

CH 301 Principles of Chemistry, 52380 Part 1, Spring 2010

Instructor : Dr. Sara Sutcliffe

Class Time : MWF 12-1pm in WEL 1.316,

Office Hours : MWF 1-2pm (starting in the classroom, moving to my office!)
I AM NOT AVAILABLE ON TUES OR THURS.

Office : WEL 3.304 (I might have to move this semester, note)

Telephone : 471-4544. If you want to leave a message, it's better to email me !

E-mail : emu@mail.utexas.edu

When emailing Dr. Sutcliffe include your first and last name as well as UNIQUE NUMBER of the course you are in. Do NOT call either Dr. Sutcliffe OR your TA at home. EVER !

Teaching Assistant: Adam Powell email adam@mail.utexas.edu

Office Hours: W F 11-12pm in cubicle B

Adam will be your primary contact with regard to **exam regrades**. Always include your first and last name, EID and the version number of the exam AND YOUR CLASS UNIQUE in your emails to Adam.

Course Text: Steven S. Zumdahl, Chemical Principles (6th edition e-book), Houghton Mifflin.

This is also the book for CH302. Frequent reference will be made to figures/data in this book. The e-book has extra features like short videos, pre and post chapter quizzes, and pop-up quizzes that you might like to try. The pre chapter test then suggests which areas you need to study the most. You will also get a loose leaf black and white printed version which you may like to bring relevant parts of to class. If you choose to get a used book, the figures and text are the same but you won't get the online content. It's your choice!

Course Webpages:

Blackboard: <https://courses.utexas.edu>

You are expected to check this **regularly** for any announcements.

The e-book version of the textbook can be accessed via the course Blackboard site.

Homework Server: QUEST: <https://quest.cns.utexas.edu/student>

Homework will be given via the server. Grades for all assignments except ALEKS will be stored there.

Grading for the Course: Grades for the course will be determined as follows:

Homework (5%)	approx. 12 assigned, drop 2 lowest. On Web.
Class Exams (65%)	4 exams drop the 1 lowest score
Final Exam** (25%)	Cumulative
ALEKS Prep (5%)	3% for completing by February 3 and 2% for scoring a 70% mastery or higher by March 29).
ALEKS CH 301 (Bonus Option 1: 5%)	See detailed discussion.
Clicker Quizzes (Bonus Option 2: 5%)	Number TBD; 1 will be dropped.

This sums to 105%, because the clicker OR CH301 ALEKS scores will be BONUS points.

** Or the average of ALL FOUR in class exams (see details later)

IGNORE ANY calculations of overall grade on Quest. It will likely show a lower value than this!

Letter Grading:

UT has adopted plus minus grading. Here are the borderlines:

Grade	GPA	Score
A	4.0	93.00% - 100.00%
A-	3.67	90.00% - <93.00%
B+	3.33	87.00% - <90.00%
B	3.0	83.00% - <87.00%
B-	2.67	80.00% - <83.00%
C+	2.33	77.00% - <80.00%

C	2.0	73.00% - <77.00%
C-	1.67	70.00% - <73.00%
D+	1.33	67.00% - <70.00%
D	1.0	63.00% - <67.00%
D-	0.67	60.00% - <63.00%
F	0	<60.00%

Note: It is possible that these cutoffs may move downward slightly at the end of the semester, based on the performance of the class as a whole. If you use these as a guide and strive to be above a certain cutoff, then you will not have to worry about how much the cutoffs change.

You need to have a C- or higher in CH301 to enroll in CH302.

Course Description: This course starts with a brief overview of the fundamentals, then discusses atoms, chemical bonding, structure of molecules, then properties of gases, liquids, and solids. We finish with thermodynamics. NOTE: If you get a used book: **We do not follow a numerical chapter order.** It is strongly recommended that you review the material covered in the first four chapters. Most of it will be left for you to learn/master independently. Notes will be posted to help, and the material will be covered on certain homeworks and exams.

Course Prerequisites: CREDIT OR REGISTRATION FOR ONE OF THE FOLLOWING:
MATHEMATICS 408C, 408D, 408K, 408L, 408M, 427L.

Attendance:

I will not be taking attendance. I may use activity on a clicker quiz as evidence of attendance if requested by the Dean's office or financial aid office in the event they request it. If you are late for class or must leave early, please do so QUIETLY!

