

Instructor: Dr. Jessica Siemer

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Office Hours: W 11:00-12:00 PM, T/R 1:00-2:00 PM

(<https://gsu meetings.webex.com/meet/jsiemer1>)

or by appointment (Webex or in person)

Co/pre-requisite: MATH 1113 and CHEM 1211K

Class time: Prelab Lecture, W 2:00-2:45 PM, CLS 327

Students must be present for the pre-lab lecture. If you are more than 20 minutes late, without a valid excuse, you will not be allowed to do the lab.

Laboratory, W 2:55-5:00 PM, CLS 237

Required Materials:

Bound lab notebook

Laboratory manual (provided at first lab session)

Safety glasses/goggles (available for purchase during the first lab session)

Scientific calculator (cellphones are not permissible calculators)

Learning Outcomes: Students apply scientific reasoning and methods of inquiry to explain natural phenomena and analyze quantitative information and solve applied problems. Students also develop skills within the following College to Career competencies:



Your constructive assessment of this course plays an indispensable role in shaping education at Georgia State. Upon completing the course, please take the time to fill out the online course evaluation.

Course policies:

Academic Honesty: The Department of Chemistry follows the University policy on academic honesty published in the "Faculty Affairs Handbook" and the "On Campus: The Undergraduate Co-Curricular Affairs Handbook". All graded assessments must represent the student's individual, unaided effort. To receive or offer information (including Facebook/GroupMe groups) during any assessment will be considered cheating. Any suspected offense may be referred to the Dean of Students for appropriate action. The consequences of cheating are severe and potentially long-lasting: don't do it!

The selling, sharing, publishing, presenting, or distributing of instructor-prepared course lecture notes, videos, audio recordings, or any other instructor-produced materials from any course for any commercial purpose is strictly prohibited unless explicit written permission is granted in advance by the course instructor. This includes posting any materials on websites such as Chegg, Course Hero, OneClass, Stuvia, StuDocu and other similar sites. Unauthorized sale or commercial distribution of such material is a violation of the instructor's intellectual property and the privacy rights of students attending the class and is prohibited.

Accommodations: Students who wish to request accommodation for a disability may do so by registering with the Access and Accommodation Center. Students may only be accommodated upon issuance by the Access and Accommodation Center of a signed **Accommodation Plan** and are responsible for providing a copy of that plan to instructors of all classes in which accommodations are sought.

Attendance: Lab starts during the second week of the semester. Students who fail to attend the first laboratory session may LOSE THEIR SPACE IN LAB. If lab space is lost, the student may be WITHDRAWN FROM THE COURSE (i.e both lab and lecture). If you miss the first two or more labs you will be dropped from the lab. Students may only withdraw for the entire course (lecture and laboratory, not each component separately). Unexcused absences do not guarantee automatic withdrawal.

Per department policy, one laboratory make-up session will be offered for students with an excused absence.

Students wishing to obtain an excused absence and subsequent accommodation should communicate with the instructor in a timely manner. Students are highly encouraged to use the Dean of Student's [Professor Absence Notification form](#), which allows students to provide documentation and send notification of an excused absence to multiple professors through the Dean of Students Office.

COVID-19 Specific Policies:

Everyone is highly encouraged to wear a mask or face covering while inside the prelab lecture room and the lab. Georgia State University continues to work closely with the Georgia Department of Public Health to prioritize the health and safety of our campus communities. The Centers for Disease Control and Prevention recommends that everyone — whether vaccinated or not — wear face coverings while on our campuses.

Should a student test COVID positive, any accommodations to the class attendance policy will be informed by evolving guidance from the CDC on quarantine. In most cases there will be no major change to mode of course delivery, so students will be responsible for collecting notes for missed in-person classes and making up any work they miss during quarantine. Anyone who has a positive COVID test is encouraged to alert the university so that appropriate contact tracing can be conducted.

Students must maintain the same seating arrangement throughout the entire semester.

Campus Carry: The Campus Carry legislation allows anyone properly licensed in the state of Georgia to carry a handgun in a concealed manner on university property with noted exceptions. It is the responsibility of the license holder to know the law. Failure to do so may result in a misdemeanor charge and may violate the Georgia State Student Code of Conduct.

