San José State University College of Science/Department of Chemistry CHEM 1A, General Chemistry (41762), Section 3, Fall 2021

Course and Contact Information

Instructor:	Resa Kelly, Ph.D.				
Office Location:	DH 418 / Online				
Telephone:	(408) 924-4940 (email is best)				
Email:	resa.kelly@sjsu.edu - For email, I will typically respond within 24 hours (however, weekends may take longer or I may not respond until Monday) If I do not respond, please send a reminder.				
Community Hours:	MW 2:30 – 3:30 PM Online or you can email me to setup a time if this time does not work for you. We can meet via Zoom, Skype, or FaceTime. Also available by appointment.				
Class Days/Time:	MW 1:30 to 2:20 pm (Online) Modules offer asynchronous videos				
Classroom:	Online				
Prerequisites:	Proficiency in high school chemistry or CHEM 010 (with a grade of "C" or better) or instructor consent; proficiency in high school algebra and eligibility for MATH 019; Writing Enrollment Group W-I or W-II, or ENGL 1AF with a grade of CR, or ENGL 1A with a grade of C- or better.				
Learning Assistants* and their email:	Alison Nguyen (alison.nguyen01@sjsu.edu); Tanner Muench (<u>tanner.muench@sjsu.edu</u>); Uyen Le (uyen.le@sjsu.edu); Joy Everson (joy.everson@sjsu.edu)				

*Learning Assistants are undergraduate students who are prepared to provide support for student learning in interactive classroom environments. They have taken CHEM 1A and they are selected for their interest in teaching as well as their understanding of the content. They will assist with facilitating small group interaction in the breakout rooms.

Workshop facilitator (SCI 1)- Howard Tang - howard.tang01@sjsu.edu

Sec 5– TTh 2:15-3:30 - online Sec 26 TTh 12:30-1:45PM - online

Course Format : Technology Intensive, Online Course

This course is delivered online through Canvas and Zoom. Modules containing the learning objectives, relevant textbook readings, short videos, and discussion threads will be offered asynchronously. Module quizzes will be mastery focused, meaning you will have two chances and the average of the two scores will be counted toward your grade. Online homework, *CHEM101*, will also be required and used to measure your understanding. Online quizzes will be administered through Canvas.

Canvas Learning Management System

Course materials such as syllabus, course content and assignment instructions, etc. can be found on <u>Canvas Learning Management</u> <u>System course login website</u> at http://sjsu.instructure.com. Please regularly check with the messaging system through <u>MySJSU</u> at http://my.sjsu.edu to learn of any updates and for course materials such as the syllabus (greensheet), modules and assignments. *See* <u>University Policy F13-2</u> at http://www.sjsu.edu/senate/docs/F13-2.pdf for more details.

This class is not self-paced. You will have deadlines in the form of biweekly quizzes, beginning Sept. 10th. I want you to be successful in the course and learn the material so I would rather you do the homework and discussion assignments late than not at all. However, if you do an assignment late, you effectively have more time for late submissions, then in fairness to those who completed on-time, late

assignments are penalized 5 to 10%. However, the last day of class at noon, no more assignments will be accepted.

Important - Course material developed by the instructor is the intellectual property of the instructor and cannot be shared publicly without her approval. You may not publicly share or upload instructor-generated material for this course such as quiz questions, lecture notes, or homework solutions without instructor consent. You may not duplicate, screenshot, or save any CHEM 1A course materials for dissemination to any other parties.

Technology Requirements

This is a technology heavy class since it is in the online environment. You must have an electronic device(laptop, desktop or tablet) with a camera and built-in microphone. SJSU has a free <u>equipment loan program</u> available for students.

You are responsible for ensuring that you have access to reliable Wi-Fi during tests. If you are unable to have reliable Wi-Fi, you must inform Professor Kelly as soon as possible to determine an alternative. See <u>Learn Anywhere</u> website for current Wi-Fi options on campus.

You must also have the necessary system requirements to smoothly run the Canvas companion site. It is your responsibility, in an online class, to ensure you have the proper technology to view the online curriculum. I cannot provide tech support for your system or software. If you find a video or something is not playing properly, try a different web browser (i.e. instead of Safari try to play it in FireFox or Chrome). This usually solves the issue.

Canvas will only read .pdf and .doc or .docx. If you submit any other type of file you may lose the chance to regain full points from that assignment. This includes links to Google docs and pages.

