

CHEM 320M/328M– Organic Chemistry I
Syllabus
Fall 2016

<u>Meeting Time</u>	<u>Location</u>	<u>Unique</u>
TTh 9:30-11:00a	WEL 1.308	50485/50580

Instructor: Dr. Brian Bocknack

Office Location: WEL 5.234

Phone: 512-223-8220 (leave voicemail; this is the phone number for my office at ACC)

E-Mail Address: bocknack@utexas.edu

In general, I will make every effort to respond to e-mail and voicemail messages within 24 hours if received Monday through Friday. Messages received on holidays or during the weekend will most likely not receive a response until the next business day.

Instructor Office Hours: TTh 11:00a-12:30p in WEL 5.234 (no appointment necessary)

Other times are available by appointment (please schedule by e-mail at least 2 days in advance). Please be aware that I cannot be on campus after 2:00p on TTh or at all on MW due to my teaching responsibilities at ACC.

Teaching Assistants: Please see Canvas for TA contact info and the schedule of TA office hours

Canvas Course Web Site

This course will use Canvas, a Web-based course management system in which a password-protected site is created for each course. Canvas will be used to distribute course materials, to communicate online, and to post grades.

You will be responsible for checking the Canvas course site regularly for class work and announcements. As with all computer systems, there are occasional scheduled downtimes as well as unanticipated disruptions. Notification of these disruptions will be posted on the Canvas login page. Scheduled downtimes are not an excuse for late work.

Canvas is available at: canvas.utexas.edu

Piazza

This term we will be using Piazza for class discussion. The system is highly catered to getting you help fast and efficiently from classmates, the TA, and myself. Rather than emailing questions to the teaching staff, I encourage you to post your questions on Piazza. If you have any problems or feedback for the developers, email team@piazza.com.

Find our class page at: piazza.com/utexas/fall2016/ch320m328m/home

I will post and answer questions as my schedule allows.

Course Description

The development of organic chemical structure, nomenclature, and reactivity. CH 320M is primarily for premedical, predoctoral, life sciences, and pharmacy majors. CH 328M is primarily for chemistry and chemical engineering majors. Only one of the following may be counted: Chemistry 610A, 310M, 618A, 318N, 320M, 328M.

Prerequisites: For CH 320M: CH 302 or 302H with a grade of at least C–.

For CH 328M: The following coursework with a grade of at least C– in each: CH 302 or 302H; and CH 204 or 317, or 104M and 104N.

Required Textbook

"Organic Chemistry", 7th ed., by Brown, Iverson, Anslyn & Foote (Brooks/Cole, 2014) is the departmentally approved text. All reading and problem assignments are given based on chapter, section, and problem numbers in this edition of the approved text.

Optional Materials

"Student Study Guide and Solutions Manual for Organic Chemistry", 7th ed., by Iverson & Iverson (Brooks/Cole, 2014) is recommended. This book contains answers for all of the textbook problems.

Purchase of a molecular models kit is also recommended. Although use of models will not be allowed during exams, most students find them to be extremely helpful when first learning how to visualize the 3-dimensional structures of organic molecules. Inexpensive models kits can be purchased online at the following website: <http://www.darlingmodels.com>

Kits #1, 1A, 1B, or 3 should be perfectly suitable for this course. The student section of the American Chemical Society typically sells reasonably priced models kits (along with safety goggles and lab notebooks) at the beginning of the semester – look for their table in the Grand Hallway of Welch. You can also find models kits at local bookstores, but these tend to be a bit more expensive.

Adds, Drops and Withdrawal

Important Note: The instructor has no control over registration, and CANNOT add students into the course or to the waitlist for the course. All questions related to enrollment in the course should be directed to the Chemistry Undergraduate Student Services Office in WEL 2.212.

Monday, August 29: Last day of the official add/drop period. After this date, changes in registration may require the approval of the department chair and usually the student's dean.

Friday, September 9: Last day an undergraduate student may add a course except for rare and extenuating circumstances. Last day to drop the course for a possible refund.

