Syllabus

Chemistry 320N Spring 2015

Organic Chemistry, Part II

Unique Numbers: 51005

MWF 11:00 - 11:50, Welch 2.224

**Lecturer: Dr. Brent Iverson**

**Teaching Assistants: Brian Ikkanda, Cameron Peebles, Maria Lambousis, Elizabeth Gratton, Christopher Wight**

Course Websites: Main resource: http://iverson.cm.utexas.edu/courses/310N/Index.html Canvas: https://utexas.instructure.com/courses/1128463

**Active Problem Solving** - In response to feedback from former students - Tuesday 3:30-5 PM Room WEL 2.224 New and challenging problems will be presented, and you will work in groups to solve them. All of us will be there to walk around the room and help answer any questions and provide guidance. These optional sessions will provide the perfect opportunity to ask any questions you have about any of the course material as well.

**Iverson Live Office Hours - Wednesday** **5-6 PM Room WEL 1.308** I will be answering questions in a standard format office hour each week.

**"Missed the Wave" Office Hours** - This is back because of popular demand -Monday 3-5 PM Room WEL 2.306 (Suite C/D) This recitation was specifically added for people who feel they need help catching up or want to discuss older material. Brian, the most experienced TA in the department will lead this.

**Live Virtual Simulcast Office Hours** - Having your questions answered is a huge part of learning Organic Chemistry. Sort of stating the obvious there I know. Unfortunately, in the past attendance at my office hours usually only reached about 20% of the class (or less) most of the time. I am trying something new in order to reach EVERY student with an "office hours" experience-Thursday 5:30-7 PM Click here to watch the live virtual office hour simulcast. We will be taking the questions you submit from your computers and answer them live. This is timed to be the evening before weekly homeworks are due (Fridays). These will be recorded for those of you with conflicts. I want to see how close we can get to having everyone watch the live or recorded sessions. There will be very limited seating available in the broadcast studio, MEZ 2.220, on a first come, first served basis.



**Special Review of 320M/320M material -** Wednesday, January 20th, 6-8 PM, WEL 2.224. We have found it helpful to hold a two-hour review at the beginning of the course to review first semester material, with an emphasis on exactly which first semester material is the most important as we begin second semester OChem.

**Review Sessions** - I will be leading these review sessions which will be designed to help you as much as possible prepare for the exams. Optional review sessions for the mid-term examinations will be given the Monday evening before each exam on the following days and times:

**Monday, February 15 Room: FAC 21 8:00 - 10:00 PM**

**Monday, March 21 Room: WEL 2.224 8:00 - 10:00 PM**

**Monday, April 18 Room: WEL 2.224 8:00 - 10:00 PM**

**Required Texts** Note that it is against the law to download an unlicensed text book as a pdf 1. Brown, Foote, Iverson and Anslyn Organic Chemistry, 7th Edition (Nautilus shell on the cover), Cengage. 2. Study Guide and Solutions Manual for above text.

**Course Prerequisites:** For CH320N: CH 320M AND 328M MAY NOT BOTH BE COUNTED. FOR PREMEDICAL, PREDENTAL, LIFE SCIENCES, AND PHARMACY MAJORS. PREREQUISITE: CH 204 OR 317 WITH A GRADE OF AT LEAST C, CH 310M WITH A GRADE OF AT LEAST C, AND CREDIT OR REGISTRATION FOR CH 210C.

**Recommended Materials:** Molecular Models. These often make the difference between an A or B and C or lower. No kidding, buy them if you don't already have them, even though they are overpriced.

**Additional Sources:** Selected old exams are posted on the web page. Exam keys will also be posted on the course web page following the exams.

**Homework:** **READ THIS** There will be two kinds of homework assigned in this class. There will be weekly homework sets that will be turned in or completed on-line BEFORE CLASS on the Friday it is due. These will be graded, and the points you earn will amount to extra credit that is added to your next exam grade as T-score points or Percentage points, whichever is in your best interest. The second type of homework will involve book problems that are assigned, but not collected. These are extremely important, as the only way to master organic chemistry is to work many, many problems over the course of the semester. Click here to see the homework assignment web page. The links will become active when the homework is assigned.

**Web Page Access:** This course will have a web page where we will place useful items including: a posting of the syllabus, Rules of the Day and homework assignments, Pictures of the day (this will make sense as the semester begins), links to the Class E-mail and a link to my chemistry movies. The page will be accessible from the Chemistry Department Undergraduate Course Home Page or you can get there directly using the following URL: <http://iverson.cm.utexas.edu/courses/310N/Index.html>

**E-mail Access:** electron@cm.utexas.edu There will be E-mail access (under "E-mail Us" on the web page) to us if you want to ask a question electronically. Be advised that during peak periods we may not be able to answer every question.

