Accessing Your ChemPortal Course

Accompanying Chemical Principles, Fourth Edition by Peter Atkins and Loretta Jones W.H. FREEMAN & COMPANY

To register:

1. Go to http://courses.bfwpub.com/chemprin (Mac users need Firefox)



PETER ATKINS / LORETTA JONES

W.H. Freeman and Company

TO PURCHASE YOUR ACCESS CODE:

1. Click on "PURCHASE access to ChemPortal"

- 2. Select "TX" from the State Drop-Down list
- 3. Select "University of Texas at Austin" from the Institution Drop-Down list
- 4. Select your instructor's name from the Instructor Drop Down List and Click
- 5. Select a subscription, either for six months or one year.
- 5. Create your account by filling in your name and email address.
- 6. Create a password. Your password must be at least 4 characters long and should be something you will easily remember, since you will need it to access student materials in the future
- 7. Click **NEXT** and fill in your credit card information.
- 8. You will receive confirmation of your purchase and can begin using ChemPortal!
- 9. Make sure you open the link to "General Chemistry" to be at the correct course site.

Need help? Contact technical support at 1-800-936-6899 or email techsupport@bfwpub.com.

Fall 2009 Professor Laude CH 301 INFORMATION PACKET

Topic	Description	page #
Coming to See your Professor	A fervent plea to not be afraid to come and see me.	2
CH301: A Capsule Summary	One page listing of important facts about this course.	3
CH 301 Course Outline	Day-by-day schedule of lectures, homework and exams.	4
Grading Policy for CH301	How letter grades will be assigned in this course.	5,6
Makeup Exam and Quiz Procedure	What happens when you oversleep.	7
Registering with the Homework Server to Access Your Grades	A Web site where you must register in order to see your grades for the course.	7
Random Musings	How we have our poetry corner.	7
A Calendar Brought to you by the Chemistry Lower Division Offices	Where and when to go about course registration issues like dropping a class.	8
Prerequisites for CH301	Can you stay in here if you aren't supposed to be in here?	8
Q drops	Will I give Q drops to just anybody?	9
Electronic World of CH301	Useful web site links	9
Electronic Lecture Notes	Stop furiously writing in class and listen!!!	9
Videos of Dr. Laude's Lectures	So just exactly why do you come in the first place.	9
E-mail	The preferred way to contact us	10
Some tips on e-mail etiquette	How to get your e-mail answered.	10
Textbook and Supplemental Materials for CH301	Suggested books and course notes for CH301.	11
Regrade Procedure	You know that you marked a B and not a C!!!	11
Students with Disabilities	Information on special accommodations.	11
Religious Observances and Make-up Exams	What it says, but let me know by the 12 th class day	11
Academic Communities	What were you going to do after dinner anyway?	12
Lessons on the Successful CNS Student	Deep thoughts by Dr. Laude on how to survive a	13
	rigorous year of math and science	
Learning Resources for Math and	Pick and choose how you will learn the material in	14
Science Courses	a course	

COMING TO SEE YOUR PROFESSOR

I know that I am a professor and a dean and old and fat and that all of that may make me seem intimidating. But actually I am very nice to children and students (I am only so-so with small animals). Please do not be afraid to contact me about your academic or non-academic problems with this course. The last thing you need is to end up with a bad grade for this course when there is something that could have been done about it if you had contacted me in time. So just send me an e-mail and I will tell you how easy it is to schedule a private discussion with me.

CH301: A CAPSULE SUMMARY

Course name and number: Class meeting time and location:

CH 301: Principles of Chemistry I, Unique number 53140 TTh 2 to 3:15 p.m. in WEL 2.224

Instructor information:

Instructor name	Professor David Laude
Office location	W. C. Hogg 2.222A (W.C. Hogg is between Welch Hall and the Tower)
Office phone	471-6176 (You'll get my assistant Judy)
e-mail	dalaude@mail.utexas.edu
Office hours	Monday through Thursday (see times below) or e-mail for an appointment

Teaching assistant information:

name	e-mail	Principal duty	Office hour	room
Travis Johnson	ubertravis@gmail.com	The Man	Tues and Thurs 3:30-5 pm	Cubicles
Miranda Colletta	mcolletta@mail.utexas.edu	exams and quizzes	Wednesday 3 to 4 pm	Cubicles
Jessica Lawshe	jelawshe@gmail.com	exams and quizzes	Monday 4 to 5 pm	Cubicles
Devin Matthews	dmatthews@mail.utexas.edu	exams and quizzes	Wednesday 2 to 3 pm	Cubicles

