

Course Title/Number	<b>Principles of Chemistry II / CHM 212, Section 201</b>
Semester/Year	Spring 2015
Days/Time	10:00-10:50 AM MWF
Location	473 Science Hall
Instructor	Dr. Laura McCunn-Jordan <b>***PLEASE CALL ME DR. MCCUNN</b>
Office	466 Science Hall (research lab: 404 Science Hall)
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E-Mail	<a href="mailto:mccunn@marshall.edu">mccunn@marshall.edu</a>
Office Hours	9:00-9:50 and 1:00-2:00 Monday, Wednesday, Friday; other times by appointment. I welcome drop-in visits, but cannot guarantee availability outside of office hours. Simple questions can be answered via email.
University Policies	By enrolling in this course, you agree to the University Policies listed below. Please read the full text of each policy by going to <a href="http://www.marshall.edu/academic-affairs">www.marshall.edu/academic-affairs</a> and clicking on "Marshall University Policies." Or, you can access the policies directly by going to <a href="http://www.marshall.edu/academic-affairs/policies/">www.marshall.edu/academic-affairs/policies/</a> . Academic Dishonesty/Excused Absence Policy for Undergraduates/Computing Services Acceptable Use/Inclement Weather/Dead Week/Students with Disabilities/Academic Forgiveness/Academic Probation and Suspension/Academic Rights and Responsibilities of Students/Affirmative Action/Sexual Harassment

### Course Description

A continuation of CHM 211 with emphasis on the inorganic chemistry of the representative elements and transition metals. 3.00 credits. Prerequisite: grade of C or better in CHM 211

### Required Texts, Additional Reading, and Other Materials

1. **Chemistry: The Science in Context**, *Third Edition* by Thomas R. Gilbert, Rein V. Kirss, Natalie Foster, and Geoffrey Davies; W. W. Norton & Company, Inc.
2. SmartWork access for the textbook
3. access to MU Online and a Marshall email account
4. non-programmable calculator for quizzes, tests, and exams (it must not have keys for the alphabet)
5. #2 pencil and ink pen for tests/quizzes

<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.	<ul style="list-style-type: none"> <li>• lectures</li> <li>• textbook readings</li> <li>• homework</li> </ul>	<ul style="list-style-type: none"> <li>• tests and quizzes</li> </ul>
Students will understand how the energy of a system governs the rate and extent of chemical reactions.	<ul style="list-style-type: none"> <li>• lectures</li> <li>• textbook readings</li> <li>• homework</li> </ul>	<ul style="list-style-type: none"> <li>• tests and quizzes</li> </ul>
Students will understand how the relative amounts of chemical species govern the rate and extent of reactions.	<ul style="list-style-type: none"> <li>• lectures</li> <li>• textbook readings</li> <li>• homework</li> </ul>	<ul style="list-style-type: none"> <li>• tests and quizzes</li> </ul>
Students will apply mathematical techniques to formulate and solve problems in chemistry.	<ul style="list-style-type: none"> <li>• lectures</li> <li>• textbook readings</li> <li>• homework</li> </ul>	<ul style="list-style-type: none"> <li>• tests and quizzes</li> </ul>

### **Grading Policy**

homework*	250	points
quizzes	50	points
tests (4 during the semester)	500	points
final exam	200	points
	<b>1000</b>	<b>TOTAL POINTS</b>
<p><b>Grading Scale:</b> A: 90-100%, B: 80-89%, C: 70-79%, D: 60-69%, F: 0-59%</p> <p>The percentage of total points earned will be rounded to the nearest whole percentage. The final grading scale may be adjusted in order to lower the threshold for a letter grade. If you believe there has been an error in the grading of your work, please consult Dr. McCunn.</p> <p>*Each student's lowest homework score of the semester will be dropped.</p>		

### **Attendance Policy**

Attendance is highly recommended. In the case that class is cancelled due to inclement weather or an emergency on the day of a scheduled test, the test will be given in the next scheduled class period. If student tardiness becomes a significant distraction during lecture, the instructor reserves the right to refuse admission to tardy students.

### Miscellaneous Policies

Please silence cell phone ringers during class or exams. The instructor reserves the right to answer any ringing cell phones during lecture, or to dismiss the offending student. Use of cell phones / PDAs / MP3 players and similar devices during tests, quizzes, and exams will be considered academic dishonesty. Recording of lectures without the instructor's permission is prohibited. Laptops should not be used during class without permission. The content of this course will adhere closely to the information contained in the textbook. You may use other resources (alternate texts, notes from other professors, etc.). If you find information that contradicts something written in the textbook or said in the lecture, please consult Dr. McCunn. Class announcements may be made occasionally via email to your university email address. Please check it on a regular basis. Lecture notes and handouts will be available in Dr. McCunn's office during office hours or by appointment. They will also be posted at MU Online as time permits.

### Course Schedule

Week of:	Chapter	Topic
1/12	10, 11	Intermolecular Forces, Solutions
1/19	no class on 1/19; 11	Solutions
1/26	14	Thermodynamics
2/2	14; TEST 1 on 2/6	Thermodynamics
2/9	15	Kinetics
2/16	15, 16	Kinetics, Equilibrium
2/23	16	Equilibrium
3/2	TEST 2 on 3/4; 17	Aqueous Equilibrium
3/9	17	Aqueous Equilibrium
3/16	Spring Break	
3/23	18	Transition Metals
	3/27 is last day to withdraw from full-semester courses	
3/30	18; TEST 3 on 4/3	Transition Metals
4/6	19	Electrochemistry
4/13	19, 21	Electrochemistry, Nuclear Chemistry
4/20	21, TEST 4 on 4/24	Nuclear Chemistry
4/27	21; TBA	Nuclear Chemistry, Special Topics
<b>5/2 SATURDAY 10:00 AM FINAL EXAM (location TBA)</b>		