Assignments:

1. Homework: We will assign and collect this over the web. The UT Homework Server (QUEST) is accessible from <http://quest.cns.utexas.edu/student> **READ the Student Instructions under "HELP". You may submit your answers any time up until the due date and time; DO NOT WAIT UNTIL THE LAST MINUTE!** Work the problems as I cover the material and submit a few at a time. Negative points are given for wrong answers (see the "help" link on the website) to prevent continuous random guessing. **Late submissions are not allowed.** Homework counts 5% of your grade and helps you understand the material. Start each assignment promptly so you can seek help if you have questions. Working with others is helpful sometimes, but note if **you don't understand the material, you will do badly on the tests!** The lowest TWO homework grades will be dropped. There are **NO MAKEUP HOMEWORKS.**

2. Exams: There will be four *EVENING* exams, from 7-9pm on the following **Wednesdays:**
****IMPORTANT: IF YOU HAVE A GENUINE CONFLICT WITH THESE EXAM TIMES DUE TO A LAB SECTION OR UT SANCTIONED EVENT YOU WILL BE **REQUIRED** TO PROVIDE DOCUMENTATION TO WEL 2.212 WITHIN TWO WEEKS OF THE EXAM****

Wednesday February 10

Wednesday March 10

Wednesday April 14

Wednesday May 5

*****LOCATIONS TO BE POSTED ON BLACKBOARD*****

We will have **review sessions** before each exam. Details will be announced on Blackboard.

The lowest of the four exam grades will be dropped. If you miss an exam, **FOR ANY REASON**, it will be counted as a zero and that exam will be dropped. It does not matter why you missed the exam. It is your responsibility to make sure you get to the exam on time. No-one will be allowed to start the exam more than 30 minutes late and no-one will be allowed to leave the classroom until 30 minutes have elapsed.

*****THERE ARE NO MAKEUP EXAMS***.** Some students feel their test scores do not reflect the amount of work they put in or their understanding of the subject. Tests are NOT like homeworks. They are done under stressed, timed conditions with NO help and very little time to ponder the questions. Remember what happens on game shows? You should think about this when reviewing for exams and developing test taking skills.

3. Final: Comprehensive. You must be present at the assigned time to take the exam. **If you miss the final exam, the average of all four of your in class exams will be used instead to calculate your grade.** TENTATIVE date information is at <http://registrar.utexas.edu/schedules/102/finals/index.html>. If you take the final and do WORSE than the average of ALL FOUR of your in class exams, then I will use the four exam average. (THIS WONT SHOW ON QUEST!!) So taking the final can be seen as less of a risk!

4. PREPARATORY ALEKS:

You should have received an email concerning this, if not, check your spam filter and/or the email address you supplied to ITS! ALEKS is an online artificial intelligence based learning system. The version the department has mandated ALL CH301 students take is a smaller, preparatory version. It is free this semester. You must access it from <http://web3.cns.utexas.edu/aleks-chemistry/>

READ the FAQ. If you have any trouble with it, please see the contact info given there. I cannot see your scores on this version. There are two deadlines: one to take the initial assessment and one to get to 70% mastery of the 132 topics given. ***If you don't take the assessment by the initial deadline, you'll throw away 5% of your grade, effectively.*** This version is free for quite some time, and, it can help you get up to speed with many, but not all of the topics you will see in CH301. But not all.. read 5b below.

BONUS POINTS: This semester, two options will be available. Both cost some money, so you can try one or both, or none! **WHICHEVER result gives you the HIGHEST score from 5a or 5b below will be used for the 5% bonus.**

5a. Clicker Quizzes: These will be given during some classes using **i-clickers**. You will need to purchase an i-clicker and then register it online at www.iclicker.com. Note: this model of clicker is also being used by many of the CH302 instructors. I will not begin having quizzes until *after* the 12th class day but I may encourage you to use it before then for a non-graded 'poll' type question to enable you to get the feel of it. You will have about 15 minutes to complete them (they will be short). The lowest grade will be dropped and the rest averaged to get your clicker score.; the exact number of quizzes remains to be determined.

NOTE: YOU are responsible for checking to see that your i-clicker is working properly. TOTAL Grades (e.g., for getting 4/5: 80%) will be posted on Quest within ~24hrs of the quiz. If you do not see a grade, then your i-clicker responses were not recorded. Specific enquires about responses to specific questions can only be addressed by seeing Dr. Sutcliffe during office hours. You will NOT be permitted to take quizzes on paper.

