## Course Syllabus Spring 2017 Chemistry 205: General, Organic, and Biological Chemistry

(CRN: 5475 – CHM 205 – Section 231) Department of Chemistry, Marshall University

Instructor: Jenifer Markiewicz Phone: 304-720-4001 ext. 3611
Office: Room #3202 TPB E-mail: markiewiczj@marshall.edu

**Office Hours:** By appointment **Credit Hours:** 3.00 hours

Course Time and Location: 11:00-11:50 a.m. M, W, F MUGC Academic Bldg.,

Room #212

**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 <u>not permitted</u> 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 (50 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. No exam grades will be dropped.
- **Quizzes (15%):** Quizzes will be administered during the final ten minutes of the class period, minimally twice per week. The two lowest quiz scores 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. No makeup tests or quizzes will be given unless prompt arrangements are made. Should attendance problems arise, please contact me before you miss, if possible. 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. 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 19 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 <a href="http://www.marshall.edu/wpmu/academic-affairs/?page\_id=802">http://www.marshall.edu/wpmu/academic-affairs/?page\_id=802</a>, will be observed.

## **Important Dates:**

**First day of classes:** January 9 **Martin Luther King Jr. Holiday:** January 16 **Freshman/Sophomore Midterm grades due:** February 27 **Last Day to Drop:** March 17 **Spring Break:** March 20-25 **Dead Week:** April 24-28

The final exam will be given to CHM 205 students on Saturday, April  $29^{th}$  at 10:00 a.m. Approximate Schedule:

Week of:	Chapters/Sections			Topics:
1/9	<b>M:</b> Ch. 1	<b>W:</b> Ch. 1	<b>F:</b> Ch. 1, 2	Matter, Measurement and
				the Elements
1/16	M: NC	<b>W:</b> Ch. 2	<b>F:</b> Ch. 3	Atomic Theory, Structure,
				and Ionic Bonding
1/23	<b>M:</b> Ch.3, 4	<b>W:</b> Ch. 4	<b>F:</b> Ch. 5	Covalent Bonding/Intro
				to Chemical Reactions
1/30	<b>M:</b> Ch. 5	<b>W:</b> Review	<b>F:</b> Exam 1	Intro to Chemical
			(1-5)	Reactions
2/6	<b>M:</b> Ch. 6	<b>W:</b> Ch. 6, 7	<b>F:</b> Ch. 7	Stoichiometry/Energy
				and Chemical Processes
2/13	<b>M:</b> Ch. 8	<b>W</b> : Ch. 8, 9	<b>F:</b> Ch. 9	Phases, Gas Laws, and
				Solutions
2/20	<b>M:</b> Ch. 10	<b>W</b> : Ch.10	<b>F:</b> Ch. 11	Acid-Base Chemistry &
				Nuclear Chemistry
2/27	<b>M:</b> Ch. 11	<b>W:</b> Review	<b>F:</b> Exam 2	Nuclear Chemistry
			(6-11)	
3/6	<b>M:</b> Ch. 12	<b>W</b> : Ch. 12	<b>F:</b> Ch. 13	Alkanes, Alkenes, Alkynes
				Aromatic Hydrocarbons
3/13	<b>M:</b> Ch. 13, 14	<b>W</b> : Ch. 14	<b>F:</b> Ch. 15	Oxygen Containing
				Organic Compounds
3/20		Spring Break		
3/27	<b>M:</b> Ch. 15	<b>W:</b> Review	<b>F:</b> Exam 3	Organic Acids and Bases
	_		(12-15)	
4/3	<b>M:</b> Ch. 16	<b>W</b> : Ch. 16	<b>F:</b> Ch. 17	Carbohydrates/Lipids
4/10	<b>M:</b> Ch. 17, 18	<b>W:</b> Ch. 18	<b>F:</b> Ch. 19	Lipids/Amino Acids,
4 / 4 =	<b>N</b> 01 10	*** 5	<b>.</b> .	Proteins, & Enzymes
4/17	<b>M:</b> Ch. 19	<b>W:</b> Review	<b>F:</b> Exam 4	Nucleic Acids
4 /2 /	1.5	*** 5	(16-19)	
4/24	M: Review	<b>W:</b> Review	<b>F:</b> Review	Review for Final
4 /20		1 10		Communications final server
4/29		1-19		Cumulative final exam