



## Marshall University Syllabus

### College of Science

### Chemistry

#### Course

CHM 212, Principles of Chemistry II, Section 201

#### Course Description

A continuation of CHM 211 with emphasis on the inorganic chemistry of the representative elements and transition metals.

#### Credits

3.00 (undergraduate)

#### Prerequisites

Grade of C or better in CHM 211

#### Term/Year

Spring 2024

#### Class Meeting Days/Times and Locations

MWF 9:00-9:50 AM *lecture in S473*

TR 5:00-6:15 PM *optional supplemental instruction session in S 460*

#### Academic Calendar

For beginning, ending, and add/drop dates, see the [Marshall University Academic Calendar](https://www.marshall.edu/academic-calendar/) (URL: <https://www.marshall.edu/academic-calendar/> ).

#### Instructor

Dr. Laura McCunn-Jordan

*\*Please call me Dr. McCunn*

#### Contact Information

- Office: S 466 Masks may be required during in-person office visits.
- Office Hours:
  - MWF 9:55 – 10:55 AM (in person or virtual in S 466)
  - T 9 - 11 AM (virtual in Teams)
    - For virtual office hour visits, schedule at least one hour in advance via

the Bookings link at Blackboard:

[https://outlook.office365.com/owa/calendar/DrMcCunnOfficeHours@livemarsmall.onmicrosoft.com/bookings/s/IDzRreI38EmTQ6x4PU\\_aKg2](https://outlook.office365.com/owa/calendar/DrMcCunnOfficeHours@livemarsmall.onmicrosoft.com/bookings/s/IDzRreI38EmTQ6x4PU_aKg2) )

- Other times by appointment (email the instructor to request)
- ***If you can't meet during those times or if you need help on short notice, email or call the instructor to request an appointment. Simple homework questions can be answered via email.***
- Office Phone: 304-696-2319
- Marshall Email: [mccunn@marshall.edu](mailto:mccunn@marshall.edu)

## Supplemental Instruction Sessions

SI Leader: Kayla Tyler

This section of CHM 212 offers Supplemental Instruction (SI). Supplemental Instruction sessions take place every Tuesday and Thursday throughout the semester 5-6:15 p.m. in the Chemistry Library (S 460). SI sessions are voluntary and facilitated by a trained peer leader who will help you review the course material and show you how to integrate "what to learn" with "how to learn." You will receive a separate handout inviting you to attend SI sessions from the SI Leader during the first week of the semester.

## Health and Safety Information

All members of the Marshall University community are expected to always observe health and safety protocols. This includes general health and safety protocols as well as specific protocols that might emerge in response to community and campus health conditions.

## Required and/or Recommended Texts and Materials

### Required Texts and Materials

- **Chemistry 2e** – OpenStax <https://openstax.org/details/books/chemistry>
- Achieve Essentials for OpenStax General Chemistry (link at Blackboard)
- Access to MU Online and a Marshall email account
- Non-programmable calculator

## Course Student Learning Outcomes

The table below shows the following relationships: How each student learning outcome will be practiced and assessed in the course.

<b>Course Student Learning Outcomes</b>	<b>How students will practice each outcome in this course</b>	<b>How student achievement of each outcome will be assessed in this course</b>

Students will identify and explain trends in physical and chemical properties.	- lectures - textbook readings - Achieve exercises	- exams - Achieve exercises
Students will understand how the energy of a system governs the rate and extent of chemical reactions.	- lectures - textbook readings - Achieve exercises	- exams - Achieve exercises
Students will understand how the relative amounts of chemical species govern the rate and extent of chemical reactions.	- lectures - textbook readings - Achieve exercises	- exams - Achieve exercises
Students will apply mathematical techniques to formulate and solve problems in chemistry.	- lectures - textbook readings - Achieve exercises	- exams - Achieve exercises

## Course Requirements/Due Dates

Due dates for Achieve exercises will be announced in class and posted on Blackboard and the Achieve website. Exam dates are listed in the schedule below.

