

**Syllabus**  
**"Lectures in Organic Chemistry" (1<sup>st</sup> Semester)**  
**Chemistry 241A, Fall 2023**

*We respectfully acknowledge the University of Arizona is on the land and territories of Indigenous peoples. Today, Arizona is home to 22 federally recognized tribes, with Tucson being home to the O'odham and the Yaqui. Committed to diversity and inclusion, the University strives to build sustainable relationships with sovereign Native Nations and Indigenous communities through education offerings, partnerships, and community service.*

**Course Description**

This course teaches the fundamentals of organic chemistry, with a focus on organic structures, properties, transformations (organic synthesis), and the mechanisms of those transformations (organic reaction mechanisms).

**Course Prerequisites:** CHEM 152, 142, 162, or 105B.

**Instructor and Contact Information**

Instructor: Dr. Lisa Dollinger (she/her)  
Office: Koffler 335  
Phone: (520) 621-2089  
email: [ldolling@arizona.edu](mailto:ldolling@arizona.edu)  
Class meetings: This is a completely asynchronous online class

**Help Hours:**

In person instructor office hours:  
T 12 PM and Th 11 AM, Koffler 335  
Zoom instructor help hours:  
T 1 PM: <https://arizona.zoom.us/j/89391915112>  
...or by appointment

Organic Teaching Team Help Hours/Problem Solving Sessions:

- **Organic Café** (M, T, W 4 PM in CHEM 218)
- List of individual preceptor office hours (both in person and zoom) can be found under Teaching Team Contact and Office Hours module on course D2L page.

**Course Objectives**

This first semester course covers the chemistry from the source textbook from chapters 1-12.

**Expected Learning Outcomes**

*Overarching Learning Outcomes for the entire 241 sequence:*

Having completed Chemistry 241A and Chemistry 241B, students will be able to discuss, both orally and in writing:

- The structure and bonding of organic compounds and the relationship of structure and bonding to physical and chemical properties.
- Reactions that transform one organic compound into another.
- The detailed mechanisms whereby organic reactions occur.

## Technology Requirements

To participate in this course, you will need

- a desktop or laptop **computer** with the Chrome browser installed
- a broadband wired or wireless (3G, 4G/LTE, or 5G) **internet** connection
- a web camera
- access to Desire2Learn (**D2L**)

If you have technology issues that may impede your participation in this course, please contact me no later than the first week of class. Assistance with technology resources on campus can be found at <https://student.it.arizona.edu/resources>.

## Textbook/Homework/Assessment Package (required!)

- Smith *Organic Chemistry* 6e 2020 – Connect McGraw Hill
- Accompanying Student Solutions Manual for Smith 6e via ebook (link will be made available upon start date in D2L)
- This course will use Proctorio, a browser-locking and remote proctoring solution designed to protect the integrity of this course's assessments, within your Connect quizzes). **NOTE: Proctorio will create a recording of video, audio, and screen activity while you are completing assessments, so a web camera is required.**

**The textbook and homework/assessment package (i.e., Connect) will come packaged as a bundle via Inclusive Access (IA) through D2L.** Ensuing IA instructions will be emailed to you by the bookstore, as well as specific pricing information. Access to digital course materials is **required** and will be available on the first day of class or within 24 hours of registering if adding the class.

Access to the digital course materials is **required** to participate in the class. They will be available on the first day of class or within 24 hours of registering if adding class after the first day of class through IA.

If you do not wish to purchase the course materials through the IA program (note: IA is the *least* expensive way to access the digital material), you have until the add/drop day to **opt-out**. To avoid being billed you **must** opt-out online before the deadline: go to [d2l.arizona.edu](https://d2l.arizona.edu), login with your NetID, select > My D2L Tools and proceed to "Inclusive Access Opt Out." *If you drop the course by the add-drop date you will have your access turned off, be automatically opted-out, and will not be billed.*

Not Required—For those of you wishing to have a hard copy of the book, upon purchase of your Connect subscription (after the add drop date has passed), you are able to purchase a discounted loose-leaf version of the textbook (in full color) from within your Connect course. Cost is \$39 (including shipping and handling). For support on purchasing your loose-leaf option, you will contact the Connect helpdesk.

