

# **Chemistry 1215 Section 212**

For additional course information, including prerequisites, corequisites, and course fees, please refer to the Catalog: https://catalog.uvu.edu/

Semester: SpringYear: 2025Course Prefix: CHEMCourse: 1215Course Title: Principles of Chemistry ICredits: 1

Laboratory

### Course Description

Primarily for students in the physical and biological sciences and engineering. Introduces laboratory safety and chemical waste disposal practices. Teaches techniques of using standard laboratory equipment. Shows how to record laboratory data and prepare laboratory reports. Experiments follow topics in CHEM 1210.

Course Lab fee of \$26 applies.

$\boldsymbol{\alpha}$	A • T .
OUTCO	Attributes

☐ General Education Requirements
☐ Global/Intercultural Graduation Requirements
☐ Writing Enriched Graduation Requirements
☐ Discipline Core Requirements in Program
☐ Elective Core Requirements in Program

This course has the following attributes:

☐ Open Elective

Other: Click here to enter text.

# **Instructor Information**

Instructor Name: Wylie, Ezra Benjamin

## **Student Learning Outcomes**

Upon successful completion of this course, students should be able to:

- Practice proper chemical safety procedures within the laboratory.
- Measure chemicals properly, safely and accurately, with proper application of significant figures.
- Safely operate equipment and instruments within the laboratory.
- Use laboratory skills learned to conduct experiments covering the nature of matter, chemical processes, and chemical stoichiometry.
- Prepare reports interpreting the results of these experiments using standard formats.

### Course Materials and Texts

1. Computer

- 2. Internet Access
- 3. Microsoft Office
- 4. Calculator
- 5. Composition notebook and pen
- 6. Safety goggles
- 7. USB storage device

# Course Requirements

### Course Assignments, Assessments, and Grading Policy

Assignments	Weight (%)
Pre-lab technical quizzes	15
Pre-lab concept quizzes	15
Pre-lab notebook preparation	10
Post-lab notebook completion	10
Post-lab formal report	30
Post-lab quizzes	10
Final Project and Exam	10

### **Required or Recommended Reading Assignments**

- Lab manuals (provided)
- Pre-lab tutorial videos

General Description of the Subject Matter of Each Lecture or Discussion

Experiment	Modality
Module: Course Orientation.	Online
Module: Essential Chemistry Practices	Online
Laboratory Safety	Face-to-Face
I. Separation and Density	Face-to-Face
II. Chemical Formula	Face-to-Face
III. Alum Synthesis	Face-to-Face
IV. Alum Hydrate Analysis	Face-to-Face
V. Solution Preparation	Face-to-Face
VI. Enthalpy	Face-to-Face
VII. Beer's Law	Face-to-Face
VIII. Flame Test and Atomic Spectra	Face-to-Face
IX. Magnetic Properties	Face-to-Face
X. VSEPR Molecular Model	Face-to-Face
Final Project and Exam	Online/Face-to-Face

The Final grade percentage is rounded to the nearest tenth and assigned the corresponding letter grade:

A = 93.0 - 100

A = 90.0 - 92.9

B+ = 87.0 - 89.9

B = 83.0 - 86.9

B - = 80.0 - 82.9

C+ = 77.0 - 79.9

C = 73.0 - 76.9

C - = 70.0 - 72.9

D+ = 67.0 - 69.9

D = 63.0 - 66.9

D - = 60.0 - 62.9

F = 0-59.9

## Required Course Syllabus Statements

#### **Generative AI**

For this course, any content-generating AI software is not permitted in graded work and will be treated as plagiarism.

#### **Using Remote Testing Software**

 $\boxtimes$  This course does not use remote testing software.

☐ This course uses remote testing software. Remote test-takers may choose their remote testing locations. Please note, however, that the testing software used for this may conduct a brief scan of remote test-takers' immediate surroundings, may require use of a webcam while taking an exam, may

require the microphone be on while taking an exam, or may require other practices to confirm academic honesty. Test-takers therefore shall have no expectation of privacy in their test-taking location during, or immediately preceding, remote testing. If a student strongly objects to using test-taking software, the student should contact the instructor at the beginning of the semester to determine whether alternative testing arrangements are feasible. Alternatives are not guaranteed.

### Required University Syllabus Statements

#### Accommodations/Students with Disabilities

Students needing accommodations due to a permanent or temporary disability, pregnancy or pregnancy-related conditions may contact UVU <u>Accessibility Services</u> at <u>accessibilityservices@uvu.edu</u> or 801-863-8747.

Accessibility Services is located on the Orem Campus in BA 110.

Deaf/Hard of Hearing students requesting ASL interpreters or transcribers can contact Accessibility Services to set up accommodations. Deaf/Hard of Hearing services can be contacted at DHHservices@uvu.edu

DHH is located on the Orem Campus in BA 112.

#### **Academic Integrity**

At Utah Valley University, faculty and students operate in an atmosphere of mutual trust. Maintaining an atmosphere of academic integrity allows for free exchange of ideas and enables all members of the community to achieve their highest potential. Our goal is to foster an intellectual atmosphere that produces scholars of integrity and imaginative thought. In all academic work, the ideas and contributions of others must be appropriately acknowledged and UVU students are expected to produce their own original academic work.

Faculty and students share the responsibility of ensuring the honesty and fairness of the intellectual environment at UVU. Students have a responsibility to promote academic integrity at the university by not participating in or facilitating others' participation in any act of academic dishonesty. As members of the academic community, students must become familiar with their <u>rights and responsibilities</u>. In each course, they are responsible for knowing the requirements and restrictions regarding research and writing, assessments, collaborative work, the use of study aids, the appropriateness of assistance, and other issues. Likewise, instructors are responsible to clearly state expectations and model best practices.

Further information on what constitutes academic dishonesty is detailed in <u>UVU Policy 541: Student Code of Conduct.</u>

#### **Equity and Title IX**

Utah Valley University does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation, gender identity, gender expression, age (40 and over), disability, veteran status, pregnancy, childbirth, or pregnancy-related conditions, citizenship, genetic information, or other basis protected by applicable law, including Title IX and 34 C.F.R. Part 106, in employment, treatment, admission, access to educational programs and activities, or other University benefits or services. Inquiries about nondiscrimination at UVU may be directed to the U.S. Department of Education's Office for Civil Rights or UVU's Title IX Coordinator at 801-863-7999 – <u>TitleIX@uvu.edu</u> – 800 W University Pkwy, Orem, 84058, Suite BA 203.

#### **Religious Accommodation**

UVU values and acknowledges the array of worldviews, faiths, and religions represented in our student body, and as such provides supportive accommodations for students. Religious belief or conscience broadly includes religious, non-religious, theistic, or non-theistic moral or ethical beliefs as well as participation in religious holidays, observances, or activities. Accommodations may include scheduling or due-date modifications or make-up assignments for missed class work.

To seek a religious accommodation, a student must provide written notice to the instructor and the Director of Accessibility Services at <a href="mailto:accessibilityservices@uvu.edu">accessibilityservices@uvu.edu</a>. If the accommodation relates to a scheduling conflict, the notice should include the date, time, and brief description of the difficulty posed by the conflict. Such requests should be made as soon as the student is aware of the prospective scheduling conflict.

While religious expression is welcome throughout campus, UVU also has a <u>specially dedicated</u> space for meditation, prayer, reflection, or other forms of religious expression.