Help Links for Students Regarding Canvas Issues/Questions <u>http://www.sjsu.edu/at/ec/docs/Canvas%20Student%20Tutorial.pdf</u> or <u>http://www.sjsu.edu/at/ec/canvas/index.html</u> You are automatically registered with canvas as a registered student of the course. Only registered students can access our canvas class. I will also be sending out emails through MySJSU periodically. Please ensure you are reading/receiving them.

Use of Camera in Class

During synchronous instruction I would like you to turn on your video (although this is optional and requires your consent) to help us remember that we are real people in the room and at times you will be working in small breakout groups. If you have special needs or requests for accommodation, please let me know so that accommodations can be made as needed.

Recording Zoom Classes

This course or portions of this course (i.e., lectures, discussions, student presentations) will be recorded for instructional **purposes**. The recordings will only be shared with students enrolled in the class through Canvas. The recordings will be deleted at the end of the semester. If, however, you would prefer to remain anonymous during these recordings, then please speak with Professor Kelly about possible accommodations (e.g., temporarily turning off identifying information from the Zoom session, including student name and picture, prior to recording).

Students are not allowed to record without instructor permission. Students are prohibited from recording class activities (including lectures, office hours, advising sessions, etc.), distributing recordings, or posting class recordings. Materials created by Professor Kelly for the course (syllabi, lectures, and lecture notes, presentations, etc.) are copyrighted by the instructor. This university policy (S12-7) is in place to protect the privacy of students in the course, as well as to maintain academic integrity through reducing the instances of cheating. Students who record, distribute, or post these materials will be referred to the Student Conduct and Ethical Development office. Unauthorized recording may violate university and state law. It is the responsibility of students that require special accommodations or assistive technology due to a disability to notify the instructor.

MYSJSU Messaging

You are responsible for regularly checking with the messaging system through <u>MySJSU</u> on <u>Spartan App Portal</u> http://one.sjsu.edu to learn of any updates. For help with using Canvas see <u>Canvas Student Resources page</u> (<u>http://www.sjsu.edu/ecampus/teaching-</u> tools/canvas/student_resources).

Course Description

Topics include: stoichiometry, reactions, atomic structure, periodicity, bonding, states of matter, energy changes, solutions using organic and inorganic examples. Lab program complements lecture. Prerequisite: Proficiency in high school chemistry or CHEM 010 (with a grade of "C" or better) or instructor consent; proficiency in high school algebra and eligibility for MATH 019; Writing Enrollment Group W-I or W-II, or ENGL 1AF with a grade of CR, or ENGL 1A with a grade of C- or better. Misc/Lab: Lecture 3 hours/lecture 1 hour/lab 3 hours.

Course Goals

The overall goal is for the student to be able to demonstrate an understanding of the basic principles of chemistry through performance on module quizzes, CHEM 101 homework, discussion threads and a final project. Lab and seminar complement lecture. In addition, the Chemistry Department has several Program Learning Outcomes (PLOs) that this course will address:

PLO 1.1 - Students will be able to identify, formulate, and solve a range of chemistry problems (fundamental to complex) through application of mathematical, scientific, and chemical principles.

PLO 1.2 - Students will be able to recognize, relate, and/or apply chemistry terms and concepts to propose and solve interdisciplinary and multidisciplinary real-world problems.

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

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

Course Learning Outcomes (CLO)

Course learning outcomes describe the behavior of learning that students taking CHEM 1A are expected to demonstrate proficiency in as they progress through the course and upon completing the course. These outcomes will be noted on the introduction page of each module.

Upon successful completion of this course, students will be able to:

Module 1 - Measurement and Properties

1) apply significant figures rules in all calculations providing the correct number of significant figures and units (Exp 1, 2, 6, 7, 10, 11 and 12)

2) convert between different units using conversion factors and dimensional analysis (Exp. 1)

Module 2 - Atoms, Periodic Table, Mass and Moles

3) name elements, provide their symbols and determine the number of protons, neutrons, electrons and nuclei in atoms of elements.

