SPRING SEMESTER 2021 – Syllabus Highlights
CHEM 2229: Organic Chemistry I Lab

INSTRUCTORS:
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OBJECTIVES:

Course objectives are to develop facility with performing laboratory techniques involving the handling of organic chemicals safely and the keeping of proper records of experiments conducted in the laboratory. The 2229 Laboratory is made up of two parts. Safe handling of chemicals and proper disposal of waste products are priority goals in this course. To help in attaining such goals, the first week of the semester is devoted to “Safety in the Chemistry Laboratory.” The remainder of the first half of the semester involves a series of weekly microscale single step syntheses experiments. Melting points, boiling points, and thin layer chromatography are used routinely as measures of purity. There will be an online comprehensive midterm exam. A review of FTIR and NMR for product characterization will be done in preparation for the second half. The second half of the semester involves a special project which entails a larger scale multistep synthesis and the introduction to chemical literature retrieval. Students will complete lab reports for each experiment. There will also be an online comprehensive final exam.

REQUIRED BOOKS:
1. 100 page Composition Notebook
   a. Be sure to verify that the pages are bound and cannot be easily removed.
   b. This item may be purchased from the local book stores, Amazon, Walmart, etc.
   c. An example of an acceptable composition notebook is shown below on the left.
      Examples of other acceptable lab notebooks are also shown below.

   Available as free pdf. Download at:

REQUIRED PERSONAL PROTECTIVE EQUIPMENT (PPE):
1. Goggles or Face shields. (Safety glasses are NOT acceptable.)
2. Nitrile Gloves. (Latex gloves are NOT acceptable.)
3. Face Masks.
4. Long pants or long skirt.
5. Closed toe shoes.
6. Lab apron or lab coat (optional).
7. Face Shields (optional).

LAB SYLLABUS:
Originally prepared by Prof. S. B. Hanna, modified by D. E. Hoiness, T. Bone.
UPDATED INFORMATION FOR CHEM 2229:

(Traditionally, the organic chemistry labs have met in person once a week for a 3 hour block. The first hour was spent in a classroom and consisted of a lecture and a quiz over the upcoming experiment. The following two hours were spent in the lab performing the experiment. Students were required to answer prelab questions prior to attending class, maintain a lab notebook and submit prelab assignments and lab reports at the beginning of lecture.)

For Spring Semester 2021, in order to adhere to social distancing requirements and maximize students’ learning environment, Chem 2229 is being offered as a hybrid course.

1. Section sizes have been decreased from 32 to 16.

<table>
<thead>
<tr>
<th>Original Times (32 students)</th>
<th>New Times (16 students)</th>
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<tbody>
<tr>
<td>Section 301 Thurs. 2:00 – 4:50 pm:</td>
<td>Section 301 (70166) Thurs. 2:00 – 3:50 pm</td>
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<tr>
<td>Section 302 (73215) Thurs. 5:00 – 6:50 pm</td>
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<tr>
<td>Section 303 Fri. 1:00 – 3:50 pm</td>
<td>Section 302 (71011) Fri. 1:00 – 2:50 pm</td>
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<tr>
<td>Section 304 (71016) Fri. 4:00 – 5:50 pm</td>
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<tr>
<td>Section 305 (73412) Tues. 5:00 – 6:50 pm</td>
<td>Section closed students moved to Tuesday.</td>
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2. Lectures and prelab quizzes will be provided online through Canvas modules approximately one week in advance of the experiment and will need to be completed before attending lab.

3. The Prelab/MSDS Information portion of the lab report will be due 3 days prior to the experiment and will be submitted online through Canvas.

4. All experiments will be completed in person during the assigned lab time in room 129 Schrenk Hall.

5. Lab reports along with post lab calculations and questions will be due one week following the experiment and will be submitted online through Canvas.

6. Comprehensive midterm and final exams will be provided online through Canvas on dates to be specified in the full syllabus which will be provided at the beginning of the semester.

DISABILITY AND SUPPORT SERVICES:

If you have a documented disability and anticipate needing accommodations in this course, you are strongly encouraged to meet with Drone and/or Dr. Bolon early in the semester. You will need to request that the Disability Services staff send a letter to them verifying your disability and specifying the accommodation you will need before they can arrange your accommodations.

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TITLE IX INFORMATIONS:

Missouri University of Science and Technology is committed to the safety and wellbeing of all members of its community. US Federal Law Title IX states that no member of the university community shall, on the basis of sex, be excluded from participation in, or be denied benefits of, or be subjected to discrimination under any education program or activity. Furthermore, in accordance with Title IX guidelines from the US Office of Civil Rights, Missouri S&T requires that all faculty and staff members report, to the Missouri S&T Title IX Coordinator, any notice of sexual harassment, abuse, and/or violence (including personal relational abuse, relational/domestic violence, and stalking) disclosed through communication including but not limited to direct conversation, email, social media, classroom papers and homework exercises.

Missouri S&T’s Title IX Coordinator is Neil Outar, J. D.
To report Title IX violations, contact him directly (naoutar@mst.edu (573) 341-6038; 203 Centennial Hall).
To learn more about Title IX resources and reporting options (confidential and nonconfidential) available to Missouri S&T students, staff, and faculty, please visit http://titleix.mst.edu