

## Syllabus for: CHEM010 – CRN# 80800 – SCC Fall 2026

Welcome to chemistry! This will be difficult and require a lot of time and effort but I'm here to help along the way. If you made it this far, you do belong here and I'm excited for the opportunity to be your professor and looking forward to meeting and working with all of you. Let's have a great semester!

### 1. Quick Info:

- Lecture – meets in Vacaville room 133 from 8:30-9:45am Tue/Thu starting Tue, Aug 18
- Lab - meets in Vacaville room 1122 from 10:00am-12:50pm Tue starting Tue, Aug 18
- Student Help Hours (see <https://www.comstgermain.com/courses/>):
  - Vacaville:
    - Monday/Wednesday – 7:00-8:00am room 215
    - Tuesday/Thursday – 8:00-8:30am room 133
    - Tuesday – 2:00-4:00pm in the ASTC
    - Friday By appointment - 8:30-11:00am
  - Fairfield:
    - Wednesday – 2:00-4:00pm in the MESA Center 1525
  - Zoom: Live Zoom Review Sessions on exam days (link in Canvas, see our calendar for schedule)
  - Online using Discord (various times) and by Zoom by appointment (Discord link in our Canvas shell)
- Personal questions/issues: email me at [commodore.st.germain@solano.edu](mailto:commodore.st.germain@solano.edu) or text/call at (phone # in Canvas)
- Class questions should be posted on the same Discord (Discord room link in our Canvas shell).
- I usually respond within a couple of hours. If I don't respond after 24 hours please contact me again as I just forgot.
- We will need the class materials on the first day of class (see below).
- This syllabus is only a guideline and adjustments may be made as needed throughout the semester.

### 2. How to Be Successful:

- Come to every class prepared and on time and actively participate in all activities.
- Complete all assignments and tasks on time (early is better).
- After completing the take-home quizzes, do them again without notes.

### 3. Student Learning Outcomes:

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

- Demonstrate knowledge of stoichiometry.
- Identify and name the course-required list of elements, ions, covalent compounds, ionic compounds, etc.
- Draw Lewis structures, identify the VSEPR geometry, and list the bond angles.
- Show proficiency in one or more lab techniques (titration, melting point apparatus, distilling, filtering, etc.).

Additional information can be found at <https://solano.elumenapp.com/public/> -> Chemistry -> Your Class.

### 4. How the class will be run:

In general, this standard grading scheme will be used to determine the final grade: 90.00-100% A; 80.00-89.99% B; 70.00-79.99% C; 60.00-69.99% D (not passing); 59.99 % or less F (not passing). I do not round and I do not give out free points because you are expected to earn your grade.

- Lecture is ~1 hour and 15 minutes long and will be a combination of traditional lectures and in-class activities. Here we will discuss concepts, work through practice problems, and have question and answer sessions. You are also encouraged to ask questions about things that you don't understand. You are expected to attend lectures and

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actively participate in class discussions and activities. I will attempt to record lectures and post links on Canvas but the lecture recordings are not guaranteed. If you miss something it is up to you to make up what you missed.

- Lab will be about three (~3) hours each and include but are not limited to performing tasks listed in the lab procedures (given during lab), following safety guidelines, taking measurements, making observations, properly disposing of chemicals and materials, cleaning up your work stations before and after lab, and performing calculations, and submitting lab reports. Lab will be performed in groups.

### Grading:

| Grading Scheme                  |                        |
|---------------------------------|------------------------|
| Grading / Exams                 | Percent of Final Grade |
| Exams (4)                       | 40%                    |
| Final                           | 20%                    |
| Take-Home Quizzes (13)          | 14%                    |
| Lab Reports                     | 10%                    |
| Lab Participation               | 10%                    |
| Daily Check-Ins                 | 3%                     |
| Lecture Review Quizzes and Misc | 3%                     |

### Exams:

There will be one (1) exam for each three (3) topics so four (4) total exams for the course. These multiple choice exams will be taken during normal lab time unless you have arranged additional time through ASC. If special accommodations are needed, you may need to schedule taking the exam at the Fairfield campus. You are required to show all of your work and your work must be submitted at the end of the exam. If no work is needed you need to explain why you chose your answers, this can be very brief. Most of the exam questions are very similar to the accompanying questions and Take-Home Quizzes. You may be allowed some notes during the exam but this will be discussed in class. There are no make-up exams. If you miss an exam AND you have a confirmed medical excuse, your missed exam grade can be determined by your next exam grade. This replacement policy applies only to missing one exam.

