Intro Organic Chemistry SUMMER 2022 CHEM 042/044 | CRN: 61442/61443

Instructor: Amy Hoeltge, Ph.D. Email: Amy.Hoeltge@uvm.edu

Office: Innovation E337

Lecture: recorded via Teams (see below)

Office Hours: open or by appointment

Exams: available Fridays online (see below)

Course Description:

This is a one semester introductory course in organic chemistry. Material will include basic principles of organic chemistry including bonding, hybridization, resonance theory, isomerism, conformations of cyclic and acyclic alkanes, stereoisomerism, chirality, optical properties of stereoisomers, and nomenclature, reactions, and mechanisms of functional groups.

Required Course Materials:

Textbook (needed immediately):

Introduction to Organic Chemistry; Brown and Poon; 6th Edition
ISBN: 978-1-119-10696-8 (print copy)
ISBN: 978-1-119-23374-9 (ebook)

Ways to get a copy of the textbook:

- (1) Rent, print, or ebook from publisher
- (2) Buy 6th Edition on Amazon
- (3) Buy 6th Edition print copy at UVM bookstore
- (4) Borrow a copy from someone

• Lab Materials (for CHEM 042):

You will find all experiments as individual PDFs on your lab section's BB website. You are responsible for printing out each one and bringing it with you to lab.

A carbon-less copy notebook is required. You can find these in the UVM bookstore. Everyone must wear OSHA approved safety glasses or goggles while in the lab. Students not observing this rule will receive a zero for the experiment, warnings will not be given. Safety eyewear can be purchased at the UVM bookstore or in Discovery's Stockroom.

Suggested Course Materials

• Online Component (general chemistry review and practice drawing organic reactions):

McGraw Hill ALEKS – PURCHASING & REGISTRATION INFO (PDF)

REGISTER YOUR ALEKS ACCOUNT IN BLACKBOARD (VIDEO INSTRUCTIONS)

• Molecular Models Kit (for help visualizing 3D structures and rotamers)

Lecture

Lectures are delivered via Teams and video recordings of these lectures will be uploaded to the respective folder in the Course Materials section of our Blackboard page. Students may view these on their own time. However, due to the accelerated pace of this Summer course, it is advised that each lecture be attended according to the schedule posted in a table near the end of this document. We will cover 2-3 chapters each week.

Exams

Weekly exams will become available on Blackboard at 12:00am each Friday (which, to some people means Thursday night) and will become unavailable that Sunday at 11:59pm. Students may login to begin their weekly exam at any time in the window. There is a 2 hour time limit once the exam is opened. These weekly exams are closed note and students are not permitted to use cell phones, laptops, tablets, or any programmable devices while taking them. Students caught employing the use of outside assistance of any kind on an exam will receive a grade of zero for that exam.

Attendance at all examinations is required. A grade of zero will be assigned to any student who misses an exam, without exception.

There will be no makeup exams or extensions given. Please see Grading policy below.

The 6th exam will ONLY be available on Friday, August 12th from 12:00am – 11:59pm. The course ends on this day and your grades need to be submitted the following day. There are NO extensions for this. Please plan accordingly.

Homework

A list of suggested practice problems can be found at the end of each chapter, in the textbook. These exercises will not be collected or graded. However, failure to master these problems will certainly not lead to a wildly successful experience in this course. Chemistry is mastered via repetition and these practice exercises are the most effective way to study and succeed in the course. Passively listening to lecture videos, reading the text, and taking notes is not enough for most people to realize success (or even a passing grade) in an organic chemistry course.

Lab (CHEM 042)

More information can be found on the Blackboard page for your lab section.

Before the start of lab, purchase your lab manual, lab notebook, and safety glasses.

Students must attend the lab section to which they are assigned. If more than two labs are missed, you will receive an F for the course. Only the academic dean of your college may grant an incomplete. An unexcused absence will result in a ZERO grade for the laboratory experiment. Official documentation of sickness or a family crisis is required for an excused absence.

Grading

Exams*: 6 exams @ 125 pts each 750 pts

Labs: CHEM 042 students 250 pts

.....

Total Course 1,000 pts (CHEM 042)

750 pts (CHEM 044)

*If you miss an exam, you will receive a zero. **There are no exceptions.** However, you may substitute your exam average (percentage wise) for your **single lowest exam score**.

This means that points lost for missing a single exam **OR** your lowest scoring exam can be recovered using your exam average. **If you miss two exams, one of them will be a zero**.

Office Hours:

You are welcome to drop by my office any time the door is open. If you would like an appointment, please email me and we can arrange something specific. I am also available to meet in evenings and on weekends via Teams.

