coordinator during an exam will be considered dishonest academic conduct. The instructor and coordinator reserve the right to make exceptions to this policy at their discretion.

- **Final Exam (Cengage):** The final will cover all 10 chapters of the course; it will be held in ENS 280 on Dec 13 from 8:00 -10:00 am. There will be no make-up for the final, except in the case of appropriately documented medical absences. The use of any disallowed materials/references or communication with anyone other than the instructor or coordinator during an exam will be considered dishonest academic conduct. The instructor and coordinator reserve the right to make exceptions to this policy at their discretion.
- **Lab Sessions:** Lab safety is very important. All students must complete the safety survey by first watching the safety video available in Canvas and then complete the survey before the start of second lab. Failure to complete the safety survey will keep you out of the lab until it is completed. Some labs will involve only completing worksheets. Other labs involve working with chemicals and you will be required to wear safety glasses along with a flame-resistant lab apron/coat. Nitrile gloves should be worn when working with concentrated acids and bases. You will be sharing a locker.

Plan to attend ALL labs; if you miss a lab, you will receive a zero score for that lab session. One lab score is dropped from the total lab score. You can miss one lab for any reason and that one zero score is dropped. Missing more than one lab will affect your grade.

If you are in a Monday lab, you will miss Lab 3 in week 3 due to Labor Day Holiday. You will make up this lab later in the semester on Monday, Nov 22. If you are in a Thursday lab, you will not meet in Week 12 due to Veterans Day Holiday. To keep Thursday lab students on schedule we will allow you to attend any other lab meeting, during week 12 or you may complete the worksheet on your own. The worksheet will be due at the start of your next lab meeting.

There are 10 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, making sure you clean up your bench area will ensure that you receive these points.

- **Lecture Participation (Canvas):** Every week there will be a discussion forum for you to ask classmates questions, answer classmates' questions, or ask me questions on topics from the lecture. For each week, you must post a minimum of 3 times in the discussion forum to receive full credit; either by answering another student's question or ask a question for other students or the instructor to answer.

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 universally modify this grade scale prior to assigning final letter grades.

Letter	Percentage	Letter	Percentage
A	≥ 90%	D	≥ 60%
B	≥ 80%	F	< 59.9%
C	≥ 70%		

Earning the respective percentage in the course listed above 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.

Your grade will be based on the following:

CHEM 100 Fall 21 Grade Scheme					
Item	Submission	Quantity	Value (each)	Total	Percentage
Chapter Problem Set	OWLv2	10	10	100	8.4%
Chapter Assessments	OWLv2	10	15	150	12.7%
Exams	OWLv2	3	165	495	41.8%
Final	OWLv2	1	215	215	18.1%
Experiment Reports	Submit to your TA	Best 11 of 12	15	165	13.9%
Lab Participation	Canvas	1	10	10	0.8%
Lecture Participation	Canvas	3 posts / week		50	4.2%
			Total	1185	100.0%

Note: Your individual grades for each course component will be posted on Canvas. You will have the 7 days to check your grades and to email the coordinator of any issues with your grades, such as, they are not showing up. Failure to do so will result in the grades being left as a zero. There will be several announcements reminding you to check your grades. Grades should appear in Canvas within 7 days after submission and you will have 7 days **after** to check your grade.