Module 3 – Chemical Compounds

4) calculate percent composition given a molecular formula and molecular formula given the percent composition (Exp. 2)

5) name salts, acids, bases and covalent compounds and provide formulas for these given a molecular formula (Exp. 3)6) explain the difference between solubility and dissociation in water and apply this knowledge to salts (Exp. 3)8

Module 4 – Stoichiometry and Precipitation Reactions

7) explain the difference between solubility and dissociation in water and apply this knowledge to acids and bases (Exp. 3)8

8) construct molecular, total and net ionic equations for double displacement reactions (Exp. 3 and 4)

9) perform stoichiometry calculations for chemical and non-chemical systems whether the limiting reactant is known or unknown (Exp. 6 and 10)

Module 5 – Acid/Base Neutralization

10) construct molecular, total and net ionic equations for acid/base neutralization reactions (Exp. 3 and 4)

11) perform stoichiometry calculations for chemical and non-chemical systems whether the limiting reactant is known or unknown (Exp. 6 and 10)

12) identify weak and strong acids and bases and insoluble compounds using dissociation and solubility rules (Exp. 3 and 4)

13) calculate molarity of a solution starting with pure solute or with a concentrated solution as well as explain how to prepare a solution of a given molarity (Exp. 6)

Module 6 – Redox Chemistry

14) identify redox reactions including identifying the oxidation, reduction, oxidation agent and reducing agent (Exp. 5)

15) calculate oxidation numbers and balance redox reactions (Exp. 5)

Module 7 – The Quantum Mechanical Model of the Atom

16) provide brief descriptions of the accomplishments of Planck, Einstein, Thompson, Rutherford, Millikan, Rydberg, Bohr, de Broglie and Schrodinger; and how these contributed to understanding the atom

17) explain how a cathode ray tube works and how it assisted in understanding the electronic configuration of atoms.

18) convert between wavelength, energy and frequency for light and understand the relationship between absorbed light and color (Exp. 7)

19) calculate the energy and wavelength of a given electronic transition in hydrogen (Exp. 7)

20) define what each quantum number represents and how to obtain quantum numbers for any electron in an atom

Module 8 - Electron Configurations and Periodic Properties of the Elements

21) analyze an atom or ion of a given element providing the full electronic configuration, the abbreviated electronic configuration, a representative diagram of the orbitals and the unpaired number of electrons; then use this information to determine the possible oxidation states of the element and the magnetic properties of the element (Exp. 8)

22) define electron affinity and ionization potential

23) organize a set of element or monoatomic ions in order of increasing atomic radius, ionic radius, first ionization energy

Module 9 - Chemical bonding - Lewis Structures

24) define electronegativity

25) organize a set of element or monoatomic ions in order of electronegativity

26) determine whether a bond is metallic, ionic, covalent or polar covalent

27) represent covalent and ionic bonding using Lewis dot structures

Module 10 – Molecular Shape and Valence Bond Theory

28) evaluate the molecular geometry, hybridization and polarity of a covalent molecule (Exp. 9)

29) evaluate the type of molecular bonding (s or p) in a covalent molecule and identify the orbitals used for bonding

Module 11 – Gas Laws

30) explain the properties of temperature and pressure including how these are measured and convert between different units for these properties, including the use of different liquids in the measurement of pressure (Exp. 10)

31) derive the relationships between pressure, volume, temperature and moles for ideal gases; perform calculations using these relations, including when they are combined with stoichiometry or percent composition problems (Exp. 10)

32) define and apply Dalton's Law of Partial Pressures and Graham's Law of Diffusion and Effusion to mixtures of gases (Exp. 10)

33) use the results from the Kinetic Molecular Theory of Gases to explain the relationship between kinetic energy, average molecular velocity, temperature, pressure, density and number of collisions when an ideal gas undergoes a change of state

Module 12 – Liquids- Intermolecular Forces

34) describe and provide examples of the five types of intermolecular forces and be able to analyze the forces present in a substance and organize a set of compounds in order of increasing intermolecular forces (Exp. 11)

35) define the terms and explain the temperature dependence of surface tension, viscosity, vapor pressure, normal boiling point, capillary action; and be able to organize a set of compounds in increasing order for most of these properties (Exp. 11)

Module 13 - Thermochemistry

36) explain the concept of specific heat and apply the equation to heating or cooling of materials

37) perform heat transfer calculations for systems with and without phase changes (Exp 12)

38) calculate heats of reaction using Hess' Law or heats of formation, including combining the process with stoichiometry, and identify whether the reaction is exothermic or endothermic (Exp 12)

Module 14 – Solids and Organic Chemistry

39) name unsubstituted and substituted alkanes, alkenes and alkynes given a drawing of a molecule and vice versa

40) identify all the isomers associated with simple aliphatic hydrocarbons and predict boiling point and vapor pressure change as a function of the number of carbons

41) identify and name some organic functional groups in a molecule

Required Textbook/Lab Manual/Homework

- 1. OpenStax- <u>Chemistry 2e</u> is the textbook we will be using.
- 2. Lab Manual for Chemistry 1A will be available through Maple Press for \$13.71
- 3. <u>CHEM 101</u> is the online homework system we will use.