5b. ALEKS: This is a **different** ALEKS course than in 4 above, one that is designed to help with ALL of CH301. Unfortunately nothing you do in the PREP ALEKS will carry into the CH301 ALEKS. However, you again start with an initial assessment, but if you start this after you've done the PREP ALEKS, then you'll probably get a lot further through the basics -so you should not have to repeat very much 'old stuff'. Unfortunately this is not a free course, one semester's access code costs \$40. You access it from <http://www.aleks.com/> The code for this course is **4UVDA-49YTH**. But to put this in perspective, there is a lot of data to indicate ALEKS should greatly help your performance in CH301. It also is about the cost of a couple of tutoring sessions, but will be with you all semester. I will group the topics to be covered into the order in which we will be getting to them in the lectures and textbook. There will be ten deadlines to meet in order to encourage you to keep up with the material, but I have set them to start **AFTER the PREP ALEKS INITIAL ASSESSMENT is due. The first is due February 26th. Six of them are due *after* the final deadline for the PREP ALEKS.** These "Objective Deadlines" are labeled to show which exam they are related to, for example: "Objective #1 (on Exam 1)" to hint at when you should attempt to finish them by. They are divided roughly by chapter. The ACTUAL deadlines may be a little later than the actual exam - particularly the first few, again, to help catch up. At the end, they will get closer to the exam dates. **I will drop the lowest two Objective Deadline scores and then average the remaining eight to determine your CH301 ALEKS score.**

Course Requirements: Your Responsibilities as a Student:

1. TURN OFF YOUR CELLPHONE. If you are expecting a genuinely important call (not a party or date), set it to vibrate and sit in the back so you can go outside.

2. **Acquire a NON-PROGRAMMABLE scientific calculator.** I'll discuss suitable calculators in class. **LEARN how to use it BEFORE the exam.** Show your calculator in office hours before the exam to check if we will allow it. You will **NOT** be allowed to use a cellphone or PDA.
3. **BRING the NON-PROGRAMMABLE SCIENTIFIC calculator TO THE EXAM.** **PROGRAMMABLE CALCULATORS ARE NOT PERMITTED IN EXAMS.** NOTE: **CALCULATORS WILL NOT BE PROVIDED FOR THE EXAMS.** If you try to use a programmable one, we will take it from you and you will finish the exam without it.
4. **If you acquire an i-clicker for use in quizzes, BRING IT TO CLASS.** If you don't have it you will not be able to take the quiz! Instructions for registering your Clicker via the web will be posted on Blackboard.
4. Get access to the book. There are options; I will mention these in class.
5. **Regularly check Blackboard and your email for messages.** (That's the email address **you provided with your EID**). I only email the class if I feel it is important (I hate spam). I will copy it on Blackboard.
6. Regularly check your grades on the HW server, especially after exams. Notify your TA **promptly** of any problems such as version number or EID bubbling error - see Regrades below.
6. **Keep ALL paper copies of exams given to you until the end of the semester.** No excuses. If your dog/cat/ferret/roommate likes to eat paper, I suggest you keep the exams somewhere inaccessible.

My Course Policies:

Regrades:

We will fix **genuine** errors on any assignment. There are **no regrades** for Homeworks. If you get the answer wrong on the first try and do not understand why, you should come to office hours. Do not email Dr. Sutcliffe or your TAs with open ended questions – instead, go to office hours. The due date for homeworks is set for the entire class, NO EXCEPTIONS. For EXAMS: If you make a mistake with your EID or version number, your TA will fix it but it is YOUR responsibility to email them **PROMPTLY** with your full name, your EID and your version number. On Quest, you will see an exam that does not match yours, and you will either have a VERY low grade like 15%, or a zero. **You MUST keep your exam-** we will have NO idea of the special code. If have lost your exam, you will NOT get a regrade and I will NOT give a makeup. If you misbubble an answer on the scantron but have the correct answer circled on your exam, we will NOT regrade the question, because the document has left the exam room. It is YOUR responsibility to check the scantron before submitting it.

Email Abuse (SPAMMING)

This class uses the Blackboard system to distribute information in the form of announcements and lecture notes. ANYONE who uses the bulk email to send a message which is *irrelevant* to THIS course (tickets, surveys, roommates etc.) **WILL BE PENALIZED ONE LETTER GRADE FOR EACH CASE INCLUDING THE FIRST OFFENCE.** Repeat abusers will also be pursued for further disciplinary action. Email abuse is discussed in more detail at <https://www.utexas.edu/vp/it/policies/aup/> specifically section V and VI.