**Section Changes, Adds, and Drops:** All such business (involving either lecture or laboratory) will be handled during the first and second weeks of class by the undergraduate office personnel in Welch 2.212.

**Exams**

Three mid-term exams will be given during the course of the semester. They will be held on Thursday evenings from 7:00 - 9:00 PM on the following days:

**Thursday, February 18**, 7:00 - 9:00 PM, Rooms: UTC 2.112A, BUR 106 Alternate Time (for excused changes only\*): 4:00 - 6:00 PM, Room: WEL 1.316 Those of you with last names starting with the letters A-K report to UTC 2.112A, those with last names starting with L-Z report to BUR 106.

**Thursday, March 24**, 7:00 - 9:00 PM, Rooms:UTC 2.112A, BUR 106 Alternate Time (for excused changes only\*): 4:00 - 6:00 PM, Room: WEL 1.316 Those of you with last names starting with the letters A-K report to UTC 2.112A, those with last names starting with L-Z report to BUR 106.

**Thursday, April 21**, 7:00 - 9:00 PM, Rooms: UTC 2.112A, BUR 106 Alternate Time (for excused changes only\*): 4:00 - 6:00 PM, WEL 1.316 Those of you with last names starting with the letters A-K report to UTC 2.112A, those with last names starting with L-Z report to BUR 106.

\*An excused change is one caused by a regularly scheduled (in the course schedule) class or lab class. NOT an organization meeting, music practice or a job. If you have any unexcused conflicts, it is up to you to arrange to be present at the mid term exams from 7-9 PM (That is why the dates are published in the course catalogue)

**Final Exam: Saturday, May 14**, 9:00 AM - noon Rooms: TBA

**Policy on Exam Coverage:** You will be responsible for all material covered up to the Friday lecture the week before each midterm. That way you will be able to think about the material for almost an entire week before you are tested on it. Also, the pace of the class can vary, so do not be concerned if we are not on the same schedule as descibed below under "proposed exam topics". The bottom line is that you are only responsible for the material covered in the previous Friday's lecture, NO MATTER WHAT THE SCHEDULE IN THE SYLLABUS SAYS ABOUT "UNITS" COVERED ON EACH MIDTERM

**Course Outline**  The following schedule is only approximate, and subject to change during the semester. In other words, if we don't cover material before a test, it will not be on the test no matter what this schedule says.

**Unit 1: NMR and Introduction to Organometallic Compounds.**

Chapter 13

Chapter 15

**Unit 2: Introduction to Carbonyl Chemistry: Aldehydes and Ketones.**

Chapter 16

**Unit 3: Carbonyl Chemistry Continued: Carboxylic Acids and Derivatives.**

Chapters 17,18

**Unit 4:Formation of Carbon-Carbon Bonds with Carbonyl Compounds: Enolates**

Chapter 19

**Unit 5: Aromatic Compounds and Their Reactions**

Chapters 20, 21, 22

**Unit 6: Amines**

Chapter 23

**Unit 7: Carbon-carbon Bond Forming Reactions and Synthesis**

Chapter 24, Selected sections

**Unit 8: Biological Molecules: Lipids, Carbohydrates, Amino Acids and Nucleic Acids**

Chapters 25-28, Various Sections

Proposed Exam Topics (Subject to Revision)

Mid-term Exam I: Units 1-2

Mid-term Exam II: Units 3-5

Mid-term Exam III: Units 6-8

Final Exam: All of the above.

**What You Will Learn in Chem 320N** This course is designed around a simple idea. By the time a student has finished he or she should be able to look at a molecule and then predict how it will react under various conditions. In order to do this, you will learn about molecular three-dimensional structure and bonding, as well as the answer to the most important question in chemistry; where are the electrons? If you understand where electrons are located in three-dimensional space around a molecule, then you will be able to predict how that molecule will react under various conditions. Predicting reactions, based on a few fundamental principles, is vastly easier than trying to memorize all of the different reactions. Strive to understand and predict, not memorize and forget. A major difference between CH320M/CH328M and CH320N is that CH320N introduces many more ways to make carbon-carbon bonds, so the synthesis possibilities are a great deal more interesting! In addition, you will be referred to the Seven Golden Rules of Chemistry that explain almost everything you will learn about molecules in Organic Chemistry. Understanding the seven golden rules of chemistry will allow you to correctly predict the mechanism of a new reaction based on the relative energies of different possible reaction intermediates. You will also be able to predict which of the possible products will predominate. Finally, you will be able to make good guesses at the physical properties of new molecules, such as their solubities, stabilities, reactivites, relative boiling points or melting points, etc.