Review the FAQs at [Bookstore Website](#) for more information. Please feel free to reach out if you have any questions or concerns to the UA BookStores Inclusive Access Team at [uabks-inclusiveaccess@email.arizona.edu](mailto:uabks-inclusiveaccess@email.arizona.edu)

### **Molecular Models Recommended**

As organic molecules are three-dimensional objects, many students find working with a set of organic molecular models helpful and instructive. There are many organic molecular model kits available at student bookstores and on the web. Most model sets are adequate, but I like the one by [Darling Models, Inc.](#) It is possible to split one of these model kits between 2 students and still have enough for the course. **You will be allowed to use the models on quizzes and exams.**

### **Course Format and Teaching Methods**

This course will be taught using completely asynchronous online instruction. Each student is unique and is responsible for their own learning process and outcome. The material to be learned is contained in the source textbook, "**Organic Chemistry**", 6th edition, by **Janice Gorzynski Smith**. Both traditional printed and electronic versions of the textbook and solutions manual are available (vide supra).

We will be using a class **GroupMe** for class discussion/questions:

[https://groupme.com/join\\_group/95720909/ajb4lyjl](https://groupme.com/join_group/95720909/ajb4lyjl)

The GroupMe is the best way for you to get help fast and efficiently from classmates, the teaching team, and myself. Rather than emailing questions, I encourage you to post your questions on the GroupMe. Find our class signup link at

**Learning organic chemistry begins with drawing structures and mechanisms and you will miss out on the very first steps of learning the material if you do not take notes.** You will be watching video lectures available for viewing through D2L in each unit section. These videos are recorded asynchronous lectures that cover the material in the textbook. As you watch the videos it is recommended that you **take notes**. You can do this in any manner that suites your learning best, however, a basic set of lecture slides are provided for each video to either print or download to a tablet where you can add in details to begin learning of how to write organic structures. Also, as you read the text and view the lectures, write down questions you wish to ask during office hours or on the GroupMe. The lectures largely follow the source textbook, and they often make more sense if you familiarize yourself with the material beforehand, so students may prefer to read the text before and/or after viewing lecture videos.

**As with many other math and science courses, working problems is the only way to master organic chemistry.** Homework is the best way to work problems to help master the material. Homework assignments will be assigned in the Connect online homework environment that accompanies the electronic version of the source textbook and linked through D2L in each Unit section. These required homework assignments will make up a significant part of your course grade and you have unlimited attempts to get them correct, so you should make every effort to complete them by the due dates published on D2L and Connect. There are addition problems for you to work from the textbook (a list of particularly relevant problems are listed in the Unit modules) and in the Unit's Additional Materials modules. In addition to extra problems, relevant tables and helpful guides can be found in the Unit's Additional Materials modules

***Keep in mind that those who put in the most effort are generally the most successful.***

Zoom instructor office hours will be Tuesdays at 1 PM. The Teaching Team will have both in-person and Zoom office hours available throughout the week (please, see the TeamUp calendar on D2L for a complete/updated list which can be found under the Teaching Team Contact and Help Hours module)

For those of you who are on or near campus, there will be three Teaching Team led, in-person problem solving sessions, known as **Organic Café** (M, T, W 4:00-5:00PM in Chem 218). There, students can work on Unit Problem Sets, End of Chapter Problems, or any questions you may have regardless of the unit (you are never too far behind to attend Café and get help). I will also have two in person office hours/week on Tuesdays 12 PM and Thursdays at 11 AM in my office, Koffler 335.