Tuesday, November 1: Last day a Q drop can/will be assigned by the instructor. You will need the approval of Dr. Bocknack, your academic adviser, and your college's dean to drop the course at this point. The results of the first two midterm exams will be available before this deadline. After this date, withdrawal from the course requires: (1) a substantial non-academic reason, and can only be approved by your college's dean; or (2) use of the One-Time-Exception. Detailed procedures are outlined in the "Academic Policies and Procedures" section of the General Information Catalog (<http://catalog.utexas.edu/general-information/>)

Monday, December 5: Last class day

Course Evaluation/Grading

Exams: Three evening midterm exams will be given during the semester. These exams are scheduled from 7:00 to 9:00 p.m. on the Wednesday evenings listed below. These dates were published in the Fall 2016 course schedule, so you should have been aware of them when you signed up to take this course! Each exam will be cumulative, and will test your understanding of all assigned textbook and lecture material covered from the beginning of the term through the previous Thursday. Exam room assignments will be announced in lecture and posted in Canvas. When you arrive to take an exam, please sit in every other seat, not directly next to another student.

<u>Exam</u>	<u>Coverage</u>	<u>Date (exam time is 7–9 p.m.)</u>
Exam #1	All textbook & lecture material covered through Thursday, 9/15	Wed 9/21 (rooms TBA)
Exam #2	All textbook & lecture material covered through Thursday, 10/13	Wed 10/19 (rooms TBA)
Exam #3	All textbook & lecture material covered through Thursday, 11/3	Wed 11/9 (rooms TBA)

Please bring your valid UT ID card to all exams, since you will need to show it to the proctors when you turn in your exam. Unless otherwise announced, all exams will be “closed book”, and you will not be allowed to use molecular models, calculators, books, or notes. Personal belongings (textbooks, notes, food and beverages, cell phones, electronic devices, etc.) WILL NOT be permitted at your seat during the exam – you will be asked to place all personal belongings besides writing instruments and your photo ID in the aisles or at the front of the room before the exam begins. If you are caught with a cell phone or any other electronic device at your desk during any exam, you will automatically receive a grade of 0 for the exam!

Exams will commence promptly at the published starting time. Students arriving late WILL NOT be provided with extra time to complete the exam. Students arriving after the first exam has been submitted WILL NOT be allowed to take the exam!!! When time is called at the end of the exam, all writing must stop immediately, and all exams and answer sheets must be turned in promptly. A student who does not stop writing immediately when time is called will not have his or her exam graded, and a grade of 0 will automatically be recorded for the exam. “Writing” includes bubbling in the Scantron answer sheet – please bubble in Scantron answers as you work through the exam since you WILL NOT be allowed to bubble in answers after time is called! Instances of academic dishonesty will be handled according to university policy, and will likely result in failure of the course.

Each exam will be divided into two parts. Part I will be comprised of a series of multiple choice questions. Your answers to the Part I questions must be submitted on a Scantron “bubble” sheet (which will be provided), and you must use a #2 pencil to bubble in your answers. Only Part I answers submitted on the Scantron “bubble” sheet will be graded – the graders WILL NOT look at answers marked on the exam form itself. Part II will be comprised of a series of “free response” questions, and will be hand-graded. Part II answers written in pencil or in pencil with ink overlay WILL NOT be eligible for regrades. Pages on which “whiteout” is used to cover mistakes WILL NOT be eligible for regrades. If you use ink, only blue or black ink is acceptable. Answers written in red ink WILL NOT be graded.

Each midterm exam will be worth a total of 150 raw points (this provides the graders with maximum flexibility in assigning partial credit). Your raw score (out of 150) will then be converted into a raw percentage (out of 100), which in turn will be converted into a standard T-score. The T-score represents your “curved” grade on the exam, on a 100 point scale. T-scores will be calculated using the following formula:

$$T = [((x-X)/s) \cdot 10] + 75$$

where

x = your raw percentage (out of 100)

X = the raw percentage average for the class = $\Sigma x/N$

N = number of exam scores recorded

s = standard deviation = $[\Sigma (x-X)^2/(N-1)]^{1/2}$

Use of 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.)

*******Important Notice******* In general, using T-scores increases everyone's grades compared to using absolute percentages. Nevertheless, we will keep track of your absolute percentage scores on every test. If your absolute percentage is ever higher than your T-score, we will use the absolute 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!

Combined, the midterms will account for 60% of your overall course grade. The lowest of your three midterm exam T-score grades will automatically be dropped. If you miss an exam for any reason (illness, family emergency, laziness, etc.), the missed exam will automatically be counted as the exam that is dropped. Failure to take two of the midterm exams without a valid, documented excuse will automatically result in a failing grade for the course.

