Syllabus: CHM 205

Spring 2017, Credit: 3 hr.

**Text:** The Basics of General, Organic, and Biochemistry, Version 1.0 by D. Ball, J. Hill, and R. Scott

**Calculator:** basic scientific calculator capable of exponential notation and logarithms. (Cell phones can be used as calculators during class time, but NOT exams.)

**Instructor:** Robert Grady, B.S. in Chemistry

**Email:** grady3@marshall.edu

**Office hours:** I can be available before or after class upon request.

**Course Policies:** This course will be conducted adhering to university policy. Marshall University’s polices regarding academic honesty, excused absences, and disabled students may be found at http://www.marshall.edu/wpmu/academic-affairs/?page\_id=802. Attendance at exams is required. Make up exams will only be given for university excused absences as defined in the policy.

If an assignment falls on a day that is cancelled by the university (e.g. a snow day), it should be turned in to me on the next day of class or by email (if applicable). Please turn off cell phone ringers before class. Failure to do so may result in you being removed from the room, even during an assignment.

**Course Curriculum:**  Lectures and assignments will cover chapters 1 through 20 in the text (tentative).  You are responsible for everything in the textbook, unless otherwise directed.

**Determination of Course Grade:**

Exams: 2 exams at 100 points each (Midterm and Final)

Weekly Quizzes: 12 quizzes at 10 points each

Unit homework packets: 4 packets at 25 points each

\*The exam date will be assigned 1 week in advance.

Topics to Be Covered in This Course: (Tentative)

**Section I**

Chapter 1: Chemistry, Matter, and Measurement

Chapter 2: Elements, Atoms, and the Periodic Table

Chapter 3: Ionic Bonding and Simple Ionic Compounds

Chapter 4: Covalent Bonding and Simple Molecular Compounds

**Section II**

Chapter 5: Introduction to Chemical Reactions

Chapter 6: Quantities in Chemical Reactions

Chapter 7: Energy and Chemical Processes

**Section III**

Chapter 8: Solids, Liquids, and Gases

Chapter 9: Solutions

Chapter 10: Acids and Bases

Chapter 11: Nuclear Chemistry

**Section IV**

Chapter 12: Organic Chemistry: Alkanes and Halogenated Hydrocarbons

Chapter 13: Unsaturated and Aromatic Hydrocarbons

Chapter 14: Organic Compounds of Oxygen

Chapter 15: Organic Acids

Chapter 16: Carbohydrates

Chapter 17: Lipids

Chapter 18: Nucleic Acids