

**ORGANIC CHEMISTRY I**  
**CHEM 3342.001**

The University of Texas at Tyler  
Fall 2017 Syllabus

**• INSTRUCTOR CONTACT INFORMATION AND OFFICE HOURS**

**Sean C. Butler, Ph.D.**

Office: RBS 3031

Phone: 903.565.5654

Email: sbutler@uttyler.edu

*Best method of contact is through email.*

**Office Hours:**

**WF** 10:00 am – 11:30 am

**R** 1:30 – 3:30 pm

**(Also by Appointment)**

It is my policy to be available anytime I am at the University. I have an open-door policy – please stop by **anytime** you have questions or concerns and I will do my best to assist you whenever possible. I can also set up appointments if necessary. I want you to succeed and will help you how and when I can.

**• SUPPLEMENTAL INSTRUCTION CONTACT INFORMATION**

**Office of Academic Support  
Supplemental Instruction**

LIB 425

**Office Hours:**

MTWRF 8:00am–5:00pm

**SI Leader**

Kinza Ashraf

**Email:** kashraf@patriots.uttyler.edu

**Office Hours:** W 12:00-4:00 pm; LIB 401

**• COURSE MEETING TIMES**

<u>Day</u>	<u>Time</u>	<u>Location</u>
TR	9:30–10:50 am	RBN 3035

**• ATTENDANCE**

Regular attendance is expected. Class participation is a significant measure of performance, and non-attendance may adversely affect a student's grade (see UT Tyler catalog). Not attending lecture may not only cause you to become behind in the understanding of the course material but it may also negatively affect your quiz average (see **Course Grade** section).

Please plan to attend each class meeting. Be on time and plan to stay the entire period. If you must miss, it is your responsibility to find out what you missed. I have no sympathy for students that do not come to class.

## • PREREQUISITES

- General Chemistry II (CHEM 1312)
- General Chemistry II Laboratory (CHEM 1112)

I cannot stress enough how important your general chemistry preparation will be to your study of organic chemistry. Since our goal is the study of *organic chemistry*, we will not have the time to review all of the topics discussed in the general chemistry lecture and laboratory courses. We will briefly review some of the topics discussed in general chemistry, but if it has been some time since you have had general chemistry, or you feel that the course you had was less than adequate, it is important that you take some time to review. This course will proceed as if you have a thorough understanding of general chemistry.

## • COURSE DESCRIPTION

Emphasis on structure-reactivity relationships, nomenclature, stereochemistry, reaction pathways, and synthesis.

## • CENSUS DATE AND LAST DAY TO WITHDRAW

The deadline for all registration, schedule, and section changes is **Monday, September 11, 2017**.

The last day to withdraw from the course is **Monday, November 6, 2017**.

## • CANVAS

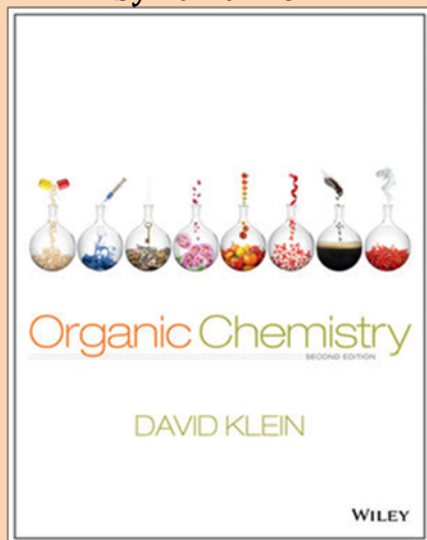
This course will be hosted on UT Tyler's Canvas server. You may access your Canvas account online at <https://www.uttyler.edu/canvas>.

This site will contain a significant amount of information that will help you in this course in addition to being the medium through which you may access your current grade.

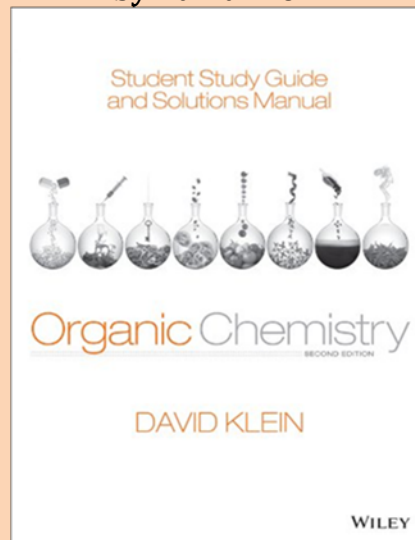
Both the SI Leader and I will contact you through Canvas, so be sure you have your account to receive alerts. We are not responsible for you not receiving announcements pertaining to this course.