Technology Requirements/Equipment/Material

1. Computer, stabile Internet connection, video camera, and microphone

2. Scientific calculator

Other Textbook - Not Required by this section of Chem 1A, but useful if you go on to take Chem 1B

Chemistry: The Central Science – Brown, LeMay and Bursten – 10^{th} , 11^{th} or 12^{th} edition (Or a college level Chem. text if you feel comfortable with a different textbook.)

Library Liaison

Yen Tran (email: <u>yen.tran@sjsu.edu</u>) - If you are interested in learning how to best use our library resources feel free to contact Yen and she can help you locate chemistry related reading material.

Course Requirements and Assignments (Required) – This course will require you to engage with approximately 14 modules that include: videos, textbook readings, and discussion tasks. In addition there will be online homework through CHEM 101 and timed quizzes at the end of each module. You will have two chances to take each quiz, your highest score will be recorded. In addition, there is a final team project that you will complete to demonstrate your understanding of chemistry and its connections to your major (or future career), other courses and life. Online synchronous sessions will be held every MWF for 50 minutes to assist you in learning the material.

Additional Information:

- University Syllabus Policy S16-9 at http://www.sjsu.edu/senate/docs/S16-9.pdf.
- Office of Graduate and Undergraduate Programs' Syllabus Information web page at http://www.sjsu.edu/gup/syllabusinfo/

The <u>University Policy S16-9</u>, Course Syllabi (http://www.sjsu.edu/senate/docs/S16-9.pdf) requires the following language to be included in the syllabus:

"Success in this course is based on the expectation that students will spend, for each unit of credit, a minimum of 45 hours over the length of the course (normally three hours per unit per week) for instruction, preparation/studying, or course related activities, including but not limited to internships, labs, and clinical practical. Other course structures will have equivalent workload expectations as described in the syllabus."

Grading Information

At the end of the semester you will receive a single grade for the course. The following grading scale is used for determining your overall grade which is a weighted average of lecture (65%) and lab (35%). Your percentage is rounded to the one tenth place and that number determines your grade. Please note that grades are non-negotiable; however, if an error is made you should contact your professor immediately

- <u>University Syllabus Policy S16-9</u> (http://www.sjsu.edu/senate/docs/S16-9.pdf)
- University Attendance and Participation Policy F15-12 (http://www.sjsu.edu/senate/docs/F15-12.pdf)

Determination of Grades

A record of your grades on Module Quizzes, CHEM 101 Homework, Discussion threads, and a final project will be posted on CANVAS. Your homework percentage will be available through the CHEM 101 website. Please check to make sure that the scores posted on CANVAS are consistent with the grade you earned. If a mistake is made, you have 1 week from the time you receive your graded quiz to contact Dr. Kelly to request the correction. If you notice a blank where a grade should be, please check on it immediately. Homework will be consistently tracked throughout the semester and your final earned percentage will be entered in the tabulation of your final grade.

Incompletes are not typically awarded, unless <u>a strong compelling reason with proof</u> is furnished to support the need for an incomplete. Incompletes do not remove past scores on exams. Incompletes are only given to persons who have completed at least 80% of the course. An incomplete is removed by completing pending tasks. Special projects are not created to make up incompletes.

PLEASE note I do not provide extra credit work.

Percentages and points are approximations and subject to change slightly (+ or -5%)

I. Homework and Discussion Threads

1. Homework (approximately 100 points) – CHEM 101: We will be using an online learning homework system called CHEM 101 this semester. Please follow the instructions to register for it. <u>https://101edu.co/login</u> Your access will be good for 6 months. Homework will be assigned after every class and it will be due within three to four days of being assigned. A late penalty, in the amount of a 7% deduction will be applied to any late assignment.

2. Discussion Threads/Class Participation (ungraded, approximately 100 points): Throughout the modules, I will offer a few opportunities for you to reflect on your learning. These exercises are meant to help both you and me to examine how you are doing with the concepts. I do not expect perfection on these discussions, but I do expect you to express what you are thinking, even if it is wrong, using good grammar and complete sentences. Most importantly, I expect effort. Instead of points, I am going to give you my feedback to help you learn from any mistakes that you made and to recognize when you are doing good work. At the end of the semester, I am going to examine your work and subjectively award points based on your effort and completion of assignments, but not on how right you were.