Accommodations:

Student Learning Accommodations Statement

"In keeping with university policy, any student with a documented disability interested in utilizing accommodations should contact ACCESS, the office of Disability Services on campus. ACCESS works with students to create reasonable and appropriate accommodations via an accommodation letter to their professors as early as possible each semester." Contact ACCESS: A170 Living/Learning Center - 802-656-7753

Academic Integrity:

This policy addresses plagiarism, fabrication, cheating, and collusion. http://www.uvm.edu/policies/student/acaintegrity.pdf

Summer 2022 Schedule For Course (lab schedule separate for CHEM 042)

Dates	Lecture	Exam	Practice Homework
Jul 5 - 10	Chapters 1 & 2 (Gen Chem Review)		Pages 34 - 38: #1.17 – 1.61 odds Pages 57 - 59: #2.7 – 2.31 odds
Jul 8 - 10		1	
Jul 11 - 17	Chapters 3, 4, 5 (Hydrocarbons)		Pages 93 – 97: #3.13 – 3.55 odds Pages 118 – 120: #4.7 – 4.33 odds Pages 154 – 158: #5.15 – 5.51 odds
Jul 15 - 17		2	
Jul 18 - 24	Chapters 6 & 7 (Chirality & Sub/Elim Rxns)		Pages 181 – 185: #6.7 – 6.39 odds Pages 219 – 223: #7.9 – 7.43 odds
Jul 22 - 24		3	
Jul 25 - 31	Chapters 8, 9, 10 (Alcohols, Thiols, Ethers, Amines, Aromatics)		Pages 260 – 264: #8.13 – 8.49 odds Pages 305 – 310: #9.11 – 9.47 odds Pages 332 – 337: #10.11 – 10.43 odds
Jul 29 - 31		4	
Aug 1 - 7	Chapters 13 & 14 (Carboxylic Acids & Carboxylic Acid Derivatives)		Pages 461 – 464: #13.9 – 13.45 odds Pages 495 – 500: #14.9 – 14.45 odds
Aug 5 - 7		5	
Aug 8 - 12	Chapters 12 & 15 (Aldehydes, Ketones, & Enolates)		Pages 428 – 433: #12.13 – 12.45 odds Pages 533 – 537: #15.13 – 15.39 odds
Aug 12*		6*	

^{*}The 6th exam must be done on Friday, August 12th. The course ends on this day. Please plan accordingly.

Religious Holidays

Religious Holiday Policy Statement

Religious Holidays: Students have the right to practice the religion of their choice. If you need to miss class to observe a religious holiday, please submit the dates of your absence to me in writing by the end of the second full week of classes. You will be permitted to make up work within a mutually agreed-upon time. Religious Holidays

COVID-19 Statement

Due to COVID-19 we advise that a student feeling any symptoms should get checked out before attending an in-person class or lab. Keep in mind that if a student attends an in-person class or lab and tests positive for COVID-19 that they are putting other students at risk and their possibly quarantine as well. When in doubt, go get tested. The **Green and Gold Promise** clearly articulates the expectations that UVM has for students, faculty, and staff to remain compliant with all COVID-19 recommendations from the federal CDC, the State of Vermont, and the City of Burlington. This include following all rules regarding facial coverings and social distancing when attending class or lab. If you do not follow these guidelines, you will be asked to leave the room. If you forget your mask, you cannot enter the room and should go back and retrieve your mask. The Code of Student Conduct outlines policies related to violations of the Green and Gold Promise. Sanctions for violations include fines, educational sanctions, parent notification, probation, and suspension.

Health & Safety

The University of Vermont's number one priority is to support a healthy and safe community: Center for Health and Wellbeing

Counseling & Psychiatry Services (CAPS): Phone: (802) 656-3340

C.A.R.E. If you are concerned about a UVM community member or are concerned about a specific event, we encourage you to contact the Dean of Students Office (802-656-3380). If you would like to remain anonymous, you can report your concerns online by visiting the Dean of Students website at https://www.uvm.edu/studentaffairs

Diversity, Equity, and Inclusion

The Division of Diversity, Equity, and Inclusion believes excellence should be inclusive of the entire University of Vermont (UVM) community and is steadfastly committed to this belief. Every day, our division strives to make our work accessible, affirming, and action-oriented to help ensure excellence is inclusive of everyone. <u>UVM Diversity</u>

Interfaith Center:

Each of us engages those questions differently, perhaps through a religious tradition, philosophy, or spiritual practice. No matter how you make meaning of your life, you are welcome at the Interfaith Center for reflection, spiritual practice, education, and community building. <u>Interfaith Center</u>

Mosaic Center for Students of Color (MCSC):

MCSC's vision is to create a diverse and rich community of empowered, engaged, and enthusiastic students of color at UVM. We fully support the holistic development of self-identified students of color so that they can obtain their goals for academic achievement, personal growth, identity formation, and cultural development. Mosaic Center

Prism Center:

The Prism Center serves the diverse queer and trans communities at the University of Vermont. We support and empower lesbian, gay, bisexual, transgender, and queer students, as well as students whose identities fall in between or expand beyond those categories, and work to create a campus community where people of all sexual and gender identities can thrive. Prism Center

UVM Women & Gender Equity Center:

The equity center cultivates joyful community while advancing gender equity across identities. We envision a brave, diverse, and equitable learning environment for all members of the UVM community. We provide advocacy services for those in our community who have experienced sexual or intimate partner violence, and strive to provide programming, education, and events that ask our community to explore the intersections of their gender and other identities. Women and Gender Equity Center

FERPA Rights Disclosure

The purpose of this policy is to communicate the rights of students regarding access to, and privacy of their student educational records as provided for in the Family Educational Rights and Privacy Act (FERPA) of 1974. FERPA