



CHEM 1211L – Principles of Chemistry I Laboratory

Course Syllabus – Fall 2017

Individuals with disabilities who need to request accommodations should contact the Disability Services Coordinator, Edgewater Hall 255, (678) 466-5445, disabilityservices@mail.clayton.edu.

Course Description:

Number and Title: CHEM 1211L: (CRN 80134), Principles of Chemistry I Laboratory

Credit Hours: 1.0 semester credit hour

Catalog Description: Laboratory accompanying CHEM 1211. CHEM 1211L is a one-credit science laboratory course, associated with Chemistry 1211, for Area D1 of the Core Curriculum of Clayton State University.

Course Prerequisites and Co-requisites:

- Co-requisite: CHEM 1211

Note: Due to the co-requisite nature of CHEM 1211 and CHEM 1211L, students dropping one of the two courses must also drop the other.

Instructor Information:

Instructor: Dr. Aubrey Dyer

phone: (678) 466-4894

fax: (678) 466-4797

e-mail: aubreydyer@clayton.edu

internet: <http://faculty.clayton.edu/adyer3>

Office: Lakeview Science Center, Room 235C

Office hours:

Mondays at 9am-10:30am

Tuesdays 9am-10am

Wednesdays at 9am – 10:30am

Other times by appointment

Class Meetings:

Lab Room and Class Times:

Lab Annex Building (LAB) Room 202, Mondays from 2:05pm to 4:55pm

Required Materials:

- Safety Goggles
- Bound Carbonless Copy Laboratory Notebook
- Combination Lock for Laboratory Drawer (Do NOT bring a keyed lock)
- Scientific Calculator
- Laptop Computer

You are required to supply your own safety glasses for the laboratory. These are available in the campus book store but may be purchased elsewhere. Safety glasses **MUST** be worn in the laboratory at all times. You will not be allowed to complete the lab without safety glasses.

The instructor will deduct points from lab reports for not bringing safety glasses to lab, or not wearing them while in the laboratory at a rate of 5 points per incident

Evaluation:

Your evaluation in CHEM 1211L will be based upon the following components:

1. Laboratory Notebook Pages (8 @ 50 points each)

All data is to be kept in a carbonless copy laboratory notebook. Your notebook pages must include all of the components listed in the notebook rubric (in D2L and explained on the second day of class). You will be graded on organization and completeness of the relevant notebook pages. Copy (yellow) notebook pages must be turned in at the beginning of the next lab period. No late notebook pages will be accepted. You will retain the original pages for your records.

2. Laboratory Reports (1 @ 100 points each)

For one of the labs (Alum synthesis), you will be required to submit a laboratory report. The written report must be typed in Word, in Standard English, and paragraph form. Your report must include all of the components as detailed in the rubric (in D2L and explained on the second day of class). You will submit the final version electronically via the dropbox folder in D2L and a hardcopy turned in at the beginning of class by the assigned date and time. There will be penalties for late assignments. *The reports are not to be handwritten or emailed.*

3. Post Lab Review Questions/Assignments (9 @ 50 points each)

For each of the labs where a report is not due, you will have a set of analysis questions to answer and a component of a formal lab report to complete as indicated in the syllabus. These will either be worksheets (i.e., the VSEPR lab) or will be questions you answer after the lab is complete. The questions/worksheets are to be typed and hard copies turned in at the beginning of the next lab period as indicated in the course schedule.

4. Prelab Quizzes (10 @ 10 points each)

Each week, a prelab quiz will be posted in D2L that will assess whether you have read and understood key points in the laboratory procedure concerning setup, handling of chemicals and waste, safety, etc. These quizzes are due before the lab period begins and a score of at least 80% must be earned for the quiz to be recorded as complete. This includes a syllabus/lab safety quiz.

Component	Points
Lab Notebook Pages (8 @ 50 points each)	400
Lab Reports (1 @ 100 points)	100
Postlab Assignments (9 @ 50 points each)	450
Prelab Quizzes (10 @ 10 points each)	100
Total	1100

Grading Scale

A	90% – 100%
B	80% – 89%
C	70% – 79%
D	60% – 69%
F	less than 59%

Mid-term Progress Report:

The mid-term grade in this course will be issued on or about October 3rd and reflects approximately 48% of the entire course grade. Based on this grade, students may choose to withdraw from the course and receive a grade of "W." Students pursuing this option must fill out an official withdrawal form, available in the Office of the Registrar, or withdraw on-line

using the Swan by mid-term, which occurs on October 6. [Instructions for withdrawing are provided at this link.](#)

The last day to withdraw without academic accountability is Friday, October 6, 2017

Tentative Lab Schedule:

The preparation and set-up of the chemistry laboratories is not an easy chore. It is critical that you attend the laboratory during your scheduled time period and that you show up on time.

