CHEM 1410 – General Chemistry I  
*University of North Texas*  
*Fall 2021*

**COURSE INFORMATION**  
CHEM 1410-003 (Lecture) and CHEM 1410-231 (Recitation)  
**Lecture:** MWF, 11:00am – 11:50am, ENV 125  
**Recitation:** Wednesday, 1:00pm – 1:50pm, ENV 125

**Course Overview and Learning Outcomes**  
This is the first of a two-semester sequence of general chemistry for science majors, intended to introduce you to the foundations of chemistry. The material is presented in what is referred to as an *atoms first* approach, which means that we begin by talking about the parts of the atom, then how they join together to create molecules, then what kind of reactions the molecules can go through. It is a gradual building up of the information that you need to understand the next topic, hopefully told in a coherent story. We approach problems in both a qualitative and quantitative manner, so math skills (basic arithmetic, algebra, and calculator skills) are necessary. I want to encourage you to be actively engaged in your own learning process and to dive more deeply into discussion with your peers about the chemistry concepts you are learning. It is my goal to give you the opportunity to “talk chemistry” with people around you, so that you can think about the material and apply chemistry concepts to solve any chemistry problem you may face, instead of just memorizing and regurgitating material for an exam. I am available to answer questions (and encourage you to ask for help when you need it), but ultimately you are responsible for your own learning in this course. I ask that you put in the time and effort necessary to truly learn the material.

I expect every person in my classroom to contribute to an inclusive and respectful environment. Dimensions of diversity include sex, race/ethnicity, age, gender identity, sexual orientation, income, socio-economic status, political ideology, and primary language. Intersections of these dimensions must be valued in our classrooms, and my goal is to help you be successful in a chemistry classroom where everyone feels safe, respected, and welcome.

Upon successful completion of this course, you should understand: 1) atomic structure and behavior on the atomic scale and macroscale, as well as how to use atomic-scale understanding to explain macroscopic behavior, 2) molecule structure and reactions, 3) how tools and skills are used in chemistry, and 4) how to think critically about chemistry. More specific learning outcomes are listed in the Canvas course page.

**Prerequisites:** MATH 1100. You must also be enrolled in the recitation section accompanying this course (1410.231). It is recommended that you also be enrolled in CHEM 1430 laboratory.

**REQUIRED TEXT**  
*Chemistry, Atoms First, 4th Ed.* Julia Burdge, Jason Overby. You will also be using ALEKS 360.
CONTACT INFORMATION

Instructor
Dr. Molly Atkinson
E-mail: molly.atkinson@unt.edu
Office Location: CHEM 265
Office Hours: Monday and Friday, 12:00pm – 1:00pm

Teaching Assistant (TA)
Courtney Cooper
E-mail: courtneycooper@my.unt.edu
Office Location: CHEM 358
Office Hours: MW 9:00 – 10:00am; R 11:30am – 12:30pm

Office hours are times that I (or the TA) am in my office, with my door open and ready to talk to you! Feel free to come ask questions about the material being covered in class or anything else about chemistry. If you show up during normal listed office hours (shown above), you do not have to make an appointment or let us know that you are coming. If you cannot make those hours, for whatever reason, send us an email and we can make an appointment.

COURSE MATERIAL
I will try to adhere to this schedule as closely as possible, but dates are subject to change based on the pace of the course. This should give you a rough idea of what to expect. I reserve the right to change or modify the syllabus at any time. If changes are made, students will be notified during scheduled class times and the revised syllabus will be made available on Canvas.

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title of Chapter</th>
<th>Approximate Starting Date</th>
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<tbody>
<tr>
<td>1</td>
<td>Chemistry: The Science of Change</td>
<td>8/23</td>
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<tr>
<td>2</td>
<td>Atoms and the Periodic Table</td>
<td>8/30</td>
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<td>3</td>
<td>Quantum Theory and the Electronic Structure of Atoms</td>
<td>9/8</td>
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<tr>
<td>4</td>
<td>Periodic Trends of the Elements</td>
<td>9/13</td>
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<td>5</td>
<td>Ionic and Covalent Compounds</td>
<td>9/20</td>
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<td>6</td>
<td>Representing Molecules</td>
<td>9/29</td>
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<td>7</td>
<td>Molecular Geometry, Intermolecular Forces, and Bonding Theories</td>
<td>10/4</td>
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<tr>
<td>8</td>
<td>Chemical Reactions</td>
<td>10/11</td>
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<td>9</td>
<td>Chemical Reactions in Aqueous Solutions</td>
<td>10/20</td>
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<td>10</td>
<td>Energy Changes in Chemical Reactions</td>
<td>11/1</td>
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<td>11</td>
<td>Gases</td>
<td>11/12</td>
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<tr>
<td>12</td>
<td>Liquids and Solids</td>
<td>11/22</td>
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Important Dates
- September 6 – Labor Day, University Closed (No Class, No Office Hours)
- November 25-26 – Thanksgiving Break, University Closed (No Class, No Office Hours)
- December 1 – Last Day of CHEM 1410 Class
- December 3 – Reading Day (No Class, No Office Hours, Preparation Time for Exams)

Please check the UNT Academic Calendar for other important dates.