Regardless of class modality, the goal is the same—student learning. Learning a difficult subject like organic chemistry requires commitment, effort, and follow-through. *You are strongly encouraged to view all lectures and to set notifications in your D2L and to work on this course each and every day!*

The material to be learned is laid out in the source text and the associated video lectures, which is reinforced by the online homework found in the Homework Assignments module on the D2L web page for this course. Due dates are intended to keep students progressing at a rate that will allow for you to keep up with the material as it is being presented. ***It is very easy to get behind; don't let that happen to you!*** Make a commitment from the start of the semester to keep up with lectures and to never be late with an assignment. Put in the effort required to do your very best work on every assignment. Follow through by maintaining your high level of effort throughout the term.

**Academic advising:** If you have questions about your academic progress this term, or your chosen degree program, please note that advisors at the Advising Resource Center can guide you toward university resources to help you succeed.

**Life challenges:** If you are experiencing unexpected barriers to your success in your courses, please note the Dean of Students Office is a central support resource for all students and may be helpful. The Dean of Students Office can be reached at 520-621-2057 or DOS-deanofstudents@email.arizona.edu.

**Physical and mental-health challenges:** If you are facing physical or mental health challenges this semester, please note that Campus Health provides quality medical and mental health care. For medical appointments, call (520-621-9202. For After Hours care, call (520) 570-7898. For the Counseling & Psych Services (CAPS) 24/7 hotline, call (520) 621-3334.

The UA's policy concerning Class Attendance and Participation is available at: <https://catalog.arizona.edu/policy/class-attendance-and-participation>. The UA policy regarding absences for any sincerely held religious belief, observance or practice will be accommodated where reasonable. Please see: <http://policy.arizona.edu/human->

[resources/religious-accommodation-policy](#).

Absences pre-approved by the UA Dean of Students (or Dean Designee) will be honored. Please see: <https://deanofstudents.arizona.edu/policies/attendance-policies-and-practices>. *To request a disability-related accommodation to this attendance policy, please contact the Disability Resource Center at (520) 621-3268 or [drc-info@email.arizona.edu](mailto:drc-info@email.arizona.edu).* If you are experiencing unexpected barriers to your success in your courses, the Dean of Students Office is a central support resource for all students and may be helpful. The Dean of Students Office is located in the Robert L. Nugent Building, room 100, or call 520-621-7057.

## Assessment Components (Video Lectures, Homework, Quizzes, and Examinations–Schedule/Due Dates)

**Lecture Videos (25 points):** Since this class is in an online format, students are provided with lecture video content (see class schedule for exact due dates for video viewing). Each video is worth 0.47 points, and must be viewed BEFORE MIDNIGHT Arizona time on the day indicated in the course calendar on the due date. To receive points, you must complete the quiz embedded within the video. **Once the due date/time has passed you still will be able to view the video in the D2L module “Lecture Videos for reference (NOT FOR CREDIT!!!),” but will not receive credit for doing so.** Watching and completing these videos will make up 5% of your grade. There are 60 videos and each is worth 0.47 points, five video grades will be dropped. Hence, 25 points of your final grade will come from completing 55 of the lecture videos before the due date/time.

**Homework (100 points):** Working problems is the only way to master organic chemistry. Online homework using the Connect software will be due about every week on Saturday night **except the homework assignment right before exam 1 is due on the Tuesday before the exam and the last homework which is due on the last day of classes (see exact dates on class schedule).** Each homework assignment is worth 6.25 points, 75 points of your class grade. The due dates for the Connect homework assignments appear on D2L in the Unit modules as well as the course calendar, on the Connect web page for this course, and in the calendar below. These required homework assignments will make up 15% of your course grade and **you have unlimited attempts to get them correct,** so you should make every effort to complete them by the due dates published on D2L and Connect.

