

University of North Texas at Dallas
FALL 2016
SYLLABUS

CHEM1430D: General Chemistry Lab, 1 credit hour	
Department of	Life & Health Sciences
Division of	Liberal Arts and Life Sciences
Instructor Name:	Dr. Muhammed Yousufuddin
Office Location:	DAL2 252
Office Phone:	972-338-1528
Email Address:	myousuf@untdallas.edu
Office Hours:	T: 9-10 am, 1 - 3 pm W: 3:30-5:30 pm Th: 9-10 am DAL2 252
Classroom Location:	DAL2 247
Class Meeting Days & Times:	Laboratory meets Th 5:30-8:20 PM
Course Catalog Description:	Laboratory techniques, weighing, errors and significant figures, identification and purification of substances, and elementary quantitative analysis.
Prerequisites:	MATH1100D or equivalent
Co-requisites:	CHEM1410D
Recommended Text and References:	Acree, Jr. <i>Modern General Chemistry Laboratory: Incorporating Computer - Oriented Data Acquisition and Evaluation Approach into the Student Laboratory Experience.</i> Eagle Images (2007).
Access to Learning Resources:	UNT Dallas Library: phone: (972) 780-3625; web: http://www.unt.edu/unt-dallas/library.htm UNT Dallas Bookstore: phone: (972) 780-3652; e-mail: 1012mgr@fhcg.follett.com

Course Objectives:**UNT'S Core Curriculum Student Learning Outcomes**

As a result of their experience with the core curriculum, UNT Dallas graduates will:

- explore English, the arts and humanities, math, the natural sciences, and social and behavioral sciences.
- be able to locate, evaluate and organize information including the use of information technologies.
- think critically and creatively, learning to apply different systems of analysis.
- develop problem solving skills that incorporate multiple viewpoints and differing contexts in their analysis.
- cultivate intellectual curiosity and self-responsibility, building a foundation for life-long learning.
- engage with a variety of others in thoughtful and well crafted communication.
- broaden and refine their thinking as a part of the give and take of ideas, seeking to better understand other's perspectives as well as their own.

These learning outcomes will be assessed through specific assignments and exam questions given during the semester. These include:

- Group presentation of an experimental lab procedure (groups and experiment will be assigned)
- Quiz questions on reaction stoichiometry and percent yield
- **Determination of identities of unknown liquids based on chemical and physical properties**

CHEM 1430 Learning Objectives/Outcomes: At the end of this course, the student will

1.	Demonstrate proficiency in basic chemical laboratory techniques.
2.	Be able to work safely with laboratory glassware, equipment and chemicals
3.	Demonstrate ability to accurately recording data and observations, and to summarize and interpret experimental results.

Course Outline

Tentative laboratory experiment schedule is given below. Any changes to this schedule will be announced in class and on Blackboard as soon as possible.

TOPICS	TIMELINE
No Lab	8/25
Lab Safety	9/1
Experiment 1B: Statistical analysis of Coke vs Diet Coke	9/8
Experiment 2: Physical & chemical properties of liquid compounds	9/15
Experiment 3: Determination of simple empirical formulas	9/22
Experiment 4: Determination of the molar mass of a volatile liquid	9/29
Experiment 5: Preparation of Alum	10/6
No Lab	10/13
Experiment 6: Densities of solids – identification of unknowns	10/20
Experiment 7: Gas laws	10/27
Experiment 8: Determination of cooling curves	11/3
Experiment 9: Determination of molar mass by freezing pt depression	11/10
Experiment 10: Introduction to Calorimetry (Practical)	11/17

Course Evaluation Methods

This course will utilize the following instruments to determine student grades and proficiency of the learning outcomes for the course.

Lab Reports: Data sheets where students record data and observations, perform necessary calculations and answer any discussion questions.

Practical: Students will perform experiments and calculations on their own for an individual grade.

