

## Organic Chemistry II Laboratory (3220.001)

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**Note:** Please take the time to read the entire syllabus document, course policies are described in this document, Canvas modules will contain all the information required to complete the online and in-person labs.

**Laboratory Coordinator** - Dr. Charles Browning ([charles.browning@unt.edu](mailto:charles.browning@unt.edu)) and Teaching Assistants (TBA). The TA is primarily responsible for conducting the laboratory, working with the students and helping them with in-person and online labs. The TA is responsible for grading and should be the first point of contact for grading, and course contents. TA's contact information will be available on Canvas during the first week of the semester.

**Communication Expectations:** Any questions, please email the TA. The students can expect a response from the TA in less than 48 hours during the weekdays. The students are expected to reach out to TA's well in advance for reporting an absence for the labs or for arranging a late submission of reports. The TA's will try to respond at the earliest to the emergency notifications. Everyone is welcome to reach out to the instructor as needed.

If you are experiencing any [symptoms of COVID-19](https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html) (<https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>) please seek medical attention from the Student Health and Wellness Center (940-565-2333 or [askSHWC@unt.edu](mailto:askSHWC@unt.edu)) or your health care provider PRIOR to coming to campus. UNT also requires you to contact the UNT COVID Hotline at 844-366-5892 or [COVID@unt.edu](mailto:COVID@unt.edu) for guidance on actions to take due to symptoms, pending or positive test results, or potential exposure. While attendance is an important part of succeeding in this class, your own health, and those of others in the community, is more important. During the quarantine period the students can finish the labs online and submit the reports for full points. The message from Dean of Students will serve as an excuse note. So please reach out to UNT hotline and report your absence related to COVID exposure.

Please report any suspected COVID exposure or symptoms to the COVID hotline immediately (844-366-5892 or email [COVID@unt.edu](mailto:COVID@unt.edu)).

## 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

1 credit hour (1;3) 1-hour lab lecture; 3-hours laboratory

This course is designed to introduce students to some well-known and popular organic synthesis reactions. Organic techniques practiced during 3210 course will become handy while performing these organic reactions in the laboratory. The experiments will focus on synthesis, characterization, and purification aspects. Selective Organic Synthesis reactions include – Oxidation, Grignard synthesis, Diels-Alder Reaction, Friedel-Crafts Acylation, Electrophilic Aromatic Substitution Reactions, Saponification, Diazonium coupling reaction, and structure assignment based on FTIR and NMR spectral analysis.

Prerequisite(s): "C" or better in CHEM 3210

Corequisite(s): CHEM 2380 or completed prior with a "C" or better

The course covers organic I laboratory experiments. The syllabus is designed to provide hands-on laboratory experience with selective organic synthesis techniques and reactions incongruent with the ongoing CHEM 2380 course. The main objective of the course is to cement the knowledge and practical understanding of theoretical techniques discussed and taught in various chapters of the ongoing CHEM 2380 course. The laboratory experiment sequence is designed to overlap with 2380 teaching content. The experiments are planned and implemented on a microscale considering lab duration and safety parameters.

## Course Prerequisites or Other Restrictions

Please check the course requirements at [https://registrar.unt.edu/sites/default/files/feeds/registrar\\_course\\_reports/fall/chemistry\\_fall.pdf](https://registrar.unt.edu/sites/default/files/feeds/registrar_course_reports/fall/chemistry_fall.pdf) or reach out to [chem-advising@unt.edu](mailto:chem-advising@unt.edu) for additional information if required.

Must have had or be concurrently registered in chem 2380. Must also be enrolled in a chem 3220.001 lab. Must also be enrolled in any chem 3220.3XX lab section. 3220.001 is Web-based instructions. This is an internet course. Course enrollment is restricted and non-texas resident students residing outside of the state are not eligible to enroll in this section. Contact the department for enrollment assistance in an appropriate section of the course if applicable. **In Spring 2021 all sections except for section 325 are required to meet in person during alternating weeks for finishing in person modules. Remaining activities are performed online. Section 325 is fully remote, not required to meet in person.**

## Course Structure

During the COVID 19, this course is designed 50% in-person (laboratory) and 50% remote instructions. 12 weekly modules, 6 modules performed online and 6 modules performed in person in the lab. There will be no in-person or synchronous meetings with the instructor (**NO LAB LECTURES**). Full course material and information is available on Canvas. During the office hour, the instructor will go over the experiment, prelab/postlab questions and bonus questions. Office hour meetings are *not mandatory*. The syllabus includes 9 laboratory experiments, one unknown assignment, one interactive simulation, one makeup assignment, and 2 quizzes. See the detailed breakdown below. Among 9 laboratory experiments, 5 experiments will be performed in the lab (in-person) and 4 experiments will be finished using online demo videos. The make-up assignment is an online interactive module, students with accessibility issues can opt for a quiz with similar content. The online experiments are completed by watching the video demonstrations of the experiments and producing the required lab reports. The TA will arrange for a short optional zoom meeting to discuss the online experiments and help the students to finish the online lab reports.

The class is divided into two groups and each group will meet alternate weeks and both groups will cover the same syllabus. The TA will divide the lab section into two groups before the first weekly module. If you cannot determine on Canvas, reach out to your TA to know your group. The syllabus is designed to finish in 12 weeks, the lab reports are due the following week after finishing the experiment for both in-person and online labs. The students will be required to work with the designated laboratory section TA in the lab, strictly follow their instructions to ensure the safety of everyone present in the lab. The students are required to understand the chemistry concepts of each experiment, get prepared for the experiment, prepare required prelabs (for in-person labs), watch experimental videos, perform the experiment in the lab or finish the online experiment and finally generate a lab report following the guidelines outlined in the syllabus and by the TA. If you have any questions or unsure about anything, **DO NOT HESITATE TO ASK!!!** Very important that you are aware of everything listed in this syllabus document. We are looking forward to sharing our knowledge and experience to facilitate a unique and the best laboratory teaching experience for each student enrolled in the 3220 courses. I know that you will bring experience and insight into our lab activities, the student's feedback is highly recommended. We are truly looking forward to this course this semester!

The weekly-laboratory (weekly module) routine can be divided into three parts

**Part 1: Prelab Preparation:** Know your experiment for the week, read the course material, and understand the experiment or assignment. Understand the underlying chemistry concepts of the experiment, very important! Reach out to the TA or the instructor if you have any questions about the experiment or the assignment. Prepare a prelab for the experiment (for in-person labs) and bring the prelab to the laboratory. The prelab should contain Objective, Reference Table, Experimental Procedure, and Prelab questions. A sample of prelab is available on Canvas. Discuss with your TA for any additional details during the first week of the labs. Please check the "LAB REPORT" help documents (Week # 1 Module) for additional information.