Date	Laboratory Experiments	Assignments Due at 2:05 Mondays
Aug 14	Introduction, safety, check-in	
Aug 21	Computer Lab and Notebook *Bring your computers to class	<ul style="list-style-type: none"> • Syllabus Quiz • Lab Safety Quiz • Lab Waivers Must be Completed
Aug 28	Density *	<ul style="list-style-type: none"> • Computer Assignment Due • Density Pre-lab Quiz
Sep 4	No Lab-Labor Day	
Sept 11	Atomic Emission	<ul style="list-style-type: none"> • Density Notebook Pages • Density Post-lab • Atomic Emission Pre-lab Quiz
Sept 18	Magnetism and Electron Configurations	<ul style="list-style-type: none"> • Atomic Emission Notebook Pages • Atomic Emission Post-lab • Magnetism Pre-lab Quiz
Sept 25	Identification of Unknown Ionic Compounds – Part 1	<ul style="list-style-type: none"> • Magnetism Notebook Pages • Magnetism Post-lab • Unknown Compound Pre-lab Quiz
Oct 2	Identification of Unknown Ionic Compounds – Part 2	<ul style="list-style-type: none"> • Unknown Part 1 Notebook Pages
Oct 9	Fall Break – No lab this week	
Oct 16	Empirical Formula of a Hydrate*	<ul style="list-style-type: none"> • Unknown Part 2 Notebook Pages • Unknown Post-lab • Empirical Formula Pre-lab Quiz
Oct 23	VSEPR Worksheet*	<ul style="list-style-type: none"> • Empirical Formula Notebook Pages • Empirical Formula Post-lab
Oct 30	Alum Synthesis *	<ul style="list-style-type: none"> • VSEPR Worksheet • Alum Synthesis Pre-lab Quiz
Nov 6	Acid/Base Titration *	<ul style="list-style-type: none"> • Alum Notebook Pages • Titration Pre-lab Quiz
Nov 13	Calorimetry	<ul style="list-style-type: none"> • Alum Formal Report • Titration Notebook Pages • Titration Post-lab • Calorimetry Pre-lab Quiz
Nov 27	Check-out	<ul style="list-style-type: none"> • Calorimetry Notebook Pages • Calorimetry Post-lab

*individual assignments

Computer Requirement:

Each CSU student is required to have ready access throughout the semester to a notebook computer that meets faculty-approved hardware and software requirements for the student's academic program. Students will sign a statement attesting to such access. For further information on CSU's Official Notebook Computer Policy, please go to <http://www.clayton.edu/hub/itpchoice/notebookcomputerpolicy>.

Computer Skill Prerequisites: Able to use your computer's (Windows or MacOS) operating system, able to send and receive e-mail, able to attach and retrieve attached files via email, able to use a Web browser, able to use Microsoft Word™ word processing, able to use Excel™ spread sheet system, including graphing.

In-class Use of Student Notebook Computers: Computers will be required to access course materials and to communicate with your instructor. Student notebook computers will only be used in the lab room once in the semester (computer lab). It is advised that if you bring your computer to lab, that you use the utmost care with your computer and other electronic devices as we are working with chemicals and will not be held responsible for any damage to these devices.

Course Webpages:

D2L: Information of interest to students will be posted on the course webpage in GeorgieVIEW Desire2Learn (D2L). You can gain access to Desire2Learn, by signing on to the SWAN portal and selecting: "D2L" on the top right side. If you experience any difficulties in Desire2Learn, please email or call The HUB at TheHub@mail.clayton.edu or (678) 466-HELP. You will need to provide the date and time of the problem, your SWAN username, the name of the course that you are attempting to access, and your instructor's name.

Program Learning Outcomes:

General education outcomes: The Clayton State University Core Curriculum outcomes (see Area D) are located in the Graduation Requirements section of the [Academic Catalog and Student Handbook](#).

Biology outcomes: CHEM 1211L is a required course in the B.S. degree program in Biology. CHEM 1211L supports outcomes 2, 3, 4 and 5 of the biology major. (<http://www.clayton.edu/science/Outcomes>)

Chemistry outcomes: CHEM 1211L is a required course in the B.S. degree program in Chemistry. CHEM 1211L supports outcomes 1-6 of the chemistry major. (http://www.clayton.edu/chemistry-physics/program_outcomes)

Course Policies:

General Policy: Students must abide by policies in the Clayton State University Student Handbook, and the [Basic Undergraduate Student Responsibilities](#). The Student Handbook is part of the [Academic Catalog and Student Handbook](#).

Grades will not be communicated by phone or email – graded materials can only be picked up by the individual to whom they belong.

University Attendance Policy: Students are expected to attend and participate in every class meeting. Instructors establish specific policies relating to absences in their courses and communicate these policies to the students through the course syllabi. Individual instructors, based upon the nature of the course, determine what effect excused and unexcused absences have in determining grades and upon students' ability to remain enrolled in their courses. The university reserves the right to determine that excessive absences, whether justified or not, are sufficient cause for institutional withdrawals or failing grades.

