

Syllabus for: CHEM160 – CRN# 80610 – SCC Fall 2024

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 Fairfield room 2703 from 9:30 - 10:45 am Tue/Thu starting Tue, Aug 13
- Lab - meets in Fairfield room 2739 from 11:00 am - 1:50 pm Tue starting Tue, Aug 13
- Student Help Hours (see <https://www.comstgermain.com/courses/>):
 - Fairfield:
 - Tue/Thu – 8:30-9:30 am room 1525 (MESA)
 - Tue – 1:50-3:00 pm in ASTC
 - Vallejo:
 - Mon/Wed – 8:30-9:30 am room 242
 - Wed – 1:50-3:00 pm room 242
 - Online using Discord (various times) and by Zoom by appointment
- Personal questions/issues: email me at commodore.st.germain@solano.edu or text/call at (707) 386-9588
- Class questions should be posted on the same Discord: <https://discord.gg/mjYYxRVvNe>
- We will need the class materials on the first day of class (see below)
- We are required to follow specific SCC COVID requirements here: <https://welcome.solano.edu/coronavirus/>.
- 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:

- Draw the Lewis structure of a molecular compounds and polyatomic ions.
- Identify and name the course-required list of elements, ions, molecular compounds, ionic compounds, etc.
- Show proficiency in lab techniques (measurements, titration, etc.)

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

3. 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 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 is ~3 hours will consist of in-class lab activities, wet experiments, computer simulations, worksheets, and/or group activities. Labs are mandatory and if you miss more than 1 lab, you can be dropped from the class or have your grade lowered. 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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Grading:

Grading Scheme	
Grading / Exams	Percent of Final Grade
4 Exams	40%
Final	20%
Lab Activities	20%
Quizzes	10%
Worksheets	8%
Other Assignments	2%

Homework/Assignments:

We will cover ~1 topic every 1-2 weeks. There will be worksheets, assignments, and other optionally assigned problems.

Lab Activities:

Labs will be mostly from the online lab manual (see Class Materials) but there will be other provided lab activities. Lab grades will be from the successful completion of in-class lab activities, using safe lab practices, and accuracy of lab results

Quizzes:

There will be 4 take-home quizzes throughout the semester (25 points each). These quizzes can be taken together with other students. All work must be shown. This is due the 1-2 days before the midterms and may need to be submitted online as one document. The questions will be provided at least 2 weeks before the midterm so you have 2 weeks to work on it. There may also be 2 in-class quizzes that are timed (5 points each). I will give you advanced notice if we are having these 2 in-class quizzes.

Exams:

There will be 1 exam for each section (100 points each). These multiple choice exams will be taken during normal lecture/lab time unless you have arranged additional time through ASC. You are required to show all of your work and your work must be submitted at the end of the exam. Most of the exam questions very similar to in-class questions, worksheets, take-home quiz questions, or other assignments. Tests are open note/book but you will not have enough time to complete the test if you do not readily know the material. 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 1 cumulative final that covers sections #1-4 in the same format as the midterms but may be slightly different and longer.

4. Class Materials:

- Device(s) and connection that can access and/or upload documents to Canvas, Discord, LibreTexts, and Top Hat.
- 5 x scantron forms – 882-E compatible
- Calculator – non phone
- Safety goggles
- Safety gloves
- Lab Manual (TopHat) – (online, ~\$23) – you will register through our Canvas page for the 14 day free trial and either pay with a credit card or use a redemption code from the SCC Bookstore to have continued access.
- Text Book (online, free) – [LibreTexts.Org](https://libretexts.org/) – [Introductory Chemistry at Solano College](https://libretexts.org/courses/solano-college/)
- Text Book (optional) – Introduction to Chemical Principles, Stoker, 11th edition, Pearson, 2014
- Lab coat (optional)

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5. 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>.

6. Course Description:

The fundamental principles of inorganic chemistry. Field trips may be required. Online work may be required. 4 unit course. NOTE: Not open to students who have completed CHEM 001, CHEM 010, or equivalent. General Education: SCC Area C. Non-transferable to UC or CSU. Hours: 48-54 lecture, 48-54 lab.