**Part 2: In-person labs:** Perform the experiment in the laboratory using the procedure from the prelab, record observations, and data in the lab notebook. Follow safety protocols, disposal protocols as per TA instructions. **The students are responsible for their actions in the lab.** *The prelab is mandatory for in person labs.*

**Part 2: Online labs:** Watch the demo experiment, record the procedure, observations, and data like in-person labs in the lab notebook/type in a word format. The online lab report should contain all items similar to an in-person lab report. Write/type the question and the answer clearly (prelab and postlab questions) for full points. Finish the lab report, reach out to your TA for any questions regarding the video or the data. **Prelab is not required for Online Labs.**

**Part 3 – Postlab (for in-person labs):** Finalize the lab report, edit the procedure if required. Finish data operations (calculations etc.) and conclusions. Answer the postlab questions and bring the full lab report and submit to the TA the following week or submit online as requested by your section TA.

**NOTE:** The PRELAB is not required for experiments not performed in the lab (for online experiments or simulations). Submission of a full lab report is required for online labs. For in-person labs, the data and observations component that is recorded during the lab is hand-written in the notebook. The final lab report can be typed and submitted online. For online labs, please type and submit everything online. Work with your TA during the first week of the labs to finalize the submission format. **TA's will use plagiarism or copy check software, DO NOT COPY, check the "Academic Integrity" policy carefully.** The students are welcome to reach out to TA's for additional information with all the activities mentioned above. A sample of prelab and full lab reports are available in weekly module 1. During the first week of the laboratory, the safety and lab report items will be discussed extensively by your TA. *Please do not miss the zoom meeting with your TA during the first week of labs.*

**NOTE:** For online lab and in person labs, the students are not responsible for answering the questions in the demo videos.

**3220.001 platform is only for the instructor to reach out to the entire class. Unless notified, do not upload any report(s) or quiz on to 3220.001 platform.** Individual sections (3220.3XX) will contain handouts, presentations, zoom recordings and other information required for performing the experiments and for writing prelabs/ lab reports. Please check with your TA if you do not find any required information. **STUDENTS ARE NOT RESPONSIBLE FOR ANY ACTIVITIES ON 3220.002 PLATFORM UNLESS MENTIONED BY YOUR TA.**

#### How to get through first week of labs

Steps	Actions
1	Check your enrollment, confirm your lab section, lab time, and room number (for in person labs)

2	Check syllabus document, and understand guidelines and rules, know your TA (name and contact info) – check 3220.001 course on Canvas and watch for announcements from the instructor.
3	Know your group (group A or B), your week#1 module -start date and items to finish in week#1 module– look for announcements from your TA.
4	Preparing for first in-person lab - goggles, dress code, facemask, prepare prelab as required, and watch for announcements from your TA. <i>Finish the safety quiz and safety agreement at least 3 days before the first in-person lab.</i>
5	First in-person lab – Arrive at least 10 minutes early, be prepared (dress code, goggles, facemask, <b>prelab</b> ). Finish in-person lab, following safety guidelines and social distancing guidelines. Do not hesitate to ask your TA if you have any questions about the course.
6	Get used to course rules, guidelines, deadlines, grading scheme and required work from your end for finishing the course.

## Course Objectives

Upon successful completion of this course, students will be able to

1. Recognize the key aspects of online learning and evaluate the differences between in-person and online teachings for laboratory courses.
2. Identify different equipment, special glassware commonly used in the organic chemistry laboratory, and handle them safely and effectively.
3. Demonstrate the ability to work safely in the organic laboratory - bench and hood spaces.
4. Review and follow safe laboratory practices in an organic lab setting. Includes safe disposal and handling of different organic chemicals.
5. Apply selective theoretical concepts covered in CHEM 2380 or equivalent organic course in a laboratory setting.
6. Operate at least five organic synthesis reactions, oxidation, Diels-Alder, Grignard synthesis, Electrophilic Aromatic Substitution, Friedel-Crafts Acylation, Aldol Condensation, Saponification, Diazonium coupling, and Aspirin synthesis in an organic lab setting.
7. Apply melting point, recrystallization, thin-layer chromatography, distillation, and extraction techniques practiced during 3210 labs for finishing the organic synthesis reactions.
8. Handle organic synthesis reactions in the organic lab setting following a written experimental procedure. In the laboratory, able to work individually or within a team to complete the experiment, collect and analyze the data.
9. Create a standard and legitimate scientific lab report using data generated in the organic lab setting.
10. Predict and apply fundamental organic chemistry laboratory skills and techniques for advanced courses in chemistry and other branches of life sciences.
11. Adapt good laboratory practices to all compliance items (laboratory work and lab reports)

## Materials

**Recommended Reading:** "Macroscale and Microscale Organic Experiments," 6<sup>th</sup> or 7<sup>th</sup> Edition by Kenneth L. Williamson and Katherine M. Masters. Refer to CHEM 2380 course material for additional information.

Any format (used, electronic, or pdf version) of the textbook is acceptable for the course.

*All the information required to perform the experiments in the labs is available on Canvas. Any additional information can be obtained from open, online resources. The textbook is recommended as an additional source of information.*

***A Lab Notebook is required for In-person Labs. Students can use a simple ruled notebook for recording the observations and data during the in person labs.***

***Lab Reports: All weekly modules, except for week#1, 2 & 3 modules requires lab report submission for full grade. Quizzes and makeup assignment does not require lab reports. Please refer to Week#2 module on Canvas for information related to writing the Lab Reports. The week#1 and 2 module are designed to interact with the TA to understand the policies, guidelines, and lab report writing information.***

**Please talk to your section TA for – acceptable submission format, file type, etc.**

## Lab Recitation and Materials

The lab recitation for this lab is remotely delivered through zoom meetings or completely online depending on the department guidelines. All lectures (PowerPoint presentations) are arranged in the form of weekly learning modules. Each module includes presentations, handouts, experiment videos, and zoom lecture recordings. The video demonstrations will provide information for setting up the experiment, usage of glassware, and other items in the laboratory. For online labs, the information from the video demonstrations is used for preparing the lab reports. Some of the zoom video recordings will contain bonus points. The handouts will contain the experimental protocol, please use the handouts only as a reference source, do not copy the procedure into the reports. The exact procedure for the online labs is written based on narration from the demo video. The demo videos will provide observations and data for the online reports. Prelab is not required for the online labs. Before the lab each week, please review all the materials available in the weekly module for the specific experiment. The quiz will be published on Canvas following the schedule in the syllabus. **Please follow the due dates for the submission of lab reports and quiz materials. Do not expect any partial credit for late submission unless arranged with the TA.**

## Teaching Philosophy

The course covers organic I laboratory experiments. The syllabus is designed to provide hands-on laboratory experience with selective organic synthesis techniques and reactions incongruent with the ongoing CHEM 2380 course. The main objective of the course is to cement the

knowledge and practical understanding of theoretical techniques discussed and taught in various chapters of the CHEM 2380 course. The laboratory experiment sequence is designed to overlap with 2380 teaching content. Understanding the concepts of CHEM 2380 teachings is very important for getting the best from the 3220 labs.