Where to go for information:

location	information provided
General chemistry office, WEL 2.212	course registration, lost and found, make-up exams
Web: http://courses.cm.utexas.edu/dlaude/	grades, answer key, course notes, handouts

Where to go for help (choose a couple of these to do every week—as of 09/25/09):

day and time	location	activity	presider
Sunday 6:00 to 6:30 pm	Jester Dining	Peer/Peer dinner with TA	Devin
Sunday 6:30 to 7:30 pm	Jester A121A	Discussion section	Devin
Sunday 7:30 to 9:30 pm	Jester dining	Academic community	Devin
Monday 2 to 3 pm	WCH 2.222 or WEL 2.308	Discussion section	Dr. Laude
Monday 4 to 5 pm	Welch first floor cubicles	Office hour	Jessica
Monday 6:30 to 7:00 pm	Kinsolving dining	Peer/Peer dinner with TA	Miranda
Monday 7:00 to 8:00 pm.	LLB 103	Discussion section	Miranda
Monday 8:00 to 10:00 pm	Kinsolving dining	Academic community	Miranda
Tuesday 11 am to noon	WCH 2.222 or UTC 4.134	Discussion section	Dr. Laude
Tuesday 3:30 to 5 pm	Welch first floor cubicles	Office hour-grading	Travis
Tuesday 6:30 to 7 pm	Kinsolving dining	Peer/Peer dinner with TA	Travis
Tuesday 7 to 8 pm	LLB 103	Discussion section	Travis
Tuesday 8 to 10 pm	Kinsolving dining	Academic community	Travis
Wednesday 1 to 2 pm	WCH 2.222 or BUR 130	Discussion section	Dr. Laude
Wednesday 2 to 3 pm	Welch first floor cubicles	Office hour	Devin
Wednesday 3 to 4 pm	Welch first floor cubicles	Office hour	Miranda
Wednesday 6:00 to 6:30 pm.	Jester dining	Peer/Peer dinner with TA	Jessica
Wednesday 6:30 to 7:30 pm.	Jester A305A	Discussion section	Jessica
Wednesday 7:30 to 9:30 pm	Jester dining	Academic community	Jessica
Thursday noon to 1 pm	WCH 2.222 or UTC 4.134	Discussion section	Dr. Laude
Thursday 3:30 to 5 pm	Welch first floor cubicles	Office hour	Travis

CH301 COURSE OUTLINE

Lecture Number	Day	Date	Торіс	Worksheet	Quizzes and Exams
	Н	8/27	Syllabus, course overview	Worksheet 1	
1	Т	9/1	Wave Particle Duality of Light		
2	Н	9/3	Development of Quantum Mechanics	Worksheet 2	
3	Т	9/8	The Origin of Atomic Orbitals		
4	Н	9/10	Electronic Configurations of Atoms and Ions	Worksheet 3	Quiz 1
5	Т	9/15	Periodic Trends Explained by ENC		
6	Н	9/17	Filled and Half Filled Shell Stability	Worksheet 4	
7	Т	9/22	The Chemical Bond: Ionic Bonds		Quiz 2
8	Н	9/24	Covalent Lewis Dot Structures	Worksheet 5	
9	Т	9/29	More Sophisticated Ideas in Structures		
	W	9/30	Exam 1		Exam 1 on Lectures 1-9
10	Н	10/1	Turning 2D into 3D VSEPR Models	Worksheet 6	
11	Т	10/6	VB and VSEPR Theory		
12	Н	10/8	VB Theory: Making MOs from AOs	Worksheet 7	
13	Т	10/13	Molecular Orbital Theory		Quiz 3
14	Н	10/15	Ideal Gas Law	Worksheet 8	
15	Т	10/20	Advanced Ideas in Gas Theory		
16	Н	10/22	Intermolecular Forces	Worksheet 9	Quiz 4
17	Т	10/27	Theory Behind IMF		
	W	10/28	Exam 2		Exam 2 on Lectures 10-17
18	Н	10/29	Getting Ready for Thermodynamics	Worksheet 10	
19	Т	11/3	Qualitative Thermodynamics		
20	Н	11/5	Quantitative Thermodynamics	Worksheet 11	
21	Т	11/10	Statistical Thermodynamics		
22	Н	11/12	Internal Energy	Worksheet 12	Quiz 5
23	Т	11/17	Internal Energy		
23	Н	11/19	Entropy	Worksheet 13	
24	Т	11/24	Entropy and Pie and Ice Cream	Worksheet 14	Quiz 6
25	Т	12/2	Free Energy and Thermo Wrap Up		
	W	12/3	Exam 3		Exam 3 on Lectures 18-25
	Sat	12/12	Final Exam 7 to 10 pm		Lectures 1-25

