

Course Syllabus Fall 2017  
Chemistry 205: General, Organic, and Biological Chemistry

(CRN: 4547 – CHM 205 – Section 131)  
Department of Chemistry, Marshall University

**Instructor:** Jenifer Markiewicz

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**Office Hours:** By appointment

**Credit Hours:** 3.00 hours

**Course Time and Location:** TR 12:30-1:45 MUGC Academic Bldg., Room #213

**Course Description:** Introductory course for health professions students and non-science majors covering basic chemical principles with applications in organic chemistry and biochemistry.

**Pre-requisites:** There are no formal pre-requisites for this course. It is, however, strongly advisable to have a math ACT score above 17 before attempting this course as you will be required to make calculations on a near daily basis.

**Required Materials:**

- **Text:** The text for this course is “The Basics of General, Organic, and Biological Chemistry” v. 1.0 by David W. Ball, John W. Hill, and Rhonda J. Scott. The text is available in digital form and in printed form. The eISBN number is: 978-1-4533-2788-3 and the print ISBN number is: 978-1-4533-1109-7. Versions of the book are available at flatworldknowledge.com ranging from \$24 to \$89 (+\$50 for color if you must) and ranging from online only to e-book, soft cover printed book and study aids. A digital version at \$39 and a print only version at \$100.50 are available at the bookstore.
- **Calculator:** You will need a basic, non-programmable calculator. You should be able to find a suitable calculator for \$15 or less. Calculators with alphanumeric and/or graphing capabilities are **not permitted** during quizzes and exams. Additionally, cell phone calculators are completely off limits during quizzes, exams, and during normal lecture periods.

## Grading:

- **Exams (75%):** Four exams and a cumulative final exam (five exams total), will be administered over the course of the semester. These exams will be strictly limited to the confines of the normal class period (75 minutes) and to the time limit set for the final exam (2 hours). All exams will be taken independently, and without the use of cell phones, books, and class notes unless otherwise specified.
- **Quizzes (15%):** Quizzes will be given at the end of each class period and should take no more than 10-15 minutes to complete. As with the exams, they too will be taken independently, without the use of cell phones, books, and class notes unless otherwise specified. The three lowest quiz grades will be dropped.
- **Homework (10%):** Homework will be assigned after each lecture period and will be collected at random (minimally once per week). When grading the homework, my focus is on completion rather than perfection. This is an opportunity for me to give you feedback and for you to seek out help, if necessary.
- **Participation/Attendance:** Regular attendance and participation is expected. **Make-up exams will only be given if the absence has been excused by the university.** For example, any student involved in an official school function or an unavoidable commitment to his or her employer can arrange to take an exam at another time than the scheduled time. Should attendance problems arise, please contact me before you miss, if possible. Additionally, please be on time in order to avoid disrupting your peers and my instruction.

**Grading Scale:** **A** > 90%, **B** 80 to 89%, **C** 70 to 79%, **D** 60 to 69%, and **F** < 60%.

**Course Curriculum:** Lectures and assignments will cover chapters 1 through 18 in the text.

**Electronic Device Policy:** All cell phones and pagers must be turned to vibrate during class. Recording of lectures without the instructor's permission is prohibited. During examinations, all electronic devices except calculators must be inaccessible. Students **MUST BRING A CALCULATOR** to class for all lectures and exams. Calculators that are part of a cell phone or PDA are not acceptable during an exam or quiz.

**University Policies:** All university policies, which can be found at this link [http://www.marshall.edu/wpmu/academic-affairs/?page\\_id=802](http://www.marshall.edu/wpmu/academic-affairs/?page_id=802), will be observed.

**Important Dates:**

**First day of classes:** August 21 **Labor Day Holiday:** September 4 **Freshman/Sophomore Midterm grades due:** October 9 **Last Day to Drop:** October 27 **Thanksgiving Break:** November 20-25 **Dead Week:** December 4-8

**The final exam will be given to all CHM 205 students on Saturday, December 9<sup>th</sup> at 10:00 a.m.**

**Approximate Schedule:**

<b>Week of:</b>	<b>Chapters/Sections</b>	<b>Topics:</b>
8/21	<b>T:</b> Ch. 1 <b>R:</b> Ch. 2 (Q1: Ch. 1)	Chemistry, Matter, and Measurement/Elements, Atoms, and the Periodic Table
8/28	<b>T:</b> Ch. 3 (Q2: Ch. 2) <b>R:</b> Ch. 4 (Q3: Ch. 3)	Ionic Bonding and Simple Ionic Compounds/Covalent Bonding and Simple Molecular Compounds
9/4	<b>T:</b> Ch. 5 (Q4: Ch. 4) <b>R:</b> Review (Q5: Ch. 5)	Introduction to Chemical Reactions
9/11	<b>T:</b> <b>Exam 1</b> (Ch. 1-5) <b>R:</b> Ch. 6	Quantities in Chemical Reactions
9/18	<b>T:</b> Ch. 6 <b>R:</b> Ch. 7 (Q6: Ch. 6)	Quantities in Chemical Reactions/Energy and Chemical Processes
9/25	<b>T:</b> Ch. 8 (Q7: Ch. 7) <b>R:</b> Ch. 9 (Q8: Ch. 8)	Solids, Liquids, and Gases/Solutions
10/2	<b>T:</b> Ch. 10 (Q9: Ch. 9) <b>R:</b> Ch. 11 (Q10: Ch. 10)	Acids and Bases/Nuclear Chemistry
10/9	<b>T:</b> Review (Q11: Ch. 11) <b>R:</b> <b>Exam 2</b> (Ch. 6-11)	Nuclear Chemistry
10/16	<b>T:</b> Ch. 12 <b>R:</b> Ch. 13 (Q12: Ch. 12)	Organic Chemistry: Alkanes and Halogenated Hydrocarbons/Unsaturated and Aromatic Hydrocarbons

10/23	<b>T:</b> Ch. 13 <b>R:</b> Ch. 14 (Q13: Ch. 13)	Unsaturated and Aromatic Hydrocarbons/Organic Compounds of Oxygen
10/30	<b>T:</b> Ch. 15 (Q14: Ch. 14) <b>R:</b> Review (Q15: Ch. 15)	Organic Acids and Bases and Some of Their Derivatives
11/6	<b>T:</b> <b>Exam 3</b> (Ch. 12-15) <b>R:</b> Ch. 16	Carbohydrates
11/13	<b>T:</b> Ch. 17 (Q16: Ch. 16) <b>R:</b> Ch. 18 (Q17: Ch. 17)	Lipids/Amino Acids, Proteins, and Enzymes
11/20	<b>Thanksgiving Break</b>	
11/27	<b>T:</b> Review (Q18: Ch. 18) <b>R:</b> <b>Exam 4</b> (Ch. 16-18)	
12/4	<b>T:</b> Review <b>R:</b> Review	Review for Final
<b>12/9</b>	<b>1-18</b>	<b>Cumulative final exam</b>