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| Course Title/Number  | **Principles of Chemistry II / CHM 212, Section 201** |
| Semester/Year | Spring 2016 |
| Days/Time | MWF 11:00-11:50 |
| Location | 473 Science Hall |
| Instructor | Dr. Leslie Frost |
| Office | 464 Science Hall |
| Phone | 304-696-6774 |
| E-Mail | frost@marshall.edu Best way to contact me is by email. |
| Office/Hours | Mondays and Wednesdays 9:00-10:00 and Tuesdays 9:00-11:00Drop-in visits are welcome. |
| 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 [www.marshall.edu/academic-affairs](http://www.marshall.edu/academic-affairs) and clicking on “Marshall University Policies.” Or, you can access the policies directly by going to <http://www.marshall.edu/academic-affairs/?page_id=802> 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:**

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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  |

**Course Outcomes:**

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

**Required Texts, Additional Reading, and Other Materials:**

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| 1. ***Principles of General Chemistry****, Third Edition* by Martin S. Silverberg; McGraw-Hill, 2013
2. ALEKS access
3. Access to MU Online and a Marshall email account
4. Non-programmable calculator
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**Course Policies**

**Grading Policy**

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| The grade for this class will be determined from Aleks exercises, four in-class exams and a cumulative, final exam. Half of the homework points will come from completion of the periodic objective assignments and half from topic mastery (% of topics mastered from pie chart) at the end of the semester. The material for the exams will come from lectures, ALEKS problems and the reading assignments. In-class exams may cover material from previous exams.ALEKS exercises 100 pointsIn-class exams 400 points Final exam 100 points 600 totalGrading Scale: A 90-100% B 80-89% C 70-79% D 60-69% F < 60%\* If you are caught cheating on any exam, you will automatically receive a grade of 0% for that exam. |

**Attendance Policy**

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| Attendance for this class is not mandatory. By that, no portion of your grade will be determined by attendance. Absences from exams can only be made-up if the absence falls within one of the categories outlined in the undergraduate catalog for excused absences. To make-up an exam, you will need to follow the process for securing an excused absence. Excused absences must be obtained as soon as possible.  |

 **Other Policies**

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| 1. Cell phones cannot be used, or out, during exams.
2. Sharing calculators during exams is prohibited.
3. During exams, all materials necessary will be provided to you except a pencil and calculator. You may NOT use your own paper, etc.
4. Please turn off cell phones during class, failure to do so may result in dismissal from lecture.
5. Class announcements will be made via blackboard and email to your university email address. It is your responsibility to check blackboard on a regular basis.
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**Course Schedule**

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| **Week Of:** | **Chapter** | **Notes** |
| January 11 | Syllabus, 12 | Introduction |
| January 18 | 13 | No class on Jan. 18th |
| January 25 | 13 and 16 | **Jan. 29- Exam 1** (Chap. 12 &13) |
| February 1 | 16 |  |
| February 8 | 16 and 23 |  |
| February 15 | 23 | **Feb. 19- Exam 2** (chap. 16 & 23) |
| February 22 | 17 |  |
| February 29 | 17 and 18 |  |
| March 7 | 18 |  |
| March 14 | 19 | **March 18- Exam 3** (chap. 17-19) |
| March 21 |  | **Spring Break-** no class |
| March 28 | 20 |  |
| April 4 | 20 and 21 |  |
| April 11 | 21 |  |
| April 18 | 22 | **April 20- Exam 4** (chap. 20 and 21) |
| April 25 | 22 |  |
| **April 30** |  | **Final Exam 10 AM** |

\* Exam dates are approximate (except for the final exam). You will be given 1 week prior notice before all exams.

\* March 18th is the last day to drop this course.

**ALEKS:**

You will be required to complete the online ALEKS component for this course. Additional information for ALEKS will be posted on MUOnline. There will be two components to the ALEKS score which will determine your overall points out of a possible 100 points.

1) Objective completion- points are earned by completing objectives by the due date. Your lowest individual objective score will be dropped before calculating the Objective score.

2) Topic (pie chart) mastery- at the end of the semester, the percentage of topics completed will be used to determine the Topic score.

**Additional Homework:**

 Each student is to prepare for each class by reading the material covered in the previous class, answering the relevant problems at the end of the chapter, and previewing the material in order to anticipate the next class lecture. Problem sets for each chapter are available at MUOnline. These are very important, because the problems on these handouts will be the same type of problems that will appear on the exam. The answers to the problem sets are located at the end of the questions, and I will also be posting a copy of worked out answer keys on the bulletin board by my office. Copies of my old tests and answers can also be found online. You are to practice the problems from each chapter in the book. Sample Problems and follow-up problems located within each chapter are excellent sources of additional problems because detailed explanations on working out each problem are provided in the textbook. You can also chose problems highlighted in blue at the end of each chapter, as the answers for these are in the back of the book.