GRADING POLICY FOR CH301

Let me make it clear that I view grading as a necessary evil. Personally I'd like to believe you are all here because you can't wait to learn chemistry. Then, after a semester of good solid effort on everyone's part, we'd shake hands and go our separate ways. Maybe a few years from now, you could take some cut-throat exam to see if you knew enough chemistry to go to medical school, and you'd smile as you paused between questions to reminisce about good ol' Dr. Laude: "Gee", you'd think, "I wonder if he's still alive..."

But this isn't the world we've made and consequently I have to have a grading procedure for this class. Here is the general policy:

The grades for the course will be determined by the following rules:

1. Grading will be on a 1000 point scale. Letter grades will then be given on the basis of total points, using the following scale:

Various forms of A:	930 or more = A; 900 or more = A^{-1}
Various forms of B:	870 or more = B^+ ; 830 or more = B; 800 or more = B ⁻
Various forms of C:	770 or more = C^+ ; 730 or more = C; 700 or more = C^-
Various forms of D:	670 or more = D^+ ; 630 or more = D; 600 or more = D^-
Various forms of F:	599 or below = F

- 2. You may earn your points in the following four ways:
- You will take three 150 to 200 point evening exams on new material worth a combined total of 500 points;
- You will take a final exam worth 300 points;
- You will take six 30-point quizzes (with the top five scores counting toward a 150 point quiz total.)
- You will complete the ALEKS Chemistry learning module earning up to 50 points

NOTE WELL: I give fair quizzes and exams and people who learn the material do very well on them—average grades are in the high 70s. Therefore, do not expect this scale to be lowered--in common terminology, there will be no curve!!!

Look on the next page to find a couple of options in the grading procedure just to spice things up a bit.

Tabulated summary of examinations times and maximum point scores:

Assignment	Date	maximum points
Exam 1	Wednesday, September 30, 7:30 to 9 pm	150
Exam 2	Wednesday, October 28, 7:30 to 9 pm	150
Exam 3	Wednesday, December 3, 7 to 9 pm	200
5 best scores out of 6 quizzes	Fortnightly	150
ALEKS	5 th class day and 40 th class day deadlines	50
Cumulative Final Exam	Saturday, December 12, 7 pm till 10 pm	300
Total course points		1000

DETAILS OF THE INDIVIDUAL COMPONENTS OF THE GRADING PROCEDURE:

EXAMS. Three examinations will be given during the semester on CH301 material. These will be given about once a month at times indicated in the course schedule.. Each examination will consist of 30 to 40 five-point multiple choice questions that will be machine graded. These exams will look remarkably like your quizzes and homework sets in format and content.

QUIZZES. Quizzes emphasizing problem solving will be given six times during the semester. The quizzes will occur fortnightly during the last 20 minutes of class. Quizzes will consist of 6 questions worth five points each. The questions will be drawn from the same data bank as the exams and will give you a flavor for what the exams will look like. The quizzes will also offer you the opportunity to keep up with the material so you won't have to cram before exams or the cumulative final. Only your five best of six quizzes will count. To the best of our ability, we will refrain from administering the quiz to people who show up late, disrupt the class asking for a scantron, and expect to be accommodated. You want to be tested, show up at the start of class.

HOMEWORK SETS, WORKSHEETS AND OLD EXAMS. Unlike some of the other CH301 courses, I do not have graded homework—I use in-class quizzes instead. However during the semester I will post on-line a variety of materials to assist in preparing for the quizzes and exams. These materials include recommended problems from each chapter, a variety of work sheets, and the quizzes and exams from previous years.

GRADING OPTIONS IF YOU DIDN'T CARE FOR THE APPROACH DESCRIBED ABOVE:

And now, grading options, because life would be boring if we didn't have the opportunity for a few extra challenges.

