

**CHE 1113-901**

TR 11:30 AM – 12:45 PM

**General Chemistry II**

BV 2.306

**Fall 2010**

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 <b>only</b> (emails through the regular utsa.edu account will not be answered; allow 12-24 hours for a response)
<b>Required Text:</b>	<u>Chemistry: A Molecular Approach</u> , Nivaldo Tro; 1 <sup>st</sup> Edition (2008)
<b>Required Ancillaries:</b>	Scantron 882 (for all exams)
<b>Pre-requisites:</b>	Grade of “C” or better in CHE 11103 (General Chemistry I)

**About the Course:** This is the second term of a one-year course in General Chemistry. We will cover Chapters 11 – 19 and Chapter 24 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: thermodynamics, intermolecular forces, colligative properties, chemical kinetics, equilibrium, aqueous equilibria (includes acid-base, solubility, complexation, etc.), electrochemistry, the chemistry of transition metals, etc. The course material provides 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 *ALEKS* (see separate handout) and one weekly pop-quiz to be administered at the discretion of the instructor.

**General Policies:**

- Calculators cannot be shared during exams (even if a student has turned in his/her exam); each student must provide its own.**
- 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.**
- It is the student responsibility to be on time for exams. **No extra time** will be given to students that come in late.
- Students will be required to present their UTSA ID (or any picture ID) when turning in their exams.
- 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 regardless of the circumstance.** 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 one week 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. **It is the student responsibility to drop the course by Wednesday, December 01, 2010 if he/she wishes to do so.** 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.
9. 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.
10. 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.
11. 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 **Scantron sheets (882) provided by the student**. Questions will be based on the material covered in the lectures, homework exercises, or the suggested problems from your textbook. **Students should expect some questions that are considerably different as well.**
2. A final comprehensive examination will be given on Saturday, December 11, 2010 from 4:30 – 7:00 PM. The place for this exam will be posted on Blackboard and it is the student responsibility to check for its location. **The date and time for the final exam is set by the Registrar and no rescheduling or make-ups will be allowed.** 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 *ALEKS* 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 14	Chapters 11 and 12
Exam II	Thursday, October 14	Chapters 13, 14, and 17
Exam III	Thursday, November 4	Chapters 15 and 16
Exam IV	Thursday, December 2	Chapters 18, 19, and 24
<b>Final Exam</b>	<b>Saturday, December 11 (4:30 – 7:00 PM)</b>	<b>Comprehensive (check Blackboard for location) Mandatory to achieve a passing grade</b>

### Homework: (10% of course grade)

1. Homework will be submitted online through *ALEKS* (<http://www.aleks.com>).
2. The student will receive a free access code from the instructor. Instructions for registering and creating an account will be available through Blackboard.
3. *ALEKS* is a homework system that works on developing mastery of the content. You will have periodic assessments of topics previously covered. Take the assessments seriously! If too many

questions are missed, you will have to demonstrate your knowledge all over again and that will result in more problems required! The weekly online homework will consist of at least 10 initial problems plus the assessments.

- 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:

85 – 100%	A
70 – 84%	B
55 – 69%	C
40 – 54%	D
< 53%	F

### TENTATIVE SCHEDULE

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Week 1            Introductions; Liquids, Solids and Intermolecular Forces (11.2 – 11.9)  
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Week 2            Solutions (12.2 – 12.7)  
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Week 3            Solutions (12.2 – 12.7)  
**Exam I (grades will be posted one week after this date)**

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Week 4            Chemical Kinetics (13.2 – 13.7)  
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Week 5            Chemical Kinetics (13.2 – 13.7)  
Chemical Equilibrium (14.2 – 14.9)

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Week 6            Chemical Equilibrium (14.2 – 14.9)  
Chemical Equilibrium (14.2 – 14.9)

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Week 7            Free Energy and Thermodynamics (17.2 – 17.7)  
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Week 8            **Exam II (grades posted one week after this date)**  
Acids and Bases (15.2 – 15.11)

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Week 9            Acids and Bases (15.2 – 15.11)  
Aqueous Ionic Equilibrium (16.2 – 16.8)

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Week 10          Aqueous Ionic Equilibrium (16.2 – 16.8)  
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Week 11	<b>Exam III (grades posted one week after this date)</b> Electrochemistry (18.2 – 18.8)
Week 12	Electrochemistry (18.2 – 18.8) Electrochemistry (18.2 – 18.8)
Week 13	Radioactivity and Nuclear Chemistry (19.2 – 19.5) Transition Metals and Coordination Compounds (24.2 – 24.5)
Week 14	Transition Metals and Coordination Compounds (24.2 – 24.5) <b>Exam IV (grades will be posted one week after this date)</b>

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**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.