Chemistry 102/106 Spring 2020

INSTRUCTOR: Michael Leonard **E-MAIL:** mleonard@sierranevada.edu
***PLEASE MESSAGE ME VIA CANVAS!**

COURSE TIMES

Lecture: Monday, Wednesday 11:00 – 12:45 p.m. in TCES 202
Lab: Monday 1:15 p.m. – 4:45 p.m. in TCES 202

OFFICE HOURS

By appointment/Email

REQUIRED MATERIALS:

1. **General Chemistry II Workbook (purchased in Class $30)**
2. **CHEM 101 App access Code:** (Course code: 4YLBL7)
3. **Electronic Calculator** with log and exponential functions for **Every lecture/lab period**
4. **A laptop computer** meeting published SNC laptop requirements w/ Logger Pro

COURSE WEBSITE:

Canvas course site
CHEM101: for online homework, and in-class activities

COURSE OBJECTIVES:

1) To introduce chemical principles of intermolecular forces, kinetics, equilibrium, acid/base chemistry, thermodynamics, and electrochemistry.

2) To explain patterns of chemical properties and reactivity.

3) To apply mathematics and algebra to chemical concepts and problem solving.

4) To explore experimental applications of the scientific method as related to the topics of intermolecular forces, kinetics, equilibrium, acid/base chemistry, thermodynamics and electrochemistry.

WHAT AND WHEN

- There are two lecture sections per week from 11:00 -12:45 p.m. on Mondays and Wednesdays. Attendance is mandatory for the lecture, students who fail to attend lecture typically do not do well in the course because they miss the class participation and guided practice. To be a successful student during the active learning part you must bring a calculator and the workbook for every lecture.

- There will be daily homework due on chem101 a half hour before the start of each class period (10:30 am). Chem101 will cover material from the previous class periods. While a total of 24 assignments will be assigned, only 20 will count towards your grade. There are no make-up homework assignments.

- There will be two unit exams during the regular lecture time. There are no make-up exams and excused absences must be discussed with the instructor prior to the exam.

- There will be a cumulative final exam held during the final exam week. There is no make-up final and this exam will not be given early.

- There is one laboratory session per week from 1:00 p.m.-4:45 p.m. on Mondays Attendance for the laboratory session is mandatory. There are no make-up labs and any excused absences must be discussed with the instructor at least one laboratory session prior to the absence.

- There will be a pre-laboratory assignment due in class at the **start** of each of the laboratory period submitted on canvas. There are no make-up pre-labs. Failure to complete the pre lab assignment will result in a deduction from your lab etiquette score also. If you send a message to your professor before the pre-lab assignment is due I will look it over and provide feedback.

- I will not discuss grade related issues during class time. If you feel something has been graded incorrectly, please see me outside of class

- The expectation is that you are on time, prepared (workbook, calculator), and participating during every class period. Cellphone use is strictly prohibited with the exception of in class activities with CHEM101 (**you cellphone is not an acceptable calculator**).

- If you come to class unprepared, or are using your phone/computer for anything other than in class activities you will lose 1 activity point for each violation during the lecture period.

GRADING

This course is graded on a point-based system. Points are awarded for completion and correctness of assignments.

	Total Points	Percentage of Overall Grade
CHEM101 Homework (10 pts each, 20 graded)	200	27.8%
Lab Etiquette (5 pts each, 9 graded)	45	6.3%
Pre-Lab Assignments (5 pts each, 9 graded)	45	6.3%
Lab Reports (10 pts each, 10 graded)	90	13.9%
Exams (100 pts each, 3 graded)	300	41.7%
Activity Points	30	4.2%
Full Course:	**720**	

Grading Scale:

The point-by-point breakdown of letter grades in this class:

A	93%	670 - 720 pts	C	73%	526 - 553 pts
A-	90%	648 - 669 pts	C-	70%	504 - 525 pts
B+	87%	626 - 647 pts	D+	67%	482 - 503 pts
B	83%	598 - 625 pts	D	63%	454 - 481 pts
B-	80%	576 - 597 pts	D-	60%	432 - 453 pts
C+	77%	554 - 575 pts	F	Below 60%	Below 431 pts

PARTICIPATION

- This class will be sufficiently challenging, please avoid distractions during the class period. Any unauthorized use of a cellphone or laptop (Texting, checking email, web surfing, working on other class assignments) will result in a 1-point penalty.