Assignment	Topic	Date
Homework 1 on...	Chapter 1	Saturday 9/2
Homework 2 on...	Chapter 2	Saturday 9/9
Homework 3 on...	Chapter 3/4	Saturday 9/16
Homework 4 on...	Chapter 5	<b>TUESDAY 9/26</b>
Homework 5 on...	Chapter 6	Saturday 10/14
Homework 6 on...	Chapter 7	Saturday 10/21
Homework 7 on...	Chapter 8	Saturday 10/24
Homework 8 on...	Chapter 9 (videos 1-4)	Saturday 10/28
Homework 9 on...	Chapter 9 (videos 5-7)	Saturday 11/5
Homework 10 on...	Chapter 10	Saturday 11/11
Homework 11 on...	Chapter 11	Saturday 11/18
Homework 12 on...	Chapter 12	<b>Wednesday 12/6</b>

**Quizzes (100 points)** The quiz content will focus primarily on the current learned *before* the quiz date (not the material in the videos due that day). Nevertheless, the material builds, layer upon layer, and so is cumulative by its very nature.

There are seven quizzes, and each is worth 20 points. Your lowest two quiz scores will be dropped. Hence, 100 points of your final grade will come from your highest five (5) quiz scores.

If you miss a quiz, you will receive a zero for that quiz, since the lowest two quizzes are dropped, they will count as your dropped scores. If you do need to miss a quiz, an early quiz will be allowed if you **contact me at least 2 days BEFORE the date of the quiz and have a Dean's excuse**

#### Quiz Dates

<b>Proctorio Quiz</b> , Friday 9/1 <b>Can Not Be Dropped</b>
<b>Quiz 1</b> (Chapter 1), Tuesday 9/5
<b>Quiz 2</b> (Chapter 2), Tuesday 9/12
<b>Quiz 3</b> (Chapters 3-4), Tuesday 9/19
<b>Quiz 4</b> (Chapter 7), Tuesday 10/17
<b>Quiz 5</b> (Chapter 8), Tuesday 10/24
<b>Quiz 6</b> (Chapter10), Tuesday 11/14
<b>Quiz 7</b> (Chapter11), Tuesday 11/21

**Proctorio MUST be installed on your computer *BEFORE* Quiz 1, on 9/5/2023.**

You can load Proctorio by taking the **Proctorio Quiz** (5 points) *before* 9/1. It will be open on the first day of class and can be found in the Quiz Module.

You can take it any time for credit between 8/21-9/1.

Once you click on the quiz, you will need to install Proctorio on your computer. It also requires you to watch some orientation videos to familiarize yourself with the system and details all the technical requirements as well as how to get help if you are having issues during quizzes/exams **You will be unable to take the Quizzes/Exams for credit if you don't have Proctorio and a web camera.**

**Examinations (200 points):** Each midterm exam will be worth 100 points. Your lowest one (1) midterm exam score will be dropped. Hence, 200 points of your final grade will come from your higher mid-term exam scores.

Each mid-term exam will focus on the material covered since the previous exam. Nevertheless, the material builds, layer upon layer, and so is cumulative by its very nature. Knowledge and understanding of the principles, reactions, and mechanisms presented in earlier chapters is a prerequisite for success in later chapters and on subsequent examinations. To do well throughout this term, you must keep up, master the material, and remember it throughout your study of organic chemistry.

Assessment	Topic	Date
<b>Exam 1</b> on...	Ch.1-5	Thursday, 9/23
<b>Exam 2</b> on...	Ch. 6-9*	Tuesday, 10/31
<b>Exam 3</b> on...	Ch. 9-12**	Thursday, 11/28

\*Exam 2 will focus on material from Chapters 6-9 (up to and including videos 1-4)

\*\*Exam 3 will focus on material from Chapters 9 (including videos 5-7)-12 (up to and including videos 1-3)

**All Quizzes/Exams are open from 12:00 am – 11:59 pm (AZ time) on the day indicated in the class schedule (see last page).**

Each midterm exam will be worth 100 points. Your lowest one (1) midterm exam score will be dropped. Hence, 300 points of your final grade will come from your highest midterm exam scores.

- Calculators, cell phones, and other electronic devices are **prohibited** during quizzes and examinations. Organic molecular model sets, a periodic table, paper, and pencil will be allowed.
- If you miss a quiz or exam, you will receive a zero for that assessment. Makeup exams will be allowed with a Dean's excuse.

