

**Chemistry 263
Organic Chemistry**

**Tentative Syllabus
Fall 2018
Department of Chemistry
The University of Akron**

Prof. David A. Modarelli
Knight Chemical Laboratory Rm 214
Phone: 972-7366
email: dmodarelli@uakron.edu
<http://gozips.uakron.edu/~dam8/>

Office Hours: As Posted

Materials:

1. "Organic Chemistry, 2nd Edition," D. Klein.
2. Sapling Learning Access (required)
3. "Organic Chemistry, Student Study Guide and Solutions Manual, 2nd Ed, D. Klein (Strongly suggested).

<u>Week Beginning</u>	<u>Chapter(s)</u>	<u>Topics</u>
8/27	1	Review of General Chemistry
9/5	2	Molecular Representation
9/10	3	Acids and Bases
9/17	4	Alkanes and Cycloalkanes
9/24	4 5	Alkanes and Cycloalkanes (cont'd), Stereoisomerism
9/26	Exam 1: Chapters 1-4	
10/1	5	Stereoisomerism
10/8	5, 6	Stereoisomerism; Chemical Reactivity and Mechanisms
10/15	6, 7	Chemical Reactivity and Mechanisms; Substitution Reactions
10/22	7	Substitution Reactions
10/24	Exam 2: Chapters 4-7	
10/29	7, 8	Substitution Reactions; Alkenes: Structure & Preparation
11/5	8, 9	Alkenes: Structure & Preparation; Addition Reactions of Alkenes
11/12	9	Addition Reactions of Alkenes

11/19	9, 10	Addition Reactions of Alkenes; Alkynes
11/21	Exam 3: Chapters 7-10	
11/26	13	Alkynes, Alcohols and Phenols
12/3	13	Alcohols and Phenols
12/12	Final Cumulative Exam	7:15 – 8:40 MGH 111

GRADES

There will be three exams of ~200 pts each, all of which will count. You are expected to be present at ALL exams. Make-up exams will be given ONLY under the MOST EXTENUATING circumstances. Unexcused absences for exams will result in a grade of zero for that exam, and it is your responsibility to make arrangements within one day for a make-up. The final exam will be worth 200 pts.

Exam 1: 200
Exam 2: 200
Exam 3: 200
Homework: 100 (Sapling)

Final: 200
Total ~900

I will curve, and so your **final total** score will be scaled to the class average which will be a C+ (~77%). To get an idea how you stand in the class after *each* exam, take your grade and divide by the total points for that exam. If you find you are ~11% points above the class average, then you are approximately in the ~B+ range on that exam (i.e., ~87 – 88%), ~15% points above the average will be in the A- range (91 – 92%), etc. This scale is *approximate* and will give you an *idea* of how you did on each exam, and how (approximately) you are doing in the class. I stress that this value is *approximate* and WILL change slightly as people drop the class through the semester and when I add in the homework at the end of the semester. The grade scale below will of course include +/- scores, although I have not specifically indicated what the exact range will be.

Grade Scale	Total Points (Percentage, Scaled)
A	90-100
B	80-90
C	70-80
D	60-70

The above scale is approximate and will serve as a guide to determining the final grade, and may be amended at any time.

I will look at grading changes (mis-added exams, etc) on exams until the next exam only. After that point I will not change point values on any exam. In other words, I will look at Exam 1 issues until Exam 2, etc.

Answer keys to my Fall 2017 exams for you to use as practice exams will be provided on my Research Group's web-page:

<http://gozips.uakron.edu/~dam8/Organic263.html>

I will also post the course notes on this site after we have finished each chapter. You should note that these notes are in .pdf format and were written (and scanned) for a different textbook many years ago. I have rearranged my notes in lecture to accommodate Klein's book, and so your class notes may be in a slightly different order than the online notes.

Homework Assignments

I will provide two different types of homework assignments. The first are available on my Research Group website (see above). You will find six problem sets (and corresponding answer keys) there – please note that again those problem sets were used with a different textbook and do not correspond exactly with your book. These problems are highly recommended but will not be graded.

I will be using the Sapling Learning online program – you will have access to ~20 problems per chapter (depending on the size of the chapter). These problems **WILL BE GRADED**. I will then scale the sum of these problem sets to be 100 pts. To access Sapling (after you have purchased the access code), follow the directions below:

1. Go to <http://saplinglearning.com> and click "US Higher Ed" at the top right.
- 2a. If you already have a Sapling Learning account, log in and skip to step 3.
- 2b. If you have Facebook account, you can use it to quickly create a SaplingLearning account. Click the blue button with the Facebook symbol on it (just to the left of the username field). The form will auto-fill with information from your Facebook account (you may need to log into Facebook in the popup window first). Choose a password and timezone, accept the site policy agreement, and click "Create my new account". You can then skip to step 3.
- 2c. Otherwise, click "create account". Supply the requested information and click "Create my new account". Check your email (and spam filter) for a message from Sapling Learning and click on the link provided in that email.
3. Find your course in the list (you may need to expand the subject and term categories) and click the link.
4. Select a payment option and follow the remaining instructions.
5. Work on the Sapling Learning training materials. The activities, videos, and information pages will familiarize you with the Sapling Learning user environment and serve as tutorials for efficiently drawing molecules, stereochemistry, etc. within the Sapling Learning answer modules. These training materials are already accessible in your Sapling Learning course.

Once you have registered and enrolled, you can log in at any time to complete or review your homework assignments. During sign up - and throughout the term - if you have any technical problems or grading issues, send an email to support@saplinglearning.com explaining the issue. The Sapling support team is almost always more able (and faster) to resolve issues than your instructor.