OPTION 1 FOR THE HOPELESS OPTIMIST. A grading scheme based on the question, "if I ace the cumulative final can I get an A for the course?" In determining your course grade I will automatically determine whether your score on the final exam is higher than your cumulative average and if it is, I will substitute the exam score. If you score 93% or above on the final, you get an A for the course even if your cumulative course average is below 93%. If you score 77% or above on the final, you get a C^+ for the course even if your cumulative course average is below 77%, etc. This is an excellent option for the student who bombs more than one test, or, believes that he or she has really started to learn the material over the course of the semester but has scores that make an A unattainable. To be eligible for this option, you have to participate in the course by taking at least two of the three exams and at least three of the six quizzes. So don't just wander into the final after a semester in Europe and expect this opportunity.

OPTION 2 FOR THE STUDENT WHO KNOWS TOO MUCH TO BE IN HERE ANYWAY. So you ace the tests and quizzes and really wish you could be home a little earlier for the holidays. Is it possible? Yes. Very simply, if you score 90 or 93% (630 or 650 points out of 700 possible) on the three exams and four of six quizzes, you will not have to take the final and will earn either an A- or an A. Each year about 20 to 25% of the class achieves this goal.

MAKE-UP EXAM AND QUIZ PROCEDURE

I will offer make-up exams and quizzes only under the following circumstances:

1. You are away from UT as part of a UT-sponsored activity including athletics and UT-sponsored organizations. Check with me if you are uncertain whether your absence qualifies.

2. The quiz or exam is in conflict with a religious observance—notify me by the 12th class day of the conflict.

3. You suffer from a chronic, documented non-academic illness or emergency that results in your missing multiple exams and quizzes. Under these circumstances you should contact me as soon as possible to discuss a course of action.

If you do miss an exam or quiz for any other reason, the following grading procedure will be implemented:

- Your lowest quiz grade is dropped, so if you are ill or simply can't make it back from OU weekend on time, I will only count your highest five scores. Bad scores and missed quizzes for good excuses all mean the same to me, they all count toward the quiz you can drop.
- If you miss an exam during the semester, it will be replaced by the equivalent percentage of your score on the final exam applied to the 150 or 200-point exam scale. For example, if you miss exam two and get a 66% on the final exam, then you will have a score of 100 points (out of 150) inserted for the your exam 2 grade. Note: this substitution will only be allowed for a single exam. There is no need to inform me of your absence. This will happen automatically.

REGISTERING WITH QUEST TO ACCESS YOUR GRADES

The course management system we use to give exams and quizzes is Quest. No doubt you will find yourself using it for other entry level math and science courses as well. If you would like to learn more, go to the link below and enter your uteid. You should automatically see the courses you enroll in that use Quest. If you don't, wait a few days. There is no reason to go there until after your first quiz—from then on it is where you find out your exam and quiz results. The nice thing is that you typically will find out how you did within just a few minutes after you finish.

http://quest.cns.utexas.edu/student/courses/list

RANDOM MUSINGS

Once a week I post a Random Musings. This is the way I keep you all aware of what is happening in class important stuff like what is on the test and why I am not able to stand up straight. Before e-mailing me to ask a question, check the musings that I spend a couple hours writing each week precisely to avoid redundant e-mails. Oh, and there is a poetry corner each week for the culturally disinclined.

A CALENDAR BROUGHT TO YOU BY THE LOWER DIVISION OFFICES

Here are some interesting pieces of information concerning University policy with respect to course registration. If you should find yourself performing more poorly than expected, some of these dates will be important to you.

date	significance
Wednesday, August 26	Classes begin. Department adds and drops for lower
	division courses will occur in WEL 2.212. Any questions
	regarding your registration should be brought to this office
	Monday through Friday between 7:30 am and 4 pm.
Monday, September 31	Last day of Official Add/Drop and Late Registration period.
	Last day to add electronically.
Friday, September 11	Twelfth Class Day. Official enrollment count is taken. Last
	day to drop a course for possible refund.
Wednesday, September 23	Last day to drop a course without possible academic
	penalty. (Q drop deadline). In my class I am extending this
	period by a few days to October 7 so that you can evaluate
	your results from the first exam.
Wednesday, October 21	Last day an undergraduate may, with Dean's permission,
	withdraw from the university or drop a course for academic
	reasons. Last day to change registration in a course between
	a letter grade and P/F.
Friday, December 4	Last day of classes.
Monday, Tuesday, December 7,8	No class days.
Saturday, December 11, 7 pm till 10 pm	Final exam for CH301.

