



CHEM 1412.201 FE - General Chemistry II F2F

Course Syllabus: Summer 2026

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

Instructor: Drew L. Murphy, PhD

Office: MS 115

Phone: 903-434-8214

Email: dmurphy@ntcc.edu

Weekday	Office Hours
Monday	None
Tuesday	None
Wednesday	None
Thursday	None
Friday	None

There are no official office hours during the summer term. I will do my best to be available before class every day. You can always schedule an appointment to reserve a specific time.

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.

Course Description:

4 credit hours.

Lecture/Lab/Clinical: Three hours lecture and four hours of lab each week.

Continuation of CHEM 1411. Topics include: chemical equilibrium, solutions, phase diagrams, acid-base concepts, thermodynamics, kinetics, electrochemistry, nuclear chemistry, and descriptive inorganic chemistry. May also include an introduction to organic chemistry. Successful completion (final grade of C or better) of CHEM 1412 will allow the student to continue on to Organic Chemistry I - CHEM 2423. (Spring, Summer)

Prerequisite(s): CHEM 1411 with final grade of C or better

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

Student Learning Outcomes:

1. state the characteristics of liquids and solids, including phase diagrams and spectrometry;
2. articulate the importance of intermolecular interactions and predict trends in physical

- properties;
3. identify the characteristics of acids, bases, and salts, and solve problems based on their quantitative relationships;
 4. identify and balance oxidation-reduction equations, solve redox titration problems;
 5. determine the rate of a reaction and its dependence on concentration, time, and temperature;
 6. analyze and perform calculations with the thermodynamic functions: enthalpy, entropy, and free energy;
 7. apply the principles of equilibrium to aqueous systems using Le Châtelier's Principle to predict the effects of concentration, pressure, and temperature changes on equilibrium mixtures;
 8. discuss the construction and operation of electrochemical cells, and determine standard and non-standard cell potentials;
 9. define nuclear decay processes;
 10. describe basic principles of descriptive inorganic chemistry;
 11. use basic apparatus and apply experimental methodologies used in the chemistry laboratory, conduct basic laboratory experiments with proper laboratory techniques, and demonstrate safe and proper handling of laboratory equipment and chemicals;
 12. make careful and accurate experimental observations, record experimental work completely and accurately in laboratory notebooks, and communicate experimental results clearly in written reports;
 13. relate physical observations and measurements to theoretical principles, interpret laboratory results and experimental data, and reach logical conclusions;
 14. design fundamental experiments involving principles of chemistry and chemical instrumentation;
 15. identify appropriate sources of information for conducting laboratory experiments involving principles of chemistry.

Evaluation/Grading Policy:

The breakdown of the course requirements is as follows:

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

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

Percentage	Letter Grade
90% and above	A
80%-89%	B
70%-79%	C
60%-69%	D
59% and below	F

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

Five unit exams will be given during the term. Unit exams are administered on campus in person as scheduled. 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 General 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 1411 and 1412. 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:
 1. no grades of zero on any unit exam
 2. no unexcused lab absences for the whole semester
 3. a score of 50% or above on total ALEKS work for the semester
 4. 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	Chapters	Date and Time
Exam 1	12, 13, 14	Monday, July 20 - 1020am
Exam 2	14, 20, 15	Monday, July 27 - 1020am
Exam 3	16, 19	Monday, August 3 - 1020am
Exam 4	17, 18	Monday, August 10 - 1020am
Exam 5	18	Wednesday, August 12 - 1020am

Laboratory Grading

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.

- Any student earning a zero grade on three or more "During Lab" assignments will earn a grade of "F" in this course.
- Questions in the lab manual that require written explanations must be answered in complete, thoughtful sentences. Failure to do so will result in loss of points.
- Calculations in the lab report must show all of the steps necessary to generate the answers provided, including proper use of units and significant figures. Failure to do so will result in loss of points.
- Lab papers must be completed neatly in pencil. Lab papers that are sloppy and/or illegible will not be graded; although, some points may be earned for completing the experiment. Errors must be completely erased. Lab reports written in pen and lab reports with scratched-out or scribbled-out writing will not be accepted and will earn zero points.
- All pages of the prelab and the during lab assignments must be properly stapled and in the correct order. Students will lose points for sloppy or incorrect submissions.
- 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.