Course Attendance Policy: Attendance is required for all lab periods. To receive credit for laboratory exercises and reports, you must complete all of the laboratory experiments or make specific arrangements with the instructor.

Missed Work: Absence on the day of a lab will result in a grade of zero. If you expect to miss a lab, you must notify the instructor in advance. There are multiple sections of 1211L this semester. If you anticipate missing your assigned lab period, you may be able to attend another section at the discretion of your instructor and availability of space in the proposed lab section. Your ability to make up any missed lab is up to the discretion of the instructor for your class and is not guaranteed. You must physically complete the laboratory experiment to get credit. You may not simply obtain the data from another student. Anyone doing this will receive a zero on the laboratory exercise as this is cheating.

Tardiness: Lab will start and end promptly at the assigned times. It is expected that you will be present and ready to start on time. Each laboratory period will begin with a short introduction lecture where important concepts and laboratory techniques are discussed. If you miss this introduction, it is your responsibility to obtain the necessary information. Excessive tardiness may result in your removal from the laboratory.

Late Work: Laboratory notebook pages and post-lab assignments are due at the beginning of class. No late notebook pages will be accepted. Post-lab assignments and the formal report are due at the start of the class period on the date indicated. After 2:05pm on the date due, the reports are considered late and an immediate 10 percentage points will be deducted from the assignment grade. For each 24 hour period after that, an additional 10% will be deducted. I will not accept any post-lab assignments or reports more than one week late.

Academic Dishonesty: I take academic integrity very seriously. Any type of activity that is considered dishonest by reasonable standards may constitute academic misconduct. The most common forms of academic misconduct are cheating and plagiarism. All instances of academic dishonesty will result in a grade of zero for the work involved, at a minimum, and can result in expulsion from the institution. All instances of academic dishonesty will be reported to the [Office of Community Standards](#). Judicial procedures are described in the section of the [Academic Catalog and Student Handbook](#) titled, Procedures for Adjudicating Alleged Academic Conduct Infractions.

Plagiarism Detection Software.

Students agree that by taking this course all required papers may be subject to submission for textual similarity review to Turnitin.com for the detection of plagiarism. All submitted papers will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. You should submit your papers in such a way that no identifying information about you is included.

Risk: Participation in laboratory activities involves an inherent risk of injury. In the event of injury, the student should immediately inform the instructor who will contact the Campus Public Safety Officer. The officer will file an accident report and administer first aid or contact appropriate medical help.

Disruption of the Learning Environment: Behavior which disrupts the teaching-learning process during class activities will not be tolerated. While a variety of behaviors can be disruptive in a classroom setting, more serious examples include belligerent, abusive, profane, and/or threatening behavior. A student who fails to respond to reasonable faculty direction regarding classroom behavior and/or behavior while participating in classroom activities may be dismissed from class. A student who is dismissed is entitled to due process and will be afforded such rights as soon as possible following dismissal. If found in violation, a student may be administratively withdrawn and may receive a grade of WF.

More detailed descriptions of examples of disruptive behavior are provided in the Code of

Conduct and Disciplinary Procedures sections of the Clayton State University [Academic Catalog and Student Handbook](#).

Laboratory Policies:

1. Arrive to lab on time and stay until the exercise is complete.
2. No children or visitors are allowed in the laboratory
3. Turn off cell phones, pagers, music players, and other personal electronic devices. Failure to do so will result in the student:
 - a. having points deducted from his/her grade
 - b. being asked to leave the room and being reported for disruptive behavior.
4. No eating, smoking or drinking in the laboratory. No food is allowed in the laboratory. This includes drink bottles.
5. Be aware of all laboratory policies and procedures and abide by the safety rules. Failure to do so may result in your removal from the laboratory.
6. Wear your safety glasses at all times in the laboratory. The instructor may deduct points from lab reports for failure to wear safety glasses.
7. Keep a clean and tidy work area. Report any chemical spills to the instructor.
8. Clothing above knee level and open-toed shoes are not to be worn in the lab. Students will not be allowed in the lab and will lose all points for lab that day for not wearing the appropriate clothing or shoes to the lab.

Weapons on Campus: Clayton State University is committed to providing a safe environment for our students, faculty, staff, and visitors. Information on laws and policies regulating weapons on campus are available at <http://www.clayton.edu/public-safety/Safety-Security/Weapons>

Group Work: There may be situations where we work in small groups in the laboratory. It is each individual's responsibility to insure that everyone in the group participates in all aspects of the experiment. You are responsible for cleaning all equipment used and keeping the lab neat and clean. Points may be deducted for failure to wear safety glasses while physically in the laboratory, for messy labs, late reports, horseplay in lab, etc., at the discretion of the instructor.

Last update: July 25, 2017