Grading Matrix:

Instrument	Value (points or percentages)	Total
Lab Reports	9 lab reports	50%
Practical		50%
Total:		100%

Letter Grade Determination: Final grade percentages will be rounded to the nearest whole number and letter grades assigned using the scale below as a guideline

- A = 90% or better
- B = 80 – 89 %
- C = 70 – 79 %
- D = 60 – 69 %
- F = <60%

University Policies and Procedures

Students with Disabilities (ADA Compliance):

The University of North Texas Dallas faculty is committed to complying with the Americans with Disabilities Act (ADA). Students' with documented disabilities are responsible for informing faculty of their needs for reasonable accommodations and providing written authorized documentation. Grades assigned before an accommodation is provided will not be changed as accommodations are not retroactive. For more information, you may visit the Student Life Office, Suite 200, Founder's Hall.

Student Evaluation of Teaching Effectiveness Policy:

The Student Evaluation of Teaching Effectiveness (SETE) is a requirement for all organized classes at UNT. This short survey will be made available to you at the end of the semester, providing you a chance to comment on how this class is taught. I am very interested in the feedback I get from students, as I work to continually improve my teaching. I consider the SETE to be an important part of your participation in this class.

Assignment Policy:

Experiments in the lab will be conducted in groups of 2-3 students. Collaboration between group members (and/or between different groups) is limited to performing the procedures and recording observations and data. **Students are expected to interpret data, perform calculations and answer discussion questions on an individual basis.**

Lab Reports are due the week after the procedures and data collection for an experiment are complete. In cases where data must be shared between groups, this deadline may be extended. Late lab reports will have points deducted as follows:

- 1-7 days: 1%/day
- >1 week: 10%/week

Academic Integrity:

Academic integrity is a hallmark of higher education. You are expected to abide by the University's code of Academic Integrity policy. Any person suspected of academic dishonesty (i.e., cheating or plagiarism) will be handled in accordance with the University's policies and procedures. Refer to the Student Code of Academic Integrity at <http://www.unt.edu/unt-dallas/policies/Chapter%2007%20Student%20Affairs,%20Education,%20and%20Funding/7.002%20Code%20of%20Academic%20Integrity.pdf> for complete provisions of this code.

Bad Weather Policy:

On those days that present severe weather and driving conditions, a decision may be made to close the campus. In case of inclement weather, call UNT Dallas Campuses main voicemail number (972) 780-3600 or search postings on the campus website www.unt.edu/dallas. Students are encouraged to update their Eagle Alert contact information, so they will receive this information automatically.

Attendance and Participation Policy:

The University attendance policy is in effect for this course. Class attendance and participation is expected because the class is designed as a shared learning experience and because essential information not in the textbook will be discussed in class. The dynamic and intensive nature of this course makes it impossible for students to make-up or to receive credit for missed classes. Attendance and participation in all class meetings is essential to the integration of course material and your ability to demonstrate proficiency. Students are responsible to notify the instructor if they are missing class and for what reason. Students are also responsible to make up any work covered in class. It is recommended that each student coordinate with a student colleague to obtain a copy of the class notes, if they are absent.

****Due to safety, preparation, and scheduling issues, there are no planned make-up periods. If you miss one lab (or one lab quiz), it will count as a drop. If you have additional excusable absences (due to illness, death of a close family member or friend, jury duty, pre-planned official university activity, etc.), the instructor MAY make arrangements for a makeup. Otherwise, a missed laboratory will result in a zero for that experiment.****

Diversity/Tolerance Policy:

Students are encouraged to contribute their perspectives and insights to class discussions. However, offensive & inappropriate language (swearing) and remarks offensive to others of particular nationalities, ethnic groups, sexual preferences, religious groups, genders, or other ascribed statuses will not be tolerated. Disruptions which violate the Code of Student Conduct will be referred to the Office of Student Life as the instructor deems appropriate.

Communication

I will use Blackboard to post homework assignments, answer keys and supplemental information. I may also email the class occasionally, so please check your university email regularly. If you prefer emails be sent to a non-university account, let me know.

Grade of "Incomplete"

If a student is unable to complete the course due to extenuating circumstances, a grade an incomplete grade "I" may be assigned: The student must have attended class regular up to November 13th with a passing grade and arrangements must be made with me before the end of the semester. Also note the University will automatically change a grade of "I" to an "F" at the end of the next term, so the missed work must be made up before that time.