### Final:

There will be a cumulative final that covers sections one through four (1-4) in the same format as the exams. The questions on the final may be similar to or even exactly like the exam questions as they are taken from the same pool of questions.

### Take-Home Quizzes:

There will be a take-home quiz for each of the twelve (12) topics we are covering and each are worth 1% of your final grade. These will be turned in during lab time. There will also be a math review quiz that includes a math tutorial that will help students that do not have a strong math background and this is worth 2% of your final grade.

### Lab Reports:

Students will complete lab reports by the end of the lab period and include but are not limited to observations, calculations, other exercises, etc. Students that fail to finish the reports by the end of lab are responsible for turning in the lab report by the next lab period.

### Lab Participation:

Students are required to come to lab on-time with their personal protective equipment. All lab periods are mandatory unless changed by the instructor and if you miss more than 1 lab, you can be dropped from the class or have your grade lowered. Every one (1) minute you arrive late or leave early you will be penalized one (1) point. Arriving 10 minutes past the lab start time or leaving 10 minutes before the class end time counts as being late. Two times being late counts as one absence.

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### Daily Check-Ins:

These will be one-question daily quizzes that are taken through Canvas that will be mostly math, basic algebra, units, light chemistry topics, and conversions to keep you engaged with the material.

### Lecture Review Quizzes, Discord Questions, and Miscellaneous Assignments:

At the start of most classes, there will be a one-question Canvas quiz (can also be completed on paper) that you can answer from attending the previous lecture. They will almost always be a question from the accompanying questions provided for that topic. You will also be asked to post a question in our Discord room for each topic. There will also be other small assignments that you will be asked to complete to help you with the class technology, campus resources, chemistry topics, communication with me, etc.

## 5. Class Materials:

- Device(s) and connection that can access and/or upload documents to Canvas, Discord, and OpenStax.
- 5 x scantron forms – 882-E compatible
- Calculator – non phone
- Safety goggles
- Safety gloves (optional)
- Lab coat (optional)
- Text Book (online, free) – [Chemistry, Atoms First 2e, OpenStax, Flowers, Neth, Robinson, Theopold, Langley](#).

## 6. Who I am:

My name is Commodore St. Germain (he/him). I did the bay area community college circuit as a student (NVC, SCC, DVC, Chabot, Merritt), earned my BS biochemistry/BA chemistry from SFSU 2014, and my PhD in Biochemistry, Molecular, Cellular, and Developmental Biology from UC Davis in 2020. I've been teaching since 2019 (chemistry, biology, and biotechnology). I spend a lot of my time: with my family/friends/dogs, exercising, watching true crime shows/anime, and talking (dreaming) about food. See more at <https://www.comstgermain.com>.

## 7. Course Description:

HOURS: 48-54 lecture, 48-54 lab. COURSE DESCRIPTION: An emphasis on the chemistry of inorganic compounds and covers selected topics such as atomic theory, bonding, equations, gas laws, solutions, acid-base theory, and oxidation-reduction. The course is intended as preparation for pathways in chemistry, allied health, and general education. NOTE: Field trip may be required. Online homework may be required. NOTE: Not open for credit to students who have completed CHEM 001. Resources:

## 8. Resources:

- If you are having problems, please email me or come to my office hours as soon as possible.
- Admissions and Records important dates: <https://solano.edu/admissions/index.php>
- Distance Education Resources: <https://solano.edu/administrative-offices/canvas/student-resources.php>
- Canvas Help Desk: Click on the "Help?" question mark in the lower left corner of your Canvas screen for current help desk hours, phone numbers, and Canvas tutorials. (Links to an external site: <https://community.canvaslms.com/t5/Student-Guide/tkb-p/student>) is a great resource for how-to information and tutorials.
- Student Resources: <https://solano.edu/administrative-offices/canvas/student-resources.php>
- Library: <https://libguides.solano.edu/home>
- Financial Aid: <https://solano.edu/financial-aid/index.php>
- Discrimination and Sexual Harassment: <https://solano.edu/administrative-offices/student-services/student-grievances.php>

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- Tutoring: If you want tutoring and/or suspect you will need tutoring contact Solano College Academic Success and Tutoring Center as soon as possible - [https://solano.edu/centers/astc\\_/index.php](https://solano.edu/centers/astc_/index.php). Sign up here: <https://solano.instructure.com/enroll/EKEA7Y>
- If you have a disability or think you have a disability please contact Solano College Accessibility Services Program as soon as possible so they can help you acquire resources - <https://solano.edu/centers/accessibility-services-center/index.php>
- MESA (Math, Engineering, Science Achievement) – a program to help students succeed in STEM - <https://solano.edu/student-success/mesa-program.php>

### 9. Plagiarism/Cheating:

From the SCC Student Handbook:

"An instructor who determines that a student has cheated or plagiarized has the right to give a failing (i.e. "F") grade, or numerical equivalent, for the assignment or examination. Instances of alleged plagiarism or any other form of academic dishonesty may be referred to the Chief Student Services Officer for action in accordance with the established disciplinary procedures as set forth in Solano Community College Board Policy, §5300. Following procedures consonant with due process, a student may be expelled, suspended, or given a lesser sanction if he or she is found to have committed an act of academic dishonesty. The totality of the particular circumstances, the student involved, and any relevant mitigating factors shall be considered in every case."

### 10. Attendance and Participation:

From the SCC Student Handbook:

"Students must attend the first meeting of their classes to assure verification of their enrollments. Students failing to appear may be dropped from class rolls [Board Policy 5020]. Regular attendance and participation is required of all students enrolled in courses and laboratories at Solano College. This includes regular attendance, completion of examinations, assignments, participation in class activities and discussions. Instructors shall provide students with written statements describing course requirements, grading standards and course prerequisites. Regular attendance is an obligation assumed by every student at the time of registration. Absences per semester should not exceed the number of hours or the number of days that a class meets per week. Absences in excess of the maximum may result in students being dropped from classes or having their grades lowered."

All lab periods are mandatory unless your instructor tells you otherwise. You are allowed to miss one (1) lab but you will not receive points for the lab you missed. Every missed lab after that, your total and final class grade will be lowered by one letter grade.

### 11. Sick Policy:

If you are sick, stay home! Let me know as soon as possible and we will find you alternative assignments for the time that you are sick. Health and Wellness Center - <https://solano.edu/centers/health-and-wellness-index.php>.

### 12. Workload:

Be prepared for about 12 hours of work per week in this course to pass (24 hours per week for Summer). Additional effort may be needed to get higher than average grades. A three unit "lecture" course, by virtue of what is known as the Carnegie Unit, mathematically establishes a standard the amount of work expected from a student (and the instructor) in a 18-week course. California state law upholds this, see California Code of Regulations, Education Code, Title 5, Section 55002.5.

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### 13. Schedule:

This is the tentative schedule and may (probably will) change. The most up-to-date schedule will be on Canvas:

| Day/Date          | Wk | Lecture (Tue & Thu 8:30 - 9:45 am, VV 133),<br>32 meetings                                | Lab (Tue 10:00am-12:50pm, VV 1122),<br>16 meetings [CRN# 80800]              |
|-------------------|----|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| Tue, Aug 18, 2026 | 1  | Atomic Structure and Significant Figures                                                  | safety (rules, video, and quiz, check-in, computer orientation), math review |
| Thu, Aug 20, 2026 | 1  | Atomic Structure and Significant Figures                                                  |                                                                              |
| Tue, Aug 25, 2026 | 2  | Ions and Periodic Properties                                                              | Exp01_Measurement                                                            |
| Thu, Aug 27, 2026 | 2  | Ions and Periodic Properties                                                              |                                                                              |
| Tue, Sep 1, 2026  | 3  | Lewis Structures, Bonding, and Molecules                                                  | Exp02_Density                                                                |
| Thu, Sep 3, 2026  | 3  | Lewis Structures, Bonding, and Molecules                                                  |                                                                              |
| Tue, Sep 8, 2026  | 4  | Review                                                                                    | Exam 1                                                                       |
| Thu, Sep 10, 2026 | 4  | Molecular Structure and Polarity                                                          |                                                                              |
| Tue, Sep 15, 2026 | 5  | Molecular Structure and Polarity                                                          | Exp09_Molecular Shapes / Exam Review                                         |
| Thu, Sep 17, 2026 | 5  | Polyatomic Ions and Nomenclature                                                          |                                                                              |
| Tue, Sep 22, 2026 | 6  | Polyatomic Ions and Nomenclature /<br>Measurements, Prefixes, and Dimensional<br>Analysis | Exp03_Nomenclature                                                           |
| Thu, Sep 24, 2026 | 6  | Measurements, Prefixes, and Dimensional<br>Analysis                                       |                                                                              |
| Tue, Sep 29, 2026 | 7  | Measurements, Prefixes, and Dimensional<br>Analysis                                       | Exp08_Flames                                                                 |
| Thu, Oct 1, 2026  | 7  | Measurements, Prefixes, and Dimensional<br>Analysis                                       |                                                                              |
| Tue, Oct 6, 2026  | 8  | Review                                                                                    | Exam 2                                                                       |
| Thu, Oct 8, 2026  | 8  | Review                                                                                    |                                                                              |
| Tue, Oct 13, 2026 | 9  | no class                                                                                  | no class                                                                     |
| Thu, Oct 15, 2026 | 9  | Intermolecular Forces, States of Matter,<br>and Energy                                    |                                                                              |
| Tue, Oct 20, 2026 | 10 | Intermolecular Forces, States of Matter,<br>and Energy                                    | Exp06_Reactions / Exam Review                                                |

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|                   |    |                                               |                           |
|-------------------|----|-----------------------------------------------|---------------------------|
| Thu, Oct 22, 2026 | 10 | Solutions and Empirical Formula               |                           |
| Tue, Oct 27, 2026 | 11 | Solutions and Empirical Formula               | Exp05_Composition         |
| Thu, Oct 29, 2026 | 11 | Chemical Equations and Chemical Reactions     |                           |
| Tue, Nov 3, 2026  | 12 | Chemical Equations and Chemical Reactions     | Exp07_Stoichiometry       |
| Thu, Nov 5, 2026  | 12 | Chemical Equations and Chemical Reactions     |                           |
| Tue, Nov 10, 2026 | 13 | Review                                        | Exam 3                    |
| Thu, Nov 12, 2026 | 13 | Stoichiometry                                 |                           |
| Tue, Nov 17, 2026 | 14 | Stoichiometry                                 | Exp10_Gases / Exam Review |
| Thu, Nov 19, 2026 | 14 | Stoichiometry                                 |                           |
| Tue, Nov 24, 2026 | 15 | Gases                                         | Exp11_Titration           |
| Thu, Nov 26, 2026 | 15 | no class                                      |                           |
| Tue, Dec 1, 2026  | 16 | Gases                                         | Review                    |
| Thu, Dec 3, 2026  | 16 | Acids, Bases, and pH                          |                           |
| Tue, Dec 8, 2026  | 17 | Review                                        | Exam 4                    |
| Thu, Dec 10, 2026 | 17 | no class (review and exam pick up at 12:00pm) |                           |
| Tue, Dec 15, 2026 | 18 | no class                                      | no class                  |
| Thu, Dec 17, 2026 | 18 | Final 8:00-10:00???                           | no class                  |