Fall '21 Schedule

Week	Date	Suggested Lecture Viewing Schedule	Lab Schedule	Homework and Chapter Assessments
1	August 23, 2021	Introduction/ Chapter 1	Lab 1 - Significant Figures, Scientific Notation, & Algebra Worksheet (Due at the beginning of your next lab session)	
	August 25, 2021	Chapter 1		
	August 27, 2021	Chapter 1		
	August 30, 2021	Chapter 1		
2	September 1, 2021	Chapter 2	Must Complete Safety Survey before Lab Check-in. Lab 2 - Density Lab (Results & Calcs, Questions due at the end of lab session)	
	September 3, 2021	Chapter 2 Last day to add/drop classes. Ends at 7:59 pm		
	September 6, 2021	Holiday Labor Day		
3	September 8, 2021	Chapter 2	No lab meeting on Monday Lab 3 -Periodic Table Worksheet for Tue – Fri labs Wksht due at end of session	
	September 10, 2021	Chapter 2		
4	September 13, 2021	Chapter 3	Lab 4 - Chemical Nomenclature Worksheet due at the end of session	
	September 15, 2021	Chapter 3		
	September 17, 2021	Chapter 3		
5	September 20, 2021	Chapter 3	Lab 5- Valence-Shell Electron-Pair Repulsion Theory (VSEPR) Worksheet due at the end of lab session	
	September 22, 2021	Chapter 3		
	September 24, 2021	Chapter 6		

6	September 27, 2021	Chapter 6	Lab 6 -Separation of an Unknown Mixture Results & Q's due at end of lab session	OWL Chapter Assessments and Chapter Problem sets for Ch 1-3 due Thursday, Sept 30 at 11:59 pm
	September 29, 2021	Review for Exam 1		
	October 1, 2021	Exam 1 (Chapters 1-3)		
7	October 4, 2021	Chapter 6	Lab 7- Determining the Specific Heat Capacity of a Metal by Calorimetry Results&Calcs, Q's & graph due at the end of lab session	
	October 6, 2021	Chapter 6		
	October 8, 2021	Chapter 4		
8	October 11, 2021	Chapter 4	Lab 10 -Determining the Empirical Formula of Magnesium Oxide Results&Calcs, Q's due at the end of lab session	
	October 13, 2021	Chapter 4		
	October 15, 2021	Chapter 4		
9	October 18, 2021	Chapter 5	Lab 8 -Determination of the Molar Volume of a Gas and the Gas Constant Data answer sheet and Calcs due at end of lab session	
	October 20, 2021	Chapter 5		
	October 22, 2021	Chapter 5		
10	October 25, 2021	Chapter 7	Lab 9-Identification of an Unknown Metal Carbonate Results and Q's due at end of lab session	OWL Chapter Assessments and Chapter Problem sets for Ch 4-6 due Thursday, Oct. 28 at 11:59 pm
	October 27, 2021	Review for Exam 2		
	October 29, 2021	Exam 2 (Chapters 4-6)		
11	November 1, 2021	Chapter 7	Lab 12- Acid-Base Titrations Part 1 Only	
	November 3, 2021	Chapter 7	First page - Results and Calcs for base stdn & pictures due at the end of lab session	
	November 5, 2021	Chapter 7		

12	November 8, 2021	Chapter 8	Lab 11- Chemical Reactions Worksheet (Thursday lab students will be allowed to go to any other lab that fits their schedule) Worksheet due at end of lab session	
	November 10, 2021	Chapter 8		
	November 12, 2021	Chapter 8		
13	November 15, 2021	Chapter 9	Lab 12 -Acid-Base Titrations Part 2 Thanksgiving, No Labs for Tue -Fri Labs (Monday labs meet and do lab 3)	
	November 17, 2021	Chapter 9		
	November 19, 2021	Chapter 9		
	November 22, 2021	Chapter 9		
14	November 24, 2021	(No Class) Thanksgiving		
	November 26, 2021	(No Class) Thanksgiving		
15	November 29, 2021	Chapter 9	Lab Checkout	OWL Chapter Assessments and Chapter Problem sets for Ch 7-9 due Thursday, Dec 2 at 11:59 pm
	December 1, 2021	Review for Exam 3		
	December 3, 2021	Exam 3 (Chapters 7-9)		
16	Dec 6, 2021	Chapter 10	Last Week of Classes	Ch 10 HW Due: 7:00 pm Dec 10
	December 8, 2021	Chapter 10		

