

CHEM 2380.004/Organic Chemistry II

Instructor Contact

Name: Dr. Xin Cui

Office Location: Room 250 in the Science Research Building.

Office Hours: Tuesday and Thursday from 1:30 PM to 2:30 PM in SRB 250, or by appointment via email! Please also use TA's office hours or the Chemistry Resource Center to have your questions answered.

Email: Xin.Cui@unt.edu

Teaching Assistant Contact

Name: Brian Tran

Office Location: Room 255 in the Science Research Building.

Office Hours: Monday from 11:00 AM to 12:00 PM in SRB 255.

Email: briantran3@my.unt.edu

Communication Expectations: Additional course information will be distributed in class and/or through Canvas announcements. It is important that you check Canvas daily to keep up with the course. Make sure to have push notifications enabled to help you stay up to date. Any questions/concerns can also be emailed to me, asked during course meetings, or asked during office hours.

Course Structure

This course will meet 3 times a week (Lectures on Tuesdays and Thursdays from 11:00 AM – 12:20 AM in **CHEM 109** and recitations on Thursdays from 12:30 – 1:20 PM in **CHEM 109**).

CH 2380 is the second half of a two-semester course in Organic chemistry. Attendance and participation at all course meetings is required and will be taken as a grade through group work. The course will cover most of the contents in chapters 12 through 24 (organic oxidation/reduction reactions, spectroscopic techniques including UV-Vis, IR, NMR, and mass spectrometry, properties and reactions of conjugated unsaturated systems, aromatics, carboxylic acids and their derivatives, alpha carbonyl carbons, and amines) of McMurray's *Organic Chemistry: A 10th Edition* textbook, which is available for free through OpenStax.

Attendance and participation at all course meetings are required and will be taken as a grade through quizzes during the lectures and recitations.

Course Prerequisites or Other Restrictions

Chem 2370 and 3210 with C or better. Must also enroll in Chem 3220 Laboratory sequence

Course Objectives

By the end of this course, students will be able to:

1. Understand how to draw chemical structures using bond line and 3D formulas and write reaction mechanisms using these structures and arrow pushing.
2. Understand structure property relationships of functional groups and aromatic compounds, and common reactions of functional groups and aromatic compounds.
3. Know absorption properties, IR, NMR, and Mass spectrometry techniques of common organic functional groups.
4. Know nomenclature of a variety of organic compounds, and how to go from a structure to a name and vice-versa.
5. Identify relevant chemical concepts and effectively use them to work through and solve organic chemistry problems.

Optional (but highly recommended) Materials

- o Organic Chemistry as a Second Language, Second Semester Topics, Klein.
- o Molecular model kit.

Course Materials

- OpenStax *Organic Chemistry: A Tenth Edition*, by John McMurray, link: <https://openstax.org/details/books/organic-chemistry?Book%20details> (this textbook and its many student resources are free! Please download a copy of the textbook at the beginning of the semester)

Course Schedule (tentative) and Exam Schedule

Week	Dates	Tuesday	Thursday	Thursday (Recitation)
1	8/18-8/22	Review and CH11	Review and CH11	Review and CH11
2	8/25-8/29	Review and CH11	CH12	Review and CH11
3	9/1-9/5	CH12	CH12	CH12
4	9/8-9/12	CH13	CH13	CH13
5	9/15-9/19	CH13	CH14	Exam 1
6	9/22-9/26	CH14	CH14	CH14
7	9/29-10/3	CH15	CH15	CH15
8	10/6-10/10	CH16	CH16	CH16
9	10/13-10/17	CH16	CH17	Exam 2
10	10/20-10/24	CH17	CH17	CH17
11	10/27-10/31	CH18	CH18	CH18
12	11/3-11/7	CH18	CH19	CH18 and CH19
13	11/10-11/14	CH19	CH19	CH19
14	11/17-11/21	CH20	CH20	Exam 3
15	11/24-11/28	--	--	--
16	12/1-12/5	Review	Review	Review

The last day for a student to drop a course with a grade of W is Nov 7th.