THE FIRST \*POINT\* OF THIS CLASS IS ORGANIC SYNTHESIS, NAMELY MAKING MOLECULES. Think Of Reactions As "Tools" You will be presented with chemical "tools" that are nothing more than the reactants needed to turn one type of molecule into another. By the time you have finished, you will have a relatively large "tool" kit, and you will be able to devise rather complex schemes for making a desired product out of a given starting material. The best way to study for this part of the course is to construct a road map that shows all of the different types of molecules we will be discussing (alkenes, aldehydes, carboxylic acids, etc.), and how the different "tools" are used to interconvert them. This "Big Picture" type of analysis will help you better understand what is going on. The key to success in this course will be the quality of your roadmap. Remember, the "tools" are not to be simply memorized, you must also understand how they work. Otherwise, you will be devastated by too much to memorize, and you will not be able to apply these "tools" to important new situations! In other words, mechanisms are important and must be learned and understood because they provide the detailed understanding that allows you to predict regiochemistry, stereochemistry, and when the reaction might not work (rearrangement, etc.). The mechanisms are very similar to each other so they are not that hard. Do not memorize mechanisms, understand them by always asking yourself "why" each step occurs the way it does.

Hint: almost all the steps in the organic mechanisms from 320N can be viewed as a SIMPLE MULTIPLE CHOICE SITUATION in which you only have to choose from four different mechanistic elements:

1. Make a bond (between a nucleophile and an electrophile)

2. Break a bond (to make stable molecules or ions)

3. Add a proton

4. Take away a proton.

Understanding the answer to the most important question in chemistry, namely where the electrons are located in a molecule, will allow you to predict accurately which groups on molecules will act as an electron-rich nucleophile and which groups will act as an electron-poor electrophile in a reaction. You will then be able to predict reaction mechanisms and thus reactions. You will understand organic chemistry and how to use it to build molecules!

THE SECOND \*POINT\* OF THIS CLASS IS PREPARING STUDENTS TO SUCCEED IN SUBSEQUENT CLASSES THAT EXPLORE THE MOLECULES OF LIFE. Many of you will pursue the medical sciences and you will be learning about the various different molecules of living cells, organisms and ultimately people. It is essential that you understand molecules, their properties and reactions well enough so that when you learn about the molecules of life they will already be familiar to you.

**Attendance:** Organic Chemistry is a very hard subject and can only be mastered through very disciplined study. This means attendance at every class is among the minimum requirements for success. It will be virtually impossible to do well in this class if you do not attend the lectures faithfully. Successful students rely more on their lecture notes than the text, since the person giving the lectures is writing the exams. Okay, so I helped write the book as well, but you get the point.

**How Can You Master Organic Chemistry?** Study the material every night, do all of the assigned problems and always try to relate new concepts and ideas to what you have already learned. Do not simply try to memorize the answers, in the hundred year history of Organic Chemistry classes, the memorization route has never, ever succeeded at the end of the semester, only the beginning when there is not that much to know. In the end, there are far too many things to memorize. You have to learn how things relate to each other, because then the whole picture is easy to remember. What is more, it becomes easy to figure out things you may have forgotten. Get behind at any time and you can kiss it good-bye....

**How Should You Study Organic Chemistry?** [Click the How to study button on the course website](http://iverson.cm.utexas.edu/courses/310N/MainPagesSp06/HowToSt.html), and how to build the all-important [roadmap](http://iverson.cm.utexas.edu/courses/310N/MainPagesSp06/Roadmaps.html) for yourself. Learning how to study efficiently is perhaps the most important thing you could learn from this class. \*\*\*\*\*\*\*\*\*TOP\*SECRET\*\*\*\*\*\*\*\*\*\*\* To get a good grade you must do well on the tests. Duh. Since I try to emphasize important material on the test, you should focus your study on the important material. What is the important material you ask ? That is easy. The "[Rules of the Day](http://iverson.cm.utexas.edu/courses/310N/MainPagesSp06/ROTD.html)" highlight the important material discussed each lecture. Make sure you thoroughly understand the rules of the day, and why they are important. Second, I will say when something is important by playing my trumpet or drawing a little key next to a 'key' concept. Always write down these cues and use them as a study guide so you can focus your study time on the important stuff, not the less important details. We are not in the business of trying to trick people; if we say it is important, chances are it will be on the test. IT IS JUST THAT SIMPLE. (Of course this doesn't mean we can’t throw in a few mind benders to see how well you can apply what you know to new situations.)

