University of North Texas at Dallas

SYLLABUS

Spring 2015

CHEM 1360D: Context of Chemistry Laboratory 0 Hrs							
Depa	artment o	f Healtl	h and Life Sciences	Division of	Liberal Arts and Life Sciences		
Instructor Name:			Dr. Sudha Chellamma				
Office Location:			Founder's Hall, 305				
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Office Hours: Monday: 2-5 pm and by appointment							
Classroom Location: FH 247							
Class Meeting I	Days & Ti	mes: V	Wednesdays, 7:00-8:50)p			
Course Catalog					vho are not science majors.		
devel devel May r			elications of chemistry to its role in the world. Topics include historical and philosophical elopment of modern chemistry, the environment, energy, industrial and economic elopment, modern materials, popular perspectives of chemistry. Includes laboratory. In not be counted toward a major or minor in chemistry. May be used to satisfy a portion the Natural Sciences requirement of the University Core Curriculum.				
Co-requisites:	CHEM '	1360 Lec	ture				
Required Text: Pearson Custom Library, University of North Texas at Dallas, Context of Chemistry, CHEM 1360D. Only available in the UNT Dallas bookstore.							
Access to Learn	ning Reso	ources:	Dallas Bookstore: phone: (972) 7	v.unt.edu/unt-dallas/l	ibrary.htm UNT		

Course Goals or Overview:

The goal of this course is for students to obtain hands-on experience with chