

CHEMISTRY 3AL – General Chemistry I (Section #4914)

Santa Rosa Junior College – Spring 2022

Instructor: Janice Crowley

Office: Zoom (**No in-person office hours**) Please use the designated zoom office hour times.

Email: jcrowley@santarosa.edu

Office hours: Tuesday 11:00 – 11:45 AM (**ZOOM only**). Invitation in Canvas.

Course Information:

Lab Lecture: All lab lectures will be remote.

Lab sessions: All lab sessions are in-person working independently, not as partners.

The course material (from the Course Outline of Record):

Description:

General principles of chemistry, including atomic theory, bonding, stoichiometry, kinetic molecular theory of gases, properties of mixtures, the periodic table, and thermochemistry. Lecture portion of the first semester of a one-year program of general chemistry. Graded only.

Student Learning Outcomes:

After successful completion of this course, a student will be able to:

1. Describe matter, its transformations and corresponding energy changes according to prevailing chemical theories.
2. Interpret and solve problems in a chemical context using quantitative reasoning.

The Complete Course Outline can be found through the SRJC Schedule of Classes:

https://portal.santarosa.edu/SRWeb/SR_CourseOutlines.aspx?ck=CHEM3A

Required material:

- 1) Lab notebook – any type of permanently bound notebook, not loose leaf, is acceptable. Pages must be sequentially numbered, and space left at the beginning of the notebook for a table of contents.
- 2) Goggles and apron for lab sessions – may be purchased at the bookstore or, if available from a prior chemistry class, you may reuse the set you own.
- 3) Scientific calculator. Must be able to do logs and square roots.

Grading and Assignments:

Lab reports 85% Lab Final Exam 15%

Lab reports must be typed and submitted electronically. Your grade depends upon the quality of the lab report and how closely you adhere to the published “Lab Report Guidelines” available in Canvas. **Consult these documents before writing your lab reports.**

Grading scale (I reserve the right to lower the grade cut-off points as appropriate.):

A – 90-100% B – 80-89% C – 70-79% D – 60-69% F – <60%.

Attendance:

Attendance during weekly online office hours is recommended. **Attendance at the FIRST office hour ZOOM meeting is mandatory. If you are unable to attend the first Zoom meeting, you MUST contact me by email, or you will be dropped from the class. No exceptions. Other students will be waiting to enroll if your position becomes available due to your absence.**

Excused absences from lab sessions **require** documentation of a serious and compelling reason, for example, a doctor's note. Medically excused absences will **ONLY** be granted in the case of emergency visits to a physician. Regularly scheduled office visits, dental visits, etc., will **NOT** be excused. Please schedule these outside normal lab session times. **There will be NO makeup for any lab sessions missed, unless the student asks the instructor, IN ADVANCE, for an alternate lab time that same week, AND, the instructor of that lab session accepts your attendance.**

SRJC department policy states if you have more than 3 absences (or are missing more than 3 lab reports, you will get an F).

Late work:

Typed lab reports are due one week after doing the lab. They are due on Mondays, by 3:40 pm. Lab reports may be turned in up to one week late with a 20% penalty. Points will not be given for labs submitted more than one week late. Last acceptable late date is the following Monday, by 3:40 pm. All reports will be submitted electronically, and date and time stamped upon submission.

Accommodations for Students with Disabilities:

If you need disability-related accommodations for this class, such as a note taker, test-taking services, special furniture, etc., please provide the Authorization for Academic Accommodations Letter from the Disability Resources Department (DRD) to me as soon as possible. Please fill out any paperwork necessary for testing accommodations in advance of the exam and keep me informed of what you need. If you have not received authorization from DRD, contact the office directly. I will accommodate as required with an Authorization for Academic Accommodations Letter from the Disability Resources Department (DRD) only.

Academic Dishonesty:

The first time a student is caught cheating, that student will receive a score of zero for the assignment, and a report will be filed with the administration. If a second instance of cheating occurs, the student will receive an F in the course, and a second report will be filed. "Cheating" entails any use of unauthorized aid: for example, copying another student's lab report or portions of a lab report, downloading lab reports from a website, buying reports from an online service, etc. If you are not sure, ask for approval in advance. SRJC policy: <https://rightsresponsibilities.santarosa.edu/academic-integrity>

Portable Electronic Devices Policy: Unless previously approved by the instructor, the use of all types of portable electronic devices is prohibited during in-person lab sessions. No exceptions are allowed without prior authorization. **Calculators ONLY may be used in CHEM 3AL**

Student Behavior:

Please read the SRJC policy carefully regarding student behavior: I will not hesitate to report violations. <https://studentconduct.santarosa.edu/acts-misconduct>

Student who come to lab prepared properly tend to really enjoy the labs and the opportunity to reflect and connect what they have learned in lecture to what they are doing in the lab. Please read the lab carefully several times and do a prelab. The prelab consists of a purpose, flowchart of procedure, and data tables neatly labeled and organized.

