

## Chemistry 212

### Spring 2023

**Text:** *Chemistry*, 2<sup>nd</sup> Edition by Flowers, Theopold, Langley, and Robinson and a subscription to *Achieve* online homework by Macmillan. Non-programmable calculator.

**Handouts:** All available on-line @ <http://science.marshall.edu/castella/C212.html>

Lecture notes for all chapters	This syllabus and learning objectives
Study suggestions	
A set of old tests & answer keys	An old final exam

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**Office hours:** Monday and Wednesday 2:00 p.m. – 3:50 p.m., Science 408 (my office), S 405, S455 (Chemistry tutoring center), or virtually.

I should also be available most Tuesday and Thursday mornings from 11:00 to noon.

If you cannot come by during scheduled office hours or if you have questions at other times, please feel free to drop by my office. My schedule is fluid and so scheduling a time is frequently the easiest way to see me. To do this, just see me right before or after class or drop me an email. *Many students believe that they bother instructors when they ask questions, but helping you learn is the reason why we are here. If you have questions, please ask them.*

If you have questions that you believe can be answered by email and would like to use that method, please feel free to send them to me. I check my email regularly during the day.

<u>Week</u>	<u>Chapter</u>	<u>Week</u>	<u>Chapter</u>
Jan. 9 – 13	10	Feb. 27 – Mar. 3	15
18 – 20	11	Mar. 6 – 10	16
23 – 27	12	13 – 17	16
Jan. 30 – Feb. 3	12-13 (Test 1)	20 – 24	16-17 (Test 3)
Feb. 6 – 10	13	27 – 30	19
13 – 17	13-14	Apr. 3 – 7	19 (Test 4)
20 – 24	14 (Test 2)	10 – 14	21
		17 – 21	
Apr 22 (Saturday) 9:00 – 11:00 a.m.			Final Exam

**Course Description:** A continuation of CHM 211 with emphasis on the inorganic chemistry of the representative elements and transition metals. 3 lec. (Prerequisite: grade of C or better in CHM 211).

<b>Learning objectives</b>	<b>Objective will be taught through...</b>	<b>Objective will be assessed by...</b>
Students will identify and explain trends in physical and chemical properties.	- Lectures - Achieve assignments - Textbook and lecture notes	- Exams - Achieve assignments
Students will understand how the energy of a system governs the rate and extent of chemical reactions.	- Lectures - Achieve assignments - Textbook and lecture notes	- Exams - Achieve assignments
Students will understand how the relative amounts of chemical species govern the rate and extent of chemical reactions.	- Lectures - Achieve assignments - Textbook and lecture notes	- Exams - Achieve assignments
Students will apply mathematical techniques to formulate and solve problems in chemistry.	- Lectures - Achieve assignments - Textbook and lecture notes	- Exams - Achieve assignments

### **Attendance**

Attendance for this course is optional, but strongly encouraged. With nearly all the material for this course available on the internet, there will be a temptation to miss class more often than if you needed to come to obtain the lecture notes, homework assignments, and other materials. There is a strong correlation between attendance and success in chemistry courses. While good study habits are the most important determiner of success, students who regularly attend class are more likely to keep up with assignments than those who miss frequently.

### **Grading**

The dates for tests provided on the first page are only approximate. Tests will be given on Chapters 1 - 3, 4 & 5, and 6 & 7.1-7.4, regardless of the dates listed above. Test 4 will cover and 7.5, 8 & possibly part of 9, and will be held on Friday, Nov. 19. Beginning with the second test, up to 20% of the points may review previous material in this course.

Online homework (9 x 10 points)	90 points
Tests (4 x 100 points)	400 points
Final Exam	<u>200 points</u>
	690 points

The scale for tests is A = 70%-100%, B = 55 – 69.9, C = 40 – 54.9, D = 30 – 39.9. Homework will use the scale A = 90%-100%, B = 80 – 89.9, C = 70 – 79.9, D = 60 – 69.9.

The “A” line will be determined by adding together the 6 minimum “A” scores on all of the tests and assignments. The “B,” “C,” and “D” lines will be calculated similarly. The total number of points you score during the semester will be compared with these values.

There are no dropped tests and no make-up tests will be given.

During tests talking to each other and sharing of calculators are forbidden.

Calculators with alphanumeric and/or graphing capabilities are not permitted for tests or the final exam. If you have questions regarding your calculator, I will be glad to look at it. Make sure you do this before the day of a test. Also, you may not use your cell phone as a calculator.

During tests you may not use your own paper or other materials except your pen/pencil and calculator.

### Online Homework

Due dates for the assignments will be found on the [Achieve](#) website. The due date will depend on when a particular chapter is completed in class. At that point, I will update the next assignment's due date.

### Miscellaneous Topics

If a test falls on a day that is cancelled by the university (e.g. a snow day), the test will occur on the next period the class meets.

Please turn off cell phone ringers before class. Failure to do so may result in you being removed from the room, even during a test.

You may not record my lectures without my permission and under no circumstances may they be posted, transferred, or reproduced to any form of media (Internet, print, television, and the like) without my permission.

### 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](#). (URL: <http://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