## **Chemistry 111: Foundations of Chemistry**

#### Fall 2018

(CRN:3008 – CHM 111 – Section 301)
Department of Chemistry, Marshall University

Instructor: Dr. Manjira Kumar (PhD) Phone: 304-720-4001 ext. 3611 Office: Room #3202 TPB E-mail: ghoshkumar@marshall.edu

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

**Course Time and Location:** Tuesday/Thursday (9:30 – 10:45 AM), MUGC

Academic Bldg., Room #213

**Course description and purpose:** This course will introduce students to basic chemical facts and concepts. Topics will include mathematics review, metric units, dimensional analysis, nomenclature, properties of matter, atomic structure, stoichiometry, Lewis dot structures, and balancing equations. Additional topics will be covered if time permits. CHM 111 is intended to prepare students for CHM 211.

**Prerequisite**: MTH ACT of 21 or better, or *C* or better in MTH 127 or equivalent

# **Required Materials**

- **Text:** "Foundations of College Chemistry Abridged for CHM 111" by Hein, 15th Edition
- Participation/Attendance: Regular attendance and participation is expected. Make-up exams will only be given if the absence has been excused by the university, or under extreme, unavoidable circumstances (at least 24 hours' notice). Should attendance problems arise, please contact me via e-mail before you miss, if possible. Additionally, please come to class on time to avoid disrupting your peers and my instruction.

#### • Distribution of Points

Exam 1 100 points Exam 2 100 points Exam 3 100 points Exam 4 100 points Quiz (1-10) 100 points Total 500 points

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

**Course Curriculum:** Lectures and assignments will cover chapters 1 through 17 in the text.

**Electronic Device Policy:** All cell phones and pagers must be turned to vibrate during class. Recording of lectures without my permission is strictly 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 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 <u>MU Academic Affairs:</u> <u>University Policies</u>. (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

## **Important Dates:**

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 111 students on Tuesday Dec 11<sup>th</sup> (8:00 to 10:00 AM)

#### **Tentative Schedule**

Date	Chapters/Topics
08/21 (T)	1 (Introduction to Chemistry)
08/23 (R)	2 (Standards for Measurements) (quiz 1)
08/28(T)	2 (Standards for Measurements)
08/30 (R)	3 (Elements and Compounds) (quiz 2)
09/04 (T)	Review
09/06 (R)	Exam 1
09/11 (T)	4 (Properties of Matter) (no quiz)
09/13 (R)	5 (Early Atomic Theory and Structure) (Quiz 4)
09/18 (T)	6 (Nomenclature of Inorganic Compounds) (Quiz 5)
09/20 (R)	6 (Nomenclature of Inorganic Compounds)
09/25 (T)	7. Quantitative Composition of Compounds) (Quiz 6)
09/27 (R)	8. (Chemical Equations) (Quiz 7)
10/02 (T)	Review
10/04 (R)	Exam 2
10/09 (T)	8. (Chemical Equations)
10/11 (R)	9 (Calculations) (Quiz 8)
10/16 (T)	9 (Calculations)
10/18 (R)	10 (Modern Atomic Theory and Periodic Table) (Quiz 9)
10/23 (T)	10 (Modern Atomic Theory and Periodic Table)
10/25 (R)	11 (Chemical Bonds) (Quiz 10)
10/30 (T)	11 (Chemical Bonds)
11/01 (R)	12 (The Gaseous State of Matter) (quiz)
11/06 (T)	Review
11/08 (R)	Exam 3

11/13 (T)	13 (Liquids)
11/15 (R)	14 (Solutions)
11/27 (T)	15 (Acids, Bases, and Salts)
11/29 (R)	16 (Chemical Equilibrium)
12/04 (T)	17. (Oxidation-Reduction)
12/06 (R)	Review
12/11 (T)	Exam (Cumulative final) (8:00 AM – 10:00 AM)

- 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