

CHEMISTRY 1440 – General Chemistry II Laboratory

Summer 2018

INSTRUCTOR INFORMATION

Dr. Charles Browning

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Phone: 940-369-7985

Office: CHEM 276

Office Hours: Tuesday 1:15-2:15 PM

Lab sections: Tuesday, Wednesday, Thursday

If you need to meet outside of normal office hours, please make an appointment.

REQUIRED TEXT

Modern General Chemistry Laboratory: Incorporating Computer-Oriented Data Acquisition and Evaluation Approach into the Student Laboratory Experience, William E. Acree, Jr.

Additional materials required: safety goggles/glasses

Recitation: This course has a **lab recitation that is solely online** in the form of Learning Modules. Each Learning Module will include a video demonstration on how to set up the laboratory experiment and related safe lab practices, brief tutorials or applications relating to the experiment and its concepts, and a **quiz that is part of the grade** for this course.

Learning Modules will be available all term once posted under Course Content, but **quizzes are only available beginning Mondays for the labs following that week until 10 minutes after the start of your lab section time.**

The link to the video demonstrations for CHEM 1440 playlist (best viewed in 1080p) is <https://www.youtube.com/playlist?list=PLZlpfOHYI5T42T3VbMZYvQv-9sSQXUHxs>

TENTATIVE SCHEDULE

Week of:	Recitation and Lab
7/10	Recitation: Learning module on safety and experiment 13, 14, 15 Tuesday Lab: Check-in, safety & <u>Experiment 13:</u> Chemical Kinetics I Wednesday Lab: <u>Experiment 14:</u> Introduction to Acid-Base Chemistry Thursday Lab: <u>Experiment 15:</u> Introduction to pH
7/17	Recitation: Learning module on experiment 16, 17, 18 Tuesday Lab: <u>Experiment 16A:</u> Determination of acetic acid in Wednesday Lab: <u>Experiment 17:</u> Determination of pK_a and molar mass Thursday Lab: <u>Experiment 18:</u> Acids and bases in common household products
7/24	Recitation: Learning module on experiment 19, 20, 21 Tuesday Lab: <u>Experiment 19:</u> Introduction to Spectrometry Wednesday Lab: <u>Experiment 20:</u> Chemical Kinetics II Thursday Lab: <u>Experiment 21:</u> Spectrophotometric determination of an equilibrium constant
7/31	Recitation: Learning module on experiment 22, 23, 25 Tuesday Lab: <u>Experiment 22:</u> Molar solubility and determination of solubility product Wednesday Lab: <u>Experiment 23:</u> Redox Titration Thursday Lab: <u>Experiment 25:</u> Electrochemistry – Verification of the Nernst equation
8/7	Recitation: None Labs: None

Laboratory reports/data sheets must be turned in within **48 hours (Thursday lab sheets can be turned in on Tuesdays)** of when the laboratory experiment is completed. The last laboratory report must be turned in to the TA **no later than 5:00 pm on August 10.**

MAKE-UP LABS

There are no make-up laboratories. If you miss a lab due to one of the following five reasons it will be excused. Otherwise, a missed laboratory will result in a zero for that experiment. **Turn in the documentation for the missed laboratory to the TA.**

Acceptable reasons for missing an experiment are:

1. Illness (with physician's note)
2. Death of a close family member or friend
3. Religious holiday (preplanned and cleared with instructor in advance)
4. An official University activity (preplanned and cleared with instructor in advance)
5. Cancellation of classes by the University (this includes inclement weather days or tornado sirens)

GRADING POLICY

Your grade will be determined by your best 11 of 12 quizzes from lab recitation and your performance in the laboratory (completed laboratory reports -top 11 of 12- and TA assessment of safe laboratory practices). This semester 12 laboratory experiments will be performed. The 285 total points in the laboratory are broken down as follows:

Best 11 of 12 Laboratory experiments	Points Possible = $11 \times 20 = 220$
TA Assessment of Safe Laboratory Practices	Points Possible = 10
Quizzes for lab recitation	Points Possible = $11 \times 5\text{pts} = 55$
Total:	= 285
90 – 100 % of the total points	Grade = A
80 – 89 % of the total points	Grade = B
70 – 79 % of the total points	Grade = C
60 – 69 % of the total points	Grade = D
Below 60 %	Grade = F

For individuals with a single excused absence, the total possible points in the laboratory will be adjusted appropriately to reflect the one excused absence. **For students with more than one excused absence, please see the Professor in charge.**

Teaching Assistants will enter grades on Blackboard Learn under the course page for lab recitation/lecture. It is the responsibility of the student to regularly check for consistency

between grades entered on BB and grades recorded on physical copies of the laboratory write-up.

ATTENDANCE AND CLASSROOM BEHAVIOR

Attendance is required at scheduled lab hours. Labs will begin as noted on myUNT, so do not be late. If you arrive late, you can not only miss any additional instructions given by the TA, but your group has already begun working, therefore, if you arrive more than 20 minutes late for lab, you will receive a 0 for that lab.

Disruptive and/or unsafe behavior will not be tolerated. Cell phones need to be muted during lab. A student engaged in disruptive or unsafe behavior can be asked to leave lab immediately and given a 0 for that lab. Disruptive or unsafe behavior includes, but is not limited to: not listening to the TA, horsing around in the lab, cell phone use (such as texting, playing games, taking phone calls, etc), not wearing safety goggle or glasses when in the lab, etc.

OTHER NOTES

By university regulations, a grade of "I" (Incomplete) cannot be given as a substitute for a failing grade in a course. Students may pick up a drop slip at the chemistry main office (CHEM 101) or at the registrar and must provide it to the lab recitation instructor of record (not the TA!) by the withdrawal date listed on the university website.

CHEM 1440 is the laboratory course and a separate course from CHEM 1420. 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 1440.00x) and a lab (CHEM 1440.5xx).

COURSE SAFETY STATEMENT (FOR LABORATORY COURSES)

Students in the laboratory are urged to use proper safety procedures and guidelines. While working in laboratory sessions, students are expected and required to identify and use proper safety guidelines in all activities requiring lifting, climbing, walking on slippery surfaces, using equipment and tools, handling chemical solutions and hot and cold products. Students should be aware that the University of North Texas is not liable for injuries incurred while students are participating in class activities. All students are encouraged to secure adequate insurance coverage in the event of accidental injury. Students who do not have insurance coverage should consider obtaining Student Health Insurance for this insurance program. Brochures for this insurance are available in the UNT Student Health and Wellness Center on campus. Students who are injured during class activities may seek medical attention at the Student Health and Wellness Center at rates that are reduced compared to other medical facilities. If you have an insurance plan other than Student Health Insurance at UNT, please be sure that your plan covers treatment at this facility. If you choose not to go to the UNT Student Health and Wellness Center, you may be transported to an emergency room at a local hospital. You are responsible for expenses incurred there.

Students 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. This also includes copying other students' data in lab, unless given express permission to do so by the TA; turning in a data sheet for an experiment that you were not physically present for; or copying other students' words or work for a lab report.

ADA STATEMENT: Office of Disability Accommodation at UNT

The University of North Texas makes reasonable academic accommodation for students with disabilities, per the Americans with Disabilities Act (ADA). Students seeking accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with an accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request accommodations at any time, however, ODA notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet with each faculty member prior to implementation in each class. For additional information see the Office of Disability Accommodation website at <http://disability.unt.edu>. You may also contact them 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, labs scheduled during that time are excused absences in addition to the one dropped lab.

UNT endeavors to offer you a high-quality education and to provide a supportive environment to help you learn and grown. And, as a faculty member, I am committed to helping you be successful as a student. Here's how to succeed at UNT: **Show up. Find Support. Get advised. Be prepared. Get involved. Stay focused.** To learn more about campus resources and information on how you can achieve success, go to <http://success.unt.edu/>