## Organic Chemistry I CHMO-331 M,W,F 9:00 am- 9:50 am Room: GOL 3435

**Instructor:** Dr. Jeremy Cody

Office: GOS-3272 E-Mail: jacsch@rit.edu Phone: 475-2545

**Office Hours:** Monday, Wednesday, and Friday from 10:00 am to 11:00 am or by appointment.

**Objective:** This course is a study of the structure, nomenclature, reactions and synthesis of the following functional groups: alkanes, alkenes, alkynes. This course also introduces chemical bonding, IR and NMR spectroscopy, acid and base reactions, stereochemistry, nucleophilic substitution reactions, and alkene and alkyne reactions. In addition, the course provides an introduction to the use of mechanisms in describing and predicting organic reactions.

**Text Required:** David Klein, Organic Chemistry 1<sup>st</sup> or 2<sup>nd</sup> Edition, Wiley.

Prerequisites: General Chemistry (CHMG-151) or equivalent

Co-requisite: CHMO-335 Organic Chemistry Lab I (unless you've already taken it).

Week Jan 10: Course management and Chapter 1
Week Jan 17: Chapter 2: Molecular Representations
Homework: Chapter 1 due Wednesday

Week Jan 24: Chapter 3: Acids and Bases

Homework: Chapter 2 due Monday

Week Jan 31: Chapter 3: Acids and Bases cont...

Homework: Chapters 2 and 3 due Monday

Week Feb 7: Chapter 4: <u>Alkanes and Cycloalkanes</u>

Homework: Chapter 4 due Wednesday

Wednesday Feb 9: Exam review Friday Feb 11: Exam 1

Week Feb 14: Chapter 5: Stereoisomerism

Week Feb 21: Chapter 5: Stereoisomerism Chapter 6: Chemical Reactivity and Mechanisms.

Chapter 11: <u>Radical Reactions (partial)</u> Homework: Chapter 5 due Monday

Week Feb 28: Chapter 6: Chemical Reactivity and Mechanisms, Chapter 11: Radical Reactions (partial)

Homework: Chapters 6 and partial 11 due Wednesday

Wednesday Mar 2: Exam review Friday Mar 4: Exam 2
Week Mar 7: Spring Break

Week Mar 14: Chapter 7: <u>Substitution Reactions</u>

Homework: Chapter 7 Due Monday

Week Mar 21: Chapter 8: Alkenes: Structure and Preparation via Elimination Reactions

Homework: Chapter 8 Due Friday

Week Mar 28: Chapter 15&16: MS, IR and NMR,

Homework: Chapter 15&16

Wednesday Mar 30: Exam Review Friday Apr 1: Exam 3

Week Apr 4: Chapter 9: <u>Addition Reactions of Alkenes</u>

Homework: Chapter 9 part 1

Week Apr 11: Chapter 9: Addition Reactions of Alkenes

Homework: Chapter 9 part 2

Week Apr 18: Chapter 10: <u>Alkynes</u>
Week Apr 25: Chapter 10: <u>Alkynes</u>

Homework: Chapter 10

Monday Apr 25 Exam Review

## Final Exam April 27<sup>th</sup> 8am GOL 3435: Exam 4 covering chapters 9, 10, 15, and 16 + Bonus Final FINAL GRADE

Exams: 72% (18% each; plus Final exam bonus points)

Quizzes 8% Homework: 20% Total: 100%

Letter grade	Percentage Range
A	93 +
A-	90-92
B+	87-89
В	83-86
B-	80-82
<u>C</u> +	77-79
C	73-76
C-	70-72
D	60-69
F	under 60

## MyCourses will be used throughout the course. Please become familiar with this tool.

**Exams:** There will be four exams and a "Bonus Final." Please note that the fourth exam will be during finals week. All exams will be cumulative because organic chemistry is a discipline that demands continued use of previously learned material. However, the emphasis on the exams will be placed on the most recently covered information. You can expect that you will be allotted only 50 minutes for each exam and 2 hours for the final exam.

The exams points are broken down in the following manner:

Exam 1: 18% Exam 2: 18% Exam 3: 18% Exam 4: 18%

bonus final exam: 9%

Proper study habits can make all the difference. Please see the website <u>www.rit.edu/lponline</u> for assistance in time management and study habits.

**Quiz:** Most Fridays a quiz on the material covered in class that week will be given in the last five minutes of lecture.

**Homework:** Homework will be handed out in class and available outside my office by the Friday before they are due. Turn in hard copies on due date in class.

**Honor Principle:** Collaboration on assigned homework problems is encouraged. All examinations will be closed book and closed notes. The exams given are your way of proving to me that you know the material. If you fail to complete the exams following the "honor code," your exam will be no longer valid. See the following link for the honor code: <a href="http://www.rit.edu/studentaffairs/studentconduct/RITHonorCode1.htm">http://www.rit.edu/studentaffairs/studentconduct/RITHonorCode1.htm</a>

Review Help: Review session have been schedule before exams (see schedule).

**Attendance:** Attendance will not be taken, but participation in the class lecture is essential for success. If you are absent from lecture with or without an excuse, you are responsible for the material covered.

RIT's official policy on attendance in part reads:

"Absences, for whatever reason, do not relieve students of their responsibility for fulfilling normal requirements in any course. In particular it is the student's responsibility to make individual arrangements in advance of missing class due to personal obligations such as religious holidays, job interviews, athletic contest, etc., in order that he or she may meet his or her obligations without penalty for missing class." (*RIT Governance Policy D4.0, Section I.B.*)

**Class participation policy:** Please refrain from using cell phones in the class. I will either not bring my cell phone or shut it off for the duration of the class. Civility can be maintained if common sense is used. If your actions interrupt the learning process you should refrain from doing that action. We are in class only a short time, so let's use our time together effectively.

During the lecture you will be expected to participate in the in-class problems. Come prepared with pencil/pen and paper.

**Testing accommodations:** At the initiation of the student –present the letter of accommodation- discuss the logistics of the recommended testing accommodations. If the student is taking the test in the classroom, discuss a plan for how to make use of their testing accommodations within the classroom.

If the student is taking the test in the testing center:

- The student will give you a test envelope: provide information on the right side of the envelope, including contact information and return instructions.
- Submit the envelope containing the test to the Academic Accommodations Office (AAO) by dropping it off at SAU #1150 or using the assigned drop-box in your college (listed on the envelope). The AAO requests receipt of exam at least 1 day in advance of testing.
- Contact the AAO as soon as possible if there are any changes to the test or additional information provided to the class during the exam.

All other accommodation: All other accommodations will be discussed on a case by case basis.

**Suggested Problems:** In addition to the assigned homework, you are encouraged to work on the problems at the end of each chapter in the textbook.