Exam Schedule

Exam 1 – Thursday, September 18, 12:30 PM – 1:20 PM – CHEM 109 (chapters 11,12,13)

Exam 2 – Thursday, October 16, 12:30 PM – 1:20 PM – CHEM 109 (chapters 14,15,16)

Exam 3 – Thursday, November 20, 12:30 PM – 1:20 PM – CHEM 109 (chapters 17,18,19)

Final Exam – Tuesday, December 9, 10:30 AM - 12:30 PM – CHEM 109

Chapter Contents:

CH11: Red/Ox Reactions Organometallic Reactions and Alcohol Synthesis

CH12: Mass Spectrometry and Infrared Spectroscopy

CH13: Nuclear Magnetic Resonance

CH14: Conjugated Systems and Reactions

CH15: Benzene and Aromaticity

CH16: Chemistry of Benzene: Electrophilic Aromatic Substitution

CH17: Aldehydes and Ketones: Nucleophilic Addition Reactions

CH18: Carboxylic Acid and Derivatives: Nucleophilic Substitution

CH19: Alpha Carbon Chemistry: Enols and Enolates

CH20: Amines

Assessments

- **Participation** – Completed class and recitation group work (2 people) and individual quizzes in class and recitation; the lowest 3 will be dropped, **15% of overall grade.**
- **Homework Assignment** – will be graded by completion, **15% of overall grade.**
- **3 mid-term exams** – the lowest will be dropped, **45% of the overall grade**
- **1 cumulative final exam** – **25% of overall grade**

Grading

This course will be graded on the following scale:

100 – 85% (**A**) 84 – 71% (**B**) 70 – 55% (**C**) 54 – 44% (**D**) ≤43% (**F**)

Course Policies

Attendance

Attendance at all course meetings is a required (and graded) part of this course. There are 3 dropped grades for Participation grades. These grades cannot be made up or excused without notice from the Dean of Students or the ODA. The 3 drops are there to account for any potential absences.

Homework Assignment

Homework assignments are a required as part of the course and will be due for each chapter. Please check the detailed assignment schedule in the “Assignments” section on Canvas. Your homework will be graded based on quality completion, not correctness. The homework must be submitted electronically on Canvas **as a single pdf file with your signature on top of each page**. One recommended pdf converter (converts pictures on your phone to a pdf file) is Genius Scan (it is free). Once you have downloaded the app to your phone you can use this link, <https://youtu.be/GXqjI9uuDiE>, to assist you in how to properly create the pdf from your photos. Submit your assignments early and do not wait until the last minute.

Examination Policy

For all exams, ***no outside information may be used when taking the assessments, and no interaction with anyone else is allowed while taking the assessments. Any cheating (talking during the exam, using mobile devices during the exam, using information outside of the allowed) will result in a 0 for the exam and a report to the Dean of Students for academic dishonesty.***

The dates of all exams are already posted above. They will take place on the specified date at the designated time in our classroom. Please make note of them and plan accordingly. ***Make-ups will not be offered without a University Approved and Documented reason; however, the lowest mid-term exam grade will be replaced by the final exam if it is higher. Additionally, if you have a university excused and documented reason for being absent, we can discuss alternatives. Please contact me via email with the proper documents as early as possible.***

Assignment Policy

The University is committed to providing a reliable online course system to all users. However, in the event of any unexpected server outage or any unusual technical difficulty which prevents students from completing a time-sensitive assessment activity, the instructor will extend the time windows and provide an appropriate accommodation based on the situation. Students should immediately report any problems to the instructor and contact the UNT Student Help Desk: helpdesk@unt.edu or 940.565.2324 and obtain a ticket number. The instructor and the UNT Student Help Desk will work with the student to resolve any issues at the earliest possible time.

Instructor Responsibilities and Feedback

I will do my best to present the information in this course in a way that you can understand, and will be available for any questions during class, office hours, and through email.

Syllabus Change Policy

Any changes to the syllabus will be uploaded to Canvas with an accompanying announcement.

Welcome to UNT!