## Technical Requirements & Skills

### Minimum Technology Requirements

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

- Computer
- Reliable internet access
- Speakers
- Microphone
- Plug-ins
- Microsoft Office Suite
- [Canvas Technical Requirements](https://clear.unt.edu/supported-technologies/canvas/requirements) (https://clear.unt.edu/supported-technologies/canvas/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 email with attachments
- Downloading and installing software
- Using spreadsheet programs
- Using presentation and graphics programs
- Using MS Word and PDF documents

### Rules of Engagement

Rules of engagement refer to the way students are expected to interact with each other and with their instructors online.

- Treat your instructor and classmates with respect in email or any other communication.
- Always use your professors' proper title: Dr. or Prof., or if in doubt use Mr. or Ms.
- Unless specifically invited, don't refer to your instructor by the first name.
- Use clear and concise language.

- Remember that all college-level communication should have correct spelling and grammar (this includes discussion boards).
- Avoid slang terms such as “wassup?” and texting abbreviations such as “u” instead of “you.”
- Use standard fonts such as Ariel, Calibri or Times New Roman and use a size 10 or 12 point font
- Avoid using the caps lock feature AS IT CAN BE INTERPRETED AS YELLING.
- Limit and possibly avoid the use of emoticons like :) or ☺.
- Be cautious when using humor or sarcasm as the tone is sometimes lost in an email or discussion post and your message might be taken seriously or sound offensive.
- Be careful with personal information (both yours and others).
- Do not send confidential information via e-mail
- Any profanity in the lab reports will not be excused – will result in zero. Contact the instructor for any questions.

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

### Course Requirements

<b>Assignment</b>	<b>Points Possible</b>	<b>Points Possible</b>
2 Quizzes. Quiz # 1: Safety quiz mandatory. Quiz # 2 – based on experiments covered in the syllabus	40 points	14.81%
9 Lab Reports – Online + In-person Labs	180 points	66.66%
1 Labster Simulation (equivalent quiz will be available)	20 points	7.40%
1 Unknown Assignment (based on spectroscopy)	20 points	7.40%
1 Make-up Assignment (Labster Simulation or equivalent quiz)	20 points	
TA Assessment	10 points	3.70%
Total Points Possible	270 points	100%
*Includes 20 bonus points.		

\*Bonus points are the instructor's discretion. Watch recorded zoom meetings for bonus questions.

### List of Modules with Description and Submission Dates for Student Groups A and B

To follow the social distance protocol, the entire lab section will be divided into two groups by the TA at the beginning of the semester. The students are required to stick to their group schedule for the rest of the semester. **If you are enrolled into laboratory section 325 (fully remote section), you will perform all experiments online following Group A schedule.**

## Group A

Weekly Modules	Module Description and Reference Materials	*Module Week	*Submission Week	Mode of Delivery
Week #1	Unknown NMR Assignment - Spectroscopy – A Labster Simulation is available for practice (simulation is not graded, check in assignments section)	January 18 – The unknown assignment will be either posted or sent out to the students the section TA	February 1- Two Weeks	Online (Attend your TA's zoom meeting for questions related to the assignment)
Week #2	Experiment 0 - Safety prep, Quiz #1, Lab Report Prep and practice of organic techniques (refreshing basic techniques).	January 25	submit the safety quiz, safety agreement and lab coat size information at least 3 days before the first in-person lab	In-Person
Week #3	Simulation 1 – Functional Groups and Basic Chemical Tests (Labster Simulation or a similar quiz)	February 1	February 15 – Two weeks	Online
Week #4	Experiment 1 – Cyclohexanol Oxidation	February 8	February 15	In-Person
Week #5	Experiment 2 – Diels Alder Reaction	February 15	February 22	Online
Week #6	Experiment 3 – Grignard Synthesis	February 22	March 1	In-Person
Week #7	Experiment 4- EAS	March 1	March 8	Online
Week #8	Experiment 5 – FC Acylation	March 8	March 15	In-Person
Week #9	Experiment 6– Aldol Condensation	March 15	March 22	Online
Week #10	Experiment 7 – Saponification	March 22	March 29	In-Person
Week #11	Quiz # 2, and Experiment 8 – Aspirin Synthesis	March 29	April 5 (can return the quiz with final report)	Online

*Week #12	Makeup Assignment and Experiment 9 – Dyes and Dyeing	April 5	Submit the final report in 3 days after finishing the lab.	In-Person
Strictly follow the due dates. TA's approval mandatory for late submissions. Students can access the makeup assignment starting week # 11.				

### Group B

Weekly Modules	Module Description and Reference Materials	*Module Week	*Submission Week	Mode of Delivery
Week #1	Unknown NMR Assignment - Spectroscopy – A Labster Simulation is available for practice (simulation is not graded, check in assignments section)	January 25 – The unknown assignment will be either posted or sent out to the students the section TA	Feb 8 <sup>th</sup> -Two Weeks	Online (Attend your TA's zoom meeting for questions related to the assignment)
Week #2	Safety prep, Quiz #1, Lab Report Prep and practice of organic techniques (refreshing basic techniques).	February 1	submit the safety quiz, safety agreement and lab coat size information at least 3 days before the first in-person lab	In-Person
Week #3	Simulation 1 – Functional Groups and Basic Chemical Tests- Labster Simulation	February 8	February 22 – Two weeks	Online
Week #4	Experiment 1 – Cyclohexanol Oxidation	February 15	February 22	In-Person
Week #5	Experiment 2 – Diels Alder Reaction	February 22	March 1	Online
Week #6	Experiment 3 – Grignard Synthesis	March 1	March 8	In-Person
Week #7	Experiment 4- EAS	March 8	March 15	Online
Week #8	Experiment 5 – FC Acylation	March 15	March 22	In-Person

Week #9	Experiment 6– Aldol Condensation	March 22	March 29	Online
Week #10	Experiment 7 – Saponification	March 29	April 5	In-Person
Week #11	Quiz # 2, and Experiment 8 – Aspirin Synthesis	April 5	April 12 (can return the quiz with final report)	Online
*Week #12	Makeup Assignment and Experiment 9 – Dyes and Dyeing	April 12	Submit the final report in 3 days after finishing the lab.	In-Person

Strictly follow the due dates. TA's approval mandatory for late submissions. Students can access the makeup assignment starting week # 11.

