

# Chemistry 212 – Principles of Chemistry I

Fall 2023

Instructor: Dr. M.A. Engen    Office: PA 346    Phone: 457-5872

Email: [mengen@winona.edu](mailto:mengen@winona.edu)

Office Hours: In-person hours posted or Zoom meetings by appointment.

Home Page: <http://course1.winona.edu/mengen/>

## Course Description: Principles of Chemistry I

An in-depth study of the basic principles of chemistry including nature of matter, stoichiometry, thermochemistry, atomic structure, chemical bonding, gases and solutions. Laboratory work includes basic chemical analysis and techniques related to the topics covered.

<u>Lecture:</u>	212	MWF	11:00 - 11:50	PA 329
<u>Labs:</u>	212-1	W	12:00 - 2:50	SL 374
	212-2	H	8:00 - 10:50	SL 374
	212-3	H	2:00 - 4:50	SL 374

Texts Required:            “CHEMISTRY – A Molecular Approach”, 6<sup>th</sup> Ed., Nivaldo J. Tro, Pearson publishing. (E-Book billed upon registration)

## Course Details and Requirements:

In order to do well or pass the course, the student is expected to attend and participate in the lecture-discussion periods, complete and turn in the assigned laboratory studies, read the assigned chapters, work assigned text and online problems, and pass quizzes and exams. **No make-up exams, quizzes, or homework will be given without prior approval or for “official excused absence” reasons.** Read “Academic Integrity Policy” which can be found linked on 212 webpage. Academic integrity is expected and will be strictly enforced. Additionally, We as faculty members in Winona State’s Chemistry department, recognizing the importance of role models in our students’ education, are going to make a concerted effort to add short stories about the scientists behind the chemistry discussed, particularly when these scientists are members of underrepresented group.

### Guaranteed Grade Assignment Scale

88 %	A
76 %	B
64 %	C
52 %	D

### Marking Distribution

Lab	20 %	
Homework	15 %	
Quizzes	10 %	
Exams (4)(15% each)	45 %	(Lowest Exam Score is Dropped)
Final Exam	10 %	(Cumulative)

## Laboratory

- All laboratory information is on the class webpage.
- Written **group lab reports** will be scored on a 50-point basis. Late reports will lose 10 points per day late.
- All other lab reports will be worth 25 points each and are typically turned in at the end of lab.
- Details for lab report format and scoring can be found on the laboratory webpage. See example lab report for further clarification of format expectations.
- Your laboratory instructor will provide you with additional detailed instruction as to what will be expected.

**Safety Goggles are Mandatory in the Laboratory!**

## Homework

Completion of homework assignments will be critical to your success in this class. Homework will be administered through the **Pearson Mastering Chemistry** website. It is important to learn the intricacies of the HWK program and stay up to date with assignments. HWK assignments count for 15% of the overall points. You will receive the full 15% for completion of 50% or more of the ***total accumulated points*** available. For a completion rate of less than 50%, your score in the HWK category will be based on your actual completion percentage. (Example: 44% HWK completion would give you 6.6/15 in that category) Completion of 75% or greater will earn 2% point of extra credit, therefore a score of 17/15 is possible.

## Quizzes

There will be a quiz most Fridays. Quizzes will count toward 10% of your overall score. Quizzes may be in-person or online. Online quizzes will be administered through the **Mastering Chemistry** website.

## Exams

Four semester exams and a final exam will be given. The lowest of the four semester exams will be dropped. Exams will be on paper and in person during scheduled class times. An approximate date for each exam is listed in the schedule. The final is cumulative. Examples exams are linked through the website. **Exams account for 55% of your overall grade.** The best way to prepare for the exams is to stay current on the homework assignments. There is a strong correlation between the amount of homework completed and exam scores, so **DO MORE HOMEWORK!**

**Syllabus may be updated as the semester progresses.**