PREREQUISITES FOR CH301

To enroll in this class you must be calculus ready (have completed M305G or equivalent with a grade of C or better or have achieved an ALEKS math score of 70 or above. (This year we are making an exception in which students who are enrolled in pre-calculus at UT because they have scored above a 50 on ALEKS may remain in CH301.) Note that if you do not meet the math readiness requirement, the General Chemistry office will drop you from CH301 on the 4th class day. E-mail me if you think there might be complications that need to be cleared up.

In order to ensure your success in CH 301, the Chemistry Department at U.T. requires that you take an ALEKS Chemistry assessment and tutorial by the 5th class day of the fall semester, 9/01/09. This assessment will count for 5% of your CH 301 grade (3% for completing ALEKS by 9/01/09 and 2% for scoring a 70 or higher by 10/21/09). Students who do not complete ALEKS-Chemistry prior to September 1 will receive a 0 for 5% of their grade.

Our experience has been that many students e-mail us with questions that are answered in the FAQ's. Please read the ALEKS FAQs carefully before attempting the assessment as they were designed to answer any ALEKS questions you may have. If you have any issues completing the assessment, contact ALEKS directly at: http://support.aleks.com.

Go to the following website for more information and to link to the FAQs and chemistry assessment:

http://web3.cns.utexas.edu/aleks-chemistry/

Q DROPS

Because I am not giving a major exam until after the 20th class day, I am extending the deadline and will rubber stamp a Q drop through October 6. After October 6 I will assign a Q only if you are: **actually passing the course with a grade of C- or better** or have **a substantiated non-academic reason**. In other words, I will be doing my job according to the rules. If you have friends who are able to extract a Q drop on October 6 in another course even with failing grades, that is between your friend and his or her professor.

ELECTRONIC WORLD OF CH301: WEB PAGES

I no longer believe in paper and consequently make everything I do for the course available on the web. Specifically, you will need to go to web sites to find:

- Lecture notes, worksheets and musings
- The text book web site
- Videos of my lectures

- The grading website
- Course communication options

What this means, then, is that you simply have to book mark my course materials and be ready to reference them constantly. The many urls you should use are

My web pages:	http://courses.cm.utexas.edu/dlaude/
Textbook web site:	http://courses.bfwpub.com/chemprin
Quest website:	http://quest.cns.utexas.edu/student/courses/list
Lecture video website:	http://web4.cns.utexas.edu/lectures/

In an effort to simplify all of this, I have captured all of these sites and created a home page on the textbook web site. If you prefer, you can go to http://courses.bfwpub.com/chemprin and link to the other sites easily from there.

ELECTRONIC LECTURE NOTES

It pains me to watch students copying furiously during a time they should be trying to understand the material, so I will make my lecture notes from class, typed and organized, available for you to purchase cheap or download from the web.

VIDEOS OF DR. LAUDE'S LECTURES

There are cameras in the room recording my every move so that a video of each of my lectures can be made available to the class. This will be handy for those of you who have to miss a class or want to revisit a difficult concept that I have eloquently explained. I guess it is also a way to take the course without ever leaving your bedroom.

To access the lectures, go to

http://web4.cns.utexas.edu/lectures/

and click on my course. I will give a brief demo in class of how to use the site after the first lecture is recorded.

E-MAIL

There are many ways to communicate with Dr. Laude and the TAs when you have routine questions about course administration and grades. The one that makes us happiest is electronic mail. That way we have a hard copy of our communication. It also frees up office hours for weightier matters. Best of all, we promise a 24 hour turn-around time for your messages. Oh, one thing we do not do by e-mail is answer complicated science questions better suited for the chalk board during any of a dozen help sessions and office hours each week. Please use a little common sense about when to e-mail us.

To contact Dr. Laude, use the following address:	dalaude@mail.utexas.edu
To contact Travis Johnson, use the following address:	ubertravis@gmail.com
To contact Miranda Colletta, use the following address:	mcolletta@mail.utexas.edu
To contact Jessica Lawshe, use the following address:	jelawshe@gmail.com
To contact Devin Matthews, use the following address:	dmatthews@mail.utexas.edu

SOME TIPS ON E-MAIL ETIQUETTE

Sorry, I can't take it anymore and have to start sounding like your father. You may have noticed there are now two ways of saying the same thing in an e-mail. Note the first form is used in presumptuously cool TV commercials from people trying to sell you small electronic gadgets.

