

CHEM 2425.001 TR - Organic Chemistry II

Course Syllabus: Spring 2026

"Northeast Texas Community College exists to provide personal, dynamic learning experiences empowering students to succeed."

Instructor: Drew L. Murphy, PhD (he/him/his)
Office: MS 115
Phone: 903.434.8214
Email: dmurphy@ntcc.edu

This syllabus serves as the documentation for all course policies and requirements, assignments, and instructor/student responsibilities. Information relative to the delivery of the content contained in this syllabus is subject to change. Should that happen, the student will be notified.

Office Hours:

	Monday	Tuesday	Wednesday	Thursday	Friday
on Campus	1000-1220 1500-1550	1100-1220	1000-1220	1000-1220 1500-1550	None

Other times and Zoom meetings are available by appointment.

Course Description:

- 4 credit hours
 - Lecture/Lab/Clinical: Three hours of lecture and four hours of lab each week.
- Prerequisite(s): CHEM 2423 with final grade of C or better

Continuation of CHEM 2423. Advanced principles of organic chemistry will be studied, including the structure, properties, and reactivity of aliphatic and aromatic organic molecules; and properties and behavior of organic compounds and their derivatives. Emphasis is placed on organic synthesis and mechanisms. Includes study of covalent and ionic bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional groups, and synthesis of simple molecules. THIS COURSE IS INTENDED FOR STUDENTS IN SCIENCE OR PRE-PROFESSIONAL PROGRAMS.

- Material in this course is cumulative and builds on itself, and future chemistry courses require knowledge from this course.

Course Structure and Overview:

- Course Format: Face-to-Face
 - Both the lecture and laboratory portions of this course will be conducted in the traditional face-to-face format during the scheduled times as posted.
 - Contingencies are in place, should the course need to transition to a virtual format.
- Lecture Sessions: **Tuesdays and Thursdays 130-250pm**
 - Lecture will take approximately one-half to two-thirds of the class time, while the rest of the class time students will be working in small groups. Students will be required to work a paper quiz in small groups during each class period. Additionally, students are expected to work on assignments, problems, and studying a minimum of 3 hours outside of class for every one hour of class time.
 - Additional course material may also be presented fully online through videos and the course Blackboard page.
 - Exams consist of multiple-choice questions, short answer questions, calculation problems, and essay questions. For more information about exams, see the syllabus section on exams.
 - Exams will be conducted on-campus in person during the times scheduled.
- Laboratory Sessions: **Tuesdays 300-650pm**
 - Detailed instructions, guidelines and descriptions of what is expected for laboratory sessions can be found on the following pages under the heading "Institutional/Course Policy". The course Blackboard page contains detail about what will be conducted in the laboratory sessions, what laboratory assignments are due, due dates, and rubrics.
 - Some days there will not be an experiment, and some days there may be additional lecture sessions during the lab time. Students are expected to follow posted schedules and the professor's instructions. On days with experiments scheduled, students should plan to be working in the lab for at least four hours.

Required Instructional Materials:

- Lecture Textbook
 - *Organic Chemistry* – Smith; 7th Edition with ALEKS
 - Digital Version with Access Code (ISBN # 9781266670114)
 - Publisher: McGraw Hill
 - The required materials for the lecture portion of this course are available using INCLUSIVE ACCESS. This means that you paid a discounted price for the eText and ALEKS when you paid tuition for this course. You automatically have your access code for ALEKS.
- Lab Supplies
 - There is no printed lab manual for this course. The lab manual is provided through the course blackboard, free of charge.
 - Lab Safety Personal Protective Equipment (PPE)
 - Approved safety glasses are available in the college store, and many safety glasses and safety goggles are also available from online retailers. Students who wear corrective-vision glasses must have elastic-strap safety goggles that cover the entire glasses and seal against the forehead. **Always check with your instructor before purchasing eye protection from somewhere other than The NTCC College Store.**
 - **Beginning Tuesday, February 3, students arriving to lab without proper safety glasses or goggles will not be allowed to participate in the experiment and will receive a grade of zero for that experiment.** Before that date, safety glasses/goggles may be rented from the instructor for the cost of five (5) points deducted from the behavior, safety, and teamwork (BST) grade.
- Scientific Calculator

A scientific calculator is required for this course. A model TI-36x Pro or TI-30Xa is suggested, but many models will work; check with your instructor. **You will NOT be allowed to use a graphing calculator, programmable calculator, or cell-phone calculator during any exam in this course.**
- Pencils and Erasers

Pencil is mandatory for writing on quizzes and exams. A strong, sturdy eraser is required to ensure that your work is professionally presentable. Any papers submitted in pen will not be graded and will receive a grade of zero. **Any papers that are too sloppy, messy, or unreadable will incur severe point deduction or earn a grade of zero.** Pentel Hi-Polymer Eraser (#ZEH10) is the recommended eraser, but any good eraser will work fine.