Project Outreach and Giving Back – Community and Distant Partnering with chemistry majors at the University of Puerto Rico and Chemistry majors at San Jose State University – for a minimum of 3 of the 14 modules, you will be asked to partner with a

student in the aforementioned group of partners to discuss chemistry concepts. These exercises will require you to turn in a video clip (2 to 3 minutes) of your Zoom recorded conversation. (this will be done under your Discussion thread/participation grade).

II. Quizzes/Final Project

1. Online Quizzes (approximately 157 points): Biweekly quizzes will be conducted and cover two modules per quiz. You will have two chances to take the quiz and an average of the two scores will be recorded. You will have a fixed amount of time for each quiz, please pay attention to this and monitor your pace accordingly. If you have accommodations through the AEC, please make sure I am aware of this so that I can provide the appropriate accommodations. Quizzes are open note, but if the quizzes are compromised in any way (should you post questions to Chegg, share answers with each other or use other online forums-this will be reported as Academic Dishonesty).

2. Six Questions (100 points) - you will construct your own test items (multiple choice, true/false, fill in the blank, calculation, etc.) by considering questions that were modeled in the modules, consulting textbooks and question banks (always provide citations for your ideas) to develop questions that you think best assess your understanding of the two modules that you are quizzed on. You will also share these questions within discussion threads to get feedback from your peers (ungraded).

3. Final Project – approximately 25% of total grade – modification to the final project may be made with advanced announcement of changes to be communicated either in class or on Canvas.

For your final project you will be asked to work in a team/group of 3 or 4 people to create a final exam. You will be assigned to a group on Canvas.

Group Components – to be done by the group (50% of final project grade)

1. Semester Test (100 points) This is a group project and one grade will be given to the group*. Your group will construct an exam from the pool of **Six Questions** that each group member contributed throughout the semester and will be graded on individually. Your group needs to determine an equitable way to work from your question pool to construct the final exam. There should be 5 to 7 questions per module for a total of 70 to 98 questions, plus 3 to 4 additional questions(one per group member) that your team constructs to challenge students to connect how chemistry connects to the "real world" or fits with concepts learned in lab. Assume that students will have a calculator and a periodic table to take your exam and you must decide whether you will provide students with equations, constants, or other relevant information.

Deliverables: 1. The exam itself (70 to 100 questions long) (**75 points**). 2. A summary to describe how the exam was constructed so that each member contributed to the exam and how each member's signature question was created for the final. (**25 points**)

2. Answer key (**25 points**) – This is a group project and one grade will be given to the group*. Provide a comprehensive key with the answers to each problem. For example, in the case of a multiple-choice question, in addition to the answer, you must provide a reason for why that choice is the best of the ones offered. For calculations or problems, please show a model of the work. In the case of true/false provide a description for what makes the statement true or false.

3. Administer your exam/Summary (25 points) - This is a group project and one grade will be given to the group*. Administer your exam to an assigned group of students (Friday, Dec. 3rd, but the exam time runs through Monday, Dec. 6th), grade the exams (send the graded exam back to the students) include a summary on how the students did. What was their average? Which questions did they miss? Which questions did they do the best on?

* If a group member does not adequately contribute to the group, this member may receive a lower grade depending on the circumstance.

Individual Components - to be done by every student. (50% of final project grade)

- 1. Exam Wrapper (50 pts)– For the exam that you take, you must complete an exam wrapper. An exam wrapper includes the following:
- A pdf of the exam that you took. It should be graded. (20 points)
- For every question that you miss, describe the error that you made. Reflect on why you missed the item and coach yourself on how to do the problem. Consider responding to the following: Did you read the question carefully or were the instructions

confusing? Did you have trouble "setting up" the problem? Did you not understand the question in the first place? Did you make a math error or did you not understand the underlying concepts? What do you need to do to help yourself get this question right in the future?

- For every question(right or wrong) how much time did it take to work the problem?
- What do you feel was a strength of the test your classmates designed?
- How could the exam be improved? Provide your input for what could make for a better exam experience.