- 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.

Extra Credit

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 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.

Required Instructional Materials:

Lecture Textbook

- *Chemistry, Atoms First* - Burdge & Overby; 5th Edition with ALEKS
 - **Publisher: McGraw/Hill** **ISBN Number: 9781266257483**
- 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

- Lab Manual for CHEM 1412 - Experiments in General Chemistry II (v 9.0)
 - NTCC Printing, only available in NTCC College Store
- 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 **Monday, July 20**, 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.

Additionally, extra reading and study materials are available in the STEM Lab – MS 112.

Optional Instructional Materials:

None

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

Functional use of MS Word and Excel for writing lab reports

Video conferencing capability using Zoom or Teams through computer or mobile phone.

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.

Lecture Sessions

- Lecture will take approximately 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. Exams will be conducted on-campus in person during the times scheduled. For more information about exams, see the syllabus section on exams.

Laboratory Sessions

- 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".
- 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.

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.

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 **Thursday, July 16 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.

- 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 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 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".
- 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

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 Policies

There will be **11** 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.

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.

Prelaboratory Assignments accompany each experiment in the lab manual and must be completed prior to working the experiment.

- Prelaboratory Assignments are due by the beginning of the laboratory period. Students not turning in a complete Prelaboratory Assignment will not be allowed to participate in that experiment and will receive a grade of zero on that experiment.
- Early Prelabs: Prelaboratory Assignments 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 they are due, or by a date and time specified by the instructor.
- Students are not to be working on ANY lab work during the lecture of this course without instructor authorization. Students found working on lab work during lecture will not be allowed to participate in the experiment and will earn grades of zero on lab work for that experiment.

Every experiment consists of data pages for recording data and observations during the experiment and post-lab questions to be completed during or after the experiment. Together, these pages are the "During Lab" assignment.

- Unless stated otherwise, During Lab Assignments are due at the end of the laboratory session.
- Any student earning a zero grade on three or more "During Lab" assignments will earn a grade of "**F**" in this course.

Withdrawal Date

Thursday, August 6 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.

Responsibilities and Expectations of Students

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.**

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.

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.

Students that have committed more than one violation of Academic Integrity 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.

Official NTCC statements regarding Artificial Intelligence and Academic Integrity follow later in this syllabus.

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 Thursday, August 6** 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.

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

Employees and students shall be permitted to explore artificial intelligence (AI) and implement its use in and out of the classroom in accordance with policy and administrative regulations. The use of AI shall only be as a support tool to enhance student outcomes or as necessary to engage in research and shall never take the place of faculty, staff, and student decision-making. Any use of AI must comply with law, policy, and administrative regulations relating to student and employee privacy and data security. A student shall only use AI tools with faculty permission and shall be expected to produce original work and properly credit sources, including AI tools used in creating the work.

Example:

APA (7th edition)

OpenAI. (2026). ChatGPT (March 25 version) [Large language model]. <https://chat.openai.com/>

MLA (9th edition)

OpenAI. ChatGPT. 25 Mar. 2026, <https://chat.openai.com/>.

Employees or students who use AI tools to deceptively harm, bully, or harass others shall be disciplined in accordance with policy. [See DH, DIA series, FFD series, FFE, FLB, and the FM series] AI Use by Employees and Students. Northeast Texas Community College 225500 TECHNOLOGY RESOURCES CRB ARTIFICIAL INTELLIGENCE (LOCAL) DATE ISSUED: 12/8/2025 1 of 1 UPDATE 50 CRB(LOCAL)-AJC Adopted: 12/16/2025

NTCC Academic Honesty/Ethics Statement:

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.

ADA Statement:

It is the policy of NTCC to provide reasonable accommodation 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 accommodation as required to afford equal educational opportunity. It is the student's responsibility to request accommodation. 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.

Tentative Course Schedule:

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 of 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.

Week	Lecture	Lab
1	States of Matter Solutions Kinetics	Specific Heat Freezing-Point Depression
2	Kinetics Nuclear Chemistry Thermodynamics	Iodine Clock Reaction Hard Water
3	Equilibrium Electrochemistry	Equilibrium Constant Le Châtelier's Principle
4	Acids and Bases	Electrode Potentials Voltaic Cells Buffers
5	Solubility	Acid-Base Titration Solubility Titration