- The expectation is that you are prepared to begin at the start of class. This means in your seat with workbook, calculator, pen, notebook, etc. out.

- No free loaders. You are expected to take an active interest in your own education. This does not necessarily mean answering questions. It does mean working with classmates, and following along with examples as well as completing in class practice problems in the workbook.

- We will begin every class period with a review on the CHEM101 app, which will be worth Activity points. You must be present and on time to earn these points. Completing additional pages in the workbook will also be worth activity points as instructed.

How to Succeed in General Chemistry

- Never get behind, never get behind, ***and never get behind!*** Get the picture? There is an enormous amount of material to be learned, and it can only be accomplished through very disciplined study. Get behind and you're sunk. You can't learn it all the night before the exam.

- Strive to understand, not just memorize the material. There is a fair amount of memorization you will have to do, but it's much easier if you understand the material first.

- Practice, practice, ***practice!*** Do all of the suggested problems on CHEM101 and workbook problems. Do the old exams. Check the study guides to make sure you understand each point because that's what the exams are written from.

- Come to class every day. Successful students rely more on their lecture notes than on the text. And remember it's the person giving the lectures, not the author of the text that is writing the exams.

- Do the readings and homework assignments before coming to class. The lecture will be much easier to follow and comprehend if you have already looked at the material. No doubt you will have questions and difficulties, but you can be prepared to have them cleared up in lecture. That's a lot better than coming to class clueless.

- Successful students ask questions when they do not understand something! There is nothing embarrassing about learning, the only embarrassing part is sitting in silence confused and afraid!

- When you get lost, come in and get help! Feel free to email me. Please, please, please don't wait!

IN THE LAB

- During each lab period, a lab-etiquette score will be given for following the appropriate safety and lab procedures. Points may be subtracted for safety violations. Each student must follow lab safety policies (especially no food/drink, no open-toed shoes, no shorts or short skirts when in chemistry lab). Instructor has a right to ask a student to leave if he/she violates safety policies. At the end of each lab period, your lab report will be submitted for grading. Failure to turn in the lab report at that time will result in a zero grade, even if you attended the lab session.

- Appropriate attire is required for all laboratory sessions. No open-toed or open-heeled shoes, shorts, short skirts or dresses, nylons or tights, midriff-baring shirts, or baggy clothing will be permitted in the lab. These are all safety hazards and may not protect you in the case of spills or fires. Failure to arrive appropriately dressed will result in your needing to go change into appropriate clothing. If you cannot do so in a timely manner, you will be asked to leave and receive a zero for that laboratory.

- You should be on time to the laboratory session. Late arrivals affect several people: 1) Your lab partner—who then has to search to find someone else to work with, 2) The group you join—who has to fill you in on what they've done so far, and finally 3) You—in that you receive a 3 point deduction on your laboratory etiquette grade for that laboratory. 4) Moreover -you will not be able to attend a lab session if you missed safety introduction and any comments about how the laboratory works.

- All labs will be completed in pairs or trios depending on the number of people present in the lab. You do not have to work with the same lab partner or group every week.

- Cell phones, backpacks, jackets, notebooks, and all extra materials besides your laboratory notebook, calculator, and writing utensil, should be stored in the cubby holes by the door No cellphones are allowed at your work desk during the Lab section.

- Please turn all cell phones off and store them for the duration of the laboratory. Using your cell phone during lab (even leaving the lab to take a call) is a safety hazard. Doing so will cost you 3 points on your laboratory etiquette grade.

- There will be a pre-laboratory assignment due in class at the **start** of each of the laboratory periods. There are no make-up pre-labs. Failure to complete the pre lab assignment will result in a deduction from your lab etiquette score also.

- Do not begin the laboratory experiment (or even set out your glassware) until the instructor indicates it is time to begin. When you first arrive in laboratory, spend those few minutes before the safety introduction re-reading over the laboratory. This will get your mind into "lab mode."

- Following the safety introduction, "goggle time" will begin. Goggles must be worn at all times while in the laboratory once the laboratory is begun and may only be removed in the computer room or outside the laboratory. Removal of goggles while in lab or forgetting to wear them will result in a 3-point deduction on your laboratory etiquette grade for each offense (and this can go beyond the original 3 points allotted for lab etiquette).