Since T-scores are used to calculate exam grades, it is not possible to take an exam late, after the rest of the class has taken it, even if you were ill or have another valid excuse. For the T-scores to be valid, everyone in the class needs to take exactly the same exam. Once the class takes an exam, its contents are essentially “public” knowledge. It is also unfair to the majority of students enrolled in the class if some students are allowed to take an exam late, and therefore have “extra” time to prepare.

Old Exams and Answer Keys: Exams from Dr. Bocknack’s Spring 2010 CH 310M class will be made available in Canvas. [Note: Spring 2010 was the last semester I taught Organic Chemistry I at UT.] Each old exam will be posted at least one week before this semester’s corresponding exam. The format of the exams this semester will be similar, although the exact material covered on each exam will very likely differ (due to differences in the lecture schedule and the pace at which we move through the material). Answer keys to all graded materials (homework and exams) will also be posted in Canvas, after the deadline for submitting the assignment has passed.

Conflict Exams: Only those students having an excusable, documented conflict are eligible to take the conflict exams which will be offered before each midterm. An excusable conflict is another regularly scheduled class or lab (published in the Fall 2016 course schedule) which meets on Wednesday evening between 7:00 and 9:00 p.m., an evening exam in another class scheduled at the same time as our exam (please be prepared to provide documentation, e.g. a copy of the syllabus from the other class), or a religious observance. An organizational meeting or a job is not an excusable conflict!!! If you have a job and you normally work on Wednesday evening, plan now to change your work schedule so that you can be present for the midterm exams. The conflict exams will be given from 4:00 to 6:00 p.m. on the same date as the regular exam (location TBA). To sign up for the alternate exam, please visit <http://www.cm.utexas.edu/testing> and follow the given instructions. If you have a conflict for ANY of the midterm exams, you need to sign up for the conflict exam by 4:00 p.m. on **Friday, September 9!!!** Students who do not sign up to take a conflict exam in advance WILL NOT be allowed to take the early exam!! Please check your assignment schedule for your other classes NOW to see if you have any conflicts with the exam schedule in the class so you can sign up for a conflict exam if necessary.

We do not offer any other alternate exam periods. If you are unable to attend both the 7-9pm regular exam time and the 4-6pm alternative exam time, please contact the Chemistry Student Services Office (WEL 2.212, 512-471-1567) for help moving into a section of this course with different exam dates.

Only religious holidays and UT related conflicts are acceptable reasons to reschedule an exam for another day. If you are away from campus for a University-sponsored activity, you must provide advance written notice on UT letterhead explaining the reason for your absence. If your exam is in conflict with a religious observance you must provide notice of the conflict at least 14 days in advance. Please contact the Chemistry Student Services Office to schedule a make-up exam.

SSD Students: If you are a student registered with the Office of Services for Students with Disabilities and you receive special accommodations for your exams, the Chemistry Student Services Office (WEL 2.212) is equipped with a limited number of seats in a reduced distraction environment for the administration of exams. Please submit your SSD letter to them.

Visit <http://www.cm.utexas.edu/testing> to sign up for accommodated exams for this course. You may contact Chemistry Student Services (512-471-1567) with any questions related to setting up SSD accommodations for any chemistry class.

Excused Absences: If you miss one midterm exam, for any reason, the grade for that exam will automatically be dropped. It is not necessary to inform me of your absence, and you do not need to provide me with an excuse (in fact, I prefer that you NOT contact me with an excuse). Failure to take two midterm exams, however, will result in

an automatic F (or, in the case of justifiable excuse, an X) being assigned in 320M/328M. Personal problems, family vacations, weddings, oversleeping, etc. are not valid reasons to receive an excused absence for an exam. If you do miss more than one exam, appropriate written documentation of a serious medical problem or family emergency must be provided in order to have the absence excused. Dr. Bocknack will contact students who miss more than one exam directly at their official university e-mail address with further instructions for providing this documentation. If an excused absence is granted, the T-score earned on the comprehensive final exam will be substituted for the missing exam score.

Final Examination: The final exam is mandatory, and will be given at the time scheduled by the university registrar (Thursday, December 8, from 2:00 to 5:00p, location to be announced). Since the final exam date and time was published in the Fall 2016 course schedule, you should have been aware of the final exam schedule when you signed up to take this class, and planned your end of term travel accordingly! It WILL NOT be possible to take the final exam at an alternative time!

The final exam will be comprehensive. Material from the entire semester will be fair game. The final exam will be worth 200 raw points, and will account for 40% of your overall grade in the course. Standard T-scores will be calculated in the manner described above.

