

## CHEM 3L Course Syllabus

**CHEM 3L Introductory Inorganic Chemistry Laboratory** **3 hours Laboratory** **1 unit**

Presents an introduction to small scale laboratory techniques and the properties of matter, chemical reactions, solubility, gas laws, and acid-base.

**Instructor** Jason Camara, Ph.D.  
Office: 605A Hours: M/W 12:30-1:30 pm; T/TH 1:00-2:00 pm  
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Course Web Page: <https://chemed.study/chem3L/>

**Schedule** Lab Sections: Monday 2:30 - 5:35 pm - **Room 610**

**Materials** Chem 3 Laboratory Manual - Available online as a PDF document from the course website as well as individual experiment links from the online schedule  
Laboratory Safety Glasses  
Scientific Calculator  
Hard-bound Laboratory Notebook

**Requisites** Prerequisite: MATH 370B  
Co-Requisite: Completion of or concurrent enrollment in CHEM 3

- Student Learner Outcomes**
1. Conduct chemical experiments and analyze the results.
  2. Solve analytical problems expressing the answer with the correct degree of uncertainty.
  3. Communicate in writing utilizing proper chemical terminology, nomenclature, and symbols.

**Assessment** Assessment is based on percentages as follows:

- **25% Technique** - Each experiment is assessed for technique based on the Technique Rubric out of a possible 20 points. The scores for each experiment are summed and the total normalized to 25 points or 25% of the total grade.
- **25% Laboratory Notebook** - Each experiment is assessed for the laboratory notebook based on the Lab Notebook rubric out of a possible 16 points. The scores for each experiment are summed and the total normalized to 25 points or 25% of the total grade.
- **25% Post-Laboratory Questions** - Each laboratory exercise contains a series of questions to be answered after the experimental portion of the lab has been completed. The questions are to be completed and turned in on the following lab period. The scores for each experiment are summed and the total normalized to 25 points or 25% of the total grade.
- **25% Lab Practical** - A lab practical exercise will be given on the last class meeting during the normal semester, the week preceding finals week. The lab practical will consist of a three hour exercise where you will be asked to demonstrate many of the skills learned throughout the semester. The lab practical will be assessed out of 25 points or 25% of the total grade.

The grading scale for each type of assessment is detailed in the following rubrics:

- Technique Rubric
- Notebook Rubric

**Assessment** Unless otherwise stated to the class, the due dates are outlined and in the schedule and are expected to be followed. While due dates are important for your academic progress, I understand that life happens and I am willing to work with you. Communication is key. Please reach out to me if you find yourself falling behind or unable to make a due date.

**Safety** For safety reasons, no student will be allowed to work in the lab without proper attire. Proper attire for the chemistry lab means:

- Safety glasses at all times when anyone is working with chemicals anywhere in the room.
- Closed toe shoes - absolutely no flip-flops, sandals or high heels.
- No shorts - legs should be covered below the knee.

Failure to wear the proper attire will result in your being asked to leave the lab. Take responsibility and wear the proper attire. **There will be no exceptions.**

Student Supervision - Students are not allowed to be left unattended in lab. Faculty or staff must be available within line of sight or auditory range for student supervision; if this is not possible, the lab room will be cleared and locked for a break during the course period.

**There are to be no unauthorized experiments conducted in the lab.**

**Absence** If you find that you need to make-up a lab, or require extra time to work on projects, you must first check with me before simply showing up in a lab section other than the one you are enrolled in.

**Classroom Conduct** Listed here are some of the common courtesies and conduct I expect in my classroom as well as the ramifications for not following them.

**and Instructor Policies** Cell phones - Cell phones are not as much a disruption in lab as they are in lecture. However, please make sure your ringer is off while lab lecture is going on. Once lab begins, should you need to make a phone call take it outside of the classroom.

Attendance - I don't take attendance other than on the first few days of class. My attendance policy is show up if you want to learn. That being said, missing lab is a really bad idea. It is extremely difficult to make up missed lab work. If you are going to miss lab because of illness or other unavoidable reasons, contact me as soon as possible to figure out a way to make up the missed work.

Chemical Stockroom - The chemical stockroom is off limits to students. Should you require materials such as chemicals or glassware you must ask one of the Laboratory Technicians (Larysa Owens or Eric Durkee) or one of the Student Employees for assistance. Students are not allowed to enter the stockroom.

Grade disputes - I encourage all of my students to regularly attend office hours. The proper place to ask about grading is during office hours. If you feel that you have been graded unfairly in any assignment, please take it up with me in office hours. I am more than happy to go over the grading of any work, however before class, during class and immediately after class are too chaotic for me to give you the attention you deserve for a grading issue.

Cheating/Plagiarism - Cheating within the laboratory course usually takes the form of copying results from fellow students. Your work should be exactly that - your work. Working together is encouraged both inside and outside of the classroom, and is an excellent way to stay motivated and to learn the material. However, directly copying the work of a fellow student is inappropriate and considered cheating. Documented occurrences of cheating will receive a zero for that assignment for all students involved.