1 man :::?" gimme 5 pt ec @@#?::"))(:HC

I know you have your own way of doing e-mail and I am unlikely to change it, but understand that there is a difference between using IM or text messaging with your bffs (I don't know what this means, I hope it won't get me fired, but Travis thinks this adds an edge of irony) and e-mailing your professor with a request. In my old-fashioned opinion, e-mail is no different than a letter, a phone call or an office visit. Each of these forms of communication includes:

• a salutation with appropriate title (for example, I am Professor Laude or Dr. Laude—I am not Mr. Laude or dave or hey loudman:::/) or undeserving of any greeting at all.

- a decent stab at identifying who you are (including your uteid if it is something to do with grades in the class) so that when I e-mail you back I can include my own correct salutation
- a succinct but thorough description of why you e-mailed me.

Also desired but non-essential courtesies include:

- A friendly farewell (like "Have a good weekend" or "Thank you")
- Punctuation reflecting the possibility you were educated in a school system.

Using these suggestions, an e-mail to me might look like this:

Professor Laude, I am e-mailing to request an appointment time with you to discuss some non-academic concerns that are making it difficult to ace your exams. Thanks for the opportunity, Harold Carmichael hc1234

Now I don't particularly care if you want to ignore my suggestions, but there will come a day when your lack of attention to these courtesies will have an undesired consequence, like ignoring your e-mail.

TEXTBOOK AND SUPPLEMENTAL MATERIALS FOR CH301

Text: Welcome to a brave new world of electronic textbooks—I am using Atkins Jones 4th edition electronic, found at http://courses.bfwpub.com/chemprin. E-books are cheaper, don't weigh anything, don't kill trees, and the bolded or colorful stuff on the pages actually turns into a video or a link to a useful web site rather than being a text book just wishing it was a web site. Congratulations.

To find out how to purchase the e-book, please use the handout found in the random musings folder on my CH301 web site. Purchase price is \$93.95 (less than half the cost of a new text) and you need to have a credit card ready. A neat feature of the e-book it that it is my personal text book to annotate on line, personalizing it for the entire class. There is an option for purchasing just one semester worth of the portal for about $2/3^{rds}$ the price, but this is based on your decision to not continue in my course in the spring—typically about 80% do continue.

Course Packet: If you are going to buy one supplement for the course, it makes sense that you buy the one your professor makes. My course packet includes all of the lecture notes, typed up neatly, all of last year's exams and quizzes, all this year's worksheets with answer keys, a nice review of high school chemistry, plus the syllabus. Much of this you could find on the web, but what a hassle. You can purchase this nice little package for about \$25 (tax free and half the price the for-profit copy centers would charge) as part of a fundraiser for scholarships for students. There will be a one-time sale of this packet on Thursday, September 3th.

REGRADE PROCEDURE

To request a regrade, send an e-mail to Travis the does the following:

- 1. Include the words "Regrade Request Laude" in the subject heading.
- 2. Make sure you provide adequate information in the body of the e-mail including the unique number of the course, your name, eid, the exact assignment (e.g. make up exam 1 if it was the first make up exam), version number and a clear concise summary of the concern.
- 3. There will be a two-week limit with respect to regrades on quizzes. So if you do not submit a regrade request to Travis by e-mail within two weeks of the quiz date, you get the grade that is recorded.
- 4.

STUDENTS WITH DISABILITIES

The Services for Students with Disabilities (SSD) office of the Student Dean's Office is charged with assisting disabled students. They estimate that about 2000 students suffer from disabilities including mobility impairments, learning disabilities, visual impairments, hearing impairments, ADD and ADHD, and others. By law, all of these students are guaranteed a learning environment that provides reasonable accommodation of their disabilities and I am happy to do so. However it is your responsibility to inform me at the beginning of the semester (by the 12th class day) if you have a disability. I must know this information as soon as possible so that I can make appropriate arrangements.

RELIGIOUS OBSERVANCES AND MAKE-UP EXAMS

It is a University policy that a student may make-up work missed due to observance of a religious holiday. Please notify me by the 12th class day to insure that you can make up the exam or quiz. In general you must do everything possible to take the regularly scheduled make-up that I provide to students with excused absences.

ACADEMIC COMMUNITIES STUDY GROUPS.

