



# Marshall University Syllabus

## College of Science

### Chemistry

#### Course

CHM 211, Principles of Chemistry I, Section 102

#### Course Description

A study of the properties of materials and their interactions with each other. Development of theories and applications of the principles of energetics, dynamics and structure. Intended primarily for science majors and pre-professional students.

#### Credits

3.00 (undergraduate)

#### Prerequisites

Math ACT of 23 or better, or 'C' or better in CHM 111, or pass placement exam

#### Term/Year

Fall 2024

#### Class Meeting Days/Times

MWF 11:00-11:50 AM      lecture

MW 4:00-5:15 PM              optional Supplemental Instruction (see Blackboard for more info)

#### Location

Science Building 473

#### 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 Instructor may require masks during in-person office visits.
- Office Hours:              Mondays 8:45-9:45 AM (virtually in Teams)

Wednesdays 8:45-9:45 AM. virtually in Teams  
Wednesdays 1:00-3:00 PM, virtually in Teams  
Fridays 8:45-9:45 AM. in person or virtually in Teams

For virtual office hours, schedule an office hour visit at least 1 hour in advance via Microsoft Bookings:

<https://outlook.office365.com/owa/calendar/DrMcCunnOfficeHours@livemars.hall.onmicrosoft.com/bookings/>

If you can't meet during regular office hours or if you need help on short notice, email or call the instructor to request an appointment.

- Office Phone: 304-696-2319
- Marshall Email: [mccunn@marshall.edu](mailto:mccunn@marshall.edu)
- Email is the preferred method of communication and responses can be expected within one business day.

## **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.

### ***Campus Carry Policy***

University Policy, UPGA-12 (Campus Carry Policy) derives its authority from West Virginia State law, including the Campus Self-defense Act (W. Va. Code § 18B-4-5b). It pertains to the exercise of Concealed Carry on Marshall University's campus, except in designated areas, by individuals with a valid permit to Conceal Carry.

Individuals who choose to Conceal Carry are responsible for knowing and understanding all applicable federal, state, and local laws and Marshall University Board of Governors Rules, University Policies, and Administrative Procedures. University Policy, UPGA-12 applies to areas of campus and buildings that are directly under the possession or control of Marshall University.

Concealed Handguns are not observable to others and must be holstered and concealed on the body of the permit holder or in a personal carrier, such as a backpack, purse, or other bag that remains under the exclusive and uninterrupted control of the permit holder. This includes wearing the personal carrier with a strap, carrying or holding the personal carrier, or setting the personal carrier next to or within your immediate reach at all times. If your participation in class activities impedes your ability to maintain constant control of your Handgun, please make alternate arrangements prior to coming to class.

### ***Faculty Office***

NOTICE: University Policy, UPGA-12 (Campus Carry Policy) defines Sole Occupancy Offices as areas that may restrict Concealed Carry. Please be aware that my office

is a Sole Occupancy Office and this statement serves as notice that ***concealed weapons or handguns are not permitted in my office***. If you plan to attend a meeting in my office or to drop by my office, secure your weapon or handgun appropriately before you arrive.

## 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
- Access to MU Online and a Marshall email account
- Non-programmable calculator without communication capabilities

### Course Student Learning Outcomes

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

| Course Student Learning Outcomes   | How students will practice each outcome in this course | How student achievement of each outcome will be assessed in this course |
|--|--|---|
| Students will identify and explain trends in physical and chemical properties.   | -lectures<br>-textbook readings<br>-Achieve exercises  | -exams<br>-Achieve exercises  |
| Students will learn vocabulary, how to classify and name chemical materials and how to develop familiarity with general chemical trends and principles                       | -lectures<br>-textbook readings<br>-Achieve exercises  | -exams<br>-Achieve exercises  |
| Students will learn how to apply general chemical knowledge to solve basic chemistry problems and to implement these logical strategies to solve complex, multistep problems | -lectures<br>-textbook readings<br>-Achieve exercises  | -exams<br>-Achieve exercises  |
| Students will apply mathematical techniques to formulate and solve problems in chemistry.  | -lectures<br>-textbook readings<br>-Achieve exercises  | -exams<br>-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        |  |
| <u>Final exam</u>         | <u>250 points</u> |  |
|                           | 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 missed exams can only be made up if the absence falls within one of the categories outlined in the undergraduate catalog for excused absences. COVID-19 related absences will be treated as excused. To make-up an exam or to extend a homework deadline, you will need to follow the process for securing an excused absence through Student Affairs. Prompt notification (no later than next class meeting) that you will be submitting documentation for an excused absence must be provided to the instructor. Makeup exams for unexcused absences will be considered if arrangements are made *prior to the exam*. If you have an excused absence, email Dr. McCunn to request a lecture recording. For unexcused absences, you may request up to 2 lecture recordings during the semester.

## Generative Artificial Intelligence (AI) Policy for Use in the this Course

- Generative AI is fully prohibited in the course.

## 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
- Pre-Finals Week Policy
- D/F Repeat Rule
- Excused Absence Policy for Undergraduates
- Inclement Weather Policy
- Sexual Harassment Policy- Title IX prohibits the harassment of students based on sex, which includes pregnancy, childbirth, and related conditions. This includes that students will not be penalized for taking medically necessary leave related to pregnancy, childbirth, or related conditions. Marshall's Title IX Office may be contacted at [TitleIX@marshall.edu](mailto:TitleIX@marshall.edu)
- Students with Disabilities (Policies and Procedures)
- University Computing Services Acceptable Use Policy

## **Other Policies**

1. Please silence cell phone ringers during class. The instructor reserves the right to answer any ringing cell phones during lecture or dismiss the offending student from class.
2. Use of cell phones / PDAs / MP3 players / Apple watches and similar electronic 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, lecture recordings, 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.

## Course Schedule

| Week of  | Chapter | Topic   |
|--|---------|---|
| Aug. 19  | 1       | Matter and measurement  |
| Aug. 26  | 2       | Atoms, molecules, and ions  |
| Sept. 2  | 3       | <b>No class on Sept. 2.</b> Moles, formulae, and concentration                        |
| Sept. 9  | 3       | Concentration, <b>Exam 1 (Chapters 1-3) on 9/13</b>                                   |
| Sept. 16   | 4       | Stoichiometry   |
| Sept. 23   | 4, 5.1  | Stoichiometry; Thermochemistry  |
| Sept. 30   | 5.1-5.3 | Thermochemistry   |
| Oct. 7   | 5.3     | <b>Exam 2 (Chapters 4-5.2) on 10/7;</b> Thermochemistry<br><b>No class on Oct. 11</b> |
| Oct. 14  | 6       | Electronic structure of the atom  |
| Oct. 21  | 6, 7    | Periodic trends; Bonding  |
| Oct. 28  | 7       | <b>Exam 3 (Chapters 5.3-6) on 10/30,</b> Molecular structure                          |
| Nov. 4   | 7, 8    | Molecular geometry; Covalent Bonding  |
| Nov. 11  | 8       | Covalent bonding  |
| Nov. 18  | 9.1-9.2 | Gases; <b>Exam 4 (Chapters 7-9.2) on 11/22</b>  |
| <i>Nov. 22: Last day to withdraw from a full semester course</i> |         |   |
| Nov. 25  |         | <i>Thanksgiving Break—no class</i>  |
| Dec. 2   | 9.3-9.6 | Gases; Review   |
| <b>Dec. 11, Wednesday at 8:00 AM FINAL EXAM Location TBA</b>     |         |   |