CHEMISTRY 1311 – General Chemistry I

Section 003

COURSE OUTLINE

Instructor: Dr. John Sibert **Office**: Berkner 3.520
Telephone: 972 883-2918 **e-mail:** sibertj@utdallas.edu

Office Hours: M, W: 12:00 pm - 1:00 pm or when the door is open.
Weekly Problem Solving Session: M: 4:00 pm - 5:00 pm, Kusch Auditorium
Class Web Site: http://www.utdallas.edu/~sibertj/index.htm
Course Web Site: http://www.utdallas.edu/~dieckgr/chem1311/CHM1311_Fall2005.htm

Text: *Chemistry: Matter and Its Changes*, 4th Edition, Brady and Senese **Required**
Study Guide: *Study Guide*, Brady and Senese **Optional**

ATTENDANCE:

Attendance will not be taken. However, you are expected to attend classes regularly if you wish to be successful in this course. Class participation and questions are encouraged. You will be responsible for all assignments made during class whether you are in attendance or not. If you are absent from class, you should contact your instructor or another student in the class to learn of any assignments.

GRADING:

Hour Exams (4)	60%
Final Exam	25%
Quizzes	15%

If it is higher, your final exam grade will replace your lowest regularly scheduled exam grade (provided all four are taken).

Consistent daily study and problem-solving cannot be overemphasized! Please note that there are no quizzes scheduled for this semester. However, occasional in-class exercises will be passed out and completed in a "workshop-type" format. Homework will be assigned from the exercises at the end of each chapter. In general, your performance on exams will reflect the effort put forth on homework (primarily) and in-class exercises. Your goal should be to keep up with the material and identify your weaknesses by diligently doing the homework. Once weaknesses are identified, turn them into strengths by seeing me or Mona (your supplementary instructor, SI) outside of class!

- **As the university does not allow the posting of student grades by student social security number, please fill out the appropriate form (obtain from Sibert) with your chosen nickname. If you do not want your grades posted at all, simply do not fill out the "nickname form". At any point during the semester, you may choose to no longer have your grades posted - just let me know.**

MAKE-UP TESTS:

Due to the large class size, makeup tests will not be given unless there is an official university excuse.

MISCELLANEOUS:

- Purchase a **scientific calculator** and bring the calculator to class regularly.
- **Help sessions** outside of class will be offered by Mona and, on occasion, me periodically throughout the semester - particularly before examinations.
- **Answer keys** to exams, in-class exercises and homework will be posted outside my office (Berkner 3.520). **Graded work** will be returned in folders next to my office.

KEYS TO SUCCESS IN CHEM 1311:

- Be prepared for lectures by reading the assigned chapters before class. This will enable you to understand the lectures more thoroughly and allow you to formulate questions in class. Reread the chapter as necessary.
- Avoid getting behind. It is my estimation that the vast majority of students who do poorly in this class do so because they fall behind. The pace of the class can be quite fast and it is, therefore, essential that you study on a daily basis.
- Work the exercises in the chapters and the assigned homework problems on a regular basis and certainly before attending help sessions. You learn chemistry by doing it - there are no shortcuts. Please note that the answers to the in-chapter practice exercises and the even-numbered problems are at the back of your text.
- Make use of your instructor's time/office hours. I welcome your visits at most other times when my office door is open. Take advantage of this resource! I am committed to helping you succeed in this course, but your success will require dedication and hard work on your part.
- Attend and participate in Help Sessions offered by the instructor or the **SI**.
- Use the Learning Aids provided at the end of each chapter in your textbook:
  Understand the "**Tools you have learned" section**.
  Challenge yourself with the "**Thinking It Through**" problems.
  Read/scan/review **chapter summaries**.

TENTATIVE SCHEDULE

Period	Date	Chapter	Topic
1	August 19	1	Atoms and Elements
2	August 22	1	Atoms and Elements
3	August 24	1	Atoms and Elements
4	August 26	2	Compounds and Chemical Reactions
5	August 29	2	Compounds and Chemical Reactions
6	August 31	3	Measurement
7	September 2	3	Measurement
	September 5		**Labor Day Holiday (no classes)**
	September 7		**Exam #1** (Chapters 1,2,3)
8	September 7	8	Quantum Mechanical Atom
9	September 9	8	Quantum Mechanical Atom
10	September 12	8	Quantum Mechanical Atom
11	September 14	8	Quantum Mechanical Atom
12	September 16	9	Chemical Bonding: General Concepts
13	September 19	9	Chemical Bonding: General Concepts
14	September 21	9	Chemical Bonding: General Concepts
15	September 23	9	Chemical Bonding: General Concepts
16	September 26	10	Chemical Bonding and Molecular Structure
17	September 28	10	Chemical Bonding and Molecular Structure
18	September 30	10	Chemical Bonding and Molecular Structure
19	October 3	10	Chemical Bonding and Molecular Structure
	October 5		**Exam #2** (Chapters 8,9,10)
20	October 5	4	The Mole
21	October 7	4	The Mole
22	October 10	4	The Mole
23	October 12	4	The Mole
24	October 14	5	Solutions
25	October 17	5	Solutions
26	October 19	5	Solutions
27	October 21	5	Solutions
28	October 24	6	Oxidation-Reduction reactions
29	October 26	6	Oxidation-Reduction reactions
30	October 28	6	Oxidation-Reduction reactions
31	October 31	6	Oxidation-Reduction reactions
	November 2		**Exam #3** (Chapters 4,5,6)
32	November 2	7	Energy and Chemical Change
33	November 4	7	Energy and Chemical Change
34	November 7	7	Energy and Chemical Change
35	November 9	7	Energy and Chemical Change
38	November 11	11	Properties of Gases
39	November 14	11	Properties of Gases
40	November 16	11	Properties of Gases
41	November 18	12.1-12.7	Intermolecular Attractions . . . Liquids and Solids
42	November 21	12.1-12.7	Intermolecular Attractions . . . Liquids and Solids
	November 23		**Exam #4** (Chapters 7,11,12.1-12.7)

43	November 23	12.8, 12.9	Intermolecular Attractions . . . Liquids and Solids
	November 25		**Thanksgiving Holiday (no classes)**
44	November 28		**Review**
	December 5, Monday		**Final Exam (8:00 - 10:45 AM)**