I have arranged for the class to form study group tables four nights a week in the residence hall dining rooms as part of the CNS Academic Communities. The way it works is that there will be TA and peer-to-peer supported study groups on Sunday through Wednesday evenings in the two dining halls. Each of these study group sessions is preceded by a discussion session where you can pick up a copy of worksheets and get questions answered by the TAs.

day and time	location	activity	usual presider
Sunday 6:30 to 7:30 pm.	Jester A121A	Discussion section	Devin
Sunday 7:30 to 9:30 pm	Jester Dining Hall	Academic community	Devin
	_	-	
Monday 7 to 8 pm	LLB 103	Discussion section	Miranda
Monday 8 to 10 pm	Kinsolving dining hall	Academic community	Miranda
Tuesday 7 to 8 pm	LLB 103	Discussion section	Travis
Tuesday 8 to 10 pm	Kinsolving dining	Academic community	Travis
		-	
Wednesday 6:30 to 7:30 pm.	Jester A305A	Discussion section	Jessica
Wednesday 7:30 to 9:30 pm	Jester Dining Hall	Academic community	Jessica

Academic Community Study Groups Times and Locations:

THE SUCCESSFUL NATURAL SCIENCES STUDENT

LESSON 1 A FABLE: THE ACTIVE LEARNER AND THE PASSIVE LEARNER

Ziquang the Passive Learner. Ziquang has never missed a lecture. Ziquang goes to two discussion sections a week. Ziquang reads and rereads the chapters in the text. Ziquang has hired a tutor. Ziquang has worked and reworked all of the questions from last year's exams one hundred times. On the day of the test I ask Ziquang if he can name the seven strong acids. He only knows three. Ziquang gets a 65 on the exam.

Indirah the Active Learner. Indirah sleeps until 4 each day and has never come to lecture. Indirah never bought the text book. On the day before the test Indirah gets on the web and finds out what the 30 questions are on the exam. One of them is to name the strong acids. Indirah memorizes all seven acids. She also stays up all night and learns how to answer the other 29 questions. On the day of the test I ask Indirah if she can name the seven strong acids. She does. Indirah gets a 92 on the exam.

The Moral of the Story. The moral is not that you should skip class and stay up all night before the test. The moral is that you have to be able to prove to yourself that you are learning the material that is on the exam. How you do it I don't care. But be aware that there is no guarantee that being a good little boy or girl will get you an A like it did in high school. Learn the material and I will give you an A. Don't and I will be happy to console you before explaining what it means to be an active learner.

LESSON 2 YOU'VE GOT TO KNOW WHAT YOU DON'T KNOW

The wisest thing I ever heard a student say. A young woman was asked by an incoming freshman what it took to be successful at UT. She replied, "you have to know what you don't know."

Imagine sitting down by yourself just before an exam and seeing how much stuff about the test you can actually write down, or say out loud, with nothing in your possession but your brain. After all, on the exam that giant back pack of material and that computer and those friends you studied with you will be of no help at all. Don't fool yourself that just because you studied hard (whatever that means), that you are prepared for the exam.

Moral of the Story? The only way you can know for certain that you will do well on the exam is if you can isolate yourself from your learning environment and really assess what you know, and what you don't know. In that quiet time, if you can spend an hour explaining to yourself what will be on the exam, and you never have to hesitate, or can always find vocabulary (other than :the word "thingy") to express yourself, then you will do fine on the exam. And if you can't? You are just kidding yourself that you are prepared. Oh, and if you don't want to know the truth, and you walk into the exam having never really queried yourself about what you know and don't know, you are simply gambling with your grade.

LESSON 3 ACHIEVING PERFECTION IS HOW YOU EARN AN A IN COLLEGE

High school was great. You glanced over the material on the study guide for a 20 question test, and then you took the exam. You "kind of" or "sort of" knew the material. And your teacher was just thankful you were coming to class and weren't a jerk. So when it came time to grade the exam, even though you actually only got 10 questions right, for the 10 questions you got wrong, you "almost" got them right and with four points of partial credit on each question, you received your A for the test and a ticket to UT. Congratulations.

College is not so great. It seems like half your exams are multiple-choice. And after studying for your 20-question exam, you "kind of" or "sort of" know the material. Oh, this time your professor doesn't care if you studied enough. She just wants to know that you learned it. So you take a multiple choice test and get 10 questions right, and for ten other questions, that you "kind of" or "sort of" know, you find a really good answer that happens to be almost right. For all that effort spent almost learning, you get a zero on the question, an F for the test, and a conversation with your parents about alternate career choices. Welcome to college.

Moral of the story? You need to tweak that calibration curve on what it means to know what you know. College demands a lot more.

LESSON 4 THERE ARE DOZENS OF RESOURCES FOR LEANING THE MATERIAL—FIND THE RIGHT ONES FOR YOU

You will want to identify an efficient and effective approach to getting an A in a course. Understand that learning to study successfully at the college level is an ongoing effort and that if you find yourself performing poorly, then this is an indication that you need to change—it is up to you to figure out which approaches works best and constantly be refining your strategies for learning.