7. 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/>

8. 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."

9. 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

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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."

10. 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/>.

11. Workload:

Be prepared for about 12 hours of work per week in this course to pass. 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.

12. 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 (chapter) (9:30 - 10: 45 am, FF 2703), 32 meetings	Lab (Tue 11:00 am - 1:50 pm, FF 2739), 16 meetings [CRN# 80610]
Tue, Aug 13, 2024	1	Chapter 1, 2 - Start Worksheet 1, Quiz 1	safety (rules, video, and quiz, check-in, computer orientation)
Thu, Aug 15, 2024	1	Chapter 2 - Start Worksheet 2	
Tue, Aug 20, 2024	2	Chapter 3	Exp 1: Density and Miscibility
Thu, Aug 22, 2024	2	Chapter 3	
Tue, Aug 27, 2024	3	Chapter 4 - Start Worksheet 3; Career Center Orientation 9:30	Exp 2: Density of Liquids and Solids
Thu, Aug 29, 2024	3	Chapter 4	
Tue, Sep 3, 2024	4	Chapter 5	review, worksheets
Thu, Sep 5, 2024	4	Exam 01 (on chapters 1, 2, 3, 4; quiz 1; worksheets 1, 2, 3)	
Tue, Sep 10, 2024	5	Chapter 5 - Start Worksheet 5, Quiz 2	Exp 3: Flame Test (comp) or density of water
Thu, Sep 12, 2024	5	Chapter 6 - Start Worksheet 4; periodic table	
Tue, Sep 17, 2024	6	Chapter 6	Exp 4: Empirical Formula
Thu, Sep 19, 2024	6	Chapter 7 - Start Worksheet 7 and 6	

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Tue, Sep 24, 2024	7	Chapter 7	job fair review??, worksheets
Thu, Sep 26, 2024	7	Review - online b/c emergency leave	
Tue, Oct 1, 2024	8	Exam 02 (on chapters 5, 6, 7; quiz 2; worksheets 5, 4, 7, 6)	Exp 5: Chemical Reactions
Thu, Oct 3, 2024	8	Chapter 8 - Start Worksheet 8; polyatomic ion table, Quiz 3	
Tue, Oct 8, 2024	9	no class - professional development day	no class
Thu, Oct 10, 2024	9	Chapter 8	
Tue, Oct 15, 2024	10	Chapter 9 - Start Worksheet 9	Exp 6: Single Displacement Reactions and Activity Series
Thu, Oct 17, 2024	10	Chapter 9	
Tue, Oct 22, 2024	11	Chapter 10 - Start Worksheet 12, 11, 13	Exp 7: Double Replacement Reactions
Thu, Oct 24, 2024	11	Chapter 10	
Tue, Oct 29, 2024	12	review	review, worksheets
Thu, Oct 31, 2024	12	Exam 03 (on chapters 8, 9, 10; quiz 3; worksheets 8, 9, 12, 11, 13)	
Tue, Nov 5, 2024	13	Chapter 11 - Start Worksheet 10, Quiz 4 (not collected)	Exp 8: Conductivity (comp), graphing - Jupyter Notebook
Thu, Nov 7, 2024	13	Chapter 11	
Tue, Nov 12, 2024	14	Chapter 13 - Start Worksheets 16, 15	exam review, Exp 10: Solutions
Thu, Nov 14, 2024	14	Chapter 13	
Tue, Nov 19, 2024	15	Chapter 14 - Start Worksheets 14	Exp 9: Acid Base Titration
Thu, Nov 21, 2024	15	Chapter 14	
Tue, Nov 26, 2024	16	review	review, worksheets
Thu, Nov 28, 2024	16	no class - Thanksgiving	no class
Tue, Dec 3, 2024	17	Exam 04 (on chapters 11, 13, 14; quiz 4; worksheets 10, 16, 15, 14)	review, worksheets

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Thu, Dec 5, 2024	17	review	
Tue, Dec 10, 2024	18	no class	no class
Thu, Dec 12, 2024	18	Final 8:00-10:00 am	no class