

ACS Study Guides for the final exam can be purchased from the GMU Bookstore or ACS.

***Effective Spring 2014--A minimum grade of "C" in all chemistry prerequisite courses (includes CHEM 211, CHEM 212, CHEM 213, and CHEM 214) in order to enroll in chemistry courses numbered 300 and higher. No exceptions !!!

Effective Summer 2016---CHEM 211 (4 credits lecture & lab) became CHEM 211 (3 credits lecture) + CHEM 213 (1 credit lab)

CHEM 212 (4 credits lecture & lab) became CHEM 212 (3 credits lecture) + CHEM 214 (1 credit lab).

Lab waivers no longer exist.

CHEM 212	Dr. Gerald L. R. Weatherspoon Planetary Hall, Rm. 303	grobert1@gmu.edu
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REQUIRED BOOK FOR LECTURE COURSE: Chemistry: The Molecular Nature of Matter and Change, 7th edition (2014); Silberberg; McGraw-Hill publishers.

General Remarks: [Cell phones, pagers, iPods, communication devices, etc. should be turned off BEFORE class begins.](#) [Failure to do so will result in your removal from the classroom.](#)

This is the second of a two semester chemistry course for science majors that builds on fundamental principles mastered in the first semester of the course. A passing grade of at least "C" should have been earned in CHEM 211 & CHEM 213 before enrolling in this course. If you register for this course and have not successfully completed the prerequisites, you will be DROPPED from the class. The material covered in the first semester course (lecture and lab) is necessary to pass this course. Therefore, simultaneous enrollment in the courses will not be allowed. A review of CHEM 211 concepts (mathematical operations, trends in the periodic table, laboratory experiments, nomenclature, Lewis Octet Rule, balancing equations, redox reactions) should take place before the first class meeting.

Please feel free to discuss any aspect of the course with me during office hours or during a scheduled appointment. Due to time constraints and duties besides this course, drop-in attempts for office hours and assistance are strongly discouraged. Do not expect to dominate the entire period reserved for office hours and be considerate of others when you do show up for office hours. If you are unable to attend office hours due to time conflicts, make sure you attend posted office hours of your lab instructor or another Graduate Teaching Assistant (GTA). An additional aid provided by the Chemistry Department is the tutoring center (basement level of Planetary Hall), which is open during the week and staffed by students who have been successful in the subject matter. Students enrolled in CHEM 212 are not required to pay additional costs to utilize the resources provided by the tutoring center; this is a cost free aid provided to students enrolled in the General Chemistry courses. Periodically announcements concerning the tutoring center and all General Chem sections will be posted electronically. To maximize your performance in the course requires daily practice and class attendance. Attendance on the first day of class is critical if you intend to get started on the right track (students not present when the roll is called will be dropped from the class--lecture and lab simultaneously). If you honestly do not have the time or inclination to work at chemistry daily and attend ALL of the scheduled classes, DROP NOW and save the tuition.

Positive classroom participation will be considered during tabulation of final grades, with the firm expectation that all aspects of the class will be conducted with civility and respect for differing ideas, perspectives, and traditions. Students should come to class prepared to work problems on the board. Paced learning, rather than last minute cramming, will prove beneficial to your performance in the lecture and laboratory portions of this course. "All-night cram sessions" and doing just enough to hopefully get by are the primary reasons for the high "F" rate in chemistry.

The successful student will make use of the many learning aids available: discussions, study groups and work sessions with fellow students, actively participating in class, working textbook problems, and completing online homework assignments. Keep in mind that lecture is a learning aid used to clarify concepts and does not control how much you learn---you do. Your textbook also lists a very useful study aid that may be accessed via the internet.

Students enrolled in this course must activate their GMU email accounts to receive important University information, including messages related to this class. I will only reply to email received from students using their GMU email accounts.

Departmental seminars are usually held at 4:30 p.m. each Thursday. Speakers and locations will be posted throughout Planetary Hall. Attendance is strongly recommended, especially for chemistry majors. Chemistry and biochemistry majors should also consider joining the local student affiliate chapter of the ACS (GMU Chemistry Club) as well as ACS.

- Grading/Exam Info
- Exam Reviews (refer to information on Blackboard)
- Resources
- Chemistry Links

REFER TO McGraw-Hill's CONNECT WEBSITE FOR UPDATED QUIZ AND HOMEWORK DEADLINES. You must have access to CONNECT in order to complete the homework assignments. Click on the link after logging in to Blackboard .

UNDERGRADUATE ACS REGISTRATION SITE

Return to Chemistry & Biochemistry Department

Homework		Deadlines
LearnSmart		POSTED ON CONNECT & Blackboard
Conceptual		

Textbook: Chemistry: The Molecular Nature of Matter and Change, 7th edition (2014); Silberberg; McGraw-Hill publishers.

"Tentative Lecture Syllabus"

Week #	Text Chapter	Topic
1	13	Solutions and Colloids
2	13	Solutions and Colloids
3	16	Rates of Reaction
4	16	Rates of Reaction
	Exam I	Ch. 13, 16
5	17	Chemical Equilibrium
6	17	Chemical Equilibrium
7	18	Acids and Bases
8	18	Acids and Bases
9	19	Ionic Equilibria in Aqueous Systems
	Exam II	Ch. 17, 18, 19

10	12	Intermolecular Forces: Liquids, Solids, and Phase Changes
11	20	Thermodynamics and Equilibrium
12	21	Electrochemistry
13	21	Electrochemistry
	Exam III	Ch. 12, 20, 21, 23 (TBD)
14	23	Transition Metal Chemistry
15	15	Organic Chemistry
16	24	Nuclear Chemistry
	LAST DAY OF CLASS	
	FINAL EXAM	ACS Comprehensive Exam;

Students must concurrently enroll in CHEM 214. There are no makeup exams in this course. Quizzes will be unannounced; makeup quizzes will not be administered.