There will be no make-up or conflict exam for the final. Since final exams are scheduled according to class meeting times, and since you cannot enroll in two classes that meet at the same time, you cannot possibly have an academic conflict for the final exam. Failure to take the final exam at the scheduled time and place without an approved, documented excuse will automatically result in a failing grade for the course. If an extreme medical emergency or justifiable nonacademic excuse prevents you from taking the final exam at the scheduled time, the symbol "X" (incomplete) will be assigned when final grades are reported at the end of the semester. (The procedure for making up an incomplete will be worked out on an individual basis, but almost always requires a student to take the final exam when it is given at the end of the next long semester.) In general, it is best for students to see a counselor in their Dean's Office regarding nonmedical excuses for missing the final.

Homework: The exams in this class will ask you to solve problems. The best way to prepare for the exams, then, is to work as many practice problems as you possibly can! To encourage this good habit, two different types of homework will be assigned on a regular basis:

- (1) Problems from the textbook that are related to the material discussed in lecture will be posted in Canvas for each lecture – click on the "Book Assignments" link. You should attempt to work these problems after you study the relevant lecture notes and the related sections of the textbook. Suggested problems from the textbook will not be collected or graded, but you'll want to work through as many of them as possible so that you can develop the problem-solving skills you'll need in order to do well on the exams!!! Students who make an effort to work through and understand the textbook problems generally perform significantly better on exams than students who do not!!!
- (2) Most weeks, a graded homework assignment from outside of the text will be posted in Canvas (12 total over the course of the semester). Assignments will be posted by 5:00 p.m. on Monday, and will be due the following Monday (see below).

The points you earn on graded homework will be converted to extra credit that is added to your next exam grade as T-score points or percentage points (whichever is in your best interest). Each assignment will contribute a maximum of 1 T-score (or percentage) point to the next exam grade. So how will this work? Suppose you earn 35 points on a graded homework assignment that is worth 40 raw points. Your T-score extra credit will be calculated as follows: $\text{Extra credit} = (35/40) * 1 = 0.875$. For each exam, there will be 3 graded homework assignments, so you may earn up to 3 extra credit T-score (or percentage) points for each exam. Please note that for the exam grade that is dropped, the "extra credit" points earned for that exam will also be dropped.

Two of the graded assignments that will be offered prior to each exam will consist of multiple choice questions that will resemble the kinds of questions you encounter on Part I of the exams (see above). Your answers to these multiple choice questions must be submitted electronically via Canvas. The submission deadline for multiple choice homework will be 5:00 p.m. on Monday, one week after the assignment is posted. In other words, answers for the assignment that will be posted on Monday, August 29 must be submitted by 5:00 p.m. on Monday,

September 5. Do not wait until the last minute to submit your answers for the “electronic” homework assignments – the submission form will “disappear” from Canvas when the deadline passes! You will not be able to receive credit for homework answers that are not submitted prior to the deadline! A public computer lab is located in WEL 2.128/2.144 which you can use to print out the assignment handouts and submit your answers to the multiple choice questions.

One of the graded assignments that will be offered prior to each exam will consist of “short answer” questions that will resemble the questions you will encounter on Part II of the exams (see above). Your answers to these short answer questions must be submitted to the “drop box” located outside of WEL 2.212 by 5:00 p.m. on the day it is due! “Electronic” submission of this homework is not allowed – you must submit a “hard copy” of your answers on the worksheet that you will download and print from Canvas. Please submit your homework to the slot labeled CH 320M/328M Bocknack 9:30-11am. Late homework will not be accepted or graded! NO EXCEPTIONS!!!

The graded homework assignments are “open book and open note”. Although you are free to discuss the homework problems with other students in the class, any written work that you submit should be your own. Be aware that students who “copy” their answers from other students without attempting to solve the problems on their own typically perform very poorly on my exams, where this option is not available! To do well on the exams in this course, you will ultimately need to develop the ability to solve challenging problems on your own – a major objective in assigning these homework problems is to give you an opportunity to develop your independent problem solving skills. Of course, we will be more than happy to answer any questions about the course material, but do not expect us to do your homework for you!

Answer keys for all graded homework problems will be available in Canvas after the submission deadline. Homework grades will be posted in Canvas after the assignments have been graded. Procedures for retrieving graded “short answer” homework assignments will be announced in lecture once they have been established.

