

## ORGANIC CHEMISTRY I

Instructor: Hemali Rathnayake, Assistant Professor of Chemistry, TCCW 440, hemali.rathnayake@wku.edu  
Lecture Times: MTWF 9.00 AM-12 PM, TCCW 369

Learning Objectives:

1. Student will learn the vocabulary of organic chemistry (nomenclature)
2. Student will learn to draw correct structural representations of organic molecules (structure).
3. Student will learn to write reaction transformations with stereochemical considerations (stereochemistry).

Office Hours: MWF from 1-3PM, and by appointment

My office hours are listed above. Unless I make an announcement in class to the contrary, I will be in my office or at least around the Department during those hours to help you or meet with you about this course. If these hours are not convenient, I will be happy to make an appointment via emails to meet with you at other times.

If you have any problem at all concerning the course or your work, it is your responsibility to contact me. There are many things we can do during the semester to assist you with the course material or help you catch up if you fall behind. But once the semester is over, it's over, and you will not be able to make up for lost opportunities. I monitor my e-mail all day every day, even when I am traveling, so you can always get in touch with me. Never *assume* anything. *Always* ask.

Of all the aspects of my job, teaching and interacting with students are certainly the ones I enjoy most. Your success in this course is a joint effort between you doing the assigned work and me assisting you, so please don't be shy to ask help.

Text: Solomons Fryhle, *Organic Chemistry*, 10 or 11<sup>th</sup> Edition

On-line Assignment/Homework site:

This class will adopt on- line practice problem site called "Sapling Learning". Students should follow following steps to get sign-up for Sapling Learning site for this class.

Steps:

1. Go to <http://saplinglearning.com>
2. (a). If you already have a Sapling Learning account, log in and skip to step 3  
(b). If you have a Facebook account you can use it to quickly create a Sapling Learning 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.  
(c). 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](mailto:support@saplinglearning.com) explaining the issue. The Sapling support team is almost always more able (and faster) to resolve issues than your instructor.

Examinations: The total of two exams and a cumulative final exam which will be given on Fridays during the class time.

Grading: Total marks will be taken from two exams, the final exam, and a set of assignments through Sapling Learning

- ❖ **Your two exams grades will count for 40% of the course marks (20% for each exam).**
- ❖ **The final cumulative examination will count for 30% of the course marks.**
- ❖ **The sum of all assignments will count for 30% of the course marks.**

*Attendance are not part of the required grading, but will count for up to 5% extra credit.*

There are absolutely **NO MAKE-UP exams** in this class. Period. No Exceptions. This cannot be stated more clearly. If you miss an exam you will have to take a zero for that exam. If you miss for an emergency medical reason (only for a medical reason) then you may take an **incomplete** for this course. However, medical emergencies must be properly documented.

**Grade Assignment:** The final course grade will conform roughly to the following scale.

**A (> 90 %) B (80 – 89 %) C (70 – 79 %) D (60 – 69 %) F (< 60%)**

***There is absolutely no grade curving!!!***

### ***Attendance***

Attendance is required. This course will involve a great deal of discussion, particularly of issues raised by students. The classroom is a dynamic environment, and you must be present to take advantage of this important learning activity. I plan to take attendance in each class. The number of classes in the course will divide the number of classes attended and that percentage will be averaged into your grade with a weight of 5% extra credits. If you miss a class, you may ask to be excused by contacting me via e-mail *before* that class and explaining the reason for your required absence. However, please note that "I have to work" is not an acceptable reason for absence. While I appreciate the need for money and I understand that we must all make difficult choices about how we spend our time, I do not excuse absences for work reasons because I know of no other way to convince you that work is temporary, while education is permanent. Thus, attending class has to have the higher priority.

***Please do not show up at my doorstep few minutes before the exam and ask to explain whole chapter.***

Exhortation: This course moves along very quickly, and covers a lot of information. In order to have a hope of learning a useful amount of chemistry from this course, the student must do problems and OSL assignments as soon as possible after they are assigned, read appropriate sections from the book shortly before or shortly after the lecture which covers those sections, and (especially) feel free to seek assistance from the instructor **BEFORE** getting deeply into difficulty. ***We are here to help you get your money's worth out of your education, so take advantage of help when you need it!***

General class policies:

1. ***All graded exams are photocopied prior to returning them to the students. If you require a re-grade for a portion of your exam first send a request via email and make an appointment to see me within 24 hrs after handing over the exam papers.*** After the 24-hour window is complete you will not be eligible to change your score.
2. ***Copying: I will not tolerate plagiarism or cheating of any kind. Be acutely aware that I have a “zero-tolerance” policy on cheating. Simply stated, if you cheat, you fail.***
3. **Academic Dishonesty and Cheating (WKU Catalog Issue 2005-2007, pg 27)**  
“Students who commit any act of academic dishonesty may receive from the instructor a failing grade in that portion of the course work in which the act was detected or a failing grade in a course without the possibility of withdrawal. The faculty member may also present the case to the Office of the Dean of Student Life for disciplinary sanctions.”
4. In compliance with university policy, students with disabilities who require accommodations (academic adjustments and/or auxiliary aids or services) for this course must contact the Office for Student Disability Services in DUC A-200 of the Student Success Center in Downing University Center. The phone number is 745-5004. Please DO NOT request accommodations directly from the professor or instructor without a letter of accommodation from the Office for Student Disability Services.
5. For all class meetings, turn off or silence cell phones or pagers, unless you are an emergency response worker. I do not want to hear your cell phone ringing during the lecture. I will ask you to leave immediately if you do so.
6. No accessing of e-mail or instant messaging in class – **do this some other time or leave, please.**
7. Take your trash away with you, or properly dispose of it before or after class (NOT during class).
8. You and your classmates are paying for this class; respect their expectation to have their classroom be quiet and as neat as possible. Thanks in advance for helping with this.
9. **After class starts door will be closed, you are not allowed to leave the classroom until the class break unless if it is an emergency situation. If you leave you are expected to not return. In this event of leaving the class you forfeit any grades earned that day as well as loose the chance for extra credit.**

***It is very essential that you behave professionally and respectfully toward my self and your fellow students. There is no exception to this and student who violates this will be immediately asked to leave the class and may dropped from the course by instructor's discretion. I want to emphasis that even the slightest break of this will result consequences. Again there is NO exception and no second chances.***

**Office Visit:**

*During the office visits, you should silent your cell phones. No text messaging. You should behave politely and respectfully. When you enter to my office, even though door is open, you should knock on the door first before you enter.*

*Please do not come to see me for contesting your exam score or asking partial credits for any exams. I strongly advise that you do not attempt to engage in this type of behavior with me (“Don’t you think I deserve more points for \_\_\_\_\_?”), unless I have made a mistake adding points on your exam.*

**Note:**

*Contents, Structure, or Schedule of this Syllabus is subject to change at the discretion of the professor.*

**Course web site:**

I will use the Black board for teaching materials, announcements, answer keys, and grade distributions.

**Course Description:**

This part of the course can be considered as “structure of organic molecules”, and builds upon the background that you (hopefully) retain from general chemistry. It is pretty intense because of the expectation that you can swiftly re-master concepts of bonding and structure from previous coursework.

**Course Outline and Sequence**

**Chapter 1:** Structure and Bonding in Organic Molecules  
**Chapter 2:** Families of Carbon Compounds  
**Chapter 3:** An Introduction to Organic Reactions and Their Mechanisms  
**Chapter 4:** Nomenclature and Conformations of Alkanes and Cycloalkanes  
**Chapter 5:** Stereochemistry  
**Chapter 6:** Nucleophilic substitution and Elimination reactions  
**Chapter 7:** Alkenes and Alkynes I  
**Chapter 8:** Alkenes and Alkynes II  
**Chapter 9:** Nuclear Magnetic Resonance Spectroscopy to Deduce Structure and Mass Spectrometry

**First Preliminary Exam:**

Section to Study	Topic(s)
Chapter 1	Structure and Bonding
Chapter 2	Families of Carbon Compounds

**Second Preliminary Exam:**

Section to Study	Topic(s)
Chapter 3	Organic Reactions & Mechanisms
Chapter 4	Conformations of Alkanes and Cycloalkanes

Third Preliminary Exam:

Section to Study	Topic(s)
Chapter 5	Stereochemistry
Chapter 6	SN1, SN2, E1 & E2

Fourth Preliminary Exam:

Section to Study	Topic(s)
Chapter 7	Alkenes and Alkynes
Chapter 8 & 9	Alkenes, Alkynes and NMR

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**FINAL NOTES**

- ❖ I do not discuss grades by email or phone.
- ❖ I will ask you to leave if you are talking during my lecture or text messaging.
- ❖ You are not allowed to operate a computer while in my class.
- ❖ Silence your cell phones prior to start of class.
- ❖ If you leave class to take a cell phone call or to get food you are expected to not return. In this event of leaving the class you forfeit a portion from your extra credit.