Recommended Instructional Materials

- Molecular Model Set for Organic Chemistry
(ISBN # 0205081363)
Publisher: Prentice Hall
- *Organic Chemistry* – Klein; 4th Edition (ISBN # 9781119761075) Publisher: Wiley

Some lecture material from the Klein text that does not appear in the Smith text may be included in the course. The Klein text is recommended additional reading, but is not required for the course. Attendance in the face-to-face lecture is required. A copy of the Klein text is available in the STEM Lab – MS 112.
- Additionally, extra reading and study materials are available in the STEM Lab – MS 112.

Minimum Technology Requirements:

- Scientific Calculator - TI-36x Pro or TI-30Xa are recommended
- Wireless Internet capable laptop computer or tablet (Chromebooks are not recommended)

Required Computer Literacy Skills:

- Web browsing skills for working with the online homework system
- Ability to use Blackboard for access to course information
- Competent and professional emailing skills
- **Adobe PDF Scanner, CamScanner, or similar free phone/tablet app for scanning and uploading lab notebook pages.**
- Functional use of MS Word and Excel for writing lab reports
- Video conferencing capability using Zoom or Teams through computer or mobile phone.

Communications:

- The major communication pathway between instructors and students in this course is face-to-face during lecture and laboratory sessions and during office hours. Students are expected to ask questions, participate in discussions during lecture and laboratory sessions, and seek assistance from the instructor and tutors in person.
- NTCC email is the official form of communication used by the college. Email communications from non-NTCC email addresses will not be answered.**
 - Students are expected to check Blackboard and their NTCC email accounts regularly.
 - This course does not use TEAMS for any communication. Messages in TEAMS or Blackboard messages will not be seen or answered. Use NTCC email for communication outside of class.
- Course announcements that occur outside of lecture and lab sessions will be announced via Blackboard's announcement feature. These will be copied to students via NTCC email.
- All grading policies and due dates for online homework assignments are listed in the online homework system.

Evaluation/Grading Policy:

	%
Attendance	3
Quizzes	10
Unit Exams	45
Final Exam	5
Laboratory	25
ALEKS Assignments	10
ALEKS Pie Progress	2
Total	100

Final course grades are rounded to the nearest whole number percent, and letter grades assigned using the grading scale.

	%
A	90-100
B	80-89
C	70-79
D	60-69
F	0-59

- Grades will be posted to Blackboard throughout the course. Blackboard provides an approximate course grade, which is typically within 1-3% of the actual course grade. **The instructor's Excel gradebook is the last word in grades and is what decides the final grades for the course.** At any time during the term, students can request to view their grades in the instructor's gradebook or can request a pdf copy of their grades.
- Questions about what score on the Final Exam is required to earn a particular grade in the course will not be answered. Please do not ask.

Exams:

- Eight unit exams will be given during the term. Unit exams are administered on campus in person as scheduled.
 - All unit exams in the course will be held at 400pm on Thursdays in MS 124.
 - Exams are scheduled for 90 minutes.
- There will be no make-up exams for missed exams without authorization before the exam date.**
- Exam dates are subject to change, if circumstances dictate it. Ample notice will be given verbally during class, in such instances. Under some rare circumstances, students may take exams in advance; this will be decided on a case-by-case basis in advance of the exam date.
- The American Chemical Society (ACS) Standardized Two-Semester Organic Chemistry Final Exam** will be administered in this course. The ACS Exam is a nationally administered exam that covers topics from the year-long course in general chemistry. Questions on this exam will cover topics from all of CHEM 2423 and 2425. This is a 70-question multiple choice exam with strict guidelines that will be discussed in class. This exam is challenging and will give students an idea as to how they perform relative to other students across the nation (community college and university) that take this test.
 - The ACS Final Exam is administered during the required scheduled final exam time set by NTCC. There will not be any rescheduling of the final exam.
 - Students with an exceptional performance on the ACS Final Exam – 80 percentile or above – will automatically earn a course grade of "A" for the semester, provided they meet the following criteria:
 - no grades of zero on any unit exam
 - no unexcused lab absences for the whole semester
 - a score of 50% or above on total ALEKS work for the semester
 - no more than three unexcused lecture absences during the semester.
- Guidelines for in-person exams in this course:** All of the unit exams in this course follow the same guidelines as the ACS Final Exam.
 - At the instructor's discretion, students may be assigned seats during an exam period.
 - Students are only allowed to bring pencils, erasers, and scientific calculators into the testing room.
 - Programmable calculators, graphing calculators, and cell-phone calculators are not allowed.** Sharing calculators will not be permitted.
 - Bags, purses, etc. are not allowed at the student tables and should be stowed at the front of the room
 - Cell phones are not permitted. Phones must be turned off and surrendered to the instructor during the

exam. A student in possession of a phone once the exam has started will earn a grade of zero on that exam. If a student's phone sounds, disrupting the exam, that student will earn a grade of zero on the exam and be asked to leave the testing room.

- Watches are not permitted in the exam room; watches, and other personal electronic devices, must be stowed in a bag or surrendered to the instructor.
- Students will be provided a formula sheet for each exam. Other papers or notes will not be permitted during the exam.
- Students that leave the testing room during the exam must turn in the exam to be graded and cannot return to the exam room until the testing period is over.
- A student found in violation of any of these guidelines during an exam period will earn a grade of zero on that exam.
- **Graded Exams will not be handed back to the student.** Students are required to review their graded exams with the instructor. Students can make an appointment to review their exams with the instructor at times outside of office hours as well. Reviewing an exam is worth 5 points and is not extra credit. **Students must review their exam 24 hours before the start of the next exam to earn the full points.**

Exam 1	Synthesis & Mass Spectrometry	Ch 9, 11, 12, A	Thurs, Jan 29	MS 124 - 400pm
Exam 2	Radicals	Ch 13	Thurs, Feb 12	MS 124 - 400pm
Exam 3	Nuclear Magnetic Resonance	Ch C	Thurs, Feb 26	MS 124 - 400pm
Exam 4	Dienes & Pericyclic Reactions	Ch 14, 25	Thurs, March 12	MS 124 - 400pm
Exam 5	Aromatic Compounds	Ch 15, 16	Thurs, April 2	MS 124 - 400pm
Exam 6	Carbonyl Chemistry	Ch 17	Thurs, April 16	MS 124 - 400pm
Exam 7	Aldehydes & Ketones	Ch 18	Thurs, April 23	MS 124 - 400pm
Exam 8	Carboxylic Acids & Derivatives	Ch 19, 20	Thurs, May 7	MS 124 - 400pm
Final	ACS Final Exam (110 min)	Two-Semester Cumulative	Thurs, May 14	MS124 - 200pm

Institutional/Course Policy:

- Students are expected to be working on assignments outside of class on their own time throughout the entire duration of this course. For each hour that you spend in class, plan to spend a minimum of three hours out of class studying, reading the book, working on homework problems, etc.
- Syllabus Quiz
 - A **required** syllabus quiz will be administered at the start of the semester. The Syllabus Quiz is given through blackboard. This quiz is a binding agreement that you have received the syllabus and agree to its terms. The Syllabus Quiz is **due Tuesday, February 3 at 1159pm**. **Students not completing the Syllabus Quiz with a score of 100% by the due date and time will be dropped from the class and not allowed to reenroll regardless of class participation.**
- Quizzes
 - A quiz will be given during all lectures. Students who are absent from class will earn a zero on the quiz, and makeup quizzes will not be given.
 - **Late Quizzes:** Quizzes that are "LATE" will earn a grade of zero; although, the late quizzes may be marked with comments for feedback on the content.
 - **In-Class Quizzes:** These quizzes are late when the instructor leaves the classroom. Quizzes not in the instructor's possession when they leave the classroom at the end of class are considered "LATE".
 - **Take-Home Quizzes:** These quizzes are considered late if they are not in the instructor's possession at the start of the class period. Take-Home Quizzes submitted to the instructor in any fashion once lecture has started are considered "LATE".
 - **Early Take-Home Quizzes:** Take-Home Quizzes can be turned in early for extra credit. They must be turned in during class or handed directly to the instructor outside of class more than 24 hours before the quiz is due, or by a date and time specified on the quiz.

