## **Organic Chemistry 1**

## **Syllabus**

Instructor: Dr. Simon E. Lopez, 312 Leigh Hall

E-mail: <u>simonlopez@chem.ufl.edu</u>

Prerequisite: CHM 2046/2046L or the equivalent.

#### **Required Text/access:**

(1) Brown, Iverson, Anslyn, and Foote "*Organic Chemistry*" 8th Edition (CENGAGE; e-book ISBN: 9781305580350; or paperback ISBN: 1305580354)

(2) ALEKS "ALEKS PREP FOR ORGANIC CHEMISTRY - 11 WEEK ACCESS CODE" (MCGRAW HILL; ISBN 9781259664427).

(3) Top Hat (TH) in class questions, one semester subscription (<u>www.tophat.com</u>). Instruction with the access code for registration will be presented at Canvas Home Page).

**Recommended:** Brown, Iverson, Anslyn, and Foote "Student Study Guide and Solutions Manual, Organic Chemistry" 8th Edition (CENGAGE; ISBN: 1305864506), OWL access, and a molecular modeling kit.

**Important notes:** This course is participating in UF All Access, the least expensive and fastest way to get access to your course materials! Please visit: https://www.bsd.ufl.edu/G1C/bookstore/allaccess.asp to OPT in and purchase your access code [includes OWLv2 access and e-book]. In addition, all students who register for CHM2210 are <u>required</u> to complete the *ALEKS Prep for Organic Chemistry* course. You can purchase your 11 week access code (\$35) directly from ALEKS.com (Note: There is also a 6 week subscription that is recently available at a lower cost), and the 10-digit class code for Spring 2022 is GJDGK-RCEGN. Progress in any prior ALEKS prep course cannot be used towards the CHM2210 – Spring 2022 prep course. The ALEKS prep course will be open on 12/15/2021. Students will earn 3% of their grade in CHM2210 for completing the ALEKS Prep course by 1/31/2022.

Model Kit: Highly Recommended Model is the following:

HGS Student model set, Fundamental organic chemistry

http://www.sigmaaldrich.com/catalog/search/ProductDetail/ALDRICH/Z277703

**Supplementary Textbooks:** Organic Chemistry Textbooks by: Klein; Wade; McMurry; Vollhardt & Schore; Morrison & Boyd; Bruice; Hornback; Streitwieser & Heathcock, Top-Hat Organic Chemistry book (2021 last ed.) **Buying Options:** Go to the bookstore and on-line booksellers.

Lectures: M, W, and F, 5th period 11:45 a.m. – 12:35 p.m.) in Flint 50.

**Progress Exams:** Jan 28<sup>th</sup>, Feb 18<sup>th</sup>, March 28<sup>th</sup>, and Apr 14<sup>th</sup>. All the four Progress Exams will be at FLINT-50 during class time.

Final Exam: Monday, April 25th 2022, Room to be announced soon (5:30 pm-7:30 pm)

Office Hours: M, W, F (12:45 p.m. – 2:45 p.m.) in 312 Leigh Hall

**E-Learning Website:** <u>https://lss.at.ufl.edu/</u> (updated regularly with announcements, exam scores and information, practice material, handouts, and lecture notes from class)

**Grad TAs Office Hours:** Graduate teaching assistants will be available in CCB 203/205, the Organic Chemistry Learning Center (OCLC), *Schedule to be announced soon!*.

Course Objective: To understand the structures, syntheses, and reactions of organic compounds.

*Course Assignments and Grading Policy:* During the semester four 50-minute progress exams (100 points each) and a *cumulative* final exam (120 points) will be given. Additionally you will have "in-class" Top Hat questions (30 points).

Your grade will be determined according to the following algorithm:

Four 50-minute exams (180 points each): 720 possible points (72 % of the final grade)

Cumulative (2-hour) final exam: 220 possible points (22 % of the final grade) Top-Hat (in class questions): 30 possible points (3% of the final grade) ALEKS Prep for Organic Chemistry: 3 % of the final grade Total: 1000 possible points

*Progress Exams*: Four 50-minute progress exams will be given during the semester. Each will focus on a minimum of two chapters of material.

