

CHEM 1073 – sections 3

Basic Chemistry

Fall 2010

TR 5:30 – 6:45

SB 2.01.12

Instructor:

Dr. Raymond Sadeghi

Office Hours and Location:

MW 11:00-12:00, TR 4:45 – 5:30 pm SB 3.01.28

Email:

raymond.sadeghi@utsa.edu

Required Text:

Zumdahl and Decoste Introductory Chemistry, 7th

Course Description: This course is designed to be a preparatory course for CHE 1103 (General Chemistry I). It may be taken to partially fulfill the Level I Core Curriculum Requirement in Domain I, Science, Technology and, Mathematics.

Course Objectives: To learn basic concepts of inorganic chemistry, atomic and molecular structure and the related mathematical treatment.

General Policies:

1. It is the student responsibility to be on time for lectures and exams. **No extra time** will be given to students that come in late.
2. It is the student responsibility to make up any material missed during an absence. The instructors will not “make-up” lectures during office hours for students not in attendance.
3. **No work for extra-credit will be assigned on an individual basis. There are no make-ups or extensions to homework regardless of the circumstance.**
4. Partial exams are not discussed during the lecture period. Students have **one week** from the date the exam is returned to submit questions about their grade and this should be done during the instructor's office hours. **Answers bubbled in the Parscore sheets are considered to be final answers**, therefore make sure to check them before turning in your test.
5. Partial exams consist mainly, but not solely, of multiple choice questions to be answered using **Parscore sheets provided by the student**. Most questions will be similar to the exercises worked during lectures, homework, or problems at the end of each chapter in your textbook. However, **students should expect some questions that are considerably different as well.**
6. Academic misconduct (cheating, plagiarism, collusion, etc.) will be severely penalized in this course. Make sure to familiarize yourself with the UTSA requirements for student behavior and the penalties you could be facing by reading the Student Code of Conduct. For more information, visit <http://www.utsa.edu/infoguide/A.pdf>

7. It is the student responsibility to drop the course if he/she wishes to do so. Failure to drop by the corresponding deadline will result in an automatic "F" in the course if the student stops attending and/or fails to complete all the course work.
8. Requests for an Incomplete grade will only be considered if the student meets the requirements set forth by UTSA and the COS. Students must have completed at least 75% of the course work, have a passing grade by the time the request is made and, it must be due to a medical/personal emergency. The student will be requested to provide evidence that such an emergency exists. Requests based on "academics" (poor course performance) will be denied.

How to study for this course: Read the material to be discussed before coming to class.

Focus on the things you were not able to understand from your reading and ask questions to your instructor. **Chemistry is learned by doing**, not only by reading and listening. Plan to work some of the end of the chapter problems to test your understanding. The instructor might make things seem easy to solve but you will not know it until you try it! Some of the material in this course relies on memorizing facts and definitions. **However, emphasis will be placed on understanding and applying those facts, not on spitting them back on an exam.** Do not leave your studying for the day or even the week before a test. You should plan to give this course at least 5 hours of studying (besides lecture times) per week. **DO NOT CRAM THEM ALL IN A 5 HOUR BLOCK!** It is more effective to study 1 - 1.5 hours daily than 5 hours on a single day. Give yourself some time to learn! If you have questions and are too shy to ask them during lectures, come to office hours.

Exam Schedule Dates will not change but, depending on the course pace, the content included in each exam may change at the discretion of the instructor)

Exam I	Thursday, Sep. 30	Chapters 2, 3, 4, part of 11
Exam II	Thursday, Oct 28	Chapters 11, 12, 5
Exam III	Tuesday, Dec 2	Chapters 5, 6, 7, 8, 9

Final Exam

Monday Dec 13th 10:30 am - 1:00 pm

Comprehensive, mandatory (You must take the final exam to achieve a passing grade) in 2.01.12 SB (Can't be rescheduled)

Grading

3 exams:	60%
Comprehensive Final:	30%
Homework/Quizzes:	10%

Total:

100%

Students will be guaranteed the grade corresponding to each tier in a standard curve.

100 - 88	A
87 - 73	B
58 - 72	C
57 - 45	D
below 44	F

TENTATIVE SCHEDULE

Week 1 An introduction to Chemistry (chapter 2)

Week 2 Standards for Measurement (units, chapter 2)

Memorize Table 2.2 (Common Prefixes and Numerical Values for SI Units);

Table 2.1 (International System's Standard Units of Measurements)

Week 2 Conversions, dimensional analysis (chapter 2)

Week 3 Elements and Compounds, symbols (chapter 3, 4)

Memorize Table 4.3 (Symbols of the Most Common Elements); Table 4.5

(Elements that Exist as Diatomic Elements)

Week 3 Elements and Compounds (chapter 4)

Week 3 Properties of Matter, conservation of energy

Week 4 Atomic symbols, isotopes (chapter 4)

Early Atomic Theory and Structure (11.1 - 11.5)

Week 5 Quantum numbers, Electron Configuration (chapter 11)

9/30 Exam 1

Week 6 Electron configuration of ions (chapter 11 and **class notes**)

Week 7 Periodic Trends, size, ionization energy (chapter 11)

Week 8 Modern Atomic Theory and the Periodic Table (chapter 12)

Week 9 Lewis Dot structure, Bonding (chapter 12)

Week 10 Nomenclature of Inorganic Compounds (chapter 5)
Week 11 Nomenclature of Inorganic Compounds (Chapter 5)

10/30 Exam 2 Chapters part of 11, 12, 5

Chemical Equations (chapter 6)

Calculations from Chemical Equations (chapter 8, 9)
Limiting reactant, % yield

Solutions (chapter 7)

12/02 Exam 3 Chapters 6-9

**12/16 Comprehensive Final (5:00 - 7:30 pm, same room as the lectures
S.B 2.01.12)**