Unauthorized Experiments - Unauthorized experiments are expressly forbidden. Unauthorized experiments can lead to dangerous situations and endanger yourself and your fellow classmates. Anyone caught performing unauthorized experiments will be removed from the class for that day, and receive a zero for the entire assignment (post-lab questions, technique, lab notebook). A second offense will result in a disruptive student report filed with the Dean of Student Services. A third offense will result in being dropped from the course and receiving a failing grade.

Laboratory Materials and Equipment - The laboratory materials (chemicals and resources) and equipment are the property of Cabrillo College and may not be removed from the classroom. Removal of any chemicals, resources or equipment from the classroom will result in a Disruptive Student Report to the Dean of Student Services and a lowering of your final grade for the course by one grade level. A second offense will result in being dropped from the course and receiving a failing grade. Deliberate misuse/mistreatment of the chemicals or laboratory equipment is not to be tolerated. As with unauthorized experiments, this type of behavior will result in the student being removed from the class for that day, receive a zero for the entire assignment (write-up, technique, lab notebook), and will have a disruptive student report filed with the Dean of Student Services. A second offense will result in being dropped from the course and receiving a failing grade.

Disruptions - A disruption is classified as an act that disrupts the normal function of the classroom, be it a distraction to me or to your fellow students, that a reasonable person would not engage in. Examples of such disruptions are engaging in disruptive conversations while lecture is proceeding, horse play while lab is in progress, unwillingness or inability to follow laboratory instructions, behavior in the laboratory that causes fear and concern among classmates or the instructor, etc.... The consequences for disruptive behavior are a three strikes policy. First disruptive behavior warrants a verbal warning, second time garners a Disruptive Student Report to the Dean of Student Services, third time you will be excused from the class and dropped from the role.

Waste Disposal - Waste disposal is extremely important. Everything has a place in terms of waste disposal. Proper waste disposal is covered at the beginning of the semester and specifics are given for individual experiments. If you don't know where something is to be disposed of it is your responsibility to ask prior to making a mistake.

Accidents/Injuries - From time to time accidents and occasional injuries happen in the lab. While accidents and injuries do not affect your grade in anyway, unless they result from disruptive behavior, unauthorized experiments, or deliberate misuse/mistreatment of chemicals and equipment, how you deal with the accidents and injuries is important. If the accident results in a small spill that is easily contained and cleaned up, do so immediately. If the accident results in a spill that you do not know how to deal with, calmly call for my attention and I will assist you. If I am not in the lab call for the attention of one of the stockroom technicians. If the accident results in you being exposed to the chemicals such as on your hands, arms, legs, face, clothing ... you should follow the safety procedures outlined at the beginning of the experiment immediately. Ask a classmate to get my attention or call out for help. Failure to notify me of any chemical exposure or injury occurring in the classroom can put your health in serious risk. You must notify me of all accidents and injuries. **In the event of chemical exposure or injury, you must clear it with me prior to leaving the classroom.**

***Expectations of your Instructor*** You can expect that I will fully answer your questions regarding course content or grading when such questions are asked at the appropriate time. You can expect that your work in the course will be evaluated fairly without bias and will be returned in a timely manner. You can expect that I will start and end class on time. You can expect to be treated with respect at all times. You can expect that I will provide you with a challenging and engaging semester which will prepare you for whatever future goals you have that have led you to take my course.

***Nondiscrimination and Accessibility Notice*** The land on which we gather is the unceded territory of the Awaswas-speaking Uypi Tribe. Today there are no known survivors of the Awaswas Nation. The Amah Mutsun Tribal Band, comprised of the descendants of indigenous people taken to missions Santa Cruz and San Juan Bautista during Spanish colonization of the Central Coast, is today working hard to restore traditional stewardship practices on these lands to honor the Awaswas and heal from historical trauma.

The District is committed to equal opportunity in educational programs, employment, and all access to institutional programs and activities. The District, and each individual who represents the District, shall provide access to its services, classes, and programs without regard to national origin, religion, age, gender, gender identity, gender expression, race or ethnicity, color, medical condition, genetic information, ancestry, sexual orientation, marital status, physical or mental disability, pregnancy, or military and veteran status, or because he/she/they is perceived to have one or more of the foregoing characteristics, or based on association with a person or group with one or more of these actual or perceived characteristics.

I encourage students with disabilities to explain their needs and appropriate accommodations, as evidenced by a counselor or specialist's recommendations, to me during office hours. As required by the Americans with Disabilities Act (ADA), accommodations are provided to insure equal opportunity for students with verified disabilities. To determine if you qualify, or if you need assistance with an accommodation, please contact the Accessibility Support Center (ASC, formerly DSPS), Room 1073 (upstairs in the Library), (831) 479-6379 or (831) 479-6370.