• **REQUIRED MATERIALS**

**Textbook  
Organic Chemistry 2<sup>nd</sup> Ed.  
by David Klein**



**Student Study Guide and  
Solutions Manual  
by David Klein**

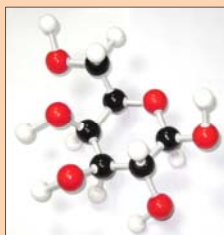


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<b>Item</b>	<b>ISBN</b>
Textbook Hardcover Version	978 1 118 45228 8
Textbook Binder Version	978 1 118 45431 2
Solutions Manual	978 1 118 64795 0
E-Text	978 1 118 79571 2
E-Text w/Solutions Manual	978 1 118 93766 2

• **RECOMMENDED MATERIALS**

**Molecular Model Kit**



I highly suggest you obtain a model kit by the time we reach chapter four (alkanes) as it will be an invaluable tool in understanding the 3-D structure of organic molecules when we reach chapter five (stereochemistry).

## • COURSE GRADE

Your course grade will be based on the following:

<b>Semester Exams</b>	<b>60%</b>
<b>Reading Quizzes</b>	<b>15%</b>
<b>Writing Quizzes</b>	<b>5%</b>
<b>Final Exam*</b>	<b>20%</b>

**Major Exams** – There will be three (3) major examinations throughout the course and will constitute 60% (each worth 20%) of your overall grade in the course. Organic chemistry is a comprehensive subject. As such, each exam will build upon the prior topics – therefore, it is a necessity not to dismiss previously covered material.

**Reading Quizzes** – There will be ten five-minute, reading quizzes that will be given at the beginning of class. The material to be covered on these quizzes will be announced in class or on Blackboard at least two days before the quiz and will be based on reading assignments and/or course topics previously assigned and/or discussed in lecture. The average of these quizzes will constitute 15% of your overall grade in the course. The two quizzes with the lowest scores will be dropped.

**Writing Quizzes** – There will be at least five, unannounced writing quizzes that will be given near the end of class. The material to be covered on these quizzes will be based on the lecture material of that class day. The average of these quizzes will constitute 5% of your overall grade in the course. You may use your class notes and/or book during the writing quizzes. The one quiz with the lowest score will be dropped.

**Final Exam** – The final exam is comprehensive and will constitute 20% of your overall grade in the course.

\*The final exam score, if higher than any individual semester exam score, will replace **only the lowest semester exam score** (see below for an example calculation). If an exam is missed during the course of the semester, that exam will be counted as the lowest exam grade. If more than one exam is missed, only one will be replaced by the final exam.

Original Scores Calculation						
E1	E2	E3	RQ	WQ	F	Final Avg
73	80	60	85	82	85	76.5%

Grade Replacement Calculation						
E1	E2	E3	RQ	WQ	F	Final Avg
73	80	85	85	82	85	81.5%

All potential points for the course have been outlined in this section. **There are no other points to be awarded and no extra credit to be given.** If you come prepared for class and keep up with the material outside of class, you should feel no desire to seek extra credit.

## • MAKE-UP POLICY

If you must miss class for a legitimate reason (e.g. reasons outlined in the **University Policies** section), the instructor will grant a make-up for a missed quiz or exam, provided that the instructor is given at least two weeks advance notice of the absence. *Also, keep in mind that the instructor decides for himself if a student's excuse for being absent is legitimate!* Failed alarm clocks, being jailed, work conflicts, attending your crush's birthday party, etc. will not constitute legitimate excuses.

The following is from the UT Tyler Catalog:

Class attendance is the responsibility of the student. When a student has a legitimate absence, the instructor may permit the student to complete missed assignments. In many cases, class participation is a significant measure of performance, and non-attendance may adversely affect a student's grade. When a student's absences become excessive, the instructor may recommend that the student initiate a withdrawal.

Unexcused absences and their relation to missed quizzes or exams will be treated as follows. The two lowest quizzes of each type will be dropped. Everyone has a bad day or is absent every now and then for reasons not outlined in the University Policies or Catalog, such as being ill or for a doctor's appointment. Therefore, **if a quiz is missed**, it will count as one of the quizzes to be dropped. **If a semester exam is missed**, it will count as your lowest exam grade and the final exam will take the place of that semester exam as outlined in the **Course Grade** section.