Grading Policy: Your final course grade will be calculated as a weighted numerical average, on a 100 point scale, as described below. Remember, you can miss any one midterm exam for any reason, since only your best 2 out of 3 midterm exam T-scores will be used in the calculation of your final weighted numerical average.

<u>Weight</u>	<u>Graded Item (max. score = 100)</u>
40.0%	Final Exam Grade
30.0%	Highest Midterm Grade
30.0%	Second Highest Midterm Grade

You may earn up to 3 “extra credit” T-score points for each exam, as described above. Remember, if your raw percentage score for any exam is higher than your T-score for that exam, the raw percentage score will be used for the calculation of your grade. Also note that the T-score for each exam represents your curved grade for that exam. Since individual exam grades are curved, no additional curve will be applied at the end of the semester.

The following conversion table will be used to determine final course letter grades:

A	93.00 ≤ T
A-	90.00 ≤ T ≤ 92.99
B+	87.00 ≤ T ≤ 89.99
B	83.00 ≤ T ≤ 86.99
B-	80.00 ≤ T ≤ 82.99
C+	77.00 ≤ T ≤ 79.99
C	73.00 ≤ T ≤ 76.99
C-	70.00 ≤ T ≤ 72.99
D+	67.00 ≤ T ≤ 69.99
D	63.00 ≤ T ≤ 66.99
D-	60.00 ≤ T ≤ 62.99
F	T < 60.00

Please note that grades in this course are based entirely on demonstrated performance on the exams and graded homework. I will only look at these numbers at the end of the term. I cannot and will not consider personal problems or other nonacademic issues which may have impacted your academic performance (trained counselors are available in each college's dean's office to assist with nonacademic issues). I do not "give" you a grade at the end of the course. You will earn your grade, and I will report the grade that you earn to the registrar. Whereas effort probably counted in your previous life ("So what if you struck out, you took a good swing at the ball!"), in the cruel "real" world, only accomplishment matters. It may seem unfair, but unfortunately that's the way life is.

Your final numerical average will be calculated out to the second decimal place. A final weighted average of 89.676 will be rounded to 89.68 (B+), not 90.00! Final grades will not be "bumped up" because you "need" a higher grade to gain entrance to an honor society, or because it will look better for your medical school application, or because you will be placed on academic probation if you fail the class, or because you had a lot of personal problems but tried your best anyway, etc. Grade boundaries do need to be established somewhere, and the unavoidable consequence is that some students end up just "a point" (or even a few hundredths of a point) away from a higher grade. ***Since everyone is graded according to exactly the same standards, for reasons of fairness, the policy in this course is to NOT adjust students' grades in such circumstances.*** Final grades reported according to the scheme described above will indeed be final, and will only be adjusted in the event that a calculation error was made. Requests to raise borderline grades for any other reason will not be considered!!!

Regrade Policy: Requests for midterm exam regrades must be submitted in writing to the Undergraduate Student Services Office (WEL 2.212) within one week after the return of the graded material (the specific deadline for each exam will be announced in lecture and in Canvas). The regrade procedure is outlined below. Students who do not follow these instructions will not have their regrade request considered!

For simple errors in adding up points or in recording of exam grades (be sure to check Canvas to confirm that each exam score was recorded correctly!), it is not necessary to follow the formal regrade procedure described below. Contact Dr. Bocknack via e-mail for further instructions.

Part I of each exam is not eligible for regrades. Only answers recorded on the Scantron answer sheet will be graded. The correct responses to the Part I questions will be included in the answer key that will be posted on Blackboard once exam scores have been uploaded to the grade center. If you feel that a Part II question was graded incorrectly, please follow the steps outlined below.

1. Regrades WILL NOT be considered for:
 - a) Part II answers written in pencil, or in ink that is not blue or black.
 - b) Pages on which "whiteout" is used to cover mistakes.
 - c) On questions that refer to "see back of page," or that give similar instructions to graders.
 - d) For less than a 5 point change in the exam raw score, except for mistakes in addition.
2. If you submit a regrade request, we will review all of Part II, and not just the problem in question. Although it rarely happens, this could potentially result in a lower score, so consider your options carefully before requesting a regrade.
3. Regrade requests must be submitted in writing at the Chemistry Student Services Office. The staff will provide you with the appropriate paperwork. You'll need to attach this form to the front of your exam. The perceived problem must be explained clearly and concisely. Do not write directly on your exam, as altering your graded exam will nullify your request for a regrade. ***Submission of an altered exam for a regrade is considered to be a violation of this University's academic integrity policies and will be treated as such.*** If you are caught cheating in this manner, the likely result will be automatic failure of this class, and possibly expulsion from the University. Please be aware that a random sample of exams is photocopied before exams are returned to students.
4. To demonstrate that you have reviewed the "official" answer key, please attach a copy of the relevant page(s) from the posted answer key to your regrade request form. Answer keys will be posted in Canvas.
5. The specific deadline to submit regrade requests for each exam will be announced in lecture and posted in Canvas. Requests for regrades will not be accepted after the announced deadline, **NO EXCEPTIONS.**

There will be no regrades possible for the final exam – there is simply not enough time to allow you to pick up and review your graded final exam before the registrar's grade submission deadline. Dr. Bocknack will look carefully at all "borderline" exams to determine if each exam was graded correctly and according to his instructions.

There is no formal regrade procedure in place for the graded homework assignments. If you have a question about how a homework assignment was graded, please visit Dr. Bocknack or a TA during scheduled office hours.

General Course Policies

Attendance and Classroom Behavior: Although attendance at lecture will not be monitored, these lectures are the heart of the course. Regular and punctual lecture attendance is strongly encouraged! If you do not attend lecture, you may miss important announcements or handouts, which may or may not be posted in Canvas. ***Students who attend lecture REGULARLY in organic chemistry typically perform significantly better and earn higher grades than students who do not attend!*** Please come to lecture prepared to listen, take notes, and participate by asking questions when you have them.

Cell phones should be silenced and put away (i.e. not visible) BEFORE class begins. If you intend to use a laptop or tablet computer during class, please sit near the back of the room, and limit your use to course-related activities. Please turn off cell phone ringers, watch alarms, and other electronic devices that can potentially make a noise BEFORE class begins. Be respectful of other students and the instructor during class. Disruptive students may be asked to leave class. Texting, checking Facebook or Twitter, playing computer games, etc. during class is highly disrespectful of the instructor and of other students who are trying to learn. Students who are observed engaging in these behaviors may be asked to leave the classroom.

Incomplete Grade Policy: 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.

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."

I expect each of you to conduct yourselves honorably. 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 random sample of exams following grading but

prior to handing them back. *****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.*****

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 recommendations needed to provide appropriate exam accommodations. This documentation must be given to Dr. Bocknack by Friday, September 12. Once documentation has been provided, you will schedule your exam with the undergraduate office in WEL 2.212. 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.

Emergency Evacuation: Please be familiar with the following recommendations regarding emergency evacuation (from the Office of Campus Safety and Security, 512-471-5767, <http://www.utexas.edu/safety/>):

1. Occupants of buildings on The University of Texas at Austin campus are required to evacuate buildings when a fire alarm is activated. Alarm activation or announcement requires exiting and assembling outside.
2. Familiarize yourself with all exit doors of each classroom and building you may occupy. Remember that the nearest exit door may not be the one you used when entering the building.
3. Students requiring assistance in evacuation shall inform their instructor in writing during the first week of class.
4. In the event of an evacuation, follow the instruction of faculty or class instructors.
5. Do not re-enter a building unless given instructions by the following: Austin Fire Department, The University of Texas at Austin Police Department, or Fire Prevention Services office.

How to Do Well in Organic Chemistry: IMPORTANT, SO READ CAREFULLY!!!

Organic chemistry is conceptually very different from other subjects you may have encountered, and can only be mastered through very disciplined study. It will be virtually impossible to do well in this class if you do not attend the lectures faithfully, prepared to learn. Study the material presented in each lecture as soon as possible (preferably every day), do all of the assigned problems (whether or not they are collected), and try to relate new concepts and ideas to what you have already learned. Knowledge in organic chemistry is cumulative. You have to learn how concepts relate to each other, because then the larger picture is easier to understand. Rote memorization will not lead to success in this course! Cramming right before exams is also not an effective way to approach this subject. For the next several months, organic chemistry really needs to be a daily part of your life.