\* Week 12 - Makeup lab will help to override the lowest grade or covers for a in-person absent lab. The makeup lab is a Labster assignment or an equivalent quiz.

Please look at the <https://registrar.unt.edu/registration/fall-registration-guide> for UNT deadlines. Classes Begin: Jan 11<sup>th</sup>; MLK day: Jan 18<sup>th</sup> (no classes, UNT closed); **NO SPRING BREAK**; Final exams: Apr 24-30; University grade submission: May 3<sup>rd</sup>; Grades/academic standings posted on official transcript: May 5th.

Laboratory Experiment (in-person and online)	Short Description and Objectives
<b>Safety and other important guidelines</b>	This week the students are required to review the safety rules and sign the documents. Send it over to the TA. Review the safety materials, finish the safety quiz, and send it over to the TA. Review the syllabus, “lab report help” documents, and get ready for the first in-person lab. Able to acquire skills to write a lab report. Able to practice safety guidelines in the organic laboratory.
<b>Spectroscopy (Assignment)</b>	This week we will do assignment # 1, the spectroscopy assignment. The students will be supplied with a handout that contains an unknown molecule. The molecular formula, molar mass, FTIR, Proton NMR, and Carbon-NMR spectra of the molecule will be included in the handout. The weekly module will cover the information required to resolve the structure. Able to describe different steps required to resolve a molecular structure based on FTIR and NMR spectral data. Able to acquire the skills required to resolve an unknown organic molecular structure. In Spring 2021, this assignment is performed online. A Labster Simulation Module is available for practice, the Labster simulation is not graded.
<b>Functional Group(s) Analysis - Simulation</b>	This week the online lab will facilitate working with a Labster Simulation to understand different reagents/chemical tests for identifying different functional groups. The weekly activity can be finished using the simulation or a quiz. Acquire knowledge to perform functional group analysis of different organic groups. Perform confirmation reactions and identify unknown organic molecules. Able to describe different

	steps involved in identifying different functional groups. Able to identify the product formation based on functional group analysis. <b>In Spring 2021, this assignment is performed online.</b>
<b>Oxidation of Cyclohexanol</b>	This week we will do experiment # 1, synthesis of cyclohexanone following oxidation mechanism. The module material will cover concepts of oxidation and procedure for making cyclohexanone starting from cyclohexanol and sodium hypochlorite (oxidizing agent) in the lab. The cyclohexanol will be synthesized starting from cyclohexanol. The formation of the final product will be analyzed using 2,4-DNP reagent. The yield of the product will be determined. Able to characterize the oxidation of cyclohexanol (or similar compounds). Able to acquire skills required to perform distillation, pH testing, salting-out procedures for future labs. Able to perform a confirmation reaction for the identification of the final product and differentiate it from the starting materials. Able to describe different steps involved in the oxidation of cyclohexanol in the final lab report. Able to compile data and observations for the lab report. <b>In Spring 2021, this experiment is performed in the lab.</b>
<b>Diels-Alder Reaction</b>	This week we will do experiment # 2, synthesis of cis-Norbornene following Diels-Alder reaction mechanism. The module material will cover the concepts of Diels-Alder mechanism and procedure for making cis-Norbornene starting from Maleic anhydride (dienophile) and cyclopentadiene (diene). The significance of Diels-Alder reactions for making cyclic rings will be analyzed. The experimental video will also demonstrate the cracking of the dicyclopentadiene, a very useful technique for the isolation of cyclopentadiene starting material. The formation of the final product will be analyzed using melting point data. The yield of the product will be determined. Able to characterize the pericyclic reaction between diene and dienophile. Able to characterize the Diels-Alder reaction mechanism. Able to acquire skills required to perform cracking and recrystallization for future labs. Able to describe the different steps involved in the final lab report. Able to compile data, observations, and conclusions for the lab report. <b>In Spring 2021, this experiment is performed online (watch experiment video).</b>
<b>Grignard Reaction (Synthesis of Benzoic Acid)</b>	This week we will do experiment # 3, synthesis of Benzoic acid following the Grignard reaction mechanism. The module material will cover concepts of Grignard reaction, reaction conditions for making Grignard reagents. The material will cover the experimental procedure for making benzoic acid starting from bromobenzene, Mg metal and dry ice. The conditions for making the Grignard reagent (phenylmagnesium bromide intermediate) will be analyzed. The formation of the final product will be analyzed using melting point data. The yield of the product will be determined. Able to characterize the formation of a Grignard Reagent starting from aryl halide and Mg metal. Able to characterize the significance of dry conditions for this reaction. Able to characterize the mechanism of formation of GR and the final product. Able to acquire skills, namely grinding of metals, handling dry solvents, recrystallization of organic compounds. Able to describe the different steps involved in the final lab report. Able to compile data, observations, and conclusions for the lab report. <b>In Spring 2021, this experiment is performed in the lab.</b>