Listed below are examples of the many resources typically available for the science and math courses you will take a UT. Mix and match them to come up with what makes you a successful student.

Lecture. From a testing perspective, the most important thing about going to class is **finding out what you are expected to learn to get a good grade** (and that is the reason you should always go to class.) It is a perk if the professor is also a dazzling lecturer who can really teach you something you will remember during a 50 or 75 minute time period. So just because you come to class daily and then nod off, or day dream, or act like a stenographer copying off the board, doesn't mean you have helped yourself at all in preparation for an exam. In many ways, the lecture is the least important thing you will do in terms of active learning.

Lectures on Demand. Increasingly faculty are posting their lectures on line for you to download and watch. This can become a more effective way to view lectures than the real-time version since you will be able to pick and choose exactly what you need to hear. For my course you can find the videos at http://web4.cns.utexas.edu/lectures/

Lecture Notes. Regardless of whether you go to class, someone has created some really good course notes. Maybe it is the professor. Maybe it is a classmate. Maybe it is you who was a really good stenographer. Whoever did the work, get a hold of these notes and to the best of your ability, know them thoroughly—don't just look at them, KNOW THEM. As a test, put them away and see how well you can recreate them from memory. After all, they are what the professor thought was important and they will be 99% of any exam.

Discussion sections, office hours, study groups. Everyone needs a secondary learning environment where they can go to have questions answered and, in general, engage in intellectual discussion about the subject matter. Make sure you provide yourself this opportunity by finding yourself a discussion section, office hour or study group each week that fits your schedule and going every week By the way, there is no more wasted time than time spent in a discussion section or study group unprepared, so go in knowing what it is you want to learn and ready to be an active learner.

Academic Communities Study Groups. Study group tables form five nights a week in the residence hall dining rooms as part of the CNS Academic Communities. For more information on how to use these communities to help you with all of your math and science classes, places check out the Academic Communities website: http://cns.utexas.edu/students/academic_community_programs/.

Worksheets and problem sets. Most every science or math course provides students with supplemental problems and worksheets to help you master the material. Of course you should do these problems, but appreciate that working them with a friend, or with an answer key, really reduces the likelihood you will be able to do the problems by yourself on an exam. Don't fool yourself by reworking the same problems multiple times!!

Textbooks. Your textbook provides an eloquent description of the course material—actually wayyyy too eloquent of a description. Understand two things about textbooks: they always have more material in them than your instructor wants you to know and there are a dozens of other textbooks in the library that you might find to be a better learning resource. Don't be afraid to use a different book.

Textbook problems. There are plenty of problems in textbooks to work. Since these questions approximate the content and difficulty of exam questions (albeit in a different format), they are a useful way to study and test your knowledge, but unless actually assigned by the professor, they might not approximate what you will be asked to learn for an exam.

Textbook support materials. You can purchase supplemental materials with most every textbook, such as answer keys and textbook outlines and study guides. You can also use the CDs provided with the text to engage you in computer-assisted exercises to test whether you have learned the material. However unless you are independently wealthy I rarely see the reason to make these purchases when you have the internet available to do the same thing.

Internet. Type any topic area you want into a search engine and you will retrieve about 4.6 million web sites that are constructed to assist with your education. One site to absolutely book mark is the one associated with your text book. In most cases it offers an array of materials from outlines to sample problems to multimedia downloads that can be more useful and easier to navigate than the text itself. And if you find another site on the web that teaches you better, bookmark it as well.

Write your own problems. Be an active learner. If you can learn to write your own questions, then you will really know that you have learned the material. It is actually not that hard once you put yourself in the position of thinking about what should go into a question. This is the number one way you will know that you know the material.

A thought on tutoring. Some people think they can buy a grade. So they shell out \$30 an hour to observe someone else prove they know the material. You've already heard your professor give a lecture on the subject that is a lot better than the tutor, and you can go (for free) to scores of discussion sections and study groups. So the only real reason to pay a tutor is to have someone act like your mom or dad and force you to sit in your room and study. So pay your roommate \$10 an hour to do the same and save.

So should you use all of these resources? Of course not. So which should you use? The ones that get you an A the faster and cheapest. Which ones are those? How do I know? Everyone is different—figure out what works for you and do it. But always be ready to change because just about the time you figure out how to ace one course, you will have another course that requires a different form of studying to be successful.