Chemistry 5224

Basic Principles of Organic Chemistry

Fall 2020

Instructor: Aaron Aponick, 403 JHH, 352.392.3484, aponick@ufl.edu

Lectures: MWF 9:35-10:25 a.m., online-synchronous via Zoom

E-Learning: We will use a Canvas site: https://lss.at.ufl.edu/
Links to the Zoom meetings are found there. Check regularly for course material

Office Hours: Available via Zoom after lectures or most any time

Required Texts: The Art of Writing Reasonable Organic Reaction Mechanisms 2nd Ed.

Strategic Applications of Named Reactions in Organic Synthesis, László Kürti and Barbara Czakó, ISBN 0124297854

Course Objective:
To learn the fundamental principles necessary to read, understand, and critique the scientific literature in the field of organic chemistry.

Course Content:
The course will meet three times per week for lectures, problems, and presentations and is designed to provide an introductory look at the underlying principles that are the foundation of modern organic chemistry. The ability to use the language of organic chemistry and to think mechanistically is of key importance to the organic chemist and thus emphasis is placed on name reactions and solving mechanistic problems using the curved arrow convention.

Attendance:
Attendance is required and participation is encouraged.

Grading: Exam Dates:

Exam 1 ........................................ 25% Exam 1 .................. September 25, 2020
Exam 2 ........................................ 25% Exam 2 .................. October 25, 2020
Exam 3 ........................................ 25% Exam 3 .................. December 9, 2020
Homework/Project ............................. 25%

Additional Literature Resources:
Name Reactions by Jie Jack Li
Named Organic Reactions by Thomas Laue and Andreas Plagens
Name Reactions and Reagents in Organic Synthesis by Mundy, Ellerd, and Favaloro

Writing Reaction Mechanisms in Organic Chemistry by A. Miller and P. Solomon
Advanced Organic Chemistry by Jerry March

Web Based Resources:
http://www.organic-chemistry.org/namedreactions/
http://scifinder.cas.org
http://www.reaxys.com
**Tentative Schedule:**

We will roughly follow the AWRORM book, but the notes will also include additional material.

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<tr>
<th>Monday</th>
<th>Wednesday</th>
<th>Friday</th>
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<tbody>
<tr>
<td>8/31- Intro</td>
<td>9/2- The Basics</td>
<td>9/4- Name reactions/Problems</td>
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<tr>
<td>9/7- No Class</td>
<td>9/9- The Basics</td>
<td>9/11- Name reactions/Problems</td>
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<tr>
<td>9/14- The Basics</td>
<td>9/16- The Basics</td>
<td>9/18- Name reactions/Problems</td>
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<td>9/21- The Basics</td>
<td>9/23- Reactions: Basic Conditions</td>
<td>9/25- Name reactions/Problems</td>
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<td>9/28- Reactions: Basic Conditions</td>
<td>9/30- Reactions: Basic Conditions</td>
<td>10/2- Name reactions/Problems</td>
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<td>10/5- Reactions: Basic Conditions</td>
<td>10/7- Reactions : Basic Conditions</td>
<td>10/9- Name reactions/Problems</td>
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<td>10/12- Reactions: Acidic Conditions</td>
<td>10/14- Reactions: Acidic Conditions</td>
<td>10/16- Name reactions/Problems</td>
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<td>10/19- Reactions: Acidic Conditions</td>
<td>10/21- Reactions: Acidic Conditions</td>
<td>10/23- Name reactions/Problems</td>
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<td>10/26- Reactions: Acidic Conditions</td>
<td>10/28- Pericyclic Reactions</td>
<td>10/25- Name reactions/Problems</td>
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<td>11/2- Pericyclic Reactions</td>
<td>11/4- Pericyclic Reactions</td>
<td>11/6- Name reactions/Problems</td>
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<td>11/9- Pericyclic Reactions</td>
<td>11/11- No Class</td>
<td>11/13- Name reactions/Problems</td>
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<td>11/16- Pericyclic Reactions</td>
<td>11/18- Pericyclic Reactions</td>
<td>11/20- Name reactions/Problems</td>
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<td>11/23- Radical Reactions</td>
<td>11/25- No Class</td>
<td>11/27- No Class</td>
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<tr>
<td>11/30- Radical Reactions</td>
<td>12/2- Radical Reactions</td>
<td>12/4- Name reactions/Problems</td>
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<td>12/7- Radical Reactions</td>
<td>12/9- Radical Reactions</td>
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Assignments will be made throughout the semester.

**Accommodations for students with disabilities:**

Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

**Course Evaluations:**

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.uafl.edu/students/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.blueera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.uafl.edu/public-results/.”

**UF Honor Code:**

We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity. On all work submitted for credit by students at the university, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.” “The university requires all members of its community to be honest in all endeavors. A fundamental principle is that the whole process of learning and pursuit of knowledge is diminished by cheating, plagiarism and other acts of academic dishonesty. In addition, every dishonest act in the academic environment affects other students adversely, from the skewing of the grading curve to giving unfair advantage for honors or for professional or graduate school admission. Therefore, the university will take severe action against dishonest students. Similarly, measures will be taken against faculty, staff and administrators who practice dishonest or demeaning behavior.”

**Cheating and Plagiarism:**

Cheating and plagiarism will not be tolerated and will result in no credit being given on the assignment in question and a report to the Dean of Students Office who may impose further penalties.

**COVID-19 Statements:**

Privacy. Our class sessions may be audio-visually recorded for students in the class to refer and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate verbally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

Course materials will be provided to you with an excused absence, and you will be given a reasonable amount of time to make up work. Find more information on the university attendance policies, click here https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/.