Grading:

Lab	Description	Assessment	Points
1	Building Lewis Structures with Candy	prelab	5
	Building Lewis Structures with Candy	post lab	10
2	Boiling Point Elevation	prelab	5
	Boiling Point Elevation	post lab	10
3	Project Experiment 1(Lab 3): Synthesis	prelab	5
	Project Experiment 1(Lab 3): Synthesis	post lab	10
	Project Experiment 1(Lab 3): Synthesis	product appearance	5
4	Project Experiment 2 (Lab 4): Analysis of the % Halide	prelab	5
	Project Experiment 2 (Lab 4): Analysis of the % Halide	post lab	10
	Project Experiment 2 (Lab 4): Analysis of the % Halide	product appearance	5
5	Project Experiment 3 (Lab 5): Analysis of the % Cobalt	prelab	5
	Project Experiment 3 (Lab 5): Analysis of the % Cobalt	post lab	10
	Project Experiment Identification	Unknown guess	5
6	Identify the concentration of HCl	prelab	5
	Identify the concentration of HCl	post lab	10
7	Create a solution of 0.1M Na ₂ S ₂ O ₄	prelab	5
	Create a solution of 0.1M Na ₂ S ₂ O ₄	post lab	10
8	Determine the % of H ₂ O ₂ using 0.1M Na ₂ S ₂ O ₄	prelab	5
	Determine the % of H ₂ O ₂ using 0.1M Na ₂ S ₂ O ₄	post lab	10
		Total wet lab points	135

	Quizzes		25
	Lab Final		40
		Total points	200

Letter grade	Range%	Letter grade	Range%
A+	97+	C+	77+
A	93+	C	73+
A-	90+	C-	70+
B+	87+	D	60+
B	83+	F	< 60
B-	80+		

Lab rules:

- 1) Students are expected to know and abide by the [Chemistry Laboratory Safety Guidelines](#) and the guidelines set forth in the lab manual.
- 2) Notebooks should be kept up to date and laboratory notes and data should be written in ink. Leave the first two pages of the notebook blank for Table of Contents. All pages must be numbered, dated and initialed at the top right corner. All data must be recorded in ink directly in the notebook during lab. Do not write on other pieces of paper and transfer data to the notebook. Do not tear out pages, or whiteout data. Instead cross-out the incorrect data and present corrected data on another blank page.
- 3) Data should be entered into both the notebook and the data sheet of each experiment.
- 4) Cleaning up is part of the lab session. Students should stop working and begin cleaning up their work area no later than 20 minutes before the conclusion of the lab session. TAs will be checking every student's work station and **points will be deducted for not cleaning up.**
- 5) Students must exit the lab by 5:00 PM.
- 6) **Lab Check-out Policy:** Lab drawer checkout is due by the last lab meeting. **Each student needs to check-out from the lab, in person and return all the unknowns by the last lab day. A charge of \$20 will be put on the student's account if the student does not show up for check-out. The above policy also applies to students who withdraw from class before the end of the semester.**

Laboratory Schedule:

The course syllabus provides a general plan for the course; deviations may be necessary.

Week 1	Check in and safety video
Week 2	Experiment 1: Building Lewis Structures with Candy
Week 3	Experiment 2: Boiling Point Elevation
Week 4	Project Experiment 1(Lab 3): Synthesis
Week 5	Project Experiment 1(Lab 3): Synthesis
Week 6	Project Experiment 2 (Lab 4): Analysis of the % Halide
Week 7	Project Experiment 2 (Lab 4): Analysis of the % Halide
Week 8	Project Experiment 3 (Lab 5): Analysis of the % Cobalt
Week 9	Experiment 6: Identify the concentration of HCl
Week 10	Experiment 7: Create a solution of 0.1M Na ₂ S ₂ O ₄
Week 11	Experiment 8: Determine the % of H ₂ O ₂ using 0.1M Na ₂ S ₂ O ₄
Week 12	Catch up Day!
Week 13	Final exam. Checkout!

Assignments:

- 1) Satisfactory completion of your experiments will be assessed with prelabs, that will be due at the beginning of your lab lecture period.
- 2) Also, each lab will feature a post lab, to be handed in at the beginning of the next week's lab lecture.
- 3) Late submission of assignments without preapproval will not be accepted.