## \*\*Please bring your student ID to all exams\*\*

**Policy on Exam Conflicts and Makeups:** This course administers all conflicts with scheduled examinations in accord with University policy. As such, certain unavoidable absences by students from examinations are allowed, if properly documented and disclosed to Dr. Lopez *at least one (01) week before* the anticipated conflict. Such allowed absences include, but are not limited to, religious observances, participation in official university activities, military obligations, and court-imposed legal obligations. In all such cases, students will be given the opportunity to take a *conflict exam*, which will be given shortly *before* the scheduled (in-class) exam.

*No* exams will be administered to absent or otherwise compromised students for a grade *after* the established and scheduled examination time. Exams given to excused students after the scheduled in-class exam are herein defined as *makeup exams*; no makeup exams are given in this course, no exceptions!.

Unpredicted absences due to illness or a significant personal emergency are not covered under the above conflict exam policy. The student should provide verifiable documentation of the illness or emergency to Dr. Lopez within a timely fashion of the scheduled examination date. The student is expected to makeup all work associated with the examination. This means completing the exam (obtainable from Dr. Lopez) honestly under the instructions given with the exam without unauthorized assistance, and then self assessing the performance using the published (on-line) exam solution. If the supporting documentation and the worked and self-graded exam are presented and prove acceptable to the instructor at the time the student is ready to restart his/her academic pursuits, the exam (only one) will be omitted from the student's course grade computation ("dropped"). In effect, the exam score will be replaced by the average of the hourly exam scores that were earned.

To alleviate the stress of potential issues that do not fall under officially-sanctioned absences, I've incorporated an "average/replace" policy (the lowest of the four progress exams will be replaced by the average of the four progress exams). This "average/replace" policy will help to minimize the impact of a single poor performance but it will not completely disappear.

**Exam Regrades:** Exams, except those written (even partially!) in pencil/erasable pen, are eligible for regrading. All exam grading inquiries must be submitted in writing to Dr. Lopez (staple the provided cover sheet to the exam that details your concerns and place the exam in the regrade box in 312 Leigh Hall by the student no later than **one week** from the date that the exams are returned to the class. *Questions regarding grades/grading are not accepted by e-mail.* **Important note**: Once submitted, the **entire exam** will be regraded to ensure accuracy and your score may increase or decrease accordingly.

*Homework*: Homework assignments will come from *two* sources: OWL ("electronic" homework) and additional study problems from the Brown text. Problems from these sources will not be collected or graded. It is your responsibility to work the recommended problems and read the book—*this is essential for being successful in the course and will help you on the exams*.

The "required" (as opposed to "optional") exercises from the OWL assignments are considered to be the most important/relevant of the on-line problems. Access instructions for OWL are provided on the course E-Learning site.

*In class Top Hat Questions (TH):* After the Drop/Add period ends, lecture participation will be facilitated via the Top Hat student response system (https://tophat.com/). You will be emailed by Top Hat with instructions on how to register for usage of the system. You'll be able to use your smart phone or laptop or tablet or any other applicable device. No clickers required. Thirty (30) points (3 %) will be based on performance on in-class Top Hat questions.

You can earn points in class by correctly answering Top Hat questions (0.5 point per correct answer + 0.5 point per participation). No "make-up" TopHat options will be offered for any reason - no exceptions.

## ALEKS Prep for Organic Chemistry:

Two percent of the course grade will be based on completion of the Aleks prep course. The deadline for completion of the Aleks prep course is January 31<sup>st</sup>, 2022. The following shows the points you can earn based on completion:

Aleks completion percentage	Percent of grade earned
0-59%	0%
60-69%	1.0%
70-79%	1.5%
80-89%	2.0%
90-98%	2.5%
99-100%	3.0%

*Approach to the Course:* Keep up with the course and you will be in good shape. Try and allow at least 2 hours **per day** (6 days a week) to study, work the problems and practice material, and read the book chapters. Use the on-line resources given by the links on the E-Learning course site. There are a big number of problems, quizzes, and exams on the internet. Please do not wait until the last minute to come to ask me for help. Use the office hours!

# Organic chemistry is a challenging course, but it is completely manageable if you work hard, have dedication and practice!

*Final Grades:* Your final grade will be based on a class "curve" that is determined at the end of the course. I will do my best to keep each of you informed as to your performance in the class as we go along. For example, approximate letter grade cut-offs will be posted following each of the exams (typically the class average will be given the letter grade equivalent of C+). *Minus grades will be used in this course. See UF grades and grading policies at: https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx* 

Attendance and Classroom Etiquette: Although attendance will not be taken, I expect you to come to class and be there on time. If you must miss a lecture, you can find the course notes (as offered in class) posted as a PDF file on E-learning. When you are in class please be respectful of others. Hats may not be worn during exams.

*Cell phone use is strictly prohibited at all times in the lecture auditorium*. Please adjust your phone so that it does not ring. If you come late on exam'days you will not be given additional time. The only exception corresponds to the use of a cell phone to participate in the Top Hat "in class" questions.

## **CONTACTING THE INSTRUCTOR / OFFICE HOURS:**

Emails are for administrative purposes only, and not for distance-instruction. All academic inquiries must be made during office hours or before/after lectures (if time permits). If this is not possible, visit the OCLC (see below). Please be prepared before coming to office hours, bring specific questions and your previous work. Questions about grades will not be discussed during office hours due to privacy regulations.

## **ORGANIC CHEMISTRY LEARNING CENTER (OCLC):**

There is free help to be had from graduate student teaching assistants in the CLC Monday through Friday in the Chemistry/Chemical Biology Building 203/205 (CCB-203/205). You may go to the CLC anytime and any TA is assigned there to get help on questions pertaining to organic chemistry. A schedule of the TA schedules will be posted in the corridor outside the CLC and, also online. Additionally, there is the teaching center located on the ground floor of Broward Hall, if you'd like to use that resource. Their web site is http://www.teachingcenter.ufl.edu.

Organic Chemistry Learning Center (OCLC) Office Hours: M – F (9:00 a.m. – 4:00 p.m.) in CCB 203/205.

## **Other Important Information:**

- **Disability Resources:** 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.
- Division of Student Affairs (Counseling, Dean of Students Office): http://www.ufsa.ufl.edu
- UF Grades and Grading Policies: https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/
- Lose or find something during class? Visit the Chemistry lost-and-found (Leigh Hall 218).
- Need help adding or dropping this class? Visit or Contact a Chemistry undergraduate advisor here: Website: https://www.chem.ufl.edu/undergraduate/academic-advisors/ Email: advising@chem.ufl.edu
- Your well-being is important to the University of Florida. The U Matter, We Care initiative (http://www.umatter.ufl.edu/) is committed to creating a culture of care on our campus by encouraging members of our community to look out for one another and to reach out for help if a member of our community is in need. If you or a friend is in distress, please contact umatter@ufl.edu so that the U Matter, We Care Team can reach out to the student in distress. A nighttime and weekend crisis counselor is available by phone at 352-392-1575. The U Matter, We Care Team can help connect students to the many other helping resources available including, but not limited to, Victim Advocates, Housing staff, and the Counseling and Wellness Center. Please remember that asking for help is a sign of strength. In case of emergency, call 9-1-1.

## **Classroom Behavior Expectations for COVID-19:**

We will have face-to-face instructional sessions to accomplish the learning objectives of this course. In response to COVID-19, the following policies and requirements are in place to maintain your learning environment and to enhance the safety of our in-classroom interactions.

- This course has been assigned a physical classroom with enough capacity to maintain certain physical distances among individuals. Please do not move desks or stations and wonder around in classroom.
- Hand-sanitizing stations are placed inside of our classroom. Please sanitize your hands before you enter and after your exit the classroom.
- You are encouraged to wear approved face coverings during the classes and within buildings.
- Please wipe your desk down with sanitizing wipes prior to sitting down and at the end of the class.
- Follow your instructor's guidance on how to enter and exit the classroom. Practice physical distancing to the extent possible when entering and exiting the classroom.
- If you are experiencing COVID-19 symptoms (https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html), please use the UF Health screening system and follow the instructions on whether you are able to attend class.
- During the office hours, you should wear approved face coverings <u>at all times</u> and practice physical distancing. Therefore, the number of students present at the office will be limited, and students will be addressed on a firstcome-first-serve basis. Meetings outside of office hours are possible but by email appointment only (at least 2 days in advance).