<b>Electrophilic Aromatic Substitution Reaction (EAS) - Nitration</b>	<p>This week we will do experiment # 4, synthesis of Methyl 3-NitroBenzoate following EAS mechanism. The module material will cover concepts of EAS and procedure for making Methyl 3-NitroBenzoate starting from Methy benzoate and a mixture of conc. Sulphuric and nitric acids. The conditions for the formation of meta substituted products selectively will be analyzed. The formation of the final product will be analyzed using melting point data. The yield of the product will be determined. Able to characterize the formation of a nitro product, following the EAS mechanism. Able to characterize the significance of in situ electrophile generation in this reaction. Able to characterize the mechanism of EAS. Able to acquire skills for handling concentrated acids in the organic labs. Able to describe the different steps involved in the final lab report. Able to compile data, observations, and conclusions for the lab report. <b>In Spring 2021, this experiment is performed online (watch experiment video)</b></p>
<b>Friedel Crafts Acylation (Acylation of Ferrocene)</b>	<p>This week we will do experiment # 5, synthesis of acetyl ferrocene following Friedel-Crafts Acetylation (FCA) mechanism. The module material will cover concepts of FCA and procedure for making acetyl ferrocene starting from ferrocene and acetic anhydride. The significance of TLC and CC techniques for isolation and purification of acetyl ferrocene will be analyzed. The formation of the final product will be analyzed using CC and melting point data. The yield of the product will be determined. Able to characterize the formation of an acylation product starting from ferrocene and acetic anhydride. Able to characterize the significance of TLC and CC techniques for this reaction. Able to characterize the mechanism and formation of different products in the reaction. Able to acquire new skills, namely CC, for future labs. Able to describe the different steps involved in the final lab report. Able to compile data, observations, and conclusions for the lab report. <b>In Spring 2021, this experiment is performed in the lab.</b></p>
<b>Aldol Condensation (Synthesis of Dibenzal)</b>	<p>This week we will do experiment # 6, synthesis of dibenzal following Aldol Condensation mechanism. The module material will cover concepts of Aldol condensation and procedure for making dibenzal starting from benzaldehyde and acetone. The formation of the final product will be analyzed using melting point data. The yield of the product will be determined. Able to describe different steps of the condensation reaction in the final lab report. Able to acquire the skills required to perform a simple condensation reaction using an aromatic aldehyde and aliphatic ketone in an organic laboratory setting. Able to characterize the formation of the aldol product. Able to characterize and differentiate the product and byproduct formation if any in the reaction. <b>In Spring 2021, this experiment is performed online (watch experiment video).</b></p>
<b>Saponification (Ester Hydrolysis, Soap Formation)</b>	<p>This week we will do experiment # 7, synthesis of sodium stearate (soap) following saponification mechanism. The module material will cover concepts of saponification, cleaning action of soap, differences between soaps and detergents, and procedure for making sodium stearate starting from glycerol tristearate and sodium hydroxide. The significance of soap, and cleaning action of soap, its applications for differentiating soft vs hard water will be analyzed. Able to characterize the formation of soap starting from an ester in the presence of sodium hydroxide. Able to characterize the significance of soap for cleaning action. Able to differentiate the</p>

	soft vs hard water using soap. Able to acquire skills for performing salting out and refluxing in organic labs. Able to describe the different steps involved in the final lab report. Able to compile data, observations, and conclusions for the lab report. <b>In Spring 2021, this experiment is performed in the lab.</b>
<b>Aspirin Synthesis (Esterification)</b>	This week we will do experiment # 8, synthesis of Aspirin following esterification mechanism. The module material will cover the mechanism of esterification of salicylic acid in the presence of acetic anhydride. The material will also include a procedure for making acetylsalicylic acid (Aspirin) starting from salicylic acid and acetic anhydride. The significance of the esterification of salicylic acid will be discussed. Able to characterize the formation of Aspirin starting from acid in the presence of an anhydride. Able to characterize the significance of Aspirin vs Salicylic acid. Able to acquire skills for differentiating starting materials and product based on differences in polarity by performing solubility and TLC analysis. Able to describe the different steps involved in the final lab report. Able to compile data, observations, and conclusions for the lab report. <b>In Spring 2021, this experiment is performed online (watch experiment video).</b>
<b>Dyes (Synthesis of Methyl Orange Dye)</b>	This week we will do experiment # 9, synthesis of Methyl Orange following diazocoupling mechanism. The module material will cover concepts of diazotization reaction, significance of pH sensitive colored azo organic compounds (dyes), dyeing process and procedure for making Methyl Orange starting from Sulfanilic acid in two steps. The ability of Methyl Orange dye synthesized in the lab will be analyzed for dyeing. Able to characterize the formation of methyl orange starting from sulfanilic acid. Able to characterize the significance of dyes for dyeing. Able to acquire skills for handling strong acids in the organic labs. Able to describe the different steps involved in the final lab report. Able to compile data, observations, and conclusions for the lab report. <b>In Spring 2021, this experiment is performed in the lab.</b>
<b>Make-up Assignment (Labster Simulation or a Quiz)</b>	This is a make-up lab. The makeup lab is performed for two reasons – one for replacing a previous lab grade or for making up a absent lab. The students are required to perform this assignment using the Labster interactive software program or answer a quiz if unable to access the Labster. The students will be provided the link and information to access the Labster to finish the assignment or the students will get a quiz that contains similar content. More details will be released within 1 weeks after the start of the semester. Tentative module: Substitution vs Elimination: Predict the outcome. The quiz will be based on same concept. <b>In Spring 2021, this assignment is performed online.</b>

**NOTE: Students are not required or not responsible for answering the questions in the videos.**

Grading

**Total Points: 270**

- 9 Experiments (in person + online)                      9\* 20 = 180 points
- Labster interactive simulation or quiz                      1\*20 = 20 points

- Unknown spectral assignment 1\*20 = 20 points
- 2 quizzes 2\*20 = 40 points
- TA assessment 1\* 10 = 10 points
- 1 Make-up assignment (Interactive module or quiz) 1\*20 = 20 points

In addition, **there will be bonus points** – watch the zoom recordings (presentations of the experiment) for bonus questions. **5 bonus points** for TA SPOT evaluation.

Include the grading scale (A-F) along with the point totals/percentages you will use to calculate the final grade. For example:

- A: 90-100%
- B: 80-89%
- C: 70-79%
- D: 60-69%
- F: 59 and below
- The grades are finalized by the TA's following the guidelines outlined in the syllabus. The participation and activities in the lab helps.
- **LAB REPORT SUBMISSION IS REQUIRED even for excused absences. Use the video demonstrations and finish lab reports, reach out to your TA and ask for extra time. NO LAB REPORT, NO GRADE.**

LAB REPORT POINTS DISTRIBUTION: Look into Sample Lab Reports for full details in Week#1 module.

Objective/Summary, Procedure, prelab and post-lab questions: 10 p

Observations, Data & Results: 7P

Conclusions: 3P

### Turnaround Time

Turn in the lab reports within one week after the experiment date, a one-week return policy applies for both in-person and online labs. The full lab report containing all information (check lab report help documents) should be submitted within one week unless prearranged with the TA. The lab reports can be submitted in person or online depending on the arrangement with the TA. The graded lab reports will be turned back to the students with feedback in 2 weeks after submission. When this is not possible, the TA's will send an announcement to the class. Quizzes are also due in one week. The TA's will provide feedback for the first report, highlighting the missing items without any penalty. From the second report onwards, the students are required to follow the feedback and finish the reports for full points. Please check the syllabus for submission deadlines. Talk to your TA if you have any questions. **Be prepared to lose points for late submissions. For the week 12 module, students must be ready to submit the reports within 3 days after the experiment is finished.**

## Late Work

Late reports will not be accepted unless the student encounters an emergency or extreme situation. All work turned in after the deadline will receive a grade of zero unless the student has a [university-excused absence](#) and provides documentation with 72 hours of the missed deadline.