## Grading Policy

The grade for this class will be determined from homework, four in-class exams and a cumulative, final exam. The homework portion of the grade will be determined from Achieve exercises. The material for the exams will come from lectures, Achieve exercises and the reading assignments.

Achieve homework*	150 points	<i>*each student's lowest homework will be dropped</i>
In-class exams (150 each)	600 points	
Final exam	250 points	
1000 total		

Grading Scale: A = 900-1000; B = 800-899; C = 700-799;  
D = 600-699; F < 600 points

## Attendance/Participation Policy

Attendance for this class is expected but not mandatory. No portion of your grade will be determined by attendance but absences from exams can be made up only if the absence falls within one of the categories outlined in the undergraduate catalog for excused absences, or if prior arrangements are made. To make up an exam, you will need to follow the process for securing an excused absence through Student Affairs. **Prompt notification (no later than next class meeting following the excused absence) that you will be submitting documentation for an excused absence must be provided to the instructor.** Students who

need to isolate or quarantine due to COVID-19 or other illness should email the instructor as soon as possible for accommodations.

## **University Policies**

By enrolling in this course, you agree to the University Policies. Please read the full text of each policy (listed below) by going to [MU Academic Affairs: University Policies](https://www.marshall.edu/academic-affairs/policies/). (URL: <https://www.marshall.edu/academic-affairs/policies/> )

- Academic Dishonesty Policy
- Academic Dismissal Policy
- Academic Forgiveness Policy
- Academic Probation and Suspension Policy
- Affirmative Action Policy
- Dead Week Policy
- D/F Repeat Rule
- Excused Absence Policy for Undergraduates
- Inclement Weather Policy
- Sexual Harassment Policy
- Students with Disabilities (Policies and Procedures)
- University Computing Services Acceptable Use Policy

## **Other Policies**

1. Please silence cell phones during class. The instructor reserves the right to answer any ringing phones during lecture or dismiss the offending student.
2. Use of cell phones and other electronic/communication devices during exams and exams will be considered as cheating. The only materials permitted during an exam are a non-programmable calculator, pen/pencil, and those provided by the instructor.
3. Class announcements may occasionally be made via email to your university email address. Please check it on a regular basis.
4. Posting any course material, including assignments, notes, exam or homework questions, and solutions, to any website or database is a copyright violation and will be reported as an act of academic dishonesty policy. Accessing such information may also be reported as academic dishonesty.
5. The use of generative AI for any assignment in this course is prohibited.

## Course Schedule

Week of	Chapter	Topic
Jan. 8	10	Liquids and Solids
Jan. 15	10, 11	<b>No class on 1/15;</b> Solutions, Colligative Properties
Jan. 22	11, 12	Kinetics
Jan. 29	12	Kinetics, <b>Exam 1 (Ch. 10-12) on Feb. 2</b>
Feb. 5	13	Chemical Equilibrium
Feb. 12	13, 14	Le Châtelier's Principle, Acids & Bases
Feb. 19	14	Acid-Base Equilibrium, <b>Exam 2 (Ch. 13-14.3) on Feb. 23</b>
Feb. 26	14, 15	Buffers, Precipitation Equilibria
Mar. 4	15, 16	Other Equilibria, Thermochemistry
Mar. 11	16	Thermochemistry, <b>Exam 3 (Ch. 14.4-16) on Mar. 15</b>
Mar 18	Spring Break	
Mar. 25	17	Electrochemistry
Apr. 1	17, 19	Electrochemistry, Transition Metals
Apr. 8	19	Coordination Chemistry, <b>Exam 4 (Ch. 17, 19) on Apr. 12</b>
<i>Apr. 12 is last day to withdraw from a full semester course</i>		
Apr. 15	21	Nuclear Chemistry
<b>SATURDAY Apr. 20 at 9:00 AM FINAL EXAM Location TBA</b>		