Academic Integrity

The University of Akron takes very seriously Academic Integrity and has outlined a code of student conduct, which may be found at:

<http://www.uakron.edu/ogc/UniversityRules/pdf/41-01.pdf>

The relevant sections pertaining to cheating are on pp 5-6. As a prospective teacher, scientist, engineer, nurse or physician you are expected to behave in a professional manner, including refraining from cheating. Cheating is the actual or attempted practice of fraudulent or deceptive acts to gain an unfair advantage in a grade, whether for yourself or for another student. Cheating includes transmitting or receiving by any and all means information about examination questions. During examinations, students will not be allowed to use or have turned on electronic devices (including cell-phones, iPods, calculators, etc). If I believe you have or are using such a device I will immediately confiscate your exam. Please do not try to hide notes or a cheat sheet anywhere on you or anywhere near you.

I will not tolerate cheating or any form of academic misconduct. I will have at least six graduate students proctoring my exams with me during each test. Penalties for cheating range from a 0 or F on a particular exam through an F for the course.

Sexual Assault – Title IX

The University of Akron is committed to providing an environment free of all forms of discrimination, including sexual violence and sexual harassment. This includes instances of attempted and/or completed sexual assault, domestic and dating violence, gender-based stalking, and sexual harassment. Additional information, resources, support and the University of Akron protocols for responding to sexual violence are available at uakron.edu/title-ix.

Accessibility

In pursuant to University policy #3359-38-01, The University of Akron recognizes its responsibility for creating an institutional atmosphere in which students with disabilities have the opportunity to be successful. Any student who feels he/she may need an accommodation based on the impact of a disability should contact the Office of Accessibility at 330-972-7928 (v), 330-972-5764 (tdd) or access@uakron.edu. The office is located in Simmons Hall Room 105.

After the student's eligibility for services is determined, his/her instructors will be provided a letter which will outline the student's accommodations.

Organic Chemistry I Learning Outcomes

You will be expected to become proficient in the following:

- 1) Demonstrate critical thinking and efficient problem-solving skills in organic chemistry.
- 2) Identify and differentiate among the various concepts, including acid-base theory, hybridization theory, nucleophilic chemistry, electrophilic reactions, alkenes and alkyne chemistry.
- 3) Demonstrate the ability to correctly predict the products for organic reactions.
- 4) Demonstrate the ability to correctly draw organic reaction mechanisms for the reactions covered in class.

University Add/Drop Policy Fall 2017

The last day to drop a class without a "WD" appearing on your academic record/transcript is Sunday September 9. No signatures are required to drop a class at this time. If you drop by this date you will also receive a full refund for the class. *AFTER* this date, the University will not issue you any refund.

The last day to Withdraw from a class is Sunday October 14; you must have my signature and the Dean's signature to withdraw.

Email

I will communicate with you in class and by email using your UA email account. If you do not use this account, you must set it up to forward messages to an account you do use. You can do this at the following UA websites:

http://support.uakron.edu/wiki/index.php/Main_Page

<https://gozips.uakron.edu/zid/app/>

Click on the "Email" tab on the second site. At the bottom of the page, you should be able to have Email forwarded from your UA address to your preferred address. Other email providers may remove or modify attachments to the message, and I am not responsible for such incomplete messages. If you send me email from a non-UA address, be sure to write your name and the course info (Organic Chemistry 2) as the subject of the message, since I may not recognize your name and might delete it.

All email messages to me from you ***MUST BE ADDRESSED TO ME*** and ***SIGNED BY YOU*** and written in Standard English. Please use proper capitalization and punctuation. I will **NOT** respond to unsigned messages.

Note that I will most likely not respond to email messages during holidays or on weekends. Please plan your studying accordingly.

Learning Assistants

We will have a learning assistant (LA) in this class this semester, Cassidy Wilson. Cassidy took my class last year ago and did very well. For those of you who are not familiar with the LA program, the LA program places students who have previously taken this class and done very well. Cassidy will sit in on every class, take notes, have weekly tutoring hours, and host review

sessions prior to each exam. She also will be able to provide you with ideas for how to best study for my class. She will be an outstanding resource for you throughout the year. I am strongly supportive of this program in general, and I really hope you will take advantage of having her being a part of this class.

Tutors

I will provide you with a list of graduate student tutors who you can also use as resources. The tutors set their own hourly rates, and often will tutor more than one student for a discounted rate. Since you are paying them if you choose to hire one, they will generally provide you with more extensive help than you will find elsewhere.

The University also provides undergraduate tutors who have taken organic chemistry in Bierce Library. If you work with one of these tutors, be sure that person has taken my organic chemistry course, as Dr. Youngs and I have slightly different teaching and testing styles.

Final Suggestions

If you wish to do well in this course, it is **ABSOLUTELY IMPERATIVE** that you stay current with the material. I suggest reading the assigned material before class and studying your notes on a DAILY basis. Doing well in Organic Chemistry is like doing well in sports or playing an instrument well – you have to practice.

Organic chemistry is also highly *cumulative*. What you learn at the beginning of class is *ESSENTIAL* for understanding later material. When we finish a chapter, we will build on that information for ALL subsequent chapters. Our exams will reflect this tendency, and you will be expected to understand material on prior exams as the class progresses -- in other words, you will probably see problems on exams that contain material from earlier exams.

If you find yourself having trouble working through the homework assignments in the book and on Sapling, please find help immediately from the LAs, a tutor or by coming to ask me questions. If you find you have done poorly on an exam, you should also get help immediately! Because Organic is cumulative, any lack of understanding you have will continue to grow as the semester goes on.

I would really like to see you all do well and learn organic chemistry this semester -- please follow my suggestions and you will have a good semester. Good luck!