**Do not expect any partial credit for the late reports unless prearranged with the TA.**

## Extra Credit

The course will include **20 bonus points**. The bonus points will be available in zoom lab lecture recordings. For lab lecture bonus questions, please type/write the question and your response very clearly for full points.

## 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 evaluation opens on 04/05 and closes on 04/22. To help with grading, the students are advised to finish their SPOT for their section before submitting their final lab report for 5 bonus points. Send the confirmation of SPOT to your TA for 5 bonus points.

## Course Policies

### Safety Policy

The University of North Texas places the utmost importance on maintaining a safe learning environment for students and employees. To prevent injury, damage, or other harm, all UNT students must always follow the following laboratory safety rules: Please follow the social distancing guidelines outlined by UNT and CHEM department, talk to your TA if you have concerns about your safety and/or health.

Please review and sign the safety rules agreement (available on Canvas) and upload it before your first in-person lab. Students cannot start working in the labs without signing the safety rules agreement. The safety rules agreement will also include social distancing policies that every student and TA/instructor are required to follow in the lab. Finish the Safety quiz (Quiz #1) and submit to your TA before the first lab. Cannot start working in the labs without finishing the safety quiz.

Be punctual, do not arrive late. If you arrive late, you will miss the instructions given by your TA at the beginning of the lab period, which may lead to unnecessary confusion as well as safety issues to you and others in the lab. **No cell phone usage, no "Horseplay" in the labs.** Repeated latecomers will not be allowed into the lab. The cut off time is strictly 10 minutes. Students will be either asked to leave or lose points.

## Attendance Policy

Visit the [University of North Texas' Attendance Policy](http://policy.unt.edu/policy/15-2-) (<http://policy.unt.edu/policy/15-2->) to learn more. **Excused Absences:** An absence may be excused for the following reasons: 1. religious holy day, including travel for that purpose; 2. active military service, including travel for that purpose; 3. participation in an official university function; 4. illness or other extenuating circumstances; 5. pregnancy and parenting under Title IX; and 6. when the University is officially closed. The students are required to submit the reports along with the excused absence documentation for full points. Arrange with the TA for the late submission of the report. Students without excused absence documentation can receive partial credit only with submission of the full report. The data and observations can be obtained from the video demo of the missed experiment. Students excused due to COVID 19 concerns are required to submit the reports online. Please reach out to me or your TA to request for extra time for late submissions.

For alternate in-person labs, attendance is mandatory. Please look into acceptable reasons for missing an experiment lab. For online experiments, if the TA arranges a Zoom meeting, attendance is mandatory. Please arrange with your TA for an excused absence. For in-person labs, produce acceptable documentation for the absence to avoid any penalty. Students absent to the zoom meetings, without prior arrangement with the TA, will lose 2 points from their reports. One Makeup Assignment is available. Due to social distancing, **swapping lab sections is strictly NOT allowed.**

## COVID-19 Impact on Attendance

While attendance is expected as outlined above, it is important for all of us to be mindful of the health and safety of everyone in our community, especially given concerns about COVID-19. Please contact me if you are unable to attend class because you are ill, or unable to attend class due to a related issue regarding COVID-19. **It is important that you communicate with your TA or with the instructor prior to being absent so I may make a decision about accommodating your request to be excused from class.** The letter or email from DOS office will serve as an excuse for absence. **LAB REPORTS SUBMISSION IS REQUIRED even for excused absences. Use the video demonstrations and finish your lab reports, reach out to your TA and ask for extra time.**

If you are experiencing any [symptoms of COVID-19](https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html) (<https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>) please seek medical attention from the Student Health and Wellness Center (940-565-2333 or [askSHWC@unt.edu](mailto:askSHWC@unt.edu)) or your health care provider PRIOR to coming to campus. UNT also requires you to contact the UNT COVID Hotline at 844-366-5892 or [COVID@unt.edu](mailto:COVID@unt.edu) for guidance on actions to take due to symptoms, pending or positive test results, or potential exposure. While attendance is an important part of succeeding in this class, your own health, and those of others in the community, is more important. During the quarantine period the students can finish the labs online and submit the reports for full points. The message from Dean of Students will serve as an excuse note. So please reach out to UNT hotline and report your absence related to COVID exposure.

## Class Materials for Remote Instruction

Class recordings are the intellectual property of the university or instructor and are reserved for use only by students in this class and only for educational purposes. Students may not post or otherwise share the recordings outside the class, or outside the Canvas Learning Management System, in any form. Failing to follow this restriction is a violation of the UNT Code of Student Conduct and could lead to disciplinary action. Please refer to <https://ypaa.unt.edu/return>. Additional remote instruction may be necessary if community health conditions change or you need to self-isolate or quarantine due to COVID-19. Students will need access to a [webcam and microphone – faculty member to include what other basic equipment is needed] to participate in fully remote portions of the class. Information on how to be successful in a remote learning environment can be found at <https://online.unt.edu/learn>.

### Statement on Face Covering

Face coverings are required in all UNT facilities. Students are expected to wear face coverings during this class (during in person labs). If you are unable to wear a face covering due to a disability, please contact the Office of Disability Access to request an accommodation. UNT face covering requirements are subject to change due to community health guidelines. Any changes will be communicated via the instructor.

Individuals may not be able to wear a face covering due to a disability. Please see the [Office of Disability Access guidance on face coverings](#). Exceptions to the face covering guidelines, including the use of a face shield in lieu of a face covering when teaching, must be reviewed by the Safety and Incident Management Advisory Team. Submit a [Request for Other Exceptions form](#) for consideration.

A [socially distanced classroom layout](#) has been created for all classrooms and class labs to help faculty create seating charts for in-person classes.

### Lab Cleanliness

It is the student's responsibility to keep their working areas clean. After finishing the experiment, please clean the allotted bench-hood space. Also, clean any equipment or glassware utilized during the experiment. The TA's have full authority to remove 2 points from the individual reports for repeated cleanliness issues (related to the experiment). During COVID 19, students are requested to clean the bench surfaces with the sanitizing materials available in the laboratory. Use GLOVES for all cleaning activities. If you have any questions or concerns, do not hesitate to "ASK" your TA for help.

### Examination Policy

There are no exams for this course. The grading is based on lab reports and quizzes.