As members of the UNT community, we have all made a commitment to be part of an institution that respects and values the identities of the students and employees with whom we interact. UNT does not tolerate identity-based discrimination, harassment, and retaliation. UNT's full Non-Discrimination Policy can be found in the UNT Policies section of the syllabus.

Course Description

2370(2323). Organic Chemistry. 3 hours. (3;0;1*).

Structure, nomenclature, occurrence and uses of main classes of organic compounds; functional groups and their interconversion; character of chemical bonding; stereochemistry; structure and reactivity; acid/base reactions, resonance, inductive and steric effects; reaction mechanisms. Prerequisite(s): "C" or better in CHEM 1415, CHEM 1420, CHEM 1422, or CHEM 1423. Corequisite(s) : CHEM 3210

*This hour is a problem-solving session.

Course Evaluation

Student Perceptions of Teaching (SPOT) is the student evaluation system for UNT and allows students the ability to confidentially provide constructive feedback to their instructor and department to improve the quality of student experiences in the course. **SPOT evaluations will be available TBA.**

Course Technology & Skills

Minimum Technology Requirements

Provide a list of the minimum technology requirements for students, such as:

- Computer
- Reliable internet access
- Speakers
- Plug-ins
- Microsoft Office Suite
- [Canvas Technical Requirements](https://clear.unt.edu/supported-technologies/canvas/requirements) (<https://clear.unt.edu/supported-technologies/canvas/requirements>)
- Connect technical requirements (<https://createwp.customer.mheducation.com/wordpressmu/success-academy/connects-system-requirements/>)

Computer Skills & Digital Literacy

Provide a list of course-specific technical skills learners must have to succeed in the course, such as:

- Using Canvas
- Using Connect
- Using email with attachments
- Downloading and installing software

Technical Assistance

Part of working in the online environment involves dealing with the inconveniences and frustration that can arise when technology breaks down or does not perform as expected. Here at UNT, we have a Student Help Desk that you can contact for help with Canvas or other technology issues.

UIT Help Desk: [UIT Student Help Desk site](http://www.unt.edu/helpdesk/index.htm) (<http://www.unt.edu/helpdesk/index.htm>)

Email: helpdesk@unt.edu

Phone: 940-565-2324

In Person: Sage Hall, Room 130

Walk-In Availability: 8am-9pm

Telephone Availability:

- Sunday: noon-midnight
- Monday-Thursday: 8am-midnight
- Friday: 8am-8pm
- Saturday: 9am-5pm

Laptop Checkout: 8am-7pm

For additional support, visit [Canvas Technical Help](https://community.canvaslms.com/docs/DOC-10554-4212710328) (<https://community.canvaslms.com/docs/DOC-10554-4212710328>)

Rules of Engagement

Rules of engagement refer to the way students are expected to interact with each other and with their instructors. Here are some general guidelines:

- While the freedom to express yourself is a fundamental human right, any communication that utilizes cruel and derogatory language on the basis of race, color, national origin, religion, sex, sexual orientation, gender identity, gender expression, age, disability, genetic information, veteran status, or any other characteristic protected under applicable federal or state law will not be tolerated.
- Treat your instructor and classmates with respect in any communication online or face-to-face, even when their opinion differs from your own.
- Ask for and use the correct name and pronouns for your instructor and classmates.
- Speak from personal experiences. Use “I” statements to share thoughts and feelings. Try not to speak on behalf of groups or other individual’s experiences.
- Use your critical thinking skills to challenge other people’s ideas, instead of attacking individuals.
- Avoid using all caps while communicating digitally. This may be interpreted as “YELLING!”
- Be cautious when using humor or sarcasm in emails or discussion posts as tone can be difficult to interpret digitally.
- Avoid using “text-talk” unless explicitly permitted by your instructor.
- Proofread and fact-check your sources.
- Keep in mind that online posts can be permanent, so think first before you type.

See these [Engagement Guidelines](https://clear.unt.edu/online-communication-tips) (<https://clear.unt.edu/online-communication-tips>) for more information.