Final -Monday December, 13 at 8:00 – 10:00 am in ENS 280

Chapter Homework & Final Exam Dates		
	Topic:	Date and time:
Exam 1	Chapters 1-3	Friday, October 1, 9:00 - 9:50 am
Exam 2	Chapter 4-6	Friday, October 29, 9:00 - 9:50 am
Exam 3	Chapters 7-9	Friday, December 3, 9:00 - 9:50 am
Final Exam	Chapters 1—10	Monday, Dec 13, 8:00 – 10:00 am

Online Assignment Policy:

The deadlines for the online assignments (Homework, Assessments, Canvas Discussion Forum) are hard deadlines and extensions will not be granted. All assignments will be scheduled with sufficient time to allow you to complete the assignment in advance of the "last minute". *Consequently, you are solely responsible for any failures to complete the assignment by the scheduled time.* Problems such as lack of internet service, OWLv2 site problems, or dogs eating WiFi antennas will not be acceptable reasons for not completing the assignments. *You are encouraged to complete the assignments well before the deadlines to avoid potential technological obstacles.*

In the case of an extended system-wide failure the instructors will be notified by the site operator and steps will be taken to accommodate any problems that arise.

For all technical difficulties or errors that arise with the OWLv2 systems **please contact the lab coordinator or OWLv2 technical support staff directly and by phone or email.** The instructors and TAs will be unable to help you resolve anything but the most basic (is it plugged in?) technical problems. For **Hayden McNeil** system **please contact them** as well. The instructors, lab coordinator, and TAs will be unable to help you resolve anything but the most basic (is it plugged in?) technical problems.

Policy on Cheating/Plagiarism:

There is a zero-tolerance policy regarding plagiarism in this course. Any instances of cheating or plagiarism identified by the TA, lab coordinator, or the instructors, will result in a meeting between the instructor and student(s) following which the instance and documentation of plagiarism will be reported to the Academic Senate as well as the student **receiving a grade of F for the course.** It is your responsibility to know what constitutes cheating and plagiarism.

Accommodations (SASC):

SDSU via the [Student Ability Success Center](#) (SASC) provides accommodations for students with documented disabilities or medical conditions covered under the Americans with Disabilities Act (ADA). In keeping with current public health guidance, I cannot provide arrangements to students without an ADA-qualified disability or medical condition.

If you are a student with a disability and are in need of accommodations for this class, please contact the Student Ability Success Center at sascinfo@sdsu.edu (or go to sdsu.edu/sasc) as soon as possible. Please know accommodations are not retroactive, and I cannot provide

accommodations based upon disability until I have received an accommodation letter from the Student Ability Success Center. SASC registration and accommodation approvals may take up to 10-14 business days, so please plan accordingly.

Additional practice problems:

One of the most common requests by students is more practice problems. The following problems from the “Exercises” section at the back of each chapter in your textbook are recommended to help with your mastery of the material prior to exams. It is recommended that you work on these in groups, identify concepts that are giving you trouble, and then bring your questions with you to office hours. Answer keys for practice problems from each chapter will be posted to the Canvas site.

Ch. Additional practice problems

1. 1-14, 18-24, 26, 29, 31,33, 36, 38, 47-48, 54-56, 58, 60, 68
2. 1-4, 9-10, 12-15, 17, 19-28, 33-42, 52-58
3. 5-12, 15, 18, 19, 23-36, 42, 44, 46, 55, 57
4. 1, 4-19, 22, 25, 27, 31-35, 40-42, 47
5. 2, 8, 12-18, 21, 22, 25-30, 34, 36-38, 48, 49
6. 1-2, 6-7, 11-12, 15-17, 20-24, 33, 35, 37, 39-43, 45-46, 48, 52-54, 59
7. 2-4, 6, 10, 14-27, 29, 31, 34-36, 38, 49, 51-52, 55, 59-61
8. 1-5, 9-11, 14-20, 23, 26-28, 31, 33
9. 1-6, 8, 11-13, 15-21, 27, 28, 35, 36, 45, 51-54, 68, 72
10. 1-8, 15, 17, 18, 43, 44, 49, 50