### Lab Reports (Assignments) Submission Policy

The details of the weekly module are listed above. The exact due dates for each experiment (module) depends on the lab section. Only PDF and MS word documents are acceptable formats for online and in-person submission, detailed instructions will be provided by the TA of the individual section during the first lab. The TA's will employ Turnitin or similar software for assignment submission. If there is a technical issue or

server unavailability, submission dates will be extended as required by the TA. ***Late assignments will not be accepted. Do not expect any partial credits for late returns unless there is an emergency or excused absence (as per UNT guidelines) or prearrangement with the TA.***

The University is committed to providing a reliable online course system for all users. However, in the event of an unexpected server outage or any unusual technical difficulty which prevents students from completing a time-sensitive assessment activity, the TA will extend the time windows and provide an appropriate accommodation based on the situation. Students should immediately report any problems to the instructor or TA and contact the UNT Student Help Desk: [helpdesk@unt.edu](mailto: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.

### Class Participation

No classroom participation is listed for this course.

### Grade Disputes and Academic Integrity

Reach out to your TA first and resolve the grade disputes. If the dispute is unresolved with your TA, make an appointment to set up the meeting. Give me a week to discuss with your TA, review the details, and to understand the quality of the work you turned in for resolving the grade dispute. Cheating is not tolerated and will result in a grade of “F” for the course. Plagiarism is not tolerated and will result in an “F” grade for the course. Both types of behavior will be reported in accordance with UNT policies regarding academic integrity. Identification of academic dishonesty in this class can result in penalties including additional work, a failing grade for the assignment or class, a grade being reduced or changed, and a referral to the Dean of Students. The APA publication manual and material on the UNT Center for Student Rights and Responsibilities webpage ([www.unt.edu/csrr](http://www.unt.edu/csrr)) can help you understand and avoid plagiarism. Please communicate in advance with your TA’s if you have any questions or concerns regarding the lab reports to avoid plagiarism issues. 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.

You will **receive a ZERO** if any type of plagiarism is found. **DO NOT** copy lab reports from any other person (including your lab partner) taking the course. The experimental section, results, and conclusions sections could be similar because everyone is doing the same experiment but needs to be written in your own words. In other words, write the report on your own. **DO NOT COPY OR PHOTOCOPY**. Each student must write their unique report, do not print off two copies of the same report and turn in it for two people, this is considered plagiarism is a very serious offense, do not take it lightly. Receive **“ZERO”** for any plagiarism and will also have to face other consequences as per the academic integrity policy. Please **“ASK”** your TA if you are not sure about anything!!!

### Instructor Responsibilities and Feedback

The responsibility of the instructor involves setting up the course, syllabus, selecting the experiments, experimental procedure, ensuring the

selected experiments fit within the scope of 2380 organic lectures, and ensuring the availability of materials and supplies by working in tandem with Laboratory supervisor (coordinator). In addition to overseeing the function of labs, the instructor is also responsible for reaching out to teaching assistants (TA's) weekly for understanding the progress and complaints from ongoing labs. The student's concerns and feedback will be discussed during the TA meetings for a productive outcome. You are more than welcome to reach out to me directly at the beginning of the course. However, I would highly recommend everyone to reach out to their laboratory section TA once the course catches the momentum. I will be happy to provide any additional instructions for answering prelab and post-lab questions for the lab reports. I am responsible for updating the syllabus changes or course content or grading rules for the entire 3220.001 section. TA's will be responsible for applying these changes to the individual lab sections. Students can expect a response from the instructor in 24 hours during the weekdays, the students can expect their reports and quizzes returned in two weeks after submission.

#### Syllabus Change Policy

Any unexpected changes in the syllabus due to chemicals unavailability or experimental issues, due dates for quizzes, due dates for lab reports will be immediately updated by the instructor.

#### 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.

You will **receive a ZERO** if any type of plagiarism is found. **DO NOT** copy lab reports from any other person (including your lab partner) taking the course. The experimental section, results, and conclusions sections could be similar because everyone is doing the same experiment but needs to be written in your own words. In other words, write the report on your own. **DO NOT COPY OR PHOTOCOPY**. Each student must write their unique report, do not print off two copies of the same report and turn in it for two people, this is considered plagiarism is a very serious offense, do not take it lightly. Receive **"ZERO"** for any plagiarism and will also have to face other consequences as per the academic integrity policy. Please **"ASK"** your TA if you are not sure about anything!!!

##### ADA Policy

The University of North Texas makes reasonable academic accommodations for students with disabilities. Students seeking reasonable accommodation must first register with the Office of Disability Access (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with a reasonable accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request reasonable accommodations at any time, however, ODA notices of reasonable 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 reasonable accommodation for every semester and must meet with each faculty member before implementation in each class. Faculty in charge of the course will receive the information from ODA office, the students are not required to deliver the letters to the faculty. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information, refer to the [Office of Disability Access website](http://www.unt.edu/oda) at <http://www.unt.edu/oda>. You may also contact ODA by phone at (940) 565-4323.

#### 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 Blackboard for contingency plans for covering course materials.

#### Retention of Student Records

Student records (lab reports) of this course are maintained in a secure location by the TA of the laboratory section. The grades will be stored by the TA and the instructor on record. The lab report and quiz sheets (with keys) submitted during the duration of the course are kept for at least one calendar year after course completion by the TA's. Course work submitted via the Canvas online system, including grading information, is also stored in a safe electronic environment for one year. Students have the right to view their records; 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 laboratory and the TA/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 classrooms, 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](http://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 between 04/05 and 04/22 to evaluate how this course is taught. The feedback will help the instructor to understand student concerns. Students will receive an email from "UNT SPOT Course Evaluations via IASystem Notification" ([no-reply@iasystem.org](mailto: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](mailto:spot@unt.edu).

### Sexual Assault Prevention

UNT is committed to providing a safe learning environment free of all forms of sexual misconduct, including sexual harassment sexual assault, domestic violence, dating violence, and stalking. Federal laws (Title IX and the Violence against Women Act) and UNT policies prohibit discrimination on the basis of sex and therefore prohibit 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. UNT's Survivor Advocates can assist a student who has been impacted by violence by filing protective orders, completing crime victim's compensation applications, contacting professors for absences related to an assault, working with housing to facilitate a room change where appropriate, and connecting students to other resources available both on and off-campus. The Survivor Advocates can be reached at [SurvivorAdvocate@unt.edu](mailto:SurvivorAdvocate@unt.edu) or by calling the Dean of Students Office at 940-565- 2648. Additionally, alleged sexual misconduct can be non-confidentially reported to the Title IX Coordinator at [oeo@unt.edu](mailto:oeo@unt.edu) or at (940) 565 2759.

