Chemistry 1465 Laboratory Syllabus Fall 2021

Lab CoordinatorBill Cleaverwcleaver@uta.eduOffice Hours:Mon 9:00-10:00 & Wed 2:00-3:00 in 217 CPB (and by appointment)

Required materials: CHEM 1465 Lab Manual, 5th Edition, Labflow online lab platform (labflow.com) and a scientific calculator. All experiments will be performed in-person during the lab period and all lab assignments will be submitted in the Labflow online lab platform.

Suggested Materials: A Sharpie marker (for glassware marking) may come in handy.

Safety Guidelines: IMPORTANT! You will be exposed to hazardous chemicals in this class. Personal protective equipment (PPE) is necessary to protect your body. You will not be admitted into the lab if any of the following guidelines are not met. If you violate any of the following guidelines, you may be asked to leave the lab. All missed work will receive zero credit.

1. Safety glasses are provided and are required at all times.

2. Shoes that cover <u>the entire foot</u> are <u>required at all times</u>. Absolutely no exceptions will be made to this guideline. Warnings will not be issued.

- 3. Long pants and sleeves are required at all times.
- 4. No musical or other entertainment devices may be used in chemistry lab at any time.
- 5. Cell phones are not permitted in lab and must be <u>turned off</u> and placed in your bag before you enter lab.
- 6. <u>Facemasks are recommended</u> and should be worn at all times.

<u>Mandatory Online Safety Training</u>: Students registered for this course must complete the University's required "Lab Safety Training" prior to entering the lab and undertaking any activities. Students should complete the required module as soon as possible, but no later than their first lab meeting. <u>Until all required Lab Safety</u> <u>Training is completed, a student will not be given access to lab facilities, will not be able to participate in any lab activities, and will earn a grade of zero for any uncompleted work.</u>

- Students must enroll themselves into the Lab Safety Training course at: <u>https://uta.catalog.instructure.com/browse/employees/ehs/courses/lab-safety-training-20212022</u> by clicking on the "Enroll" button available there. Follow instructions to enroll.
- 2. Login to Canvas at <u>https://uta.instructure.com</u> with your NetID and password.
- 3. Under Courses, click Lab Safety Training.
- 4. Follow the instructions, work your way through all of the modules and complete the two quizzes with a score of 80% or greater on each one in order to complete the training.

Once completed, Lab Safety Training is valid for the remainder of the same academic year (i.e. September through next August) for all UTA courses that include a lab. If a student enrolls in a lab course in a subsequent academic year, he/she must complete the required training again.

General questions about the Lab Safety Training, including content or enrollment should be directed to the Office of Environmental Health and Safety at <u>ehsafety@uta.edu</u> or (817) 272-2185. All technical questions/problems with online training should be directed to the Canvas Support Hotline either online or by calling 1 (855) 597-3401.

Teaching Assistants (TAs): Your TA's office hours will be announced in lab, via email, Teams and will be posted outside of 114 CPB. You may attend the office hours of any 1465 TA.

Week of:	Lab Schedule
Aug 25-27	No labs. Buy the lab manual and notebook in the bookstore. Complete the online safety training.
Aug 30-Sept 3	Lab Check-in, Lab & Safety orientation. Complete the online safety training and sign up for Labflow,
Sept 6-10	No Labs. Labor Day Holiday on Monday, Sept 6. <u>Sign up for Labflow.</u>
Sept 13-17	UTA-801: Mass and Volume Measurements
Sept 20-24	UTA-804: Acid Content in Vinegar
Sept 27-Oct 1	UTA-806: The Ideal Gas Law and Gas Constant
Oct 4-8	UTA-501: Energy Content of Fuels
Oct 11-15	UTA-807: Hess's Law and Calorimetry
Oct 18-22	UTA-810: Atomic Emission Spectra of Gases
Oct 25-29	UTA-502: Spectrophotometry and Beers Law
Nov 1-5	UTA-503: Molecular Shapes by VSEPR and Solid State Structures (completed during the lab period)
Nov 8-12	UTA-504: Polymers
Nov 15-19	UTA-745: Determination of the Equilibrium Constant of a Complex Ion
Nov 22-26	No Labs. Thanksgiving Break.
Nov 29-Dec 3	UTA-750: Batteries and Electrolysis and Lab Check-out
Dec 6-7	No Labs. Last day of classes is Tuesday, Dec 7.
Dec 9-15	No labs. University Final Exams.