2. Individual Reflection (50 pts)- Complete the Canvas quiz for reflecting on your test creating experience.

More details about final examinations can be found in <u>University policy S17-1</u> (http://www.sjsu.edu/senate/docs/S17-1.pdf) *which states that*

"Faculty members are required to have a culminating activity for their courses, which can include a final examination, a final research paper or project, a final creative work or performance, a final portfolio of work, or other appropriate assignment."

Grade	Percentage
A plus	97 to 100%
Α	91.0 to 96.9%
A minus	88.0 to 90.9 %
B plus	84.0 to 87.9 %
В	79.0 to 83.9%
B minus	76.0 to 78.9%
C plus	71.0 to 75.9%
С	64.0 to 70.9%
C minus	60.0 to 63.9%
D plus	56.0 to 59.9%
D	53.0 to 55.9%
D minus	50.0 to 52.9%

Grading Scale for the lecture portion of CHEM 1A

Your total number of points divided by the total amount of lecture points (620) gives you your Lecture %.

<u>The Lab portion</u> of the class must be passed with 55% or better. The total percentage earned determines your grade based on the grading scale provided above. The total lab grade constitutes 35% of the final grade. Your Teaching Assistant (TA) will review how your grade in lab is determined. If you should fail lab (55.0% or less or due to unexcused absences) this will result in an F grade for the FULL COURSE, regardless of how well you are doing in lecture. Details regarding the lab grade will be provided in the lab/seminar green sheet(syllabus).

- There is no extra credit.
- Late work or missed work is not assigned a penalty. You may do your homework at any time.
- For the quizzes, there will be a range of days for you to take the quiz. If you do not take the quiz during the four day window of time it is available, you will be assigned a score of 50% on that quiz. Your lowest quiz score will be dropped.

Classroom Protocol

Safe and Respectful Community

We hope that the classroom and laboratory will serve as an environment that will promote learning and the development of new ideas, as well as be a safe and respectful community. Behavior that interferes with the normal academic function in a classroom or lab is unacceptable. Students exhibiting this behavior will be asked to leave the zoom session or meeting. Examples of such behavior include:

- a) Persistent interruptions or using disrespectful adjectives in response to the comments of others.
- b) The use of obscene or profane language.
- c) Yelling at classmates and/or faculty.
- e) Physical threats, harassing/bullying behavior, or personal insults (even when stated in a joking manner).

Zoom Classroom Etiquette

- Mute Your Microphone: To help keep background noise to a minimum, make sure you mute your microphone when you are not speaking.
- Be Mindful of Background Noise and Distractions: Find a quiet place to "attend" class, to the greatest extent possible.
- Avoid video setups where people may be walking behind you, people talking/making noise, etc.
- Avoid activities that could create additional noise, such as shuffling papers, listening to music in the background, etc.
- Position Your Camera Properly: Be sure your webcam is in a stable position and focused at eye level.
- Limit Your Distractions/Avoid Multitasking: You can make it easier to focus on the meeting by turning off notifications, closing or minimizing running apps, and putting your smartphone away (unless you are using it to access Zoom).
- Use Appropriate Virtual Backgrounds: If using a virtual background, it should be appropriate and professional and should NOT suggest or include content that is objectively offensive or demeaning.

For online quizzes - please adhere to the following:

- No earbuds, headphones, or headsets should be worn.
- The environment is free of other people besides the student taking the test.
- No other browser or windows besides Canvas opened.
- Personal calculators are permitted.

Technical difficulties

Internet connection issues:

Canvas autosaves responses a few times per minute as long as there is an internet connection. If your internet connection is lost, Canvas will warn you but allow you to continue working on your exam. A brief loss of internet connection is unlikely to cause you to lose your work. However, a longer loss of connectivity or weak/unstable connection may jeopardize your quiz.

Other technical difficulties:

Immediately email the instructor a current copy of the state of your quiz and explain the problem you are facing. Your instructor may not be able to respond immediately or provide technical support. However, the copy of your quiz and email will provide a record of the situation.

Contact the SJSU technical support for Canvas:

Technical Support for Canvas Email: ecampus@sjsu.edu Phone: (408) 924 -2337

https://www.sjsu.edu/ecampus/support/

If possible, complete your quiz in the remaining allotted time.

Academic Dishonesty

Students who are suspected of cheating during an exam will be referred to the Student Conduct and Ethical Development office and depending on the severity of the conduct, will receive a zero on the assignment or a grade of F in the course. Grade Forgiveness does not apply to courses for which the original grade was the result of a finding of academic dishonesty.

