

Chemistry 205: General, Organic, and Biochem.

Fall 2018

(CRN:1392 – CHM 205 – Section 103)
Department of Chemistry, Marshall University

Instructor: Jenifer Markiewicz

Office: S 408

Office Hours: MW 9-12, TR 1-4, & by appointment

Credit Hours: 3.00 hours

Course Time and Location: MW 2-3:15 S 473

Phone: (304) 696-4808

E-mail: markiewiczj@marshall.edu

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. 2.0.4 by David W. Ball, John W. Hill, and Rhonda J. Scott. The book is published by FlatWorld and is available in both print and digital form.

The Marshall University Bookstore sells access passes for the online textbook (\$40) or you may purchase it from the publisher:

https://students.flatworldknowledge.com/catalog/editions/ballgob_2_0-31733-the-basics-of-general-organic-and-biological-chemistry-2-0-4

For \$29.95, you can get online access, which gives you internet access to the text materials, but it can only be used while you are logged in to the FlatWorld website.

For \$49.95, you may purchase the package which gives you online access plus Ebook downloads. Here you'll be able to access the book while logged in to FlatWorld and you may download the book as a PDF, which can be read from any computer. Files that can be loaded onto an iPad, a Kindle reader, or some Android devices are also included. It's even possible to put it on your phone, if you like.

For \$54.95, you may purchase the package which gives you online access, plus a color printed textbook.

For \$74.95, you can get a package that includes online access, Ebook downloads, and the color printed textbook. You get immediate access to the digital materials and the printed book is shipped about a week after you order it. The most cost-effective option is the \$74.95 package because it gives you multiple options for accessing the book at a reasonable price.

*Note that all packages include the access pass, which is necessary to complete the homework.

**If you purchase just the access pass either through the bookstore or through the publisher's website, you can upgrade at any time for the difference between the publisher website price for the access pass and whatever package you want to upgrade to.

***Note that all three formats of the text (access pass, downloadable files, & printed book) have exactly the same content, so you can select the format that best fits your budget and your way of reading text materials.

- **Calculator:** You will need a basic, non-programmable scientific 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 exams. Additionally, cell phone calculators may also not be used during exams. Most importantly, gain practice with the calculator you intend to use for the exam *before* attempting to use it on the exam.

Grading:

- **Exams (80%):** Four regular exams and a cumulative final exam (five exams total), will be administered over the course of the semester. The four regular exams will be strictly limited to 50 minutes. All exams will be taken independently, and without the use of cell phones, books, and class notes unless otherwise specified. You may, however, use a 3" x 5" notecard (front and back okay) of handwritten notes on all regular exams only. The lowest exam grade, excluding the final exam, will be dropped.
- **Homework (20%):** Homework will be available through the FlatWorld online access system. Each chapter has an assignment associated with it (16 assignments total), which consists of approximately 45 questions. The format of these questions varies in difficulty and in format to include, for example, multiple choice, fill in the blank, and mathematical calculations. Each assignment can be repeated an unlimited number of times. You may work together on the assignments as long as it is in the spirit of learning. Do not simply share the answers with each other as this will not adequately prepare you for the exams. Please see the table on the following page for the deadlines.

Chapter	1	2	3	4	5	6	7	8
Due Date	8/29	9/5	9/10	9/12	9/24	9/26	10/1	10/3
Chapter	9	10	11	12	13	14	15	16
Due Date	10/15	10/22	10/24	10/29	11/7	11/14	11/26	11/28

**Deadline for all homework assignments is at 1 p.m. on date indicated. Late assignments will not be accepted.

- **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 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 16 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. Calculators that are part of a cell phone or PDA are not acceptable during an exam.

University Policies: All university policies, which can be found at this link http://www.marshall.edu/wpmu/academic-affairs/?page_id=802, will be observed.

Important Dates:

First day of classes: August 20 **Labor Day Holiday:** September 3 **Freshman/Sophomore Midterm grades due:** October 8 **Last Day to Drop:** October 26 **Thanksgiving Break:** November 19-24 **Dead Week:** December 3-7

Final Exam: Saturday, December 8, 10:00 a.m.

Approximate Schedule:

Week of:	Chapter	Topics:
8/20	M: Course Intro, Ch. 1 W: Ch. 1	Chemistry, Matter, and Measurement
8/27	M: Ch. 2 W: Ch. 3	Elements, Atoms, & the Periodic Table/Ionic Bonding and Simple Ionic Compounds
9/3	M: No Class W: Ch. 4	Covalent Bonding and Simple Molecular Compounds
9/10	M: Review W: Exam 1 (1-4)	Introduction to Chemical Reactions
9/17	M: Ch. 5 W: Ch. 6	Introduction to Chemical Reactions/ Quantities in Chemical Reactions
9/24	M: Ch. 7 W: Ch. 8	Energy and Chemical Processes/ Solids, Liquids, and Gases
10/1	M: Review W: Exam 2 (5-8)	Solids, Liquids, and Gases
10/8	M: Ch. 9 W: Ch. 10	Solutions/Acids and Bases
10/15	M: Ch. 10, Ch. 11 W: Ch. 11	Acids and Bases/Nuclear Chemistry
10/22	M: Ch. 12 W: Review	Organic Chemistry Basics
10/29	M: Exam 3 (9-12) W: Ch. 13	Carbohydrates
11/5	M: Ch. 13, Ch. 14 W: Ch. 14	Carbohydrates/Lipids
11/12	M: Ch. 15 W: Ch. 16	Amino Acids, Proteins, and Enzymes/ Nucleic Acids
11/19	Thanksgiving Break	
11/26	M: Review W: Exam 4 (13-16)	Review/Exam
12/3	M: Review W: Review	Review for Final
12/8	1-16	Cumulative final exam