University of North Texas | Page 2
CHEM 1410, Fall 2021
COURSE STRUCTURE
Measuring Success in This Course

Points Breakdown
34% Semester Exams
22% Final Exam
11% ALEKS
11% Reading Assignments
11% Quizzes
11% Recitation, Participation, etc.

A = 100.0% - 90.0% possible points
B = 89.9% - 80.0% possible points
C = 79.9% - 70.0% possible points
D = 69.9% - 60.0% possible points
F = 59.9% - 0.0% possible points

There may be extra credit offered throughout the semester, at the discretion of the instructor. Extra credit will not be offered after December 1st, so do not ask!

Semester Exams (34%) and Final Exam (22%)
There will be FOUR 50-minute exams that are comprised of 20 multiple choice questions. Each exam will have 100 points possible. Your average will be calculated after dropping the lowest hourly exam grade. If a student receives a “0” because of cheating, that grade cannot be used as the dropped grade. There will also be a cumulative final exam at the end of the semester. All exams in this course are closed notes; this means that no additional resources may be used.

Please plan accordingly for the following Exam Dates:
Exam 1 (100 points) – Monday, September 13th
Exam 2 (100 points) – Monday, October 18th
Exam 3 (100 points) – Monday, November 8th
Exam 4 (100 points) – Monday, November 29th
Final Exam (200 points) – Monday, December 6th, 10:30am – 12:30pm

All exams must be taken at the regularly scheduled class time. Exams cannot be taken outside of the scheduled time. There will not be any makeup exams. A missed exam will count as your dropped test (unless there is a well-documented serious illness requiring hospitalization, or other documented extenuating circumstance). If classes are cancelled by the university on the day of a scheduled exam, then the test is automatically scheduled for the next class lecture period. Exams will be completed via pencil/paper/santron. I will provide the scantrons and paper. You are expected to bring the following items to each exam: your student ID, a writing utensil (preferably a pencil with a good eraser), and a scientific calculator. Cell phones, tablets, laptop computers, or other electronic devices will NOT be allowed! Scratch paper and scantrons will be provided. If you must leave the room at any time during an exam, you must turn in your exam to the instructor before leaving and will not be allowed to continue with the exam.
afterwards. If you arrive late to the exam and a worked exam has already been turned in, you will not be allowed to take the exam. This includes the final exam.

**ALEKS (11%) and Reading Assignments (11%)**
ALEKS will be used throughout the semester as help with mastery of the content presented in lecture, accessed through the Canvas site. ALEKS is a different type of learning system that is adaptive, so it can take a while to complete the objective assignments, which will be due every Sunday by 11:59pm (unless otherwise specified). Reading assignments will come from SmartBook, a program attached to the e-book. Additional practice problems (for no credit, but strongly recommended) can be accessed through Connect, also included within the bundle. We do not have time to cover absolutely everything in the lecture hour, so you need to do the pre-reading in order to be prepared for a useful discussion of the material.

**Quizzes (11%) and Recitation/Participation/etc. (11%)**
Attendance at the recitation hour is required. During recitation dates, we will have a weekly quiz, covering information from the previous class days. There will also be a group assignment, to be turned in at the end of the recitation period (or as otherwise instructed). This is a time for you to work on problems; recitation is not a social hour, nor is it time for working on homework or material for other classes.
iClicker will also be used during all class sessions (lecture and recitation) to track participation. If you complete 75% of all of the iClicker questions over the course of the semester, you will get 100% of the available iClicker points.

**HOW TO GET HELP**
The following opportunities are great ways to get help if you need it:
- Attend Instructor/TA drop-in office hours: Come with specific questions about the course, problems, help with technology (I'll do my best!), or whatever you might need. You do not need to make an appointment to come to office hours.
- Attend Chemistry Resource Center (CRC) drop-in tutoring: This is a drop-in tutoring center staffed by Chemistry graduate students in the Chemistry building, Room 231 (https://chemistry.unt.edu/undergraduate-program/instructional-resources).
- Sign up and attend (Peer-Led Team Learning) PLTL sessions: You sign up and agree to attend weekly meetings with a group from your class, led by a PLTL leader. This meeting is 90 minutes, once a week. More information about this program will be given in class and can be found on Canvas. This session is NOT intended to be a tutoring session.
- Attend the Learning Center in Sage Hall 315: There is also has a tutoring center in Sage Hall, with drop-in, appointments, or even online tutoring available.

