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| Course Title/Number | **Principles of Chemistry II / CHM 212, Section 202** |
| Semester/Year | Spring 2016 |
| Days/Time | 12:00-12:50 PM MWF |
| Location | 465 Science Hall |
| Instructor | Dr. Bin Wang |
| Office | 241L Byrd Biotechnology Science Center |
| Phone | (304) 696-3456 |
| Email | [wangb@marshall.edu](mailto:wangb@marshall.edu) |
| Office Hours | 1:30-4:30 PM Tuesdays & Thursdays (BBSC 241L), or by appointment |
| 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 <http://www.marshall.edu/academic-affairs/policies/>  Academic Dishonesty / Excused Absences / University Computing Services’ Acceptable Use / Inclement Weather / Dead Week / Students with Disabilities / Academic Dismissal / Academic Forgiveness / Academic Probation and Suspension / Affirmative Action / Sexual Harassment |

**Course Description:**

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| 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:**

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| 1. ***Principles of General Chemistry****, Third Edition* by Martin S. Silberberg; McGraw-Hill, 2013 2. ALEKS access 3. Access to MU Online and a Marshall email account 4. Non-programmable calculator 5. #2 pencil for quizzes, tests, and exams |

**Course Outcomes:**

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| **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 * textbook readings * ALEKS exercises | * tests and quizzes * ALEKS exercises |
| Students will understand how the energy of a system governs the rate and extent of chemical reactions. | * lectures * textbook readings * ALEKS exercises | * tests and quizzes * ALEKS exercises |
| Students will understand how the relative amounts of chemical species govern the rate and extent of reactions. | * lectures * textbook readings * ALEKS exercises | * tests and quizzes * ALEKS exercises |
| Students will apply mathematical techniques to formulate and solve problems in chemistry. | * lectures * textbook readings * ALEKS exercises | * tests and quizzes * ALEKS exercises |

**Grading Policies:**

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| ALEKS exercises 20 points  quizzes (4 during the semester) 10 points  tests (4 during the semester) 50 points  final exam 20 points  **100 TOTAL POINTS**  **Grading Scale:** A: 90-100, B: 80-89, C: 70-79, D: 60-69, F: < 60 |

**Attendance Policy:**

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| Attendance for this class is highly recommended. In general, missed quizzes and tests may not be made up except in the case of an excused absence, according to university policy. In the case that class is cancelled due to inclement weather or an emergency on the day of a scheduled quiz/test, the quiz/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:**

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| 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 quizzes, tests, and exams will be considered academic dishonesty. Recording of lectures without the instructor’s permission is prohibited. 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. Wang. Class announcements may occasionally be made via email to your university email address. Please check it on a regular basis. Lecture slides will be posted at MU Online. |

**Tentative Schedule:**

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|  | Monday | Wednesday | Friday |
| Week 1  1/11 - 1/15 | Syllabus, ALEKS, Chapter 12 | Chapter 12 | Chapter 12 |
| Week 2  1/18 - 1/22 | *Martin Luther King, Jr. Holiday* | Chapter 13 | Class canceled |
| Week 3  1/25 - 1/29 | Chapter 13 | Chapter 13 | Chapter 13/16 |
| Week 4  2/1 - 2/5 | Chapter 16 | Chapter 16 | Quiz 1 (Chapters 12, 13, and 16) |
| Week 5  2/8 - 2/12 | Chapter 16  Review Chapters 12, 13, and 16 | TEST 1 (Chapters 12, 13, and 16) | Chapter 16/17 |
| Week 6  2/15 - 2/19 | Chapter 17 | Chapter 17 | Chapter 17 |
| Week 7  2/22 - 2/26 | Chapter 17/18 | Chapter 18 | Chapter 18 |
| Week 8  2/29 - 3/4 | Chapter 18 | Chapter 19 | Quiz 2 (Chapters 16-18) |
| Week 9  3/7 - 3/11 | Chapter 19  Review Chapters 16-18 | TEST 2 (Chapters 16-18) | Chapter 19  Review Chapters 16-18 |
| Week 10  3/14 - 3/18 | Chapter 19/20 | Chapter 20 | Chapter 20 |
| *3/18 is last day to drop an individual course* | | | |
| Week 11  3/21 - 3/25 | *Spring Break* | | |
| Week 12  3/28 - 4/1 | Chapter 21 | Chapter 21 | Quiz 3 (Chapters 19-21) |
| Week 13  4/4 - 4/8 | Chapter 21  Review Chapters 19-21 | TEST 3 (Chapters 19-21) | Chapter 21  Review Chapters 19-21 |
| Week 14  4/11 - 4/15 | Chapter 22 | Chapter 22 | Chapter 22 |
| Week 15  4/18 - 4/22 | Chapter 23 | Chapter 23 | Quiz 4 (Chapters 21-23) |
| Week 16  4/25 - 4/29 | Chapter 23  Review Chapters 21-23 | TEST 4 (Chapters 21-23) | Review |
| **4/30 SATURDAY 10:00 AM FINAL EXAM (location TBA)** | | | |