- If you are hurt or think you have come into contact with a chemical, notify the instructor immediately (or send your lab partner to fetch the instructor) while following proper safety procedures. Know where the eyewash, safety shower, and fire extinguishers are located.

- Laboratory notebooks will be turned in at the end of each lab period. No late lab books will be accepted. Be sure to turn in any appropriate data printed from computers. Individual lab experiments are available on the canvas course page.

- When you are done with the laboratory, you should clean up your station and dispose of all chemicals as instructed. Another group of students should be able to come in and start with the lab station ready to go after you are done. This is also part of your laboratory etiquette grade.

Just a few notes on the lab format…

1) Come prepared! Read through the lab before you come in so that you have some idea of what is taking place. You may not understand all the details of the procedures, but when we cover those items during the lab introduction, you will already be familiar with the terms.

2) Think of the lab as an active learning session where you will be applying principles you learned in class. Very often, I will answer a question with a question because I want you to apply your knowledge and think about what you are observing and the big picture.

3) This portion of the course is your chance to be a scientist and base your conclusions on what happens in the lab. The right answers are the ones based upon what you observe. In other words, it is possible that your lab group may have completely different answers than another group, and that's okay!

OTHER USEFUL INFORMATION

Recording of Lectures and Labs: Surreptitious or covert video-taping of class or unauthorized audio recording of class is prohibited by law and by Board of Regents policy. This class may be videotaped or audio recorded only with the written permission of the instructor. In order to accommodate students with disabilities, some students may have been given permission to record class lectures and discussions. Therefore, students should understand that their comments during class may be recorded.

ADA Accommodations

In accordance with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973, students with a documented disability are eligible for support services and accommodations. If a student wishes to request an accommodation, please contact the Director of Academic Support Services, Henry Conover, at (775) 831-1314 x7534, hconover@sierranevada.edu, office in Prim Library: PL-304.

The SNC Email System

The SNC email system is the official communication vehicle among students, faculty members and administrative staff and is designed to protect the confidentiality of student information as required by the Family Educational Rights and Privacy Act of 1974 Act (FERPA). Students should check their college email accounts daily during the school year.

Students have a right to forward their SNC e-mail to another e-mail account (for example, @hotmail or @gmail). However, confidentiality of student information protected by FERPA cannot be guaranteed for SNC e-mail forwarded to an outside vendor. Having email redirected does not absolve a student from the responsibilities associated with official communication sent to his or her SNC email account.

Sanctions for Cheating and/or Plagiarism

The Honor Code

The faculty of SNC believes students must be held to high standards of integrity in all aspects of college life in order to promote the educational mission of the College and to encourage respect for the rights of others. Each student brings to the SNC community unique skills, talents, values and experiences which, when expressed within the community, contribute to the quality of the educational environment and the growth and development of the individual. Students share with members of the faculty, administration and staff the responsibility for creating and maintaining an environment conducive to learning and personal development, where actions are guided by mutual respect, integrity,

responsibility and trust. The faculty and students alike must make diligent efforts to ensure high standards are upheld by their colleagues and peers as well as themselves. Therefore faculty and students accept responsibility for maintaining these standards at Sierra Nevada College and are obligated to comply with its regulations and procedures, which they are expected to read and understand.

Consequences of Violating the Student Honor Code

SNC students and faculty share the responsibility for maintaining an environment of academic honesty. Thus, all are responsible for knowing and abiding by the SNC Faculty/Student Honor Code published in the current SNC Catalog. Faculty are responsible for presenting the Honor Code and the consequences of violating it to students at the start of their classes AND for reporting all incidences of academic dishonesty to the Provost. Students are responsible for knowing what constitutes CHEATING, PLAGIARISM and FABRICATION and for refraining from these and other forms of academic dishonesty. Violations of the Honor Code become part of a student's academic record.

1st Offense: Student receives a zero for assignment/exam and counseling with faculty on the honor code, consequences for violating the honor code, and the value of academic honesty in learning.

2nd Offense: Student fails course and receives counseling with faculty on the honor code, consequences for violating the honor code, and the value of academic honesty in learning.

3rd Offense: Student is expelled.