

CHEM 1211 Principles of Chemistry I Fall 2016

Instructor

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Office: TLC 2136
Office hours: M, T, W, R: 9 – 11 am
SI hours: T 5:15 – 6:15 pm, R 2:30 -3:30 pm

Purpose

This is the first course in a two-semester sequence covering the fundamental principles and applications of chemistry for science majors. The course satisfies Core Requirement in Area D. The “**flipped**” **classroom** model will be used in lecture to promote active student learning as well as logical thinking and analytical reasoning in problem solving.

Textbook

Chemistry: Structure and Properties by Nivaldo J. Tro, 1st edition, Pearson is required. Students Solutions Manual accompanying textbook is optional.

Learning Outcomes

Each student will:

- acquire a basic understanding of the structure and properties of matter, modern atomic structure and properties, chemical bonding, types of chemical reactions, stoichiometry, thermochemistry, gas properties.
- apply scientific reasoning and methods of inquiry to explain natural phenomena
- use appropriate scientific tools and instruments to acquire data, process information, and communicate results

Academic Honesty Policy

We take academic honesty very seriously. Plagiarism of any sort will not be tolerated. Plagiarism is the use of someone else’s ideas or words as your own. This definition includes copying another student’s exam or assignment, as well as using material from a book or Internet site without acknowledging the source. If you plagiarize any part of an assignment for this course, you will receive a zero for the entire assignment, and disciplinary action will be taken. UWG Academic Integrity and Honor Code Pledge is available at <http://www.westga.edu/handbook/59.php>.

Course Policies and Guidelines

- You are expected to behave **professionally** in this course, which means considering the effect that your behavior will have on other people involved in the course. Use of cell phones and/or personal laptops will not be allowed during lecture and lab.
- Cell phones, laptops and other electronic devices are not allowed during class. They must be turned off and placed in book bag or purse. Bags and purse must be placed on the floor. Only textbook, notebook, calculators and pencils/pens/erasers are allowed on the desk.
- The official communication will be through campus e-mail (myUWG email account).
- Course materials including the syllabus, class-notes, sample exams are available through Course Den. You will be responsible to print notes.
- The class meets on Mondays and Wednesdays from 12:30 – 1:45 pm in TLC 2105 AND the lab meets on Fridays from 12:09 – 1:59 pm in TLC 3108. Please come to class on time, and do not leave early. Remember to fill your water bottle or use the restroom before class.
- No make up quizzes or exams will be given. In case of an illness or a dire emergency, the instructor must be contacted prior to the examination in-person, via phone or email. Accommodations for missed exams, quizzes and assignments will be handled depending on the severity of the situation between the student and the instructor.
- Refer to the student handbook for information on academic support and other policies [http://www.westga.edu/assetsDept/vpaa/Common Language for Course Syllabi.pdf](http://www.westga.edu/assetsDept/vpaa/Common%20Language%20for%20Course%20Syllabi.pdf)

In-Class/Take-Home Assignments

These assignments include announced/unannounced quizzes where you will need to use a scientific calculator and textbook. Remember to bring your calculators and textbooks to class every day since you cannot share these resources. You must be present in class to get credit for in-class assignments or submit take-home assignments on the due date.

Examinations and Grades

There will be four examinations and a comprehensive final examination during the semester. Each examination will be closed book and notes. You will need to bring a calculator to the tests. If necessary, I will provide the scantron sheets, periodic charts and conversion tables. The standardized examination (multiple choice) from the American Chemical Society will serve as the final examination.

All exam and quiz grades will be based on your ability to DEMONSTRATE full understanding of the material. Full credit will only be given if you SHOW ALL YOUR WORK, not just for obtaining the correct answer. Your grade will be calculated based on the following components:

In-class exams (4 @ 100 points each)	400 points
Final (Comprehensive)	100 points
In-class and take home assignments	100 points
TOTAL	600 points

The grading scale will be as follows: 90% : A; 80 – 89% : B; 70 – 79% : C; 60 – 69% : D; < 60% : F

Tentative Schedule for the Course

WEEK	<i>Monday</i>	<i>Wednesday</i>
1		August 10 – Chapter 1
2	August 15 – Chapter 1	August 17 – Chapter 2
3	August 22 – Chapter 2	August 24 – Chapter 3
4	August 29 – Chapter 3	August 31 – EXAM 1
5	<i>Sept 5 – No class</i>	September 7 – Chapter 3
6	September 12 – Chapter 4	September 14 – Chapter 4
7	September 19 – Chapter 4	September 21 – Chapter 5
8	September 26 – Chapter 5	September 28 – EXAM 2
9	October 3 – Chapter 6	October 5 – Chapter 6
10	October 10 – Chapter 7	October 12 – Chapter 8
11	October 17 – Chapter 8	October 19 – Chapter 8
12	October 24– Chapter 9	October 26 – EXAM 3
13	October 31 – Chapter 9	November 2 – Chapter 10
14	November 7 – Chapter 10	November 9 – Chapter 10
15	November 14 – Chapter 11	November 16 – Chapter 11
16	<i>November 21– No class</i>	<i>November 23 – No class</i>
17	November 28 – Chapter 11	November 30 – EXAM 4
18	<i>December 5 – No class</i>	December 7 – ACS Final 11:00 AM – 1:00 PM

Homework is not graded but highly recommended for practice and mastery of content.

Chapter 1 - 33, 35, 45, 47, 51, 55, 57, 67, 69, 71, 75, 77

Chapter 2 - 17, 19, 21, 23, 31, 39, 43, 45, 47, 51, 55, 57

Chapter 3 - 2, 5, 6, 8, 9, 10, 12, 14, 15, 24, 25, 26, 27, 28, 29, 32, 33, 34, 39, 41, 45, 51, 57, 61, 69, 71

Chapter 4 - 45, 47, 49, 51, 53, 55, 57, 61, 63, 67, 71, 73, 75, 77, 79, 81, 85, 87, 89, 93

Chapter 5 - 29, 31, 35, 39, 43, 49, 51, 55, 57, 59, 63, 65, 69, 71, 73, 75, 77, 79, 86, 88, 97, 101, 103, 105, 107

Chapter 6 - 23, 25, 29, 31, 35, 37, 41, 43, 45, 47, 49, 51, 57, 59, 61, 63, 67

Chapter 7 - 31, 35, 39, 41, 45

Chapter 8 - 15, 17, 21, 23, 25, 27, 29, 33, 35, 41, 43, 47, 49, 51, 55, 57, 59, 61, 63, 65

Chapter 9 - 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 45, 47, 49, 51, 53, 55, 57, 59, 61, 63, 65, 67, 69

Chapter 10 - 10.31, 10.33, 10.35, 10.37, 10.39, 10.41, 10.43, 10.45, 10.47, 10.49, 10.51, 10.53, 10.55, 10.57, 10.59, 10.61, 10.63, 10.65, 10.67, 10.69, 10.71, 10.73, 10.75, 10.77, 10.79, 10.81, 10.83, 10.85, 10.87, 10.89, 10.91.

Chapter 11 - 27, 31, 33, 35, 37, 39, 41, 43, 45, 49, 53, 55, 57, 59, 61, 65, 73, 77, 79, 81, 83, 85, 87, 89