- Attendance
 - Attendance is mandatory for this course.
 - You are expected to attend all classes. Chemistry is too hard to learn on your own. Some lecture material not found in the text may be presented during the semester that may show up on exams.
 - Attendance is tracked through the Blackboard Attendance feature, and counts toward your course grade.
 - Students who are late to class will lose attendance points.
 - Attendance points may be lost for attitude, teamwork, and/or other interpersonal issues.
- Online Homework
 - This course uses the ALEKS online homework system. Details about registering in ALEKS can be found on the course Blackboard page and will be discussed in the first day of class.
 - Assignments, due dates, and grade policies are listed in the ALEKS system.
 - Late work is accepted in ALEKS according to the guidelines posted in ALEKS and on Blackboard.
 - **Access to a computer with the internet is required for this course.** Computers are available on campus in the STEM Lab (MS 112) and the Learning Commons.
- Electronic Devices Policy
 - Use of cell phones is prohibited during class and lab time. Students using phones for unapproved purposes during lab will be asked to leave lab and will earn a grade of zero on material for that lab period.
 - Students are not to be in possession of electronic devices (phones, music players, watches, computers, tablets, headphones, etc.) during an exam.
 - Students found with devices other than scientific calculators during an exam will earn a grade of zero on that exam.
- Laboratory Experiments
 - There will be 13 experiments performed during the laboratory periods over the course of the term.
 - Any lab work not completed and turned in will receive a grade of zero.
 - Any student earning a zero grade on three or more "During Lab" assignments will earn a grade of "**F**" in this course.
 - A schedule of experiments will be provided as a separate handout.
 - It is the responsibility of the student to arrive to lab prepared for the correct scheduled experiment.
- Laboratory Conduct and Attire
 - Students are expected to adhere to the guidelines set forth in the "Commitment to Laboratory Safety Pledge" and in the safety video.
 - Students must wear long pants covering their ankles—closed shoes (no exposed skin or sock), and shirts that cover their shoulders.
 - Approved safety glasses/goggles are to be worn at all times in the lab. Students who wear corrective-vision glasses must have elastic-strap safety goggles that cover the entire glasses and seal against the forehead.
 - Long hair should be pulled back.
 - All jewelry - rings, watches, bracelets, etc. - should be removed.
 - Failure to follow laboratory safety protocols could result in injury to yourself or others and will result in reduction of your laboratory grade.
 - Students not dressed appropriately for lab will be asked to leave and will earn a grade of zero on that experiment.
- Laboratory Assignments
 - Details about laboratory assignments can be found on the course blackboard.
 - All laboratory due dates, deadlines, and late policies are explained on the course blackboard.
 - **Laboratory assignments require uploading pdf copies of notebook pages to blackboard. Students need a scanner app on their phone or table to complete this task. Adobe Scan PDF Scanner and CamScanner are free options available among others.**
 - Students not turning in the copy notebook pages of complete Prelaboratory Work at the start of lab will not be allowed to participate in that experiment and will receive a grade of zero on that experiment.
 - Unless otherwise stated, Lab Notebook Pages are due at the end of the laboratory period. Data and Observation Notebook Pages must be uploaded as pdf to the blackboard assignment by 1159pm on the day that the physical copy pages were turned in.
 - The typed Written Report will be submitted electronically via blackboard. Reports will be written using the Turinitin Clarity tool built into blackboard. Reports are due at 1159pm on the Sunday after the experiment is completed. More details about writing and submitting reports will be provided in class and on

blackboard.

- Postlab Questions are submitted in blackboard and are due at 1159pm on Sundays.
- Specific experimental and report details and due dates are listed on the course Blackboard page, and it is the students' responsibility to check for current requirements and due dates.
- Students found working on lab work during lecture will lose significant points or earn a grade of zero on that assignment.