UNT Policies

Academic Integrity Policy

Academic Integrity Standards and Consequences. According to UNT Policy 06.003, Student Academic Integrity, academic dishonesty occurs when students engage in behaviors including, but not limited to cheating, fabrication, facilitating academic dishonesty, forgery, plagiarism, and sabotage. A finding of academic dishonesty may result in a range of academic penalties or sanctions ranging from admonition to expulsion from the University. [Insert specific sanction or academic penalty for specific academic integrity violation.]

ADA Policy

UNT makes reasonable academic accommodation for students with disabilities. Students seeking accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide a student with an accommodation letter to be delivered to faculty to begin a private discussion regarding one's specific course needs. Students may request accommodations at any time, however, ODA notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet with each faculty member prior to implementation in each class. For additional information see the [ODA website](https://disability.unt.edu/) (<https://disability.unt.edu/>).

Prohibition of Discrimination, Harassment, and Retaliation (Policy 16.004)

The University of North Texas (UNT) prohibits discrimination and harassment because of race, color, national origin, religion, sex, sexual orientation, gender identity, gender expression, age, disability, genetic information, veteran status, or any other characteristic protected under applicable federal or state law in its application and admission processes; educational programs and activities; employment policies, procedures, and processes; and university facilities. The University takes active measures to prevent such conduct and investigates and takes remedial action when appropriate.

Emergency Notification & Procedures

UNT uses a system called Eagle Alert to quickly notify students with critical information in the event of an emergency (i.e., severe weather, campus closing, and health and public safety emergencies like chemical spills, fires, or violence). In the event of a university closure, please refer to Canvas for contingency plans for covering course materials.

Retention of Student Records

Student records pertaining to this course are maintained in a secure location by the instructor of record. All records such as exams, answer sheets (with keys), and written papers submitted during the duration of the course are kept for at least one calendar year after course completion. Course work completed via the Canvas online system, including grading information and comments, is also stored in a safe electronic environment for one year. Students have the right to view their individual record; however, information about student's records will not be divulged to other individuals without proper written consent. Students are encouraged to review the Public Information Policy and the Family Educational Rights and Privacy Act (FERPA) laws and the University's policy. See UNT Policy 10.10, Records Management and Retention for additional information.

Acceptable Student Behavior

Student behavior that interferes with an instructor's ability to conduct a class or other students' opportunity to learn is unacceptable and disruptive and will not be tolerated in any instructional forum at UNT. Students engaging in unacceptable behavior will be directed to leave the classroom and the instructor may refer the student to the Dean of Students to consider whether the student's conduct violated the Code of Student Conduct. The University's expectations for student conduct apply to all instructional forums, including University and electronic classroom, labs, discussion groups, field trips, etc. Visit UNT's [Code of Student Conduct](https://deanofstudents.unt.edu/conduct) (<https://deanofstudents.unt.edu/conduct>) to learn more.

Access to Information - Eagle Connect

Students' access point for business and academic services at UNT is located at: my.unt.edu. All official communication from the University will be delivered to a student's Eagle Connect account. For more information, please visit the website that explains Eagle Connect and how to forward e-mail [Eagle Connect](https://it.unt.edu/eagleconnect) (<https://it.unt.edu/eagleconnect>).

Student Evaluation Administration Dates

Student feedback is important and an essential part of participation in this course. The student evaluation of instruction is a requirement for all organized classes at UNT. The survey will be made available during weeks 13, 14 and 15 [insert administration dates] of the long semesters to provide students with an opportunity to evaluate how this course is taught. Students will receive an email from "UNT SPOT Course Evaluations via IASystem Notification" (no-reply@iasystem.org) with the survey link. Students should look for the email in their UNT email inbox. Simply click on the link and complete the survey. Once students complete the survey they will receive a confirmation email that the survey has been submitted. For additional information, please visit the [SPOT website](http://spot.unt.edu/) (<http://spot.unt.edu/>) or email spot@unt.edu.