### Success in an Online Course

While the online classroom shares many similarities with the face-to-face classroom, success in online education requires certain skills and expectations. Please check the syllabus, course description, course content on Canvas. Understand the assignments, deadlines, report submission methods, and rules regarding the late work, absence, and grading policies. Reach out to your instructor or the TA immediately for any questions or concerns during the first week of the semester. The first week of the labs is very important, please make sure you do not miss it. Please check announcements on Canvas. Please refer to "[How to Succeed as an Online Student](https://clear.unt.edu/teaching-resources/online-teaching/succeed-online)" (<https://clear.unt.edu/teaching-resources/online-teaching/succeed-online>).

### Return to Learning at UNT:

<https://vpaa.unt.edu/return>

Useful resources and training materials can be found on the [Teach Anywhere site](#) or <https://classroomsupport.unt.edu/teaching-with-tech>.

### Highlights relevant to this course

- Classes will start week of January 18<sup>th</sup> for Group A and week of January 25<sup>th</sup> for Group B. Online activity only. No in person activities

- First in-person lab – week of January 25<sup>th</sup> for Group A and week of February 1<sup>st</sup> for Group B.
- Last week of labs for Group A and Group B - Week of April 5<sup>th</sup> and Week of April 12<sup>th</sup>
- For the online labs, experiment demo videos and zoom recordings are available
- All experiments have video demos to ensure participation of students during quarantine period as needed
- This course is 12 weeks – the students are required to come in-person labs for 6 weeks. The remaining part of the course (experiments) will be finished using online materials.

Each laboratory room will be fully cleaned by custodial staff each night. Each laboratory classroom will be equipped with sanitizing spray and other cleaning supplies – as your TA for any supplies. Students may use these cleaning supplies to sanitize their working bench spaces when they arrive.

Laboratory classrooms are being set up to facilitate social distancing requirements of 6 feet between students. There will be signs all over the room, please follow the signs. Avoid gatherings at wash stations (sinks) or chemical stations or disposal areas. Please follow TA's instruction while entering and leaving the labs.

A person who has been in close contact with someone testing positive for COVID-19 may be asked to self-isolate. A close contact is defined as anyone who was within 6 feet of an infected person for at least 15 minutes starting from 48 hours before the infected person developed symptoms. The 15-minute time frame is cumulative. Someone can be a close contact regardless of whether masks were worn or not. A close contact of a close contact is NOT a close contact.

A COVID hotline has been established to help UNT community members report and understand COVID-19 symptoms, testing information and/or results; receive guidance on actions they may need to take following potential exposure, and with questions related to COVID-19's impact on our university operations. The hotline number is 844-366-5892 and email address is [COVID@unt.edu](mailto:COVID@unt.edu).

UNT requires the use of face coverings by all community members inside buildings and in public settings outside, especially where other social distancing measures are difficult to maintain. Students are expected to wear face coverings during class. There are some exceptions:

- Faculty may request to wear a face shield instead of a face covering while teaching, if they can maintain 6 feet of distance from others in the classroom.
- In certain learning environments, face coverings may be removed temporarily if they impede learning such as in music or language learning classes

- Individuals may not be able to wear a face covering due to a disability. [Please see the Office of Disability Access guidance on face coverings](#)

Face coverings are required in all UNT facilities and when outdoors and unable to maintain a consistent minimum of 6 feet separation from others. [Read the UNT System Guidelines on face coverings](#) for most current information. To enable faculty to project their voice while teaching an in-person class, faculty may opt to wear a face shield if they can maintain 6 feet of distance from others in the classroom. Face shields are not a substitute for cloth face coverings in slowing the spread of COVID-19, therefore faculty are expected to follow UNT guidelines for face coverings at all times other than when they are teaching in the classroom. Face coverings are required in all UNT facilities and when outdoors and unable to maintain a consistent minimum of 6 feet separation from others. [Read the UNT System Guidelines on face coverings](#) for most current information. If a student is exhibiting COVID-19 symptoms in class, the faculty should politely ask the student to excuse themselves from class and return to their place of residence. [Refer to the Health Alerts website for self-monitoring information](#). The student is also asked to contact the COVID Hotline for assistance. Please reach out to your TA or the instructor for any additional questions.

#### [Planned Protective Equipment and Sanitation Procedure in the Labs:](#)

Each laboratory section will be overseen by a graduate Teaching Assistant or an Adjunct Assistant, who will instruct the students how to clean their bench areas, hood spaces, and stools (depending on the usage) with disinfectants each day before and after conducting experiments. Supplies of disinfectant (70% isopropyl alcohol or benzalkonium chloride solution), paper towels, and gloves will be maintained in each lab and replenished when the TA or supervising Instructional Lab Coordinator deems necessary. Face coverings will be required during all class meetings, and students will be asked not to enter a teaching lab until they are wearing a mask. Disposable gloves will be provided in all lab courses. Finally, freshly laundered lab coats will be supplied to students each week through a third-party vendor. These are delivered wrapped in plastic and are placed in a collection bin after each lab, to make sure they are not a source of viral spread. Benches will be marked with tape to show allowed student locations consistent with social distancing. Floors will be marked with tape and/or stickers to show where lab stools should be. Unused stools will be removed. When possible and when necessary, the floor will be marked with taped arrows to show the allowed direction of the student movement in the labs, especially for entering/exiting the labs. All in-person experiments are operated at reduced capacity to maintain 6' social distancing. Half of the section will be doing virtual activities remotely each week and the rest meeting face-to-face, on an alternating basis. In the laboratory, there will be only two students on each side of the working bench, with more than 6 feet distance in between. Each student is allotted a hood, most of the supplies required for performing the experiment will be made available in the hood. Students are requested and required to follow social distancing guidelines while entering, working (interacting with the TA or friends, disposing of chemicals, etc.), and while leaving the labs.

#### [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 the 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](mailto: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. lab reports, photographs, and presentations and 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.
- The 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 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 is 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.

### Class Recordings & Student Likenesses

Zoom recordings of the lectures and office hour meetings (recordings) will be posted for students enrolled in this class section to refer to throughout the semester. Class recordings are the intellectual property of the university or instructor and are reserved for use only by students in this class and only for educational purposes. Students may not post or otherwise share the recordings outside the class, or outside the Canvas Learning Management System, in any form. Failing to follow this restriction is a violation of the UNT Code of Student Conduct and could lead to disciplinary action.

## 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/)