In general, you should expect to spend at least 4 hours of study time outside of class for every hour spent in lecture. Given the large quantity of information that we will cover in a relatively short amount of time, it is critical that you make a DAILY effort to study and work problems. Cramming only before exams is not a recipe for success in this class! Most "A" students employ the following study strategies:

1. **Skim the textbook material before a topic is covered in lecture.** I will post the suggested "preview" reading on the announcements slide at the beginning of each lecture. The sections expected to be covered during each class are also listed in the tentative schedule below. Don't attempt to learn everything at this stage; rather, try to get a general sense of what the important topics are. Even a brief prior exposure to the main ideas will help to focus your attention in lecture to make it a more worthwhile learning experience.
2. **Listen carefully in lecture.** Most lectures will be given using a "chalk talk" format, meaning that I will draw out structures/reactions/mechanisms and write out important points during class. This "chalk talk" material will be generated on an iPad Pro and projected onscreen, and it's not a bad idea to write down what I write down during class (research has shown that active note taking enhances the ability to retain the material). After lecture (within a day or two), I will post in Canvas images of the "slides" that I generate during class, in .pdf format. Make an effort to listen, and pay close attention in class, because unless otherwise indicated, you will be expected to understand all of the material presented in lecture. Jot down any questions or points for clarification as they arise, so you don't forget them. I view the lectures as being the most important component of the course. In my opinion, the textbook is best used as a supplement to your lecture notes, and as a convenient source of practice problems. We will occasionally cover material in lecture that is not presented in your textbook.
3. **Take good notes during lecture, and review them as soon as possible after lecture**, preferably later the same day. I strongly discourage students from relying only on the posted "slides"! The slides will not include all of the important information that I say. Don't just stare at the slides and your notes as you study, however. You should study actively with pen or pencil in hand. The act of rewriting and summarizing your notes will help you to reinforce your understanding of the important concepts. It is especially important that you rewrite reaction mechanisms on your own. The physical act of drawing curved arrows really does help in your understanding of how electron pairs move during a reaction! As you study your notes, refer to the relevant sections of the textbook for clarification or alternative explanations of the important concepts. Once again, jot down questions as they arise, since you have to realize what you don't understand before you can seek help!
4. **After you spend no more than an hour or two studying the concepts presented in a particular lecture, TAKE A BREAK!!!** Spend some time studying for a different class, go to the gym to exercise your body, or relax for a while. Research has shown that long term recall is facilitated when information is learned in small chunks. Your brain needs time to process the information it has taken in. Give the part of your brain that processes organic chemistry a rest and allow it some time to process what it has learned subconsciously.
5. **After your break (for instance, the next day), test your understanding of the concepts you studied by working related homework problems.** Working lots and lots of problems is the best way to prepare for exams in this course. Think about it – the exams will ask you to solve problems, and the only way you will develop the skills necessary to do this is with extensive practice!!! Suggested textbook problems related to each day's lecture material will be listed in Canvas. Do not consult the study guide/answer key until you have spent considerable time (at least 15 minutes) attempting to work through a problem on your own, however. Simply looking at answers developed by someone else will generally not lead to understanding that is sufficient for adequate

performance on exams. If you get completely stuck, you haven't mastered the key concepts yet. Go back to your notes and the text to study some more on your own. If you are still stuck, visit office hours to get help!

6. **Don't be afraid to ask for help if you need it!** We are here to help you learn organic chemistry. If you are struggling, we will try our best to help you figure out what you are doing wrong, and what you can do to fix the problem. The only way we can help you is if you ask for help, however! Admitting that you need help in a challenging subject like organic chemistry is not a sign of weakness – rather it is a sign of maturity. Please take advantage of office hours and the Piazza discussion forum throughout the semester (not just before exams).
7. **Students who find themselves in trouble generally end up there because they fall behind.** Organic chemistry is a cumulative subject. We will encounter a tremendous amount of material this semester, and a thorough understanding of the early material will be critical for understanding more advanced topics. For this reason, cramming right before exams is generally not an effective strategy for learning organic chemistry. You simply won't have enough time to learn the material at the level you will be expected to understand it, and you certainly won't have enough time to work through lots and lots of practice problems. Remember, it is better to keep up than to catch up!

Tentative Course Outline/Schedule of Lecture Topics/Exam Dates

All dates below are tentative, and are subject to change! Topics will be covered in the order listed below, even though specific dates may change. *Unless otherwise announced in class, you are responsible for all of the material in all of the assigned textbook sections, even if it is not discussed in lecture!* If there is a discrepancy between a textbook explanation and a lecture explanation, assume that the lecture explanation is correct (ask for clarification if necessary).

Each exam will cover all course material through the Thursday immediately preceding the exam date. The specific point at which coverage stops for each exam will be announced in lecture, and posted in Canvas.