Survivor Advocacy

UNT is committed to providing a safe learning environment free of all forms of sexual misconduct. Federal laws and UNT policies prohibit discrimination on the basis of sex as well as sexual misconduct. If you or someone you know is experiencing sexual harassment, relationship violence, stalking and/or sexual assault, there are campus resources available to provide support and assistance. The Survivor Advocates can be reached at SurvivorAdvocate@unt.edu or by calling the Dean of Students Office at 940-5652648.

Important Notice for F-1 Students taking Distance Education Courses

Federal Regulation

To read detailed Immigration and Customs Enforcement regulations for F-1 students taking online courses, please go to the [Electronic Code of Federal Regulations website](http://www.ecfr.gov/) (<http://www.ecfr.gov/>). The specific portion concerning distance education courses is located at Title 8 CFR 214.2 Paragraph (f)(6)(i)(G).

The paragraph reads:

(G) For F-1 students enrolled in classes for credit or classroom hours, no more than the equivalent of one class or three credits per session, term, semester, trimester, or quarter may be counted toward the full course of study requirement if the class is taken on-line or through distance education and does not require the student's physical attendance for classes, examination or other purposes integral to completion of the class. An on-line or distance education course is a

course that is offered principally through the use of television, audio, or computer transmission including open broadcast, closed circuit, cable, microwave, or satellite, audio conferencing, or computer conferencing. If the F-1 student's course of study is in a language study program, no on-line or distance education classes may be considered to count toward a student's full course of study requirement.

University of North Texas Compliance

To comply with immigration regulations, an F-1 visa holder within the United States may need to engage in an on-campus experiential component for this course. This component (which must be approved in advance by the instructor) can include activities such as taking an on-campus exam, participating in an on-campus lecture or lab activity, or other on-campus experience integral to the completion of this course.

If such an on-campus activity is required, it is the student's responsibility to do the following:

- (1) Submit a written request to the instructor for an on-campus experiential component within one week of the start of the course.
- (2) Ensure that the activity on campus takes place and the instructor documents it in writing with a notice sent to the International Student and Scholar Services Office. ISSS has a form available that you may use for this purpose.

Because the decision may have serious immigration consequences, if an F-1 student is unsure about his or her need to participate in an on-campus experiential component for this course, s/he should contact the UNT International Student and Scholar Services Office (telephone 940-565-2195 or email internationaladvising@unt.edu) to get clarification before the one-week deadline.

Student Verification

UNT takes measures to protect the integrity of educational credentials awarded to students enrolled in distance education courses by verifying student identity, protecting student privacy, and notifying students of any special meeting times/locations or additional charges associated with student identity verification in distance education courses.

See [UNT Policy 07-002 Student Identity Verification, Privacy, and Notification and Distance Education Courses](https://policy.unt.edu/policy/07-002) (<https://policy.unt.edu/policy/07-002>).

Use of Student Work

A student owns the copyright for all work (e.g. software, photographs, reports, presentations, and email postings) he or she creates within a class and the University is not entitled to use any student work without the student's permission unless all of the following criteria are met:

- The work is used only once.
- The work is not used in its entirety.
- Use of the work does not affect any potential profits from the work.
- The student is not identified.
- The work is identified as student work.

If the use of the work does not meet all of the above criteria, then the University office or department using the work must obtain the student's written permission.

Download the UNT System Permission, Waiver, and Release Form

Transmission and Recording of Student Images in Electronically-Delivered Courses

1. No permission is needed from a student for his or her image or voice to be transmitted live via videoconference or streaming media, but all students should be informed when courses are to be conducted using either method of delivery.
2. In the event an instructor records student presentations, he or she must obtain permission from the student using a signed release in order to use the recording for future classes in accordance with the Use of Student-Created Work guidelines above.
3. Instructors who video-record their class lectures with the intention of re-using some or all of the recordings for future class offerings must notify students on the course syllabus if students' images may appear on video. Instructors are also advised to provide accommodation for students who do not wish to appear in class recordings.

Example: This course employs lecture capture technology to record class sessions. Students may occasionally appear on video. The lecture recordings will be available to you for study purposes and may also be reused in future course offerings.

