

## Syllabus CHM 227H Fall 2023

**Instructor:** Brett Lucht

**Office Hours:** M 1-2 pm, W 12-1 pm, F 11am-12 pm Beaupre 374F, 874-5071, blucht@uri.edu

**Lecture:** MWF 10:00, Beaupre 215

**Books:** Organic Chemistry by T. W. Solomons, 12th ed.  
A PDF version of the textbook is fine. Previous years students have been able to obtain free copies online.  
Online access to WileyPlus IS NOT NEEDED.  
Strongly recommended: A molecular model set (available from www.megamolecules.com or any other vendor).

**Course Site:** Information for course is posted on Brightspace (brightspace.uri.edu)

**Course Objectives:** Develop a strong understanding of the fundamental aspects of organic chemistry. Develop critical thinking and technical writing skills. Develop cooperative learning skills directed around complex problems in organic chemistry.

### Course Requirements:

- (1) Four hourly exams (100 pts each) will be given on the following dates -. The exam schedule will be maintained in all circumstances. If the University is closed due to weather on the exam date, the exam will be given during the following class session. **No make up exams will be given.** If a student fails to attend an exam the student will be given 0 points for the exam. The lowest exam grade will be dropped.
- (2) Eight unannounced quizzes (20 pts. each) will be given during the lecture session (~6 min). **No make up quizzes will be given.**
- (3) Four group project assignments (20 pts each) will be required. These assignments will require students to work together to solve problems on the whiteboard in class. Everyone will work on the whiteboard at the same time. The two lowest quiz/project grades will be dropped.
- (4) The final exam (250 pts) will be given on Monday December 19<sup>th</sup> from 8-10 am.
- (5) There are a total of 750 pts possible. **There will be no extra credit work.**
- (6) The last day to drop courses is-. **Incomplete grades will only be given in extraordinary circumstances.**

## Lecture Schedule

<u>Date</u>	<u>Chapters</u>	<u>Topic</u>
9/6-9/11	1	The Basics
9/13-9/18	2	Families of Carbon Compounds
9/20	-	Exam 1
9/22-9/27	3	Acids and Bases
9/29-10/4	4	Nomenclature: Alkanes/Cycloalkanes
10/6	-	Exam 2
10/9-10/13		No Class
10/16-10/25	5	Stereochemistry
10/27-11/1	6	Nucleophilic Reactions
11/3	-	Exam 3
11/6-11/15	7	Alkenes and Alkynes I
11/17-11/29	8	Alkenes and Alkynes II
12/1	-	Exam 4
12/4-12/8	10	Radical Reactions
12/11	-	Review of Semester

### Student Learning outcomes:

1. Identify the various organic functional groups present in the structure of an organic molecule.
2. Give the correct name of an organic compound when provided the structure of the compound, and give the correct structure of a compound when provided the name.
3. Illustrate basic concepts of structure and bonding in organic compounds, including constitutional isomerism, stereoisomerism, conformational analysis, and structural effects on the physical and chemical properties of organic compounds.
4. Illustrate basic concepts relating to reactivity of organic compounds, including: substitution, addition, elimination, oxidation-reduction, reactions and the mechanisms for these reactions.
5. Predict the product(s) of an organic reaction(s) consisting of one or several steps, correctly taking into account aspects of stereo-, regio-, and chemoselectivity.

*Academic Integrity Academic dishonesty will not be tolerated. It is an unforgivable offense. Students who have been caught cheating or misrepresenting their work will be subject to the disciplinary actions contained in the URI University Manual including failure of the assignment/exam and potentially culminating with expulsion from the University. During exams and quizzes students are not allowed to use or have access to the internet. Simply having a cellphone (e.g.) in their line of site will result in a zero for the exam.*