The University of Texas at San Antonio – Department of Chemistry

CHE 1103-002 **General Chemistry I** **Fall 2010**
TR 8:00 – 9:15 AM SB 2.01.12

Instructor:	Dr. L. Martinez-Rivera
Office Hours and Location:	MW from 10:00 – 11:30 AM (Main Campus; BSE 1.342; 458-5455) TR from 1:00 – 1:45 PM (Downtown Campus; FS 4.444; 458 – 2573)
Email:	through Blackboard **only** (emails through the regular utsa.edu account will not be answered; allow 12-24 hours for a response)
Required Text:	Chemistry, Raymond Chang; 10th Edition (2010)
Required Ancillaries:	Access code to *Mastering General Chemistry* Scantron 882 (for all exams)
Pre-requisites:	Passing grade on the Chemistry Placement Exam or a grade of "C" or better in CHE 1073 (Basic Chemistry), and completion of or concurrent enrollment in MAT 1073.

About the Course: This is the first term of a two-term course in General Chemistry. We will cover the first ten chapters of the required text (*see above*). **There is a lot of emphasis on quantitative skills and critical thinking skills**. Some of the topics we will cover include: mathematical treatment of data, the nature and structure of matter, energy transformations, chemical reactions in aqueous solutions, the gaseous state, chemical bonds, the three-dimensional structure of compounds, etc. The course material and the pedagogy employed by your instructor provide an excellent way to fulfill the UTSA **Quality Enhancement Plan** (QEP).

The QEP is a course of action designed to enhance student learning and is a required component of the accreditation process conducted by the Southern Association of Colleges and Schools (SACS). The UTSA QEP, *"Quantitative Scholarship: From Literacy to Mastery"*, provides you with the skills needed to evaluate and interpret data, understand risks and benefits, and make informed decisions in your personal and professional lives. The plan focuses on integrating qualitative reasoning and communication skills in existing courses across the undergraduate curriculum. You are encouraged to learn more about the QEP by visiting the website http://www.utsa.edu/qep.

What to expect: The lectures will be structured with students at the center of the learning process. Learning is accomplished by doing which translates into a considerable amount of work inside and outside the classroom. As a general rule, you should be spending a minimum of 8 – 9 hours outside class doing the assigned readings, homework and, practicing the end – of – chapter problems. If you find yourself spending much less time than 8 hours per week, it is highly probable that you are studying incorrectly for this class.

For each day we meet, you will have some sections from a chapter assigned as reading before coming to class. Additional reading material may be assigned at the discretion of the instructor. **In class, all of the work will be done relying on your preparation for the lecture**. **Every activity you perform in lecture also counts towards your grade**. In addition to these activities, students will have weekly homework problem-sets that will be worked online through *Mastering General Chemistry* (see separate handout) and one weekly pop-quiz to be administered at the discretion of the instructor.

General Policies:

1. **Calculators cannot be shared during exams (even if a student has turned in his/her exam); each student must provide its own.**
2. The use of any electronic device (except for your calculator) during exams is strictly prohibited. That includes (but is not limited to) cell phones (not even the calculator on it!), laptops, iPods/CD players, iPhone's/PDA's, Blackberry, iPads, etc. **Cell phones must be switched off during exams**. **No headphones/earphones or Bluetooth devices can be worn during exams. No bathroom breaks are allowed during term exams or the final exam. Students are not allowed to talk during an exam.**
3. It is the student responsibility to be on time for exams. **No extra time** will be given to students that come in late.

4. Students will be required to present their UTSA ID (or any picture ID) when turning in their exams.
5. **No work for extra-credit will be assigned**. **No homework extensions will be granted.**
6. **It is a departmental policy not to offer make-up exams <u>regardless of the circumstance</u>**. Personal emergencies will be dealt with on an individual basis.
7. Partial exams are not discussed during the lecture period nor returned to students. Students have ***<u>one week</u>*** from the date the Scantron 882 is returned to submit questions about their grade and discuss the exam with the instructor during office hours.
8. An SI leader has been assigned to this course. Participation in the SI sessions, while voluntary, is strongly encouraged.
9. **<u>It is the student responsibility to drop the course by Wednesday, December 01, 2010 if he/she wishes to do so</u>**. This date should be verified against the official UTSA academic calendar. 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.
10. Instructional support services, including registration assistance and equipment, are available to students with documented disabilities through the Office of Disabled Student Services (DSS), MS 2.03.18. Qualifying students should contact DSS at 458-4157 to make arrangements for these services.
11. 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 (Student Code of Conduct) and the penalties you could be facing.
12. 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.