All Lab sessions will be held in Bech Hall Room, 1980, from 3:40 – 6:30 pm on Mondays. You are required to review the lab lecture asynchronously on zoom before doing the respective lab.

Prelabs are required and will be checked before you may begin lab. General prelab requirements are posted in Canvas. Additional prelab requirements specific to the scheduled lab of the week will be noted in the asynchronous lab lecture or by announcements.

Plan on attending lab the full time unless otherwise stated. Students who earned A's typically stayed the full lab time. You must obtain lab instructor signature in lab notebook before leaving lab.

Week	Day	Date	Lab Activity: Title of Lab and/or description of activity. Schedule is subject to change depending upon pandemic status/conditions.
1			NOTE: failure to turn in 3 labs results in automatic failure in the lab. Dept. policy
2	M	1/24	Excel Training and Safety
3	M	1/31	Lab Check In and Important Information regarding quality lab reports
4	M	2/7	Measurements and Density
5	M	2/14	Analysis of a Hydrate
6	M	2/21	Washington's Day – no lab nor classes
7	M	2/28	Estimation of Avogadro's Number
8	M	3/7	Stoichiometry of Chemical Reaction
9	M	3/14	Synthesis of $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$
	M		Spring Break – no classes or lab 3/21-3/27
10	M	3/28	Gases: Density
11	M	4/4	Specific Heat Capacity of a Metal
12	M	4/11	Hess's Law
13	M	4/18	Atomic Spectroscopy
14	M	4/25	Titration of a Diprotic Acid
15	M	5/2	Lewis Structures and VSEPR
16	M	5/9	Identification of 11 Unknown Solutions
17	M	5/16	Intermolecular Forces and Evaporation Lab Check Out
18	M	5/23	Final Exam 1:00 – 3:45 pm RoomTBA



The student comments I received recently said they really liked being able to do labs in person. They enjoyed doing the labs and told me to emphasize to students the importance of watching my Zoom asynchronous lab lecture slide show at least once a few days before lab and watch again the day before the lab. Also, look for my announcements I post in Canvas. I do post helpful prelab and post lab information to help you be more successful doing the lab correctly and to ensure you understand the calculations... associated with the lab. Pre-labs are due at beginning of lab and require the purpose and flow chart (mostly hand-drawn pictures) of what you will be performing and data tables written up in your lab notebook. Read the lab thoroughly at least twice before doing lab and prelab.

Zoom Etiquette and Behavior Required for Online Office Hour Sessions

Be sure to mute your mic (lower-left corner of your screen) as soon as you sign on and whenever you are not speaking. This is important and perhaps the most critical tip to avoid background noise and distraction for others.

Success in Chemistry:

Chemistry is a vertical subject that is best learned in appropriate chunks. As an instructor I have gone to great lengths to not overburden you with an inordinate amount of information per lab. Therefore, it is imperative that you complete the recommended lab reading assignment before performing the lab to avoid gaps in understanding and to complete the lab in time. Studying on a daily basis (not cramming) increases your ability to retain long-term information and perform more successfully lab finals.

Labs are an excellent way to apply what you are learning. The proper reading of the lab several times prior to lab, preparing prelab tables..., watching the zoom lab lecture or viewing the PowerPoint slides, and performing the lab will help you retain the chemistry content better. In addition, it is important that you learn as a prelab to put together good lab data tables and flow charts, write all data down in your lab notebook as you collect the data, record observations, and turn in a typed lab report that addresses results, conclusions, random and systematic errors.

I have enjoyed teaching chemistry at the college level for three decades. Many students have stayed in touch to let me know how they are doing. It is exciting to see students meet their goals in STEM careers. Most people find STEM careers to be intellectually stimulating and financially rewarding. I hope you find joy in learning the fundamentals of chemistry and the rewards of your dedication to doing the necessary work in this lab class as well as properly preparing lab skills for subsequent science classes.