## **Student Honor Code**

**The UF Student Honor Code** (see: <u>https://dso.ufl.edu/?s=honor+code</u> for details): *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 of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

Honor Code violations include copying on an exam (or helping another student to copy) and/or turning in an exam for regrading that has been changed since it was graded by the instructor.

Any student found responsible for an academic honesty violation in this course will be recommended sanctions consistent with the offense.

#### CHM 2210 Organic Chemistry 1, Spring 2022 (Section 0211, Class: 25426) Course Schedule

Instructor: Dr. Simon E. Lopez, 312 Leigh Hall (Office; phone: 352-3929700), Sisler 412/336 (Research Lab) E-mail: <u>simonlopez@chem.ufl.edu</u> E-Learning: https://lss.at.ufl.edu/ (*will be updated regularly*)

**Text:** Brown, Foote, Iverson, and Anslyn, *Organic Chemistry*, 8th Edition and, highly recommended, the accompanying *Student Study Guide and Solutions Manual, Organic Chemistry*. **Lecture:** M, W, and F, 5th period (11:45 p.m – 12:35 p.m.) in Flint 50 **Office Hours:** M, W, F (12:45 – 2:45 p.m.) *in 312 Leigh Hall*.

Dates:	Chapter	Topics	Recommended Study Problems (from Brown's 8 <sup>th</sup> edition text)
Jan 5,7,10,12,14	1	Course Intro; Covalent Bonding, Shapes of Molecules	1: 23-33, 35, 38-49, 51-53, 55-60, 62, 63, 69, 71, 73, 74
Jan 19,21,24,26,28	2	Alkanes and Cycloalkanes	<b>2</b> : 16-18, 20-27, 32-36, 39, 42-44, 46, 48- 50, 62-65
	Exam 1: Mon	day, January 31 <sup>st</sup> , 2022 (during class p Chapters 1 – 2	period, at FLINT 50)
Feb 2,4,7,9	3	Stereoisomerism and Chirality	<b>3:</b> 13, 14, 16-28, 30-32, 34, 36
Feb 11, 14	4	Acids and Bases	<b>4:</b> 9-17, 19, 20, 22, 26-28, 30-35, 38, 41, 42, 45-50, 52-54
Feb 16	5	Alkenes	<b>5:</b> 9-11, 13-20, 23, 24, 35
	<i>Exam 2</i> : Frid	ay, February 18 <sup>th</sup> , 2022 (during class p Chapters 3 – 5	period, at FLINT 50)
Feb 21,23,15,28 Mar 2,4	6	Reactions of Alkenes	<b>6:</b> 15-24, 26, 28-42, 44-51, 54
Mar 14, 16, 218	7	Alkynes	<b>7:</b> 8, 10-12, 14, 16-18, 20, 21, 23-25, 29-34
Mar 21,23,25	8	Haloalkanes, Radical Halogenation, and Radical Reactions	<b>8</b> : 8, 9, 13, 14, 16-18, 22-30, 32
	Exam	3: Monday, March 28 <sup>th</sup> , 2022 (during Chapters 6 – 8.5	class period)
Mar 30 Apr 1,4,6	9	Nucleophilic Substitution and β-Elimination	<b>9</b> : 10-13, 15, 17-22, 24-28, 30-35, 37-41, 44, 45, 47, 48, 50, 52, 54-61
Apr 7, 9, 11	10	Alcohols	<b>10</b> : 14, 16, 17, 25-32, 34, 35, 37-43, 45, 46, 49-56
	Exan	4: Monday, April, 14 <sup>th</sup> , 2022 (during Chapters 8.6 – 10.6	class period)
Apr 16, 18	11	Ethers and Epoxides	11: 15, 16, 20, 21, 23-25, 27, 30-35, 42-45
Final E	Exam: Monday	y, April 25th, 2013, 5:30 am-7:30 pm; l Chapters 1 – 11	Room to be announced soon

Holidays (no classes): January 17<sup>th</sup> (Dr. Martin Luther King's Jr. day); March 5<sup>th</sup> -12<sup>th</sup> (Spring Break)