“.....(Something bad) happened so I missed/ did badly in.....” It is important to realize that wanting a specific grade and actually getting the results to justify it are not the same thing. To be fair to ALL students, the details of this syllabus are applied **WITHOUT EXCEPTION**. People get ‘flu, break up with the love of their life, have their car break down, oversleep, etc. But we still have to go to work and do our job. I have given you the ability to drop one exam, one quiz, and two homeworks. If something very bad happens to you (such as a serious car wreck, a significant family member dies, or you become ill to the point of missing several weeks of school) during this semester you should go to your Dean’s office and explain your situation to them (and provide proof of this). They will communicate with me if they feel the situation is warranted. Depending on the situation, you may be allowed to drop the class or I may assign you an incomplete if I feel your performance in the class prior to the event justifies this. An incomplete (you must currently have a passing grade in order to qualify) means you will receive an X for your final grade. You will have to complete the missing assignment(s) which occurred as a result of the event in the following semester, or you will get an F. More details are available in the UT Course Schedule. However if your grades take a beating due to a mild sickness, you should work with a TA or myself and try to catch up as best as possible, but realize that it won’t be easy!

“I can’t take the exam/final on that day because”.... You are required to give me 2 WEEKS notice of an exam conflict (or potential conflict) for religious holidays or if you are a member of a UT sanctioned organization (the latter requires a letter). No exam can be taken late. If you have a lab section or other UT class that meets during the exam, you need to see Jeff Daily in WEL 2.212. He will verify your situation and then you will be allowed to take the exam at the alternative time of 4-6pm. If this is also unavailable Jeff will arrange another time on the same day. **ANY other reasons** will require you to go to your dean’s office and explain to them your situation, and **IF** they make a recommendation to me that I consider an alternative, I will consider it. You will have to provide proof to them of why you think you should be able to take the exam on a different day, and frivolous reasons will probably not be accepted. Basically, **DO NOT SCHEDULE ANYTHING during exams and finals!** More information can be found in the online General Information Catalogue published by the Registrar’s Office.

Cheating: In a word, DONT! I despise cheating and *will* penalize it. Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in this course and /or dismissal from The University. Since such dishonesty harms the individual, all students, and the integrity of The University, policies on scholastic dishonesty will be strictly enforced. "Scholastic dishonesty" includes, but is not limited to, *cheating*, plagiarism, collusion, falsifying academic records, and *any act designed to give unfair academic advantage to the student, providing false or misleading information in an effort to receive a postponement or an extension on a test, quiz, or other assignment*, or *the attempt to commit such an act*. More info here: <http://deanofstudents.utexas.edu/sjs/scholdis.php>

UT Austin Policy on Accommodations:

The University of Texas at Austin provides upon request appropriate academic accommodations for qualified students with disabilities. We are happy to provide alternative testing rooms in Welch for those who qualify for reduced distraction and/or extended time. This DOES require advanced setup and documentation, again, at least two weeks if possible for the first case. If you are given a letter, bring it to me yourself and don't wait for campus mail For more information on qualifying for accommodations, contact the Office of the Dean of Students at 471 6259, 471 6441-TTY

UT Policies Regarding Quizzes, Exams, and Grading:

1. The use of programmable calculators is not permitted during quizzes or exams.
2. As stipulated in the University guidelines regarding exams, you may not leave the exam room for any reason during an exam and then re-enter the room to resume the exam.
3. You are required to keep your copy of all exams and quizzes. You will be asked to submit them to solve any grading related problems.
4. Scholastic dishonesty will be prosecuted to the full extent. It is the student's responsibility to find out what is considered as scholastic dishonesty. This information is available in the current issue of the General Information Catalogue published by the Registrar's Office.

Chapters Covered in this course and their Order:

Fundamentals: Chapters 2 & 3,4* (not covered in class: spread out over the semester)

UNIT 1: The Atom: Chapter 12

UNIT 2: Bonding: Chapters 13 & 14

UNIT 3: Gases, Liquids, Solids: Chapters 5 & 16 (not all of 16)

UNIT 4: Thermodynamics: Chapters 9 & 10

Suggestions to help you do well in this course: Pre-read before lecture. Check out the various online features of the e-book, if you have purchased it. Check Blackboard and your email for notices. Keep up with your ALEKS. Take class notes. Look at the course notes on Blackboard. After studying the material, do the assigned homework. **Don’t submit at the last minute -or hour if you can avoid it!** Use the material soon and often -practice. When you work a problem, rework it using a different unknown. Divide huge scary problems into smaller chunks. Develop the ability to interpret equations rather than only using them to do one kind of problem. In other words, how does the equation summarize the concept? If you have exam anxiety, seek help, the UTLC has many resources. Don’t be intimidated to seek help, you have choices: your lecturer, your TAs, the UT Learning Center, classmates ALEKS, the e-book.... Don’t get overwhelmed -Come to office hours!