## • REGRADING POLICY

I will be very careful and consistent in the grading of your exams; however, errors in grading are possible. **Questions concerning the grading of an exam should be submitted in writing before the next scheduled class meeting after the item was returned to you.** Alternatively, you may see me during office hours (or any other time you find me available) with the suspect assignment or exam in hand. All scores will be considered final one week after originally being returned to you.

## • HELP SESSIONS

It is my goal to have help sessions (outside of office hours) each week during the semester in order to aid you in succeeding in organic chemistry. *Unless otherwise noted*, these help sessions will be conducted on **Tuesday evenings in RBS 2015 from 6:30-7:30pm**. There will be some instances where these sessions may have to be cancelled, but I will let you know this through the course website or in class when that happens. Sessions may also be added and/or extended based on need or before exams. These sessions are very informal and are your opportunity to ask questions about current material, previous material, and anything in between.

• **TENTATIVE LIST OF COURSE TOPICS**

1. Review of General Chemistry (*on your own*)
2. Molecular Representations
3. Acids and Bases
4. Alkanes and Cycloalkanes
5. Stereoisomerism
6. Chemical Reactivity and Mechanisms (mixed in with each chapter)
7. Substitution Reactions
8. Alkenes: Structure and Preparation via Elimination Reactions
9. Addition Reactions of Alkenes
10. Alkynes

• **TENTATIVE EXAM DATES\*\***

Exam	Tentative Date	Lectures Covered
1	Thursday, September 29	Lecture #1–8 (8 Lectures)
2	Tuesday, October 24	Lecture #9–14 (6 Lectures)
3	Thursday, November 30	Lecture #15–22 (8 Lectures)
Final	December 14	Lecture #1–25 (Fall 2017)

\*\*Exam dates are subject to change depending on material covered

• **NOTE REGARDING READING AND HOMEWORK**

It is important that you read each section or chapter as we discuss it, or better yet *before* we discuss it. The best way to develop a proper understanding of advanced organic is to solve problems using concepts discussed in the text and/or in lecture. The text is organized such that examples and problems follow the discussion of a concept or series of similar concepts. I would suggest that you sit down to read with pencil and paper handy and work through each example and problem as you reach them. If you get stumped on a particular problem review the relevant text material and lecture notes and then try it again.

You should work all end-of-chapter problems unless otherwise noted. Additional homework problems will be posted online on the course website. **Homework will not be graded and it is your responsibility to stay up-to-date with the practice problems. You must show that you are self-motivated and have the discipline to complete the homework in an effort to be successful in the course.** Work hard on the problem before surrendering to the temptation to look in the study guide. Simply scanning the answers provided in the study guide will most likely not be enough to earn a passing grade. The best thing you could possibly do to improve your grade is to diligently and consistently work and rework problems. Although some memorization is necessary in learning organic chemistry, it is much more important to *understand* the concepts involved and how to apply them. Portions of exams will involve problems that will be challenging to solve without an understanding of the concepts involved.

## • STUDENT LEARNING OUTCOMES

***“IF A FELLOW HAS AN EMPTY STOMACH, IT WON’T LET HIM REST UNTIL HE FILLS IT.  
TOO BAD AN EMPTY HEAD DOESN’T DO THE SAME.”***

By the end of this course, you should:

1. Have a greater understanding of the atomic and molecular structure, chemical bonding, molecular geometry, conformational analysis, and stereochemical (3-D) relationships of organic molecules.
2. Be able to identify the name of an organic compound by observing its structure and/or its functional groups and be able to draw a specific organic compound from the appropriate systematic (IUPAC) name.
3. Rationalize the stereochemical and regiochemical course of standard organic reactions in terms of reaction mechanisms based on principles of energetics, reaction kinetics and thermodynamics.
4. Be able to predict the products as well as the mechanisms of certain chemical transformations. Specifically, the reactions of alkanes, alkenes and alkynes.

## • STUDENT ACADEMIC CONDUCT STATEMENT (*see also University Policies*)

In this course, students are encouraged to study and to prepare for exams with one another. ***However, during exams, students are to work alone. Cheating will not be tolerated.*** The University regulations are very explicit about academic misconduct, and these regulations will be fully enforced. ***During exams, a code of honor will apply under which students are to work alone and neither give help to others nor receive help from any sources.*** Students also are expected to help enforce this code. The minimum penalty for cheating will be a zero on the exam or assignment in question. **Maximum penalties, up to university expulsion, will be pursued in extreme or repeat cases.**

## • CONDUCT TOWARD OTHERS

As you know, this is a chemistry course. Chemists come from all walks of life (e.g. varying ethnicities, different religious beliefs, gender, etc.) and it is important as scientists to be able to work professionally with others in different environments. Under **no circumstances** will **any** derogatory remarks or actions toward race, gender, religion, or the like be tolerated in this course.

## • CONCEALED CARRY ON CAMPUS (EFFECTIVE **AUGUST 1, 2016**)

We respect the right and privacy of students who are duly licensed to carry concealed weapons in this class. License holders are expected to behave responsibly and keep a handgun secure and concealed. More information is available at <http://www.uttyler.edu/about/campus-carry/index.php>.

## • TOBACCO-FREE CAMPUS (EFFECTIVE **AUGUST 15, 2016**)

All forms of tobacco will not be permitted on the UT Tyler main campus, branch campuses, and any property owned by UT Tyler. This applies to all members of the University community, including students, faculty, staff, University affiliates, contractors, and visitors.

Forms of tobacco not permitted include cigarettes, cigars, pipes, water pipes (hookah), bidis, kreteks, electronic cigarettes, smokeless tobacco, snuff, chewing tobacco, and all other tobacco products.

There are several cessation programs available to students looking to quit smoking, including counseling, quitlines, and group support. For more information on cessation programs please visit [www.uttyler.edu/tobacco-free](http://www.uttyler.edu/tobacco-free).

## UNIVERSITY POLICIES

### UT Tyler Honor Code

Every member of the UT Tyler community joins together to embrace: Honor and integrity that will not allow me to lie, cheat, or steal, nor to accept the actions of those who do.

### Students Rights and Responsibilities

To know and understand the policies that affect your rights and responsibilities as a student at UT Tyler, please follow this link: <http://www.uttyler.edu/wellness/rightsresponsibilities.php>

### Campus Carry

We respect the right and privacy of students 21 and over who are duly licensed to carry concealed weapons in this class. License holders are expected to behave responsibly and keep a handgun secure and concealed. More information is available at <http://www.uttyler.edu/about/campus-carry/index.php>

### UT Tyler a Tobacco-Free University

All forms of tobacco will not be permitted on the UT Tyler main campus, branch campuses, and any property owned by UT Tyler. This applies to all members of the University community, including students, faculty, staff, University affiliates, contractors, and visitors.

Forms of tobacco not permitted include cigarettes, cigars, pipes, water pipes (hookah), bidis, kreteks, electronic cigarettes, smokeless tobacco, snuff, chewing tobacco, and all other tobacco products.

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### Grade Replacement/Forgiveness and Census Date Policies

Students repeating a course for grade forgiveness (grade replacement) must file a Grade Replacement Contract with the Enrollment Services Center (ADM 230) on or before the Census Date of the semester in which the course will be repeated. (For Fall, the Census Date is Sept. 12.) Grade Replacement Contracts are available in the Enrollment Services Center or at <http://www.uttyler.edu/registrar>. Each semester's Census Date can be found on the Contract itself, on the Academic Calendar, or in the information pamphlets published each semester by the Office of the Registrar.

Failure to file a Grade Replacement Contract will result in both the original and repeated grade being used to calculate your overall grade point average. Undergraduates are eligible to exercise grade replacement for only three course repeats during their career at UT Tyler; graduates are eligible for two grade replacements. Full policy details are printed on each Grade Replacement Contract.

The Census Date (Sept. 12th) is the deadline for many forms and enrollment actions of which students need to be aware. These include:

- Submitting Grade Replacement Contracts, Transient Forms, requests to withhold directory information, approvals for taking courses as Audit, Pass/Fail or Credit/No Credit.
- Receiving 100% refunds for partial withdrawals. (There is no refund for these after the Census Date)
- Schedule adjustments (section changes, adding a new class, dropping without a "W" grade)
- Being reinstated or re-enrolled in classes after being dropped for non-payment
- Completing the process for tuition exemptions or waivers through Financial Aid

### State-Mandated Course Drop Policy

Texas law prohibits a student who began college for the first time in Fall 2007 or thereafter from dropping more than six courses during their entire undergraduate career. This includes courses dropped at another 2-year or 4-year Texas public college or university. For purposes of this rule, a dropped course is any course that is dropped after the census date (See Academic Calendar for the specific date).



Exceptions to the 6-drop rule may be found in the catalog. Petitions for exemptions must be submitted to the Enrollment Services Center and must be accompanied by documentation of the extenuating circumstance. Please contact the Enrollment Services Center if you have any questions.

