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| Course Title/Number  | **Principles of Chemistry I / CHM 211, Section 201** |
| Semester/Year | Spring 2016 |
| Days/Time | 9:00-9:50 AM MWF |
| Location | 473 Science Hall |
| Instructor | Dr. Bin Wang  |
| Office | 241L Byrd Biotechnology Science Center |
| Phone | (304) 696-3456 |
| Email | wangb@marshall.edu |
| Office Hours | 1:30-4:30 PM Tuesdays (S 460) & 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 study of the properties of materials and their interactions with each other. Development of theories and applications of the principles of energetics, dynamics and structure. Intended primarily for science majors and pre-professional students. 3.00 credits. Prerequisites: grade of 23 or better in Math ACT, grade of C or better in CHM 111, or passed placement exam. |

**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
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| **Student Learning Objectives**  | **Objective will be taught through…** | **Objective will be assessed by…** |
| Become familiar with the atomic structure of matter. | * lectures
* textbook readings
* ALEKS exercises
* learning assistance sessions
 | * tests and quizzes
* ALEKS exercises
* questions in learning assistance sessions
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| Develop analytical skills to solve problems presented in a chemical context. | * lectures
* textbook readings
* ALEKS exercises
* learning assistance sessions
 | * tests and quizzes
* ALEKS exercises
* questions in learning assistance sessions
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| Understand how energy is utilized in natural systems. | * lectures
* textbook readings
* ALEKS exercises
* learning assistance sessions
 | * tests and quizzes
* ALEKS exercises
* questions in learning assistance sessions
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| Describe and predict the basic chemical bonding patterns that explain the physical and chemical properties of matter. | * lectures
* textbook readings
* ALEKS exercises
* learning assistance sessions
 | * tests and quizzes
* ALEKS exercises
* questions in learning assistance sessions
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**Grading Policies:**

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| ALEKS exercises 20 pointslearning assistance sessions 2 pointsquizzes (4 during the semester) 8 pointstests (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.  |

**Miscellaneous Policies:**

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| Please silence cell phone ringers during class or exams. 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 11/11 - 1/15 | Syllabus, ALEKS, Chapter 1  | Chapter 1 | Chapter 1/2 |
| Week 21/18 - 1/22 | *Martin Luther King, Jr. Holiday*  | Chapter 2 | Class canceled |
| Week 31/25 - 1/29 | Chapter 2 | Chapter 3 | Chapter 3 |
| Week 42/1 - 2/5 | Chapter 3/4 | Chapter 4 | Quiz 1 (Chapters 1-3) |
| Week 52/8 - 2/12 | Chapter 4 Review Chapters 1-3 | TEST 1 (Chapters 1-3) | Chapter 4Review Chapters 1-3 |
| Week 62/15 - 2/19 | Class canceled | Chapter 5 | Chapter 5 |
| Week 72/22 - 2/26 | Chapter 5/6 | Chapter 6 | Chapter 6 |
| Week 82/29 - 3/4 | Chapter 6 | Chapter 7 | Quiz 2 (Chapters 4-6) |
| Week 93/7 - 3/11 | Chapter 7Review Chapters 4-6 | TEST 2 (Chapters 4-6) | Chapter 7Review Chapters 4-6 |
| Week 103/14 - 3/18 | Chapter 7/8 | Chapter 8 | Chapter 8 |
| *3/18 is last day to drop an individual course* |
| Week 113/21 - 3/25 | *Spring Break* |
| Week 123/28 - 4/1 | Chapter 8 | Chapter 9 | Quiz 3 (Chapters 7-9) |
| Week 134/4 - 4/8 | Chapter 9Review Chapters 7-9 | TEST 3 (Chapters 7-9) | Chapter 9Review Chapters 7-9 |
| Week 144/11 - 4/15 | Chapter 10 | Chapter 10 | Chapter 10 |
| Week 154/18 - 4/22 | Chapter 11 | Chapter 11 | Quiz 4 (Chapters 9-11) |
| Week 164/25 - 4/29 | Chapter 11Review Chapters 9-11 | TEST 4 (Chapters 9-11) | Review |
| **4/30 SATURDAY 10:00 AM FINAL EXAM (location TBA)** |