10 Steps to Chem 100 success

1. Read the relevant chapter in the book BEFORE watching the lecture that covers that chapter. The material may not be clear at that time, but you will have an idea of where the material is headed and that will help you understand concepts.
2. Attend every lecture, take notes, and try to solve problems as they are presented. This means you must have a calculator. Do not write down the material and think “I will do it later”, there is no substitute for trying it at that moment, figuring out what you have problems with, and ASKING A QUESTION! (All questions are excellent, the only dumb questions are the ones that stay in your mouth.)
3. Read the book again.
4. As soon as you can following lecture, try relevant HW problems. Get help as needed well before an assessment, try all HW, even ones not assigned for credit like the ones suggested at the end of each chapter, - the answers to all are posted so you can check.
5. Do all the worksheets. Not a "few", do not just "try" them, DO them, and get help as needed.
6. Read the book again (and again). Read other Intro to Chem books
7. Do the Chapter Assessments - pretend they are real, no notes, no help. Do the chapter assessments as soon as you can- this allows you to ask about topics you are having trouble with.
8. Do NOT allow yourself to fall behind. If you think "I will catch up later" you are lying to yourself.

9. Review everything that you have done - HW, worksheets, problems during lecture, lab worksheets, and the textbook. We draw exam questions from multiple sources.
10. After each exam, look at the posted answers and figure out why you missed each problem. This will help you learn what to focus on for the next exam.

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.

Suggested: Consider adding a link to your college's Student Success Center or your department's tutoring center or supplementary instruction activities.

- CAL Student Success Center: <https://cal.sdsu.edu/student-resources/student-success>
- College of Education Student Success Center: <https://education.sdsu.edu/oss>
- Center for Student Success in Engineering: <https://csse.sdsu.edu/>
- CoS Student Success Center: <https://cossuccess.sdsu.edu/>
- FSB Student Success Center: <https://business.sdsu.edu/undergrad/advising>
- HHS Advisors: <https://chhs.sdsu.edu/student-resources/advising/>
- IVC Student Success and Retention: https://ivcampus.sdsu.edu/student_affairs/retention
- PSFA Advisors: https://psfa.sdsu.edu/resources/student_advisors
- Math & Stats Learning Center: <https://mlc.sdsu.edu/>

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.

Help control the COVID-19 pandemic:

Addressing the COVID-19 pandemic is a shared responsibility. The California State University System mandates that students, faculty and staff receive a full COVID-19 vaccination to be on campus. Facial coverings are required when in instructional settings such as instructional classrooms and instructional labs. Do not come to campus if you do not feel

well. Remain home and monitor your symptoms and seek medical attention as needed. If you receive a positive COVID-19 test, complete the [COVID-19 Reporting Form](#). Contact the lab coordinator if you will be absent from a lab session. If students need assistance purchasing facial coverings, please contact the [Economic Crisis Response Team](#).

Medical Related Absence

Contact the lab coordinator in the event you miss a class or lab due to an illness, injury, or emergency. Remember one lab score is dropped but if you miss more than one lab due to an illness, you must provide medical documentation of your sickness or emergency.

If you miss a class or lab because you are quarantined because of a positive COVID-19 result, you must request a class excuse letter. Send an email to vpsafontdesk@sdsu.edu to notify the university. Student Affairs and Campus Diversity will initiate the process for absent letters to be sent to course instructors, Assistant Deans, and the Provost. Medical documentation may be required prior to the letter being issued.

[Student Health Services](#) (SHS) does not provide medical excuses for short-term absences due to illness or injury. When a medical-related absence persists beyond five days, SHS will work with students to provide appropriate documentation.

When a student is hospitalized or has a serious, ongoing illness or injury, SHS will, at the student's request and with the student's consent, communicate with the student's instructors via the Vice President for Student Affairs and Campus Diversity and may communicate with the student's Assistant Dean and/or the [Student Ability Success Center](#).

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 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 (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.

Religious Observances

According to the University Policy File, students should notify instructors of planned absences for religious observances by the end of the second week of classes. Contact the coordinator:

Lclare+chem100@sdsu.edu

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.