

***Instructor***

Dr. Sharmistha Basu-Dutt

Office: TLC 2136

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Phone: (678)839-6018

Instructor Office hours:

M, W 11 – 12:30 pm, 2 – 3 pm T, R 1 – 3 pm

SI: Calleigh Hitt [chitt1@my.westga.edu](mailto:chitt1@my.westga.edu)

M 10:30 – 11:30 am, 2:30 – 3:30 pm, W 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 and Calculator***

*Chemistry: Structure and Properties* by Nivaldo J. Tro, 2<sup>nd</sup> edition, Pearson is required. Students Solutions Manual accompanying textbook is optional.

A *graphing calculator* is required and must be brought to class everyday.

***Learning Outcomes***

Students will:

- acquire a basic understanding of chemical bonding, equilibrium, kinetics, thermodynamics.
- apply scientific reasoning and methods of inquiry to explain natural phenomena.

***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.
- 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.
- 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. 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, honor code, email policy, credit hour policy and HB 280 campus carry policy [https://www.westga.edu/administration/vpaa/assets/docs/faculty-resources/common\\_language\\_for\\_course\\_syllabi\\_v2.pdf](https://www.westga.edu/administration/vpaa/assets/docs/faculty-resources/common_language_for_course_syllabi_v2.pdf)

### ***In-Class/Take-Home Assignments/Quizzes***

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, covering content from 1211 and 1212, will serve as the final.

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
<b>TOTAL</b>	<b>600 points</b>

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*

<b>WEEK</b>	<b><i>Monday</i></b>	<b><i>Wednesday</i></b>
1	January 8 – Chapter 11	January 10 – Chapter 11
2	<i>January 15 – No class</i>	January 17 – Chapter 11
3	January 22 – Chapter 13	January 24 – Chapter 13
4	January 29 – Chapter 13	<b>January 31 – EXAM 1</b>
5	February 5 – Chapter 14	February 7 – Chapter 14
6	February 12 – Chapter 14	February 14 – Chapter 15
7	February 19 – Chapter 15	February 21 – Chapter 15
8	<b>February 26 – EXAM 2</b>	February 28 – Chapter 16
9	March 5 – Chapter 16	March 7 – Chapter 16
10	March 12 – Chapter 17	March 14 – Chapter 17
11	March 26 – Chapter 17	March 28 – Chapter 18
12	April 2 – Chapter 18	<b>April 4 – EXAM 3</b>
13	April 9 – Chapter 18	April 11 – Chapter 19
14	April 16 – Chapter 19	April 18 – Chapter 19
15	April 23 – Chapter 19	<b>April 25 – EXAM 4</b>
16	April 30 – Review	<b>May 2 – FINALS</b>  <b>11 am – 1 pm</b>

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

**Chapter 11:** 35, 37, 39, 41, 43, 45, 47, 49, 51, 53, 55, 57, 59, 61, 63, 65, 67, 69, 71, 75

**Chapter 13:** 25, 27, 29, 31, 37, 39, 41, 43, 45, 47, 49, 51, 53, 55, 59, 61, 63, 67, 69, 73, 77, 81, 83, 85, 91

**Chapter 14:** 27, 29, 37, 39, 41, 43, 45, 49, 51, 53, 55, 57, 59, 61, 63, 65, 67, 69, 71, 77

**Chapter 15:** 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 45, 47, 49, 53, 55, 57, 61, 71

**Chapter 16:** 33, 39, 41, 47, 49, 51, 55, 59, 61, 65, 69, 71, 73, 77, 85, 87, 93, 99, 103, 109

**Chapter 17:** 27, 29, 31, 35, 39, 41, 43, 45, 47, 49, 53, 59, 61, 67, 69, 71, 73, 79, 83, 87

**Chapter 18:** 27, 31, 35, 37, 41, 43, 45, 49, 51, 53, 55, 59, 61, 63, 65, 67, 69, 71, 75, 79

**Chapter 19:** 33, 35, 37, 39, 41, 43, 45, 47, 49, 53, 57, 59, 61, 63, 65, 67, 69, 73, 83, 85, 91