University Policies

Per University Policy S16-9 (http://www.sjsu.edu/senate/docs/S16-9.pdf), relevant information to all courses, such as academic integrity, accommodations, dropping and adding, consent for recording of class, etc. is available on Office of Graduate and Undergraduate Programs' Syllabus Information web page at http://www.sjsu.edu/gup/syllabusinfo/" Make sure to review these university policies and resources with students.

If applicable, include links to department and college-level rules, requirements and services

CHEM 1A / General Chemistry, Fall 2021, Course Schedule

Course Schedule

Week	Tentative Lab Schedule	Dates	Modules – Pacing Guide (Textbook readings are in Canvas)
1	Safety	Aug. 20	Module 1 – Measurement and Properties
2	Safety	Aug. 23, Aug. 25, Aug. 27	Module 1 – Measurement and Properties
3	Exp. 1 Basics (Aug. 27 – Sept. 2)	Aug. 30 – Sept. 1st	Module 2 – Atoms, Periodic Table, Mass and Moles
4	Exp. 2 – Hydrate (Sept. 3- Sept 9)	Sept. 6 th , Sept. 8 ^{th.} , Sept. 10th	Module 3 – Chemical Compounds
5	Exp. 3 – Conductivity (Sept 10- Sept. 16)	Sept. 13, Sept. 15, Sept. 17	Module 4 – Stoichiometry and Precipitation Reactions
6	Exp. 4 – Mystery Bottles (Sept. 17 – Sept. 23)	Sept. 20, Sept. 22, Sept. 24	Module 5 – Acid/Base Neutralization
7	Exp. 5 – Activity Series (Sept 24 – Sept. 30)	Sept. 27, Sept. 29, Oct. 1st	Module 6 – Redox Chemistry
8	Exp. 6 – Acid In Vit. C/Titration (Oct. 1 – Oct. 7)	Oct. 4th, Oct. 6, Oct. 8	Module 7 – Quantum Mechanical Model of the Atom
9	Exp. 7 – Light & Color (Oct. 11 – Oct. 14)	Oct. 11, Oct. 13, Oct. 15	Module 8 – Electron Configurations and Periodic Properties of the Elements
10	Exp. 8A Periodic Properties (Oct. 18 – Oct. 21)	Oct. 18, Oct. 20, Oct. 22	Module 9 – Chemical Bonding – Lewis Structures
11	Exp. 9 – Molecular Models (Oct. 25 – Oct. 28)	Oct. 25, Oct. 27, Oct. 29	Module 10 - Molecular Shape and Valence Bond Theory
12	Exp. 10 - Gas Law Exp. 8B – Semiconductors (Nov. 1 – Nov. 5)	Nov. 1, Nov. 3, Nov. 5	Module 11 – Gas Laws
13	Exp. 11 – Intermol. Forces (Nov. 8 – Nov. 11)	Nov. 8, Nov. 10, Nov. 12th	Module 12 – Liquids and Intermolecular Forces
14	Exp. 12 – Hess' Law/ Heats of Reaction (Nov. 15- Nov. 18)	Nov. 15, Nov. 17, Nov. 19	Module 13 - Thermochemistry
15	No Lab	Nov. 22	Module 14 – Solids and Organic Chemistry
16	No Lab	Nov. 29, Dec. 1 Dec. 3	Module 14 – Solids and Organic Chemistry Administer exams
17	No Lab	Dec. 6	Return graded exams to classmates/wrap-up

Schedule of Bi -Weekly Quizzes

Quiz	Start date (available at 3PM or sooner)	Due Date (all quizzes are due by 1:00PM)	Modules
1	Sept. 10th - Friday	Sept. 13th - Monday	1-2
2	Sept. 24th - Friday	Sept. 27th - Monday	3-4
3	Oct. 8th Friday	Oct. 11 th - Monday	5-6
4	Oct. 22 rd - Friday	Oct. 25 th - Monday	7-8
5	Nov. 5 th - Friday	Nov. 8 th - Monday	9-10
6	Dec. 3rd - Friday	Dec. 6	13-14

Note – Lab exam midterm is Oct. 15th and the lab final is Dec. 3rd. Last day for late homework is – Dec. 6th at noon. At noon, you will no longer be able to access the homework and grades will be finalized.

Final Projects are due – Thursday, Dec. 9th at 12:15PM, which is the date and starting time of the <u>final exam</u>.