No notification is needed if only audio and slide capture are used or if the video only records the instructor's image. However, the instructor is encouraged to let students know the recordings will be available to them for study purposes.

Academic Support & Student Services

Student Support Services

Mental Health

UNT provides mental health resources to students to help ensure there are numerous outlets to turn to that wholeheartedly care for and are there for students in need, regardless of the nature of an issue or its severity. Listed below are several resources on campus that can support your academic success and mental well-being:

- [Student Health and Wellness Center](https://studentaffairs.unt.edu/student-health-and-wellness-center) (https://studentaffairs.unt.edu/student-health-and-wellness-center)
- [Counseling and Testing Services](https://studentaffairs.unt.edu/counseling-and-testing-services) (https://studentaffairs.unt.edu/counseling-and-testing-services)
- [UNT Care Team](https://studentaffairs.unt.edu/care) (https://studentaffairs.unt.edu/care)
- [UNT Psychiatric Services](https://studentaffairs.unt.edu/student-health-and-wellness-center/services/psychiatry) (https://studentaffairs.unt.edu/student-health-and-wellness-center/services/psychiatry)
- [Individual Counseling](https://studentaffairs.unt.edu/counseling-and-testing-services/services/individual-counseling) (https://studentaffairs.unt.edu/counseling-and-testing-services/services/individual-counseling)

Chosen Names

A chosen name is a name that a person goes by that may or may not match their legal name. If you have a chosen name that is different from your legal name and would like that to be used in class, please let the instructor know. Below is a list of resources for updating your chosen name at UNT.

- [UNT Records](#)

- [UNT ID Card](#)
- [UNT Email Address](#)
- [Legal Name](#)

**UNT eulDs cannot be changed at this time. The collaborating offices are working on a process to make this option accessible to UNT community members.*

[Pronouns](#)

Pronouns (she/her, they/them, he/him, etc.) are a public way for people to address you, much like your name, and can be shared with a name when making an introduction, both virtually and in-person. Just as we ask and don't assume someone's name, we should also ask and not assume someone's pronouns.

You can [add your pronouns to your Canvas account](#) so that they follow your name when posting to discussion boards, submitting assignments, etc.

Below is a list of additional resources regarding pronouns and their usage:

- [What are pronouns and why are they important?](#)
- [How do I use pronouns?](#)
- [How do I share my pronouns?](#)
- [How do I ask for another person's pronouns?](#)
- [How do I correct myself or others when the wrong pronoun is used?](#)

[Additional Student Support Services](#)

- [Registrar](https://registrar.unt.edu/registration) (https://registrar.unt.edu/registration)
- [Financial Aid](https://financialaid.unt.edu/) (https://financialaid.unt.edu/)
- [Student Legal Services](https://studentaffairs.unt.edu/student-legal-services) (https://studentaffairs.unt.edu/student-legal-services)
- [Career Center](https://studentaffairs.unt.edu/career-center) (https://studentaffairs.unt.edu/career-center)
- [Multicultural Center](https://edo.unt.edu/multicultural-center) (https://edo.unt.edu/multicultural-center)
- [Counseling and Testing Services](https://studentaffairs.unt.edu/counseling-and-testing-services) (https://studentaffairs.unt.edu/counseling-and-testing-services)
- [Pride Alliance](https://edo.unt.edu/pridealliance) (https://edo.unt.edu/pridealliance)
- [UNT Food Pantry](https://deanofstudents.unt.edu/resources/food-pantry) (https://deanofstudents.unt.edu/resources/food-pantry)

[Academic Support Services](#)

- [Academic Resource Center](https://clear.unt.edu/canvas/student-resources) (https://clear.unt.edu/canvas/student-resources)
- [Academic Success Center](https://success.unt.edu/asc) (https://success.unt.edu/asc)
- [UNT Libraries](https://library.unt.edu/) (https://library.unt.edu/)
- [Writing Lab](http://writingcenter.unt.edu/) (http://writingcenter.unt.edu/)