**Final Exam (150 points):** The Final Exam (Chapters 1-12) will be worth 150 points, and may not be dropped. It will be open on Connect from **on Tuesday, December 12..**

### Grading Scale and Policies

University policy regarding grades and grading systems is available at <http://catalog.arizona.edu/policy/grades-and-grading-system>

Total points for the course will be determined as shown in the following table.

ASSIGNMENT	POINTS	Percentage	
Videos	25	5	5 Will Be Dropped
Homework	75	15	Cannot Be Dropped
Quizzes	100	20	Lowest 2 Will Be Dropped
Exams	200	40	Lowest 1 Will Be Dropped
Final Exam	100	20	Cannot Be Dropped
<b>TOTAL POINTS</b>	<b>500</b>		

Final grades will be assigned based on the breakdown shown in the following table.

GRADE	Total Points	Percentage
A	440-500	88.0
B	380-	76.0
C	300-	60.0
D	225-	45.00

**Requests for incomplete (I) or withdrawal (W)** must be made in accordance with University policies, which are available at <http://catalog.arizona.edu/policy/grades-and-grading-system#incomplete> and <http://catalog.arizona.edu/policy/grades-and-grading-system#Withdrawal> respectively. The last day to administratively drop a class with a W appearing on your transcript is 1/26/2021.



**Dispute of Grade Policy:** Inquiries concerning the grading of a particular examination must be submitted before the date of the next examination.

**Scheduled Topics/Activities:** See the Course Calendar (available on the course D2L site under the “Content” heading)

**Classroom Behavior Policy:** To foster a positive learning environment, students and instructors have a shared responsibility. We want a safe, welcoming, and inclusive environment where all of us feel comfortable with each other and where we can challenge ourselves to succeed. To that end, our focus is on the tasks at hand and not on extraneous activities. Students observed engaging in disruptive activity will be asked to cease this behavior. Those who continue to disrupt the class will be reported to the Dean of Students.

**Threatening Behavior Policy:** The UA Threatening Behavior by Students Policy prohibits threats of physical harm to any member of the University community, including to oneself. See <http://policy.arizona.edu/education-and-student-affairs/threatening-behavior-students>.

**Accessibility and Accommodations:** At the University of Arizona we strive to make learning experiences as accessible as possible. If you anticipate or experience barriers based on disability or pregnancy, please contact the Disability Resource Center (520-621-3268, <https://drc.arizona.edu/>) to establish reasonable accommodations.

**Code of Academic Integrity:** Students are encouraged to share intellectual views and discuss freely the principles and applications of course materials. However, graded work/exercises must be the product of independent effort unless otherwise instructed. Students are expected to adhere to the UA Code of Academic Integrity as described in the UA General Catalog. See: <http://deanofstudents.arizona.edu/academic-integrity/students/academic-integrity>.

The University Libraries have some excellent tips for avoiding plagiarism, available at <http://new.library.arizona.edu/research/citing/plagiarism>.

*Selling class notes and/or other course materials to other students or to a third party for resale is not permitted without the instructor’s express written consent.* Violations to this and other course rules are subject to the Code of Academic Integrity and may result in course sanctions. Additionally, students who use D2L or UA e-mail to sell or buy these copyrighted materials are subject to Code of Conduct Violations for misuse of student e-mail addresses. This conduct may also constitute copyright infringement.

**UA Nondiscrimination and Anti-harassment Policy:** The University is committed to creating and maintaining an environment free of discrimination; see <http://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy>. Our classroom is a place where everyone is encouraged to express well-formed opinions and their reasons for those opinions. We also want to create a tolerant and

open environment where such opinions can be expressed without resorting to bullying or discrimination of others.

**Additional Resources for Students**

UA Academic policies and procedures are available at  
<http://catalog.arizona.edu/policies>

Student Assistance and Advocacy information is available at  
<http://deanofstudents.arizona.edu/student-assistance/students/student-assistance>

**Confidentiality of Student Records**

For details, please see: <http://www.registrar.arizona.edu/personal-information/family-educational-rights-and-privacy-act-1974-ferpa?topic=ferpa>

**Subject to Change Statement**

Information contained in the course syllabus, other than the grading and absence policy, may be subject to change with advance notice, as deemed appropriate by the instructor.