**How to Succeed in Chem. 320N** If you were happy with your grade in CH320M/CH328M: Keep up the good work! If you were not satisfied with your grade in CH320M/CH328M: You will have to change something! Find someone in the class who received the grade you wanted last semester, and ask them what they did differently than you. If you do not approach this class differently, then the result will probably be the same. The following is a top twelve list of things you could change:

1. Never get behind, never get behind, never get behind

2. Strive to understand, not memorize the material

3. Come to class everyday and take great notes. Nothing can replace the human experience of lecture. We have analyzed attendance in previous semesters and those students coming to class averaged an entire course grade higher than those choosing to miss lecture. Your notes will be a primary study aid.

4. Do all of the homework. It is OK to work together in groups, but make sure you understand all the homework, every problem, every week. The entire course is built around you doing the homework so you are very comfortable with the material going into the exams!

5. Keep up with outlining your lecture notes and the book.

6. Keep up with updating your roadmap for each new reaction.

7. Understand, do not memorize mechanisms.

8. Practice predicting new reaction mechanisms, before you are told the mechanism.

9. Use the videotaped lectures to work through any parts of your lecture notes that are not clear.

10. Work through the old exams.

11. Never get behind, never get behind, never get behind.

12. Strive to understand, not memorize the material.

I wasn't kidding with the 12 tips above. For more detailed tips on how previous students have succeeded in my class please click here.

**Grading:**

The raw scores earned on each of the exams in this course will be converted to Standard T-Scores. The Standard T-Score is computed as follows:

T = [(x-X/s) •10] + 77

where:

x = your raw test score

X = the class mean score =  x/N

N = number of test scores

 = standard deviation = [ (x-X)2/(N-1)]1/2

Using Standard T-Scores allows an effective averaging of grades without introducing a bias in favor of tests with the greatest standard deviations. Since it is based on a normal (Gaussian) distribution, it generally represents the fairest way of grading. (Nearly all national exams such as the SAT, MCAT, and GRE use a similar form of Standard T-Scores)

Your final course grade will be calculated as 30% of your best midterm T-score, 30% of your second best midterm T-score and 40% of your final exam T-score. There will be three midterms during the semester, so this means that your lowest midterm exam T-score will be dropped OR you will be able to miss one midterm for any reason with no penalty.\* The following conversion table will be used to calculated final course grades:

T-Score .............................Letter Grade

93.0000 < T ..............A

90.0000 < T < 93.0000 ..............A-

87.0000 < T < 90.0000 ..............B+

83.0000 < T < 87.0000 ..............B

80.0000 < T < 83.0000 ..............B-

77.0000 < T < 80.0000 ..............C+

73.0000 < T < 77.0000 ..............C

70.0000 < T < 73.0000 ..............C-

67.0000 < T < 70.0000 ..............D+

63.0000 < T < 67.0000 ..............D

60.0000 < T < 63.0000 ..............D-

T < 60.0000 ..............F

\*Missing two midterms or the final exam without a documented, valid excuse will result in a failing grade.

NOTE: WE DO NOT ROUND SCORES. AN 89.92 IS ENTERED AS 89.92, N0T 90.00.

\*\*\*\*\*Important Notice\*\*\*\*\*\* In general, using T-scores increases everyone's grades compared to using absolute percentages. Nevertheless, we will keep track of your percentage scores on every test. If the percentage scores are ever higher than your T-score, we will use the percentage score for your course grade calculation. Thus, if everyone does extremely well in this course, no grade will be lowered by using a curving system!

Your homework grades will be added to the better of your T-score or percentage score and that total is the score we will record for your official exam score.

Taken together, the mid-term examinations will count for 60% of the final course grade. Plan NOW to be present for these exams! During the semester, however, one exam may be missed for any reason whatsoever without penalty. If you take all three exams, we will automatically drop your lowest grade.

Failure to take two mid-term exams will result in an automatic F (or, in the case of justifiable excuse, an X) being assigned in 320N. It is particularly important that students avoid any potential conflicts between these scheduled evening exams and any other activities such as laboratory classes. If unavoidable conflicts exist, please come see me immediately. Please note, I am sorry for any inconvenience these out of class two hour exams might cause, but we do things this way for your own protection because:

1. We can use rooms large enough to ensure no cheating is taking place during the exam.

2) The two-hour format means we can administer tests that are comprehensive, yet do not have unreasonable time limits. Thus, you will have a chance to show what you know, not just how fast you can write.

Note that for the midterm exam grade that is dropped, the homework points for the weeks leading up to that exam do not count for any other exams. Also, for any exam for which you arrive after the official start time, you will only be allowed to enter the exam room is not a single student has already finished and left. BE ON TIME!!

The final exam, accounting for 40% of the course grade, will be comprehensive in its coverage of the material presented in Chemistry 320N. There will be no make-up exam for the final and it may not be taken at an alternative time for any reason. Specifically, failure to take the final exam at the scheduled time and place without an approved, documented excuse will automatically result in a failing grade being assigned for 320N. A documented, excused absence at the final will result in an Incomplete being assigned for the course. An example of a documented, excused absense is a note from a doctor that states you are physically UNABLE to attend the final. Simply not feeling your best is NOT considered to be an excused absence, as we all have days in which we are not feeling well but must take care of our responsibilities anyway. If you are up and walking around campus on the day of the final, you must take it. NO EXCEPTIONS.

**Academic Dishonesty**:

**Honor Code** "As a student of The University of Texas at Austin, I shall abide by the core values of the University and uphold academic integrity."

**University Code of Conduct** "The core values of The University of Texas at Austin are learning, discovery, freedom, leadership, individual opportunity, and responsibility. Each member of the university is expected to uphold these values through integrity, honesty, trust, fairness, and respect toward peers and community."

Any violation of the above Honor Code that occurs during an exam or in the regrading process will result in a 0 being assigned for that exam and the student involved will be formally reported to the Dean of Students, where they will be subject to additional penalties or actions. The exam with the 0 will be automatically counted in the final grade calculation at the end of the semester. To guard against altered exams being submitted for a regrade, we routinely copy a large number of exams following grading but prior to handing them back.

**Regrades:** Exams can be turned in for regrades as long as they were taken in permanent ink, not pencil or erasable ink. Regrades must be submitted within 7 days after the exam is handed back. They can be submitted in the labeled class slot adjacent to WEL 2.212 or you can hand the exam to myself or one of the TA's. You must indicate what problems need to be regraded, and provide a brief explanation for your concern. The entire exam will be regraded.

**Exam rules:** No notes or books are allowed used during the exams. Because of recent incidents, you will not be allowed to interact with your cell phone in any way during exams. No exceptions. Turn them off, or leave them at home. \*\*\*Interacting with a cell phone during an exam will be considered a violation of the Honor Code and will result in a 0 being recorded for your grade on the exam, no matter what you were actually doing with the phone.\*\*\*

**Incompletes:** An incomplete (X) is a temporary delay in reporting the final course grade. An X may properly be assigned for students who must miss the final due to illness or other imperative nonacademic reasons. An X may also be given when the student has not been able to complete all the required assignments for reasons other than lack of diligence but only if the student has a passing grade on the work completed. Documentation of non-medical excuses will be required. In general it is best for students to see a counselor in their Dean's Office regarding non-medical excuses for missing the final. Just to be clear, you will be required to have a written medical excuse stating you are physically unable to attend the final signed by the person who treated you if the reason for the request for a postponed final is illness. Simply not feeling your best is NOT considered to be an excused absence, as we all have days in which we are not feeling well but must take care of our responsibilities anyway. If you are up and walking around campus on the day of the final, you must take it. NO EXCEPTIONS. Students have one long semester to make up an X and extensions are rare. After one long semester, the X converts to an F if no other grade is reported. An X will not be assigned to allow the student an opportunity to repeat the entire course; the only assignments or exams that should be completed to resolve the X are those that were missed for legitimate reasons during the semester. In addition, the X should be assigned only if the student has been informed and the exact procedures by which the student will make up the work are agreed upon. The assignment of an X constitutes a contract between the student and the instructor. It is often helpful to have the arrangement in writing, specifying what the student is expected to do to complete the course, including due dates.

**Drop dates:**

**4th class day:** Dropping courses electronically: During the first four class days, students may add and drop courses with the Registrar's online registration service, ROSE (January 23, 2015).

**12th class day**: Dropping a class with possible refund: During days five through twelve (February 4, 2015) students may drop courses online, but must go to the department offering the course to seek permission to add a course. Be advised that some departments do not allow adds/drops after the fourth class day. For those departments that do allow adds/drops, the add-transactions before the twelfth class day will be processed in the respective department. Students who wish to add a class after the twelfth class day should be required to go to the Student Division of the Dean's Office (first floor of W. C. Hogg) to provide justification for the proposed change. The student must have written permission and documentation of class attendance from the instructor and departmental approval.

**49th class day**: Last day to drop a course with approval: After the 12th day of class, and until the deadline for dropping courses (April 6, 2015), a student wishing to drop a course will get the forms from the Dean's Office (WCH 1.106) or their departmental advising center and ask the instructor to sign the drop form. Instructors are also asked to indicate on this form the grade (A-F) that the student has earned in the class up to this point. In contrast to previous years, instructors are not asked or able to assign a Q vs F on this form; henceforth the students are completing this paperwork for a Q-drop.

**Nonacademic Q-drop:** After the last day for academic Q-drop students with substantiated nonacademic reasons (as determined by the Dean's Office) may be allowed to drop a course. Faculty will be asked to provide information on student performance up to the time of the nonacademic Q-drop request but are not responsible for making the decision about assigning a grade of Q. Please encourage students who experience significant nonacademic problems such as extended health-related problems or family emergencies to contact the Dean's Office.

**New One-time Drop Policy:** Beginning this year, students have the option once in their undergraduate degree to drop a class or drop out of all classes in a semester right up til the last class day. This new policy was proposed and approved by UT Faculty Council on May 9, 2011, and more information is available at http://www.utexas.edu/faculty/council/2010-2011/legislation/EPC\_OTE.html. According to the policy as approved by the Provost, a student who has completed at least two long semesters here at UT can drop a class only if he or she has an average grade of D+ or below in the class at the time of the request and if there are no pending investigations of scholastic dishonesty for the course in question.

**Courses Taken on a Pass/Fail Basis (CR/NC)** The University defines a D- as a passing grade for undergraduate students. The instructor is obliged to assign a grade of CR (Credit) for a student registered on a pass/fail basis who has a D- or better in the course. It is important that the roster indicate the student is registered for the course on a pass/fail basis. Otherwise, a letter grade must be assigned. There is a time limit for students to change courses from a grade basis to pass/fail basis and vice versa. During the long session, it is the same as the final deadline for drop/withdrawal for academic reasons. See the current academic calendar for the exact date. After that deadline, students should see a counselor in the Student Division of the Dean's Office of their college. For majors within the College of Natural Sciences, the College has instituted a minimum C- standard of passing grades for courses in order to progress to subsequent courses. For example, a grade of C- in M408N (calculus-I) is required to progress to M408S (calculus-II). This minimum standard applies to graduation requirements as well (see +/- grading below).

**Students with Disabilities:** The rights of students with disabilities are protected under Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act, which are civil rights provisions aimed at ending discrimination against persons with disabilities. Section 504 specifically refers to post-secondary and vocational education services. The legislation reads: "No otherwise qualified handicapped individual in the United States shall, solely by reason of his handicap, be excluded from the participation, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." The University of Texas at Austin provides a wide variety of services to assist students with disabilities in becoming active members of the University community. These services vary according to the different types and severity of impairments. 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, these students are guaranteed a learning environment with reasonable accommodation of their disability. We will provide any necessary and reasonable accommodation for students with disabilities, including accommodations for all of the exams. In order to qualify for accommodations, you will need to contact the Division of Diversity and Community Engagement, Services for Students with Disabilities, 471-6259, http://www.utexas.edu/diversity/ddce/ssd/. They will supply the documentation and recomendations needed for us to provide appropriate exam accommodations. This documentation must be provided prior to the first midterm exam. Because we administer night midterm exams, students requiring extra time must be prepared to either come earlier or stay later than other students on exam nights.

**Absences due to Athletics or other University Activities:** Any athlete competing for UT on an NCAA or club level team needs to notify me as soon as possible about any missed exams. Written documentation from the Athletic department will be required for accommodations to be given. An official team proctor must be provided to traveling team members by the athletic department, so that a copy of the exam can be administered outside of Austin at the same time as the students are taking the exam here. The sealed exam is then returned to me by the proctor, as soon as the team returns to Austin.

**Religious Holy Days:** A student who misses classes or other required activities, including examinations, for the observance of a religious holy day should inform me as far in advance of the absence as possible, so that arrangements can be made to complete an assignment or exam within a reasonable time after the absence. For reference, sections 51.911 and 51.925 of the Texas Education Code relate to absences by students and instructors for observance of religious holy days.