<u>Date</u>	<u>Preview Reading</u>	<u>Lecture Topic(s)</u>
Th 8/25	1.1, 1.2	Overview of course; historical perspective; Lewis structures
Tu 8/30	1.4-1.7	Shapes of molecules; electronegativity; hybrid orbitals
Th 9/1	1.3, 1.8-1.10	Resonance; molecular orbitals; introduction to functional groups
M 9/5		HW#01 due by 5:00 p.m. (submit via Canvas)
Tu 9/6	2.1-2.3	Structure and nomenclature of alkanes
Th 9/8	2.5	Conformational analysis of acyclic alkanes
M 9/12		HW#02 due by 5:00 p.m. (submit to "drop box" outside WEL 2.212)
Tu 9/13	2.4-2.6	Nomenclature and stereochemistry of cycloalkanes; chair conformation of cyclohexane
Th 9/15	2.5, 2.7-2.9	Conformational analysis of cycloalkanes; reactions of alkanes (end Exam #1 coverage)
M 9/19		HW#03 due by 5:00 p.m. (submit via Canvas)
Tu 9/20	3.1-3.3, 3.7, 3.8	Introduction to chirality; the <i>R,S</i> nomenclature system
W 9/21		Exam #1 (7:00-9:00p) – Room assignments TBA
Th 9/22	3.4-3.6, 3.9	Molecules with more than one chiral center
Tu 9/27	4.1-4.5	Acids and bases
Th 9/29	4.6, 4.7	Structural effects on acid strength; introduction to the curved arrow formalism
M 10/3		HW#04 due by 5:00 p.m. (submit via Canvas)
Tu 10/4	5.1-5.4	Structure, nomenclature, and stereochemistry of alkenes
Th 10/6	6.1-6.3	Electrophilic addition reactions of alkenes and Markovnikov's rule
M 10/10		HW#05 due by 5:00 p.m. (submit to "drop box" outside WEL 2.212)
Tu 10/11	6.3	Carbocation rearrangements; halogenation reactions of alkenes
Th 10/13	6.3, 6.4	Hydration reactions of alkenes (end Exam #2 coverage)
M 10/17		HW#06 due by 5:00 p.m. (submit via Canvas)
Tu 10/18	6.5-6.7	Oxidation and reduction reactions of alkenes
W 10/19		Exam #2 (7:00-9:00p) – Room assignments TBA

<u>Date</u>	<u>Preview Reading</u>	<u>Lecture Topic(s)</u>
Th 10/20	7.1-7.6	Introduction to alkynes; acidity of terminal alkynes; electrophilic addition reactions of alkynes
M 10/24		HW#07 due by 5:00 p.m. (submit via Canvas)
Tu 10/25	7.7, 7.8	Hydration and reduction reactions of alkynes
Th 10/27	7.9	Synthesis problems in organic chemistry
M 10/31		HW#08 due by 5:00 p.m. (submit to "drop box" outside WEL 2.212)
Tu 11/1	8.1-8.5	Introduction to alkyl halides; radical halogenation of alkanes
Th 11/3	8.6-8.8	Additional radical reactions (end Exam #3 coverage)
M 11/7		HW#09 due by 5:00 p.m. (submit via Canvas)
Tu 11/8	9.1-9.3	Nucleophilic substitution reactions of alkyl halides
W 11/9		Exam #3 (7:00-9:00p) – Room assignments TBA
Th 11/10	9.4-9.6	Factors influencing rate of nucleophilic substitution; E1 reaction mechanism
M 11/14		HW#10 due by 5:00 p.m. (submit via Canvas)
Tu 11/15	9.6-9.10	E2 reaction mechanism; summary of alkyl halide chemistry
Th 11/17	10.1-10.4	Introduction to alcohols
M 11/21		HW#11 due by 5:00 p.m. (submit to "drop box" outside WEL 2.212)
Tu 11/22	10.5-10.7	Nucleophilic substitution and β -elimination reactions of alcohols
Th 11/24		NO CLASS MEETING – Thanksgiving holiday
Tu 11/29	10.8, 11.1-11.5	Oxidation reactions of alcohols; introduction to ethers
Th 12/1	11.6-11.10	Silyl ethers; epoxides
M 12/5		HW#12 due by 5:00 p.m. (submit via Canvas)
Th 12/8		Final Exam (2:00-5:00p) – Room assignments TBA