Chemistry 1441 Laboratory Syllabus
Fall 2017

Lab Coordinator Bill Cleaver wcleaver@uta.edu
Office Hours: Mon 9:00-10:00 & Wed 2:00 – 3:00 in 217 CPB (and by appointment)

Required materials: *CHEM 1441 Lab Manual*, Seventh Edition (orange cover) and duplicating page lab notebook, both are available at the UTA Bookstore. Scientific calculator.

Suggested Materials: Additional graph paper and 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. Goggles, gloves and aprons are provided and are required at all times.
2. Shoes that cover the entire foot are required at all times. Absolutely no exceptions will be made to this guideline. Warnings will not be issued.
3. Long pants and sleeves are highly recommended.
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 turned off and placed in your bag before you enter lab.

Mandatory Online Safety Training: 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. Until all required Lab Safety 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.

1. Login to **Blackboard** at https://elearn.uta.edu with your NetID and password.
2. Under **My Blackboard** tab, click **Lab Safety Training.**
3. Click **Welcome** from the left pane to start and follow the instructions.

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 ehsafety@uta.edu or (817) 272-2185. All technical questions/problems with online training should be directed to the Blackboard Support Center either online or by calling 1-855-308-5542.

Teaching Assistants (TAs): Your TA's office hours will be announced in lab and will be posted outside of 114 CPB. You may attend the office hours of any 1441 TA.

CHEM 1441 Lab Schedule

Week of:	Lab Schedule
Aug 24-25	No labs. Buy the lab manual and notebook in the bookstore. Complete the online safety training.
Aug 28-31	Lab Check-in, Lab & Safety orientation. Complete the online safety training.
Sept 4-7	No Labs. Labor Day Holiday.
Sept 11-14	UTA-701: Mass and Volume Measurements
Sept 18-21	UTA-702: Separation of a Three Component Mixture
Sept 25-28	UTA-703: Formula of a Copper Oxide
Oct 2-5	UTA-704: Titration to Determine the Acid Content in Vinegar
Oct 9-12	UTA-705: Qualitative Analysis
Oct 16-19	UTA-706: The Ideal Gas Law and Gas Constant.
Oct 23-26	UTA-707: Hess's Law and Calorimetry
Oct 30-Nov 2	UTA-708: Synthesis of Tris-1,10-phenanthroline iron(II) chloride
Nov 6-9	UTA-709: Spectrophotometric Determination of Purity and Concentration
Nov 13-16	UTA-710: Atomic Emission Spectra of Gases
Nov 20-23	No Labs. Thanksgiving Holiday.
Nov 27-30	UTA-711: Chemiluminescence (Lab Check-Out Thur labs).
Dec 4-6	Hand in UTA-711 report. Lab Check-Out for Mon-Wed labs. (No labs Thur)
Dec 9-15	No labs. University Final Exams.

Grading: The lab average, which comprises 25% of the Chemistry 1441 grade, is determined the following way:

Quizzes	30%
Pre-Lab Assignment	20%
Post-Lab Reports	40%
Notebook/Technique	10%

• **Quizzes:** There will be a quiz given at the beginning of every lab period. They will cover material and techniques used in experiments preceding and including that day's experiment. The quiz will only be given in the first 10 minutes of the lab period. Missed quizzes cannot be made-up.

• **The Pre-Lab Assignment** is due when you walk through the door. Each pre-lab is worth 100 points. Pre-labs will not be accepted more than 15 minutes after the beginning of the lab. Any student not completing the Pre-Lab assignment will not be permitted to perform that week's experiment.

• **The Post-Lab Report** is due when you walk through the door for the next lab meeting. The post-lab consists of completing all the calculations and answering the questions outlined in the lab manual as well as a one or two paragraph conclusion where you will analyze your experimental results. Each post-lab is worth 100 points. Post-labs are considered late 15 minutes into the lab period and will be assessed a point-penalty of 25 points per day. Reports will not be accepted more than ***two*** days late. Students are responsible for contacting their TA to deliver a late report. Please do not take them to the Chemistry Office or to the Lab Coordinator.

• **The Lab Notebook/Technique:** You will hand in the carbonless copy of your data, signed by your TA, at the end of the lab period. Failure to do so will be counted as a lab absence. Your TA will grade your lab notebook as well as your lab technique during the experiment.

All work, with the exception of computer-generated graphs, must be original and hand-written. Photocopied or computer-generated work will not be accepted.

Your lowest pre-lab grade, post-lab grade and quiz grade will be dropped. 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 and any conflicts should be addressed to your TA at least a week in advance of the conflict (including observing religious holidays). *There are no makeup labs once the week is over.*

Do not turn in a report for an experiment for which you were absent. This is considered cheating and will be addressed as such.

Lab Problem Sessions

Lab Problem Sessions will be conducted during the first few minutes of most labs. These sessions are intended to provide a setting for students to work additional problems based on current lecture topics. During these sessions, students are encouraged to work in groups so that the immediate feedback from their peers and from the laboratory teaching assistant can help dispel common chemistry misconceptions. At the end of each session students will show mastery through a graded quiz, contributing 5% to each student's overall average in the course.

Attendance Policy: 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.

Students with Disabilities: 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.***

If you drop or fail Chemistry 1441, grades earned in the lab cannot be carried over when you re-take Chemistry 1441.