



Marshall University Syllabus
College of Science
Chemistry

Course

CRN: 4547 – CHM 205 – Section 131

Course Description

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

Credits

Undergraduate: 3 credit hours

Prerequisites

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.

Term/Year

Fall 2018

Class Meeting Days/Times

TR 12:30-1:45

Location

MUGC Academic Bldg., Room #213

Academic Calendar

For beginning, ending, and add/drop dates, see the [Marshall University Academic Calendar](http://www.marshall.edu/academic-calendar/) (URL: <http://www.marshall.edu/academic-calendar/>).

Instructor

Dr. Manjira Kumar (PhD)

Contact Information

Office: Room #3202 TPB

Office Hours: by appointment

Office Phone: 304-720-4001 ext. 3611

Email: ghoshkumar@marshall.edu

Required Texts and 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. The text is available in printed form or in digital form. The eISBN number for the book is 978-1-4533-9345-1. The MU Bookstore sell access passes for the text or you can order it direct from the publisher by going to -

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

For \$30 you can get online access - this gives you internet access to the text materials, but you can only use it while you are logged in to the Flatworld web site. For \$50 you can purchase a package that gives you online access plus Ebook downloads. If you get this digital version, you can access the book through the web or you can download it as PDF files which you can print or read from your computer. Files that can be loaded on an iPad, a Kindle reader, or some Android devices are also included. If you have good eyesight you could even put the book on your smart phone. For \$55 you can buy a package that gives you online access plus a color printed text book. For \$75 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 \$75 package because it gives you multiple options for accessing the book at a reasonable price.

Note that, all of the packages include the access pass. If you buy 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 web site price for the access pass and whatever package you want to upgrade to.

Moreover, all three formats (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 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.

Course Student Learning Outcomes

The table below shows the following relationships: How each student learning outcome will be practiced and assessed in the course.

Course student learning outcomes	How students will practice each outcome in this course	How student achievement of each outcome will be assessed in this course
Students will learn basic chemistry concepts	Lecture In-class discussions In-class problem solving quizzes	exam
Students will learn to apply the knowledge of chemistry in biology	Lecture In-class discussions In-class problem solving quizzes	exam

Dates to Remember

First day of classes: August 20, **Labor Day Holiday:** Sept 3, **Freshman/Sophomore Midterm grades due:** Oct 8, **Last Day to Drop:** Oct 26 **Thanksgiving:** Nov 19 – 23, **Dead Week:** Dec 3 – 7, **Last day of class:** Dec 6, **Final grades due:** Dec 17

The final exam will be given to all CHM 211 students on Thursday Dec 13th (10.30 AM to 12.30 PM)

Grading Policy

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 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.

Distribution of Points

Exam 1: 100 points
Exam 2: 100 points
Exam 3: 100 points
Exam 4: 100 points

Exam Final: 100 points
Total: 500 points

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

Attendance/Participation Policy

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.

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

By enrolling in this course, you agree to the University Policies. Please read the full text of each policy (listed below) by going to [MU Academic Affairs: University Policies](http://www.marshall.edu/academic-affairs/policies/). (URL: <http://www.marshall.edu/academic-affairs/policies/>)

- Academic Dishonesty Policy
- Academic Dismissal Policy
- Academic Forgiveness Policy
- Academic Probation and Suspension Policy
- Affirmative Action Policy
- Dead Week Policy
- D/F Repeat Rule
- Excused Absence Policy for Undergraduates
- Inclement Weather Policy
- Sexual Harassment Policy
- Students with Disabilities (Policies and Procedures)
- University Computing Services Acceptable Use Policy

Tentative Course Schedule

Date	Chapters/Topics
08/21 (T)	Chapter 1: Review of the Basics
08/23 (R)	Chapter 1: Review of the Basics (Quiz 1)
08/28(T)	Chapter2: Elements, Atoms and the Periodic Table
08/30 (R)	Chapter2: Elements, Atoms and the Periodic Table (Quiz 2)
09/04 (T)	Chapter 3: Ionic Bonding
09/06 (R)	Exam 1
09/11 (T)	Chapter 4: Covalent Bonding
09/13 (R)	Chapter 5: Introduction to Chemical Reactions
09/18 (T)	Chapter 5: Introduction to Chemical Reactions
09/20 (R)	Chapter 6: Quantities in Chemical Reactions
09/25 (T)	Chapter 6: Quantities in Chemical Reactions
09/27 (R)	Exam 2
10/02 (T)	Chapter 7: Energy and Chemical Processes
10/04 (R)	Chapter 7: Energy and Chemical Processes
10/09 (T)	Chapter 8: Solids, Liquids and Gases
10/11 (R)	Chapter 9: Solutions
10/16 (T)	Chapter 10: Acids and Bases
10/18 (R)	Exam 3
10/23 (T)	Chapter 10: Acids and Bases
10/25 (R)	Chapter 11: Nuclear Chemistry
10/30 (T)	Chapter 12: Organic Chemistry
11/01 (R)	Chapter 12: Organic Chemistry
11/06 (T)	Chapter 13: Carbohydrates
11/08 (R)	Exam 4
11/13 (T)	Chapter 14: Lipids
11/15 (R)	Chapter 15: Amino Acids, Proteins and Enzymes
11/27 (T)	Chapter 15: Amino Acids, Proteins and Enzymes

11/29 (R)	Chapter 16: Nucleic Acids
12/04 (T)	Chapter 16: Nucleic Acids
12/06 (R)	Review
12/13 (R)	Exam 5 (Cumulative final) (10:30 AM – 12.30 PM)

- *Instructor reserves the right to change the syllabus if needed for the fulfillment of the course objective and outcome*
- *Use of cell phone is not allowed during class lecture and lab*