## COURSE CALENDAR AND SCHEDULE OF VIDEOS, HOMEWORKS, QUIZZES and EXAMS:

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.
Wk 1 Ch 1	Aug 21 1 (p1)	Aug 22	Aug 23 1 (p2-4)	Aug 24	Aug 25 1 (p5-6)	Aug 26	Aug 27
Wk 2 Ch 1-2	Aug 28 1 (p7)	Aug 29	Aug 30 1 (p8)	Aug 31	Sept 1 2 (p1-2) Proc. Quiz	Sept 2 HW 1(1)	Sept 3
Wk 3 Ch 2-3	Sept 4 Labor Day	Sept 5 Q1(Ch.1)	Sept 6 2 (p3-4)	Sept 7	Sept 8 3 (p1-2)	Sept 9 HW 2(2)	Sept 10
Wk 4 Ch 4	Sept 11 4 (p1-3)	Sept 12 Q2(Ch. 2)	Sept 13 4 (p4-6)	Sept 14	Sept 15 4(p7-8)	Sept 16 HW 3(3-4)	Sept 17
Wk 5 Ch 5	Sept 18 5(p1-2)	Sept 19 Q3(Ch.3-4)	Sept 20 5(p3)	Sept 21	Sept 22 5(p4)	Sept 23	Sept 24
Wk 6 Ch 5	Sept 25	Sept 26 HW 4(5)	Sept 27	Sept 28 EX 1 (1-5)	Sept 29	Sept 30	Oct 1
Wk 7 Ch 6/7	Oct 2 6(p1-2)	Oct 3	Oct 4 7(p1-2)	Oct 5	Oct 6 7(p3)	Oct 7 HW 5(6)	Oct 8
Wk 8 Ch 7/8	Oct 9 7(p4-5)	Oct 10	Oct 11 8(1-2)	Oct 12	Oct 13 8(3)	Oct 14 HW 6(7)	Oct 15
Wk 9 Ch 8-9	Oct 16 8(4-5)	Oct 17 Q4(Ch.7)	Oct 18 8(4-6)	Oct 19	Oct 20 9(1-2)	Oct 21 HW 7(8)	Oct 22
Wk10 Ch 9	Oct 23 9(3)	Oct 24 Q5(Ch.8)	Oct 25 9(4)	Oct 26	Oct 27	Oct 28 HW 8(9a)	Oct 29
Wk11 Ch 9	Oct 30	Oct 31 EX 2(6-9*)	Nov 1 9(5-6)	Nov 2	Nov 3 9(7)	Nov 4 HW 9(9b)	Nov 5
Wk12 Ch 10	Nov 6 10(1-2)	Nov 7	Nov 8 10(3-4)	Nov 9	Nov 10 Veteran's Day	Nov 11 HW 10(10)	Nov 12
Wk13 Ch 11	Nov 13 11(1-2)	Nov 14 Q6(Ch. 10)	Nov 15 11(3)	Nov 16	Nov 17 11(4)	Nov 18 HW 11(11)	Nov 19
Wk14 Ch 12	Nov 20 12(1)	Nov 21 Q7(Ch.11)	Nov 22 12(2)	Nov 23 Thanksgiving	Nov 24 Thanksgiving	Nov 25	Nov 26
Wk15 Ch 12	Nov 27 12(3)	Nov 28	Nov 29	Nov 30 EX 3 (10-12*)	Dec 1	Dec 2	Dec 3
Wk16 Ch 12	Dec 4 12(4-6)	Dec 5	Dec 6 HW 12 (12)	Dec 7 Reading Day	Dec 8	Dec 9	Dec 10
Wk17	Dec 11	Dec 12 Final Exam	Dec 13	Dec 14	Dec 15	Dec 16	Dec 17