### **Disability/Accessibility Services**

In accordance with Section 504 of the Rehabilitation Act, Americans with Disabilities Act (ADA) and the ADA Amendments Act (ADAAA) the University of Texas at Tyler offers accommodations to students with learning, physical and/or psychological disabilities. If you have a disability, including a non-visible diagnosis such as a learning disorder, chronic illness, TBI, PTSD, ADHD, or you have a history of modifications or accommodations in a previous educational environment, you are encouraged to visit <https://hood.accessiblelearning.com/UTTyler> and fill out the New Student application. The Student Accessibility and Resources (SAR) office will contact you when your application has been submitted and an appointment with Cynthia Lowery, Assistant Director of Student Services/ADA Coordinator. For more information, including filling out an application for services, please visit the SAR webpage at <http://www.utt Tyler.edu/disabilityservices>, the SAR office located in the University Center, #3150 or call 903.566.7079.

### **Student Absence due to Religious Observance**

Students who anticipate being absent from class due to a religious observance are requested to inform the instructor of such absences by the second class meeting of the semester.

### **Student Absence for University-Sponsored Events and Activities**

If you intend to be absent for a university-sponsored event or activity, you (or the event sponsor) must notify the instructor at least two weeks prior to the date of the planned absence. At that time the instructor will set a date and time when make-up assignments will be completed.

### **Social Security and FERPA Statement**

It is the policy of The University of Texas at Tyler to protect the confidential nature of social security numbers. The University has changed its computer programming so that all students have an identification number. The electronic transmission of grades (e.g., via e-mail) risks violation of the Family Educational Rights and Privacy Act; grades will not be transmitted electronically.

### **Emergency Exits and Evacuation**

Everyone is required to exit the building when a fire alarm goes off. Follow your instructor's directions regarding the appropriate exit. If you require assistance during an evacuation, inform your instructor in the first week of class. Do not re-enter the building unless given permission by University Police, Fire department, or Fire Prevention Services.

### **Student Standards of Academic Conduct**

Disciplinary proceedings may be initiated against any student who engages in scholastic dishonesty, including, but not limited to, cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts.

- i. "Cheating" includes, but is not limited to:
  - copying from another student's test paper;
  - using, during a test, materials not authorized by the person giving the test;
  - failure to comply with instructions given by the person administering the test;
  - possession during a test of materials which are not authorized by the person giving the test, such as class notes or specifically designed "crib notes". The presence of textbooks constitutes a violation if they have been specifically prohibited by the person administering the test;
  - using, buying, stealing, transporting, or soliciting in whole or part the contents of an unadministered test, test key, homework solution, or computer program;
  - collaborating with or seeking aid from another student during a test or other assignment without authority;
  - discussing the contents of an examination with another student who will take the examination;

- divulging the contents of an examination, for the purpose of preserving questions for use by another, when the instructors has designated that the examination is not to be removed from the examination room or not to be returned or to be kept by the student;
  - substituting for another person, or permitting another person to substitute for oneself to take a course, a test, or any course-related assignment;
  - paying or offering money or other valuable thing to, or coercing another person to obtain an unadministered test, test key, homework solution, or computer program or information about an unadministered test, test key, home solution or computer program;
  - falsifying research data, laboratory reports, and/or other academic work offered for credit;
  - taking, keeping, misplacing, or damaging the property of The University of Texas at Tyler, or of another, if the student knows or reasonably should know that an unfair academic advantage would be gained by such conduct; and
  - misrepresenting facts, including providing false grades or resumes, for the purpose of obtaining an academic or financial benefit or injuring another student academically or financially.
- ii. “Plagiarism” includes, but is not limited to, the appropriation, buying, receiving as a gift, or obtaining by any means another’s work and the submission of it as one’s own academic work offered for credit.
- iii. “Collusion” includes, but is not limited to, the unauthorized collaboration with another person in preparing academic assignments offered for credit or collaboration with another person to commit a violation of any section of the rules on scholastic dishonesty.
- iv. All written work that is submitted will be subject to by plagiarism software.

#### **UT Tyler Resources for Students**

- [UT Tyler Writing Center](mailto:writingcenter@uttyler.edu) (903.565.5995), [writingcenter@uttyler.edu](mailto:writingcenter@uttyler.edu)
- [UT Tyler Tutoring Center](mailto:tutoring@uttyler.edu) (903.565.5964), [tutoring@uttyler.edu](mailto:tutoring@uttyler.edu)
- The Mathematics Learning Center, RBN 4021, this is the open access computer lab for math students, with tutors on duty to assist students who are enrolled in early-career courses.
- [UT Tyler Counseling Center](mailto:uttyler@uttyler.edu) (903.566.7254)

Revised 05/17