

Ticket: 2216  
Room: San Gabriel 204  
9:10 AM – 12:20 PM

# Chemistry 110

General Chemistry Laboratory  
Spring 2019



**Instructor:** Professor Charles Mallory  
[Professor.Mallory@gmail.com](mailto:Professor.Mallory@gmail.com)  
<http://themalloryfamily.net/chemistry/chem110l.html>  
Office Hours: Tuesday & Wednesdays 12:20 – 12:40 Room: Arroyo Seco Adjunct Offices

## Course Goals:

- Solve quantitative problems and check answers to make sure that they are physically reasonable as applied to areas such as unit conversions, stoichiometry, and gas laws.
- Apply IUPAC naming rules to acids, salts and molecular compounds.
- Clearly explain qualitative chemical concepts and trends.
- Perform laboratory experiments using appropriate technique and safety procedures.
- Describe, model and analyze subatomic behavior to explain macroscopic properties as applied to such areas as chemical bonding, gas laws, atomic theory, acids, bases, and oxidation-reduction.
- Write and predict the products of chemical reactions along with the classify of the different types of chemical reactions.

## Grading:

Lab Exams (three exams).....	45%
Lab work (including all reports and exercises).....	55%

## Lab Exams:

Lab Exams will be given throughout the semester based on all lab material covered since the last exam and will cover the prelab material, experimental procedures, observations, interpretation and calculations. Additionally, there may be occasional mini-quizzes that will be announced.

## Attendance and Etiquette:

- Regular attendance and promptness are mandatory. Important procedural and safety information is presented at the beginning of lab; any tardiness poses a risk to yourself and others. 10% is deducted from each report not turned in immediately at the start of lab. Additionally, late lab reports are subject to a 25% per day past the deadline.
- No excuses for leaving lab are accepted. Please, schedule doctor / dentist / auto mechanic / counseling / etc. appointments outside of lab time. No credit is given for missed labs and a report may not be submitted if the experiment was not performed.
- An "F" grade will earn if a student misses or fails to complete three or more labs. Be aware that failure to pass the lab portion will result you earning a failing grade for the entire course.
- Points will be deducted for disruptive and rude behavior in class (talking during lecturing, using cell phones, late arrivals and early departures) or for safety violations such as goggle reminders or open-toed shoes. You are expected to act as adults and if you can not do so may result in you being asked to leave the class and you will have earned a zero for the day's assignment.
- I advise against taking this class if you are pregnant. In case you decide to take the class, please bring a note from your physician indicating their approval for you to take the course (the list of chemicals is available at request).

## Lab Safety:

- Each student will be provided with a copy of the *Chemistry Department Laboratory Safety Rules* the first day laboratory meets. You are to complete the bottom portion of the sheet and provide the bottom portion to the instructor.

**By the second lab meeting you must have a Chemistry 110 Lab Manual (GCC bookstore), chemistry laboratory goggles, and appropriate attire in order to participate.**

# Tentative Lab Schedule

Date	Lab
Tuesday, February 19, 2019	Introduction / Safety / Safety Video
Tuesday, February 26, 2019	Exercise A - Math Drill
Tuesday, March 5, 2019	Check-In Experiment 1- Safety, Lab Equipment, Techniques
Tuesday, March 12, 2019	Experiment 2 – Measurement
Tuesday, March 19, 2019	<b>Lab Exam 1</b> (including polyatomic ions) Exercise B - Nomenclature
Tuesday, March 26, 2019	Experiment 5 - Empirical Formula
Tuesday, April 2, 2019	Experiment 4 - Double Displacement Reactions
Tuesday, April 9, 2019	Exercise C - Chemical Reactions
Tuesday, April 16, 2019	Spring Break
Tuesday, April 23, 2019	<b>Lab Exam 2</b>
Tuesday, April 30, 2019	Experiment 6 – Stoichiometry
Tuesday, May 7, 2019	Exercise D - Lewis Dot Structures
Tuesday, May 14, 2019	Experiment 10 – Gases
Tuesday, May 21, 2019	Experiment 12 Titrations
Tuesday, May 28, 2019	Experiment 11 Solutions
Tuesday, June 4, 2019	<b>Lab Exam 3</b> Check Out