- Laboratory Evaluation/Grading Policy

- *The laboratory portion of the course counts towards 25% of your overall course grade.*
- The overall laboratory grade is the sum of all of all the points earned on laboratory assignments as a percentage.
- **Students must pass the laboratory portion of the course with a 70% or higher in order to pass the course, regardless of their grades in the lecture portion of the course.**
- Copying answers on any work will not be tolerated. Lab papers that appear to have answers copied from other students or internet sources or that appear to have cheated in any way will earn a grade of zero.
- Details about what is expected for laboratory assignments can be found on the course blackboard page.
- Specific experimental and report details and due dates are listed on the course Blackboard page, and it is the students' responsibility to check for current requirements and due dates.
- Additionally, relevant rubrics can be found on the course blackboard page.
- Students are expected to attend all laboratory periods.
 - Failing to attend lab will earn you zero points for that experiment.
 - **There are no make-up experiments in this course.**
 - "I have to work" is not an acceptable excuse for missing a laboratory period.
- Leaving lab early is not permitted; students leaving lab before the experiment is completed without permission of their lab partner(s) and instructor may earn a grade of zero on that experiment.

- Withdrawal Date (Drop Date)

- **Thursday, April 16** is the last day to withdraw from the course with a grade of "**W**". If you stop attending class and fail to officially withdraw, expect to earn a grade of "**F**" in the course.

- Student Athletes

- It is the student athlete's responsibility to communicate with the instructor. If the athlete will be absent from class or lab, it is the student's responsibility to inform the instructor with as much advance notice as is logistically possible. Arrangements can be made for missed assignments, quizzes, experiments, exams, etc. with advance notice from the student. If no notice is provided from the student, missed assignments, quizzes, experiments, exams, etc. will not be excused and will earn grades of zero.

- Student Accommodations

- Students that have classroom accommodations from the Advising Office according to NTCC's ADA guidelines are responsible for ensuring that their accommodations have been received by the instructor and are responsible for communicating with the instructor about their accommodations. Students with official accommodations will have their indicated needs met according to NTCC's ADA guidelines.
- See also later in this syllabus for the official ADA Statement.

- Late Enrollment of Students

- Students that have enrolled in the course after the start of the semester are still responsible for any course material from the start of the semester. Quizzes may be made up if the student discusses in-person with the instructor on their first day of class after enrollment. Otherwise, grades of zero will be given on these quizzes. ALEKS due dates will not be changed for late-enrolled students. Late assignment policies in ALEKS still apply.

- Extra Credit Opportunities

There are many ways to earn "Extra Credit" in this course. There will be no additional extra credit at the end of the semester to bump up student grades.

- 10% of each exam is extra credit. Meaning students can earn up to 110% on each unit exam.
- Extra credit assignments are available in ALEKS.
- Completing the course evaluation at the end of the semester will net the student 3 extra credit exam points. The evaluation system automatically tracks who completes the course evaluation. Points will be awarded during the final exam; evaluations must be complete prior to the final exam to earn points.
- Prelaboratory Assignments and Take-Home Quizzes can be turned in up to 24 hours early for extra credit.
- Students have the opportunity to serve as judges for the Region VIII Science Fair for extra credit.

- Students have the opportunity to participate in the Psi Beta Suicide Awareness 5k for extra credit.
- Students can erase portions of the white boards in class or lab for extra credit.
- Additional extra credit opportunities may become available during the semester at the discretion of the instructor. These will be announced during class or on blackboard.

Tentative Course Timeline:

- The instructor reserves the right to make adjustments to this timeline at any point in the term. This course will cover most of the material in Chapters 12-20, and 22 the Burge text, additional material may be included if time permits. More detail can be found by examining the Table of Contents in the text and the detailed course schedule posted on Blackboard.

	Lecture	Lab
Week 1	Synthesis & Chapter 9 Review Mass Spectrometry	Lab Check In
Week 2	Radicals I Radicals II	Exp 11
Week 3	Radicals III Nuclear Magnetic Resonance	Exp 12
Week 4	¹ H-NMR I ¹ H-NMR II	Exp 13
Week 5	¹³ C-NMR Dienes	Exp 14
Week 6	Cycloaddition Pericyclic Reactions	Exp 15 & 16
Week 7	UV-Vis Spectroscopy Aromatics	Exp 16
Week 8	Electrophilic Aromatic Substitution I Electrophilic Aromatic Substitution II	Exp 17
SPRING BREAK		
Week 9	Electrophilic Aromatic Substitution III Other Aromatic Reactions	Exp 18
Week 10	Carbonyl Chemistry Organometallic Reactions I	Exp 19
Week 11	Organometallic Reactions II Aldehydes & Ketones I	Exp 20
Week 12	Aldehydes & Ketones II Aldehydes & Ketones III	Exp 20 & 21
Week 13	Carboxylic Acids Nitriles	Exp 21
Week 14	Carboxylic Acid Derivatives I Carboxylic Acid Derivatives II	Exp 22
Week 15	Alpha Carbon Chemistry Carbonyl Condensation Reactions	Exp 23 Lab Check Out
Week 16	ACS Final Exam	