Grading Policies:

1. Four exams will be given during the semester. The best three exams will constitute 60% of the grade. Partial exams consist mainly, but not solely, of multiple choice questions to be answered using **<u>Scantron sheets (882) provided by the student</u>**. Questions will be based on the material covered in the lectures, homework exercises, or the suggested problems from your textbook. S**tudents should expect some questions that are considerably different as well.**
2. A final comprehensive examination will be given on Saturday, December 11, 2010 from 7:30 – 10:00 AM. The place for this exam will be posted on Blackboard and it is the student responsibility to check for its location. **<u>The date and time for the final exam is set by the Registrar and no rescheduling or make-ups will be allowed.</u> Students MUST take the Final Exam to achieve a passing grade**. The final exam accounts for 30% of the grade.
3. The weekly homework sets turned in through *Mastering General Chemistry* and the pop-quizzes will count towards 10% of the course grade.

Exam Schedule

The dates of the exams will not change but the instructor reserves the right to change the content covered.

Exam I	Tuesday, September 21	Chapters 1, 2, and 3
Exam II	Tuesday, October 12	Chapters 4 and 5
Exam III	Tuesday, November 9	Chapters 6, 7, and 8
Exam IV	Thursday, December 2	Chapters 9 and 10
Final Exam	**Saturday, December 11 (7:30 – 10:00 AM)**	**Comprehensive (check Blackboard for location) Mandatory to achieve a passing grade**

Homework: (10% of course grade)

1. Homework will be submitted online through *Mastering General Chemistry* (http://www.masteringchemistry.com).
2. It is the student responsibility to purchase an access code to submit homework online.
3. Weekly problem sets will consist of at least 10 problems for which you will be able to request hints without loosing any points. However, if the hints are not used, there will be a 2% bonus based on the point-value of the question if it is answered correctly. You will have 5 attempts per question to obtain the correct answer without being penalized. You cannot give-up and request the answer to a problem. By doing so you will loose the credit for that problem and the answer will not be posted until after the homework due date.
4. No extensions on homework will be granted.

Grading:

Partial exams:	best three exams out of four; 60%
Comprehensive Final:	30 %
Homework:	10%

Grading scale

Grades are assigned in this course based on performance and they are noncompetitive. This means that grades **will NOT be adjusted based on the class average**; every member of the class can get an A (or every member of the class can get an F) under this system. The grading scale shown below is guaranteed and final grades will be assigned as follows:

88 – 100%	A
75– 87%	B
63 – 74%	C
53 – 62%	D
< 53%	F

TENTATIVE SCHEDULE

Week 1	Chemistry: The Study of Change (Chapter 1) Chemistry: The Study of Change (Chapter 1)
Week 2	Atoms, Molecules, and Ions (Chapter 2) Atoms, Molecules, and Ions (Chapter 2)
Week 3	Mass Relationships in Chemical Reactions (Chapter 3) Mass Relationships in Chemical Reactions (Chapter 3) Mass Relationships in Chemical Reactions (Chapter 3)
Week 4	Mass Relationships in Chemical Reactions (Chapter 3) **First Partial Exam (grades will be posted one week after this date)**
Week 5	Reactions in Aqueous Solutions (Chapter 4) Reactions in Aqueous Solutions (Chapter 4) Reactions in Aqueous Solutions (Chapter 4)
Week 6	Reactions in Aqueous Solutions (Chapter 4) Gases (Chapter 5)
Week 7	Gases (Chapter 5) **Second Partial Exam (grades will be posted one week after this date)**

Week 8	Thermochemistry (Chapter 6) Thermochemistry (Chapter 6)
Week 9	Thermochemistry (Chapter 6) Quantum Theory and the Electronic Structure of Atoms (Chapter 7)
Week 10	Quantum Theory and the Electronic Structure of Atoms (Chapter 7) Periodic Relationships Among the Elements (Chapter 8)
Week 11	Periodic Relationships Among the Elements (Chapter 8) **Third Partial Exam (grades will be posted one week after this date)**
Week 12	Chemical Bonding I: Basic Concepts (Chapter 9) Chemical Bonding I: Basic Concepts (Chapter 9)
Week 13	Chemical Bonding II: Molecular Geometry and Hybridization of Atomic Orbitals (Chapter 10) Chemical Bonding II: Molecular Geometry and Hybridization of Atomic Orbitals (Chapter 10)
Week 14	Chemical Bonding II: Molecular Geometry and Hybridization of Atomic Orbitals (Chapter 10) **Fourth Partial Exam (grades will be posted one week after this date)**

Disclaimer: This syllabus is provided for informational purposes regarding the anticipated course content and schedule of this course. It is based upon the most recent information available on the date of its issuance and it is as accurate and complete as possible. I reserve the right to make any changes I deem necessary and/or appropriate. I will make my best efforts to communicate any changes in the syllabus in a timely manner. Students are responsible for being aware of these changes.