**COURSE POLICIES**
**Face Coverings**
UNT encourages everyone to wear a face covering when indoors (regardless of vaccination status) to protect yourself and others from COVID infection, as recommended by current CDC guidelines. Face covering guidelines could change based on community health conditions.
Attendance
Attendance is required for both lecture and recitation. You will check-in through an online system, so make sure that you bring a phone/laptop/tablet/WiFi-enabled device to class. In order to assist with contact tracing, an assigned seating chart will be followed throughout the semester. Students are expected to attend class meetings regularly and to abide by the attendance policy established for the course. It is important that you communicate with the instructor prior to being absent, so that we can discuss and mitigate the impact of the absence on your attainment of course learning goals. Please inform the instructor if you are unable to attend class meetings because you are ill, in mindfulness of the health and safety of everyone in our community. If you are experiencing any symptoms of COVID-19 (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) or your health care provider PRIOR to coming to campus. UNT also requires you to contact the UNT COVID Team at COVID@unt.edu for guidance on actions to take due to symptoms of COVID-19, pending/positive COVID-19 test results, or potential exposure to COVID-19.

Classroom Behavior
Classes will begin/end as noted at the beginning of the syllabus; if you are late to class or anticipate having to leave early, please sit as close to the door as possible to minimize the disruption to the rest of the class. Disruptive behavior (such as talking, giggling, snoring, talking on a cell phone, playing on the Internet, or texting, etc.) will not be tolerated. Cell phones should be silenced during class. A student engaged in disruptive behavior can be asked to leave class immediately and can be suspended from class for a period of up to a week for the first offense, and longer if the behavior persists.

Late Work
Late work will not be accepted in this course, with the exception of documented university-excused absences. The instructor must be notified within 48 hours of the missed assignment and provided documentation. Prior notice, if possible, is best.

Other Notes
By university regulations, a grade of “I” (Incomplete) cannot be given as a substitute for a failing grade in a course. It is up to you to be aware of class withdrawal deadlines if you should choose to drop this course, as I will not do it for you. CHEM 1430 is the laboratory course and a separate course from CHEM 1410. Students will receive separate grades for the two courses. Dropping either course does NOT automatically drop you from the other course. (For lab classes, be aware that you should be registered for both a lab lecture course (CHEM 1430.00x) and a lab (CHEM 1430.3xx).

Regarding dissemination of information, I exclusively use Canvas to email the entire class with reminders of deadlines, changes to classroom policies, etc. In addition, I post the lecture notes and grades on Canvas. Please make it a habit to check Canvas (and your email) at least twice a week. I will not respond to email received from non-UNT email address, especially concerning grade information. With a personal email address, I cannot be certain that it is you on the other end. As such, please use your official UNT email address to email me.
UNIVERSITY OF NORTH TEXAS

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. Students in this course caught cheating or plagiarizing will receive a “0” for that particular assignment or exam. Additionally, the incident will be reported to the Dean of Students, who may impose further penalty. According to the UNT catalog, the term “cheating” includes, but is not limited to: a. use of any unauthorized assistance in taking quizzes, tests, or examinations; b. dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments; c. the acquisition, without permission, of tests or other academic material belonging to a faculty or staff member of the university; d. dual submission of a paper or project, or resubmission of a paper or project to a different class without express permission from the instructor(s); or e. any other act designed to give a student an unfair advantage. The term “plagiarism” includes but is not limited to: a. the knowing or negligent use by paraphrase or direct quotation of the published or unpublished work of another person without full and clear acknowledgment; and b. the knowing or negligent unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials.

ADA Accommodation Statement

The University of North Texas makes reasonable academic accommodation 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 prior to implementation in each class. Students are strongly encouraged to deliver letters of reasonable accommodation during faculty office hours or by appointment. 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 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 you 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). The system sends voice messages (and text messages upon permission) to the phones of all active faculty staff, and students. Please make certain to update your phone numbers at http://www.my.unt.edu. Some helpful emergency preparedness actions include: 1) know the evacuation routes and severe weather shelter areas in the buildings where your classes are held, 2) determine how you will contact family and friends if phones are temporarily unavailable, and 3) identify where you will go if you need to evacuate the Denton area suddenly. In the event of a university closure, please refer to Canvas for contingency plans for covering course materials.

Retention of Student Records

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

Acceptable Student Behavior

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

Access to Information – Eagle Connect

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

Student Evaluation Administration Dates

Student feedback is important and an essential part of participation in this course. The student evaluation of instruction is a requirement for all organized classes at UNT. The survey will be made available during weeks 13, 14 and 15 (November 15, 2021 – December 2, 2021) of the long semesters to provide students with an opportunity to evaluate how this course is taught. Students will receive an email from "UNT SPOT Course Evaluations via IASystem Notification" (noreply@iasystem.org) with the survey link. For more info, please visit the SPOT website (http://spot.unt.edu/) or email spot@unt.edu.

Survivor Advocacy

UNT is committed to providing a safe learning environment free of all forms of sexual misconduct, 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 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 or at (940)-565-2759.

University of North Texas | Page 6
CHEM 1410, Fall 2021