INSTRUCTOR INFORMATION

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Phone: 940-369-8829
Office: CHEM 363
Office Hours: MW 9-1050AM and F 1-230PM, email or message on Canvas for any appointment outside of those days/times

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. (this textbook is printed here at UNT and is sold at any local bookstore; it is the same lab manual from CHEM 1430)

Additional materials required: safety goggles/glasses (these can be purchased during the second week of classes on the first floor of the chemistry building, or from any bookstore)

Recitation: This course has a lab recitation that is solely online in the form of Learning Modules on the lab Canvas page. 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 available the week prior to the week of the lab experiment and are due 11:59PM the Sunday night before the week of the lab experiment.

The link to the video demonstrations for CHEM 1440 playlist (best viewed in 1080p) is https://www.youtube.com/playlist?list=PLZ1pfOHy15T42T3VbMZYvQv-9sSQXUHxs

TENTATIVE SCHEDULE

<table>
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<tr>
<th>Week of:</th>
<th>Recitation and Lab</th>
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| 1/13     | **Online Recitation:** Available Learning Module and Quiz: Experiment 19  
           | **Lab:** does not meet |
| 1/21     | **Online Recitation:** Mass-Based Approach to the Determination of the Henry’s Law Constant for CO2(g) Using a Diet Carbonated Beverage  
           | **Lab 1:** Experiment 19: Introduction to Spectrometry – Verification of Beer’s Law |
| 1/27     | **Online Recitation:** Learning module on experiment 21  
           | **Lab 2:** Mass-Based Approach to the Determination of the Henry’s Law Constant for CO2(g) Using a Diet Carbonated Beverage |
**Online Recitation**: Learning module on Thermodynamics of Urea solubility

**2/3**  
**Lab 3**: Experiment 21: Spectrophotometric determination of an equilibrium constant for complex formation

**2/10**  
**Online Recitation**: Learning module on experiment 14  
**Lab 4**: Thermodynamics of urea solubility (not in lab manual) *Lab report*

**2/17**  
**Online Recitation**: Learning module on experiment 15  
**Lab 5**: Experiment 14: Introduction to acid-base chemistry: determination of acetic acid in vinegar

**2/24**  
**Online Recitation**: Learning module on experiment 16A  
**Lab 6**: Experiment 15: Introduction to pH – Titration of acetic acid in vinegar and phosphoric acid in Coca-Cola

**3/2**  
**Online Recitation**: Learning module on experiment 17  
**Lab 7**: Experiment 16A: Determination of acetic acid in vinegar by use of pH titration curve

**3/9**  
**Online Recitation**: none – SPRING BREAK  
**Lab**: none – SPRING BREAK

**3/16**  
**Online Recitation**: Learning module on Alkaline Diet (Mythbusters-style)  
**Lab 8**: Experiment 17: Determination of pKₐ and molar mass of an unknown acid*Lab report

**3/23**  
**Online Recitation**: Learning module on experiment over experiment 22  
**Lab 9**: Investigating the Alkaline Diet Mythbusters-style (not in lab manual)

**3/30**  
**Online Recitation**: Learning module on experiment 23  
**Lab 10**: Experiment 22: Molar solubility and determination of solubility product

**4/6**  
**Online Recitation**: Learning module on safety and experiment 13  
**Lab 11**: Experiment 23: Redox Titration – Standardization of potassium permanganate solution

**4/13**  
**Online Recitation**: none  
**Lab 12**: Experiment 13: Chemical Kinetics I – Determination of the order of reaction and rate constant based on differential rate form expression

**4/20**  
No labs or online lab recitation this week- **look for SPOT evaluation email in your UNT inbox**

**4/27**  
**Online Recitation**: none (pre-finals week)  
**Lab**: none (pre-finals week)

Laboratory reports/data sheets must be turned in within one week 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 April 27.
MAKE-UP LABS

There are no make-up laboratories; students may seek permission from their TA to complete the lab in another section but this must be a rare occurrence. If you miss a lab due to one of the following five reasons you may request a make-up lab (more than once: see Dr. Petros in advance and you will be directed to either Dean of Students or ODA). Otherwise, a missed laboratory will result in a zero for that experiment. Turn in the documentation for the missed laboratory to the TA by April 13th or the absence will not qualify for completion of a make-up lab.

Acceptable reasons for missing an experiment are:

1. Illness (this does not include routine, scheduled appointments)
2. Death of a close family member
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 in Denton)

Students with more than one potential excused absence must meet with Dr. Petros in advance. If the student registers for a lab section that regularly interferes with military service, medical services/appointments, UNT athletics or band, and other excused absence criteria multiple times, it is the student’s responsibility to complete labs during the week in other lab sections with their TA’s permission.

LAB REPORTS

There will be two written lab reports during the semester, turned in with a data sheet attached. The report will be due within 1 week of completing the experiment. The format for the lab report will be posted on Canvas. The other labs require only writing the laboratory procedure in the manual as a step-wise procedure, and completion of the Data Sheet. All students must complete 2 lab reports in order to pass this course. If a student is absent on a designated lab report day, the TA will direct the student to write a lab report over a different experiment that the student has completed or will complete.

GRADING POLICY

Your grade will be determined by 12 quizzes from online lab recitation and your performance in the laboratory. This semester 12 laboratory experiments will be performed. The 300 total points in the laboratory are broken down as follows:

Lab experiment points: 5 points clean-up, 5 points check-in and check-out with TA, 10 points completion of the experiment and Data Sheet

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<tr>
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<th>Points Possible</th>
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<tr>
<td>12 Laboratory experiments</td>
<td>12 x 20 = 240</td>
</tr>
<tr>
<td>Quizzes for lab recitation</td>
<td>12 x 5pts = 60</td>
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<tr>
<td><strong>Total:</strong></td>
<td><strong>300</strong></td>
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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

NOTE- Canvas may show different total points or percentages, the only accurate way to determine grades is to add up all your recorded points and divide by 310.

2 lab reports are due this term, all other labs are turning in the Data Sheets only. The lab report format will be posted on Canvas. For the first lab report, your lab TA will grade and return to you to make corrections and only your second attempt will go into the gradebook. For the second lab report, you will only get one opportunity to complete the lab report.

Teaching Assistants will enter grades on Canvas under the course page for lab recitation/lecture. It is the responsibility of the student to regularly check for consistency between grades entered on Canvas 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 15 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 and put away 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 goggles or glasses or close-toed shoes 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 1440.3xx).

COURSE SAFETY STATEMENT (FOR LABORATORY COURSES)

Students must sign and abide by the Safety Agreement given to them by the TA or instructional staff in order to complete this course. 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.

**ACADEMIC DISHONESTY**

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 COMPLIANCE STATEMENT**

The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking 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 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.
STUDENT PERCEPTION OF TEACHING (SPOT)

Student feedback is important and an essential part of participation in this course. The Student Perception of Teaching (SPOT) is a requirement for all organized classes at UNT. This short survey will be made available at the end of the semester to provide you with an opportunity to evaluate how this course is taught.

Extra credit: TA may give up to 5 points extra credit for completing the SPOT online evaluation form.

SUCCEED AT UNT

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/