# Syllabus for: CHEM501 – CRN# 10585 – SCC Spring 2027

Welcome to Chemistry Preparedness! Chemistry is difficult and you're taking the right steps to help ensure your success. 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:

- Class – meets on Zoom from 1:00 - 2:15 pm Monday for six (6) weeks starting Monday January 25th.
- Before Class – complete the assigned module in our Canvas shell (~1-2 hours of guided work and assessments)
- Student Help Hours (see https://www.comstgermain.com/courses):
    - Monday – 11:30-12:30pm – Zoom online (link in Canvas shells)
    - Tuesday – 2:00-4:00pm in the ASTC in VV
    - Wednesday – 2:00-4:00pm in the MESA Center 1525
    - Thursday – 7:30-9:00am in VV 215/1126
    - Friday By appointment - 8:30-11:00am
- Online using Discord (various times throughout the week)
- Personal questions/issues: email me at 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. Student Learning Outcomes:

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

- Solve chemical problems using a variety of techniques such as algebraic manipulation and significant figures.
- Demonstrate the proper use of a scientific calculator by solving chemical problems involving dimensional analysis and mole ratios.

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

## 3. Prerequisites and Advisories:

**Prerequisites:** There are no prerequisites for this class.

**Advisory:** There are no advisories for this class.

**Recommended Companion Class:** This class is designed to be taken with or before CHEM160,010,012,001 or BIOL005

## 4. How the class will be run:

This is a non-credit course that does not have grades. You are taking this course because you want to increase your math skills to be better prepared for chemistry and physiology.

### Before class:

You are expected to work on the material in the modules BEFORE coming to class and should take you 1-2 hours per week depending on your current proficiency in the topics.

### During class:

Class is ~1 hour and 15 minutes and during class we will have time to answer any questions that you may have regarding the topics we are covering. You will also be working in groups to solve math/chemistry problems and those problems can be things you are going over in your current chemistry or physiology class so please bring those to work on!

### Quizzes/Exams/Finals:

There are no quizzes, exams, or final exam. There will be assessments taken on Canvas to help ensure you have review the material before coming to class as well as for placing you in various groups during our meeting times together.

## 5. Class Materials:

- Device(s) and connection that can access and/or upload documents to Canvas, Discord, and other online resources
- Calculator – non phone

## 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 and Objectives:

This course will help students increase their math and number skills that are necessary to be successful in chemistry. Topics may include but are not limited to: algebra for chemistry, simplifying expressions, exponents, scientific notation, using a scientific calculator, conversions, dimensional analysis, and the mole concept. No additional homework will be required outside of the weekly hours expected of students. This is for students who have not taken a college level algebra course or feel they need a review in algebra for chemistry concepts. This course can be taken concurrently with or in preparation for any chemistry or physiology course. Non-credit course. Non-transferable to UC or CSU.

**Course Objectives:**

- Develop knowledge of algebra skills that are used frequently in chemistry.
- Develop knowledge of simplifying equations and order of operations for mathematical expressions.
- Count the correct number of significant figures in a given numerical value.
- Apply the significant figures rules in simple calculations.
- Develop knowledge of the proper use of a scientific calculator in solving chemistry equations.
- Develop knowledge of ratio and mole ratios.
- Develop knowledge of unit conversions such as ones used in the metric system and dimensional analysis.

## 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://welcome.solano.edu/ar-dates/
- Distance Education Resources: http://www.solano.edu/online_classes/
- 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 Services: http://www.solano.edu/online_student_services/
- Library: https://libguides.solano.edu/libraryresources
- Financial Aid: http://www.solano.edu/financial_aid/
- Discrimination and Sexual Harassment: http://www.solano.edu/student_service/grievances.php
- Tutoring: If you want tutoring and/or suspect you will need tutoring contact Solano College Academic Success and Tutoring Center as soon as possible - http://www.solano.edu/academic_success_center/. 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://welcome.solano.edu/asc/

## 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."

## 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. Follow SCC guidelines found here: https://welcome.solano.edu/coronavirus/.

## 12. Workload:

Be prepared for about 1-2 hours of work per week outside of our meetings.

## 13. Course Content Outline:

- Math for Chemistry
- Order of Operations
- Solving for Variables
- Simplifying Expressions
- Understanding Units
- Exponents and Scientific Notation
- Scientific Calculator
- Conversions and Dimensional Analysis
- Ratios and the Mole Ratio

## 14. Schedule:

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

| Day/Date | Wk | Asynchronous (do it yourself at home or with a friend before class) | Synchronous Lecture (Mon 1:00 pm - 2:15 pm, Zoom), 6 meetings |
|---|---|---|---|
| Mon, Jan 25, 2027 | 1 | Module 1: Order of Operations 1-4 | Order of Operations Classwork |
| Mon, Feb 1, 2027 | 2 | Module 2: What are Variables? 1-4 | What are Variables Classwork |
| Mon, Feb 8, 2027 | 3 | Module 3: Solving For Variables 1-6 | Solving For Variables Classwork |
| Mon, Feb 22, 2027 | 4 | Module 4: Simplifying Expressions with Exponents 1-4 | Simplifying Expression with Exponents Classwork |
| Mon, Mar 1, 2027 | 5 | Module 5: Exponents and Scientific Notation 1-6 | Exponents and Scientific Notation Classwork |
| Mon, Mar 8, 2027 | 6 | Module 6: Understanding Units 1-3; Conversions and Dimensional Analysis 1-4 | Understanding Units & Conversions and Dimensional Analysis Classwork |