Student Responsibilities/Expectations:

- This course covers a lot of material and moves rapidly, so do not fall behind.
- ***The only way to learn chemistry is through practice.*** You must be willing to spend time working problems from the textbook to be successful. If you are having problems with a particular topic, it may even be necessary to work problems from the textbook that are not assigned.
- At the first sign of trouble, you should seek help immediately. I am happy to help you with any of your chemistry coursework. However, if you wait too long to seek help, there is a point where there will be nothing I can do to help you.
- Do not wait until the night before a test to study. Almost everything we cover will come up again later in the class. If you learn the material only long enough to take an exam, you will not recognize it when we encounter it again. This will cause you to struggle through the entire course and to struggle through future chemistry courses.
- Questions and/or observations are encouraged during the class period. Courteous and attentive behavior is always expected. Students who consistently misbehave can expect to have their grade lowered.
- Like all colleges, Northeast Texas Community College strives to be a "community of scholars." Please remember

that you and all of the students in this class are pursuing very important goals in your lives. As human beings and as scholars, I expect every student to be courteous and considerate toward other students throughout the lecture and laboratory portions of this course.

- Work with a classmate on the homework, but do not just copy answers that you do not understand. There is a difference between working together and cheating. ***If it feels like cheating, then it is cheating.***

Side Bar on Academic Integrity

Students are expected to do their own work in this class, in college and at the university, in their careers, and in life in general. To this end, in this course, students are expected that anything submitted for a grade is their own work and represents their personal efforts.

- ✓ Students are not to use artificial intelligence (AI) or any internet resources on any work submitted for a grade in this course, unless otherwise instructed by the professor.
- ✓ Work that appears to have unauthorized use of internet resources or AI will earn a grade of zero.
- ✓ Work that appears to be copied from other present or former students of this course will earn a grade of zero.
- ✓ Students that have committed more than one violation of Academic Integrity will earn an **"F"** in the course.
- ✓ Cheating of any form on any exam is not allowed. Unless expressly told otherwise, students are to work on their own in silence during the exam session. Students found cheating on any exam in this course will earn an **"F"** in the course.

The goal of this course to teach students the course material, and students in this majors-level course will be required to use this material in future courses and in their careers; in addition, a strong understanding of chemistry leads to greater understanding of the world around us. Violating Academic Integrity undermines these core values of education. Additionally, students that cheat their way through college courses become workers that cannot perform their duties or university students that do not understand the basic material taught to them in college. This reflects poorly on the student, their instructors, and the college as a whole. This damages the reputation of the instructors and the institution in the eyes of the community.

Course Student Learning Outcomes: Upon successful completion of this course, students will...

1. Correlate molecular structure with physical and chemical properties of aliphatic and aromatic organic molecules.
2. Identify organic molecules using appropriate organic nomenclature.
3. Predict the mechanism and outcome of aliphatic and aromatic substitution and elimination reactions, given the conditions and starting materials.
4. Predict the chirality of reaction products based on enantiomeric and diastereomeric relationships.
5. Describe reaction mechanisms in terms of energetics, reaction kinetics, and thermodynamics.
6. Use spectroscopic techniques to characterize organic molecules and subgroups.
7. Formulate appropriate reaction conditions for the synthesis of simple organic molecules.
8. Perform chemical experiments, analysis procedures, and waste disposal in a safe and responsible manner. Utilize scientific tools such as glassware and analytical instruments to collect and analyze data.
9. Record experimental work completely and accurately in laboratory notebooks, and communicate experimental results clearly in written reports.
10. Identify and utilize appropriate separation techniques such as distillation, extraction, and chromatography to purify organic compounds.
11. Predict the mechanism and outcome of aliphatic and aromatic substitution and elimination reactions, given the conditions and starting materials. Predict the chirality of reaction products based on enantiomeric and diastereomeric relationships.
12. Correlate molecular structure with physical and chemical properties of aliphatic and aromatic organic molecules, in a laboratory setting.
13. Describe reaction mechanisms in terms of energetics, reaction kinetics, and thermodynamics, in a laboratory setting.
14. Use spectroscopic techniques to characterize organic molecules and subgroups, in a laboratory setting.

NTCC Academic Honesty/Ethics Statement:

Refer to the "Sidebar on Academic Integrity" at the top of this page for additional guidelines.

NTCC upholds the highest standards of academic integrity. The college expects all students to engage in their academic pursuits in an honest manner that is beyond reproach using their intellect and resources designated as allowable by the course instructor. Students are responsible for addressing questions about allowable resources with the course instructor. Academic dishonesty such as cheating, plagiarism, and collusion is unacceptable and may result in disciplinary action. This course will follow the NTCC Academic Honesty and Academic Ethics policies stated in the Student Handbook. Refer to the student handbook for more information on these subjects.

Statement Regarding the Use of Artificial Intelligence (AI) Technology:

See also the "Sidebar on Academic Integrity" on the previous page.

Absent a clear statement from a course instructor, use of or consultation with generative AI shall be treated analogously to assistance from another person (collusion). Generative AI is a subset of AI that utilizes machine learning models to create new, original content, such as images, text, or music, based on patterns and structures learned from existing data (Cornell, Center for Teaching Innovation). Unauthorized use of generative AI tools to complete an assignment or exam is not permitted. Students should acknowledge the use of generative AI and default to disclosing such assistance when in doubt. Individual course instructors may set their own policies regulating the use of generative AI tools in their courses, including allowing or disallowing some or all uses of such tools. Students who are unsure of policies regarding generative AI tools are encouraged to ask their instructors for clarification. **(Adapted from the Stanford University Office of Community Standards-- accessed August 31, 2023)**

- **Extra Credit Opportunity:**

- As a reward for making it this far, attach a picture of a shark to the last part of the Syllabus Quiz by 1159pm Tuesday, February 3 to get three extra credit exam points.

Alternate Operations During Campus Closure and/or Alternate Course Delivery Requirements:

In the event of an emergency or announced campus closure due to a natural disaster or pandemic, it may be necessary for Northeast Texas Community College to move to altered operations. During this time, Northeast Texas Community College may opt to continue delivery of instruction through methods that include, but are not limited to, online through the Blackboard Learning Management System, online conferencing, email messaging, and/or an alternate schedule. It is the responsibility of the student to monitor NTCC's website (<http://www.ntcc.edu/>) for instructions about continuing courses remotely, Blackboard for each class for course-specific communication, and NTCC email for important general information.

Additionally, there may be instances where a course may not be able to be continued in the same delivery format as it originates (face-to-face, fully online, live remote, or hybrid). Should this be the case, every effort will be made to continue instruction in an alternative delivery format. Students will be informed of any changes of this nature through email messaging and/or the Blackboard course site.

ADA Statement:

It is the policy of NTCC to provide reasonable accommodations for qualified individuals who are students with disabilities. This College will adhere to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations as required to afford equal educational opportunity. It is the student's responsibility to request accommodations. An appointment can be made with the Academic Advisor/Coordinator of Special Populations located in Student Services and can be reached at 903-434-8264. For more information and to obtain a copy of the Request for Accommodations, please refer to the special populations page on the NTCC website.

Family Educational Rights and Privacy Act (FERPA):

The Family Educational Rights and Privacy Act (FERPA) is a federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education. FERPA gives parents certain rights with respect to their children's educational records. These rights transfer to the student when he or she attends a school beyond the high school level. Students to whom the rights have transferred are considered "eligible students." In essence, a parent has no legal right to obtain information concerning the child's college records without the written consent of the student. In compliance with FERPA, information classified as "directory information" may be released to the general public without the written consent of the student unless the student makes a request in writing. Directory information is defined as: the student's name, permanent address and/or local address, telephone listing, dates of attendance, most recent previous education institution attended, other information including major, field of study, degrees, awards received, and participation in officially recognized activities/sports.