CHEM 1465 Lab Schedule

Grading: The lab average, which comprises 25% of the Chemistry 1465 grade, is determined the following way:

Pre-Lab Quiz (Labflow)	35%
Post-Lab Report (Labflow)	55%
Lab Technique Score	10%

You must attend the lab and earn at least an average of 60% in lab to be eligible to pass the CHEM 1465 class

• **The Pre-Lab Quiz** is completed in Labflow and is available to be completed in the week before the lab. It is due 1 hour before the start of your scheduled lab. Each quiz is allowed three attempts and the highest score is kept. <u>Any student not scoring a minimum score of 70% on the Pre-Lab Quiz will not be</u> permitted to perform any face-to-face experiment that week.

• **The Post-Lab Report** is completed in Labflow and is available from the start of the experiment. It is due one week later at 11:59 the night before the next experiment. You are allowed multiple attempts on the lab report, however, there is a small point deduction for each additional attempt beyond the first. The one exception to this is UTA-503 which will be completed during the lab period.

• **The Lab Technique Score** is assigned by your TA at the end of the semester and is based on how well the lab techniques are learned and how much effort is put in during the face-to-face experiments.

Your lowest pre-lab quiz and post-lab report grades will be dropped. If you miss one experiment for any reason it will simply count as the dropped grade. Additional missed labs will receive zero credit. Any zero resulting from Academic Dishonesty is not eligible to be the lowest grade dropped. Each experiment runs for one week only. Do not turn in a report for an experiment for which you were absent. This is considered cheating and will be addressed as such.

<u>Attendance Policy</u>: The following is from UT-Arlington Undergraduate Catalog's Academic Regulations section

Class Attendance

Class attendance and lateness regulations will be established by instructors and announced to their classes. At the discretion of the instructor, such regulations may or may not include

provisions for making up work missed by the student as a consequence of an absence. Students who are late to class are responsible for reporting their presence to the instructor after the class is dismissed.

Information that stresses safety and technique is disseminated at the beginning of each lab period. Students are expected to be in the lab on time, and they will not be admitted to the lab more than 15 minutes after it begins. All missed work will receive zero credit. These 15 minutes are intended as a grace period for rare instances. It is not intended to become the norm. Abuse of this grace period will result in its cancellation. You are required to attend lab in the section for which you have registered. Do not go to another lab section.

Academic dishonesty: All students enrolled in this course are expected to adhere to the UT Arlington Honor Code:

I pledge, on my honor, to uphold UT Arlington's tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence.

I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.

Instructors may employ the Honor Code as they see fit in their courses, including (but not limited to) having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. Per UT System *Regents' Rule* 50101, §2.2, suspected violations of university's standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the student's suspension or expulsion from the University.

<u>Students with Disabilities:</u> Students who need an accommodation based on disability should arrange to meet with the laboratory coordinator to see that they are appropriately accommodated.

Students with Pregnancies: For students who are pregnant, it is recommended by the Chemistry and Biochemistry Dept. that you do not enroll into a chemistry lab at this time. If you become pregnant during the semester, we recommend dropping the course as soon as possible; and special provisions will be made to assist you in finishing the course at a later date. *Please see the Lab Coordinator for assistance.*

Face Covering Policy: All students and instructional staff are requested to wear facial coverings while they are on campus, inside buildings and classrooms (including labs). If students need masks, they may obtain them at the Central Library, the E.H. Hereford University Center's front desk or in most lab rooms. Students who refuse to wear a facial covering in class are putting themselves and others in the room at higher risk of transmission of diseases, including COVID-19.

If you drop or fail Chemistry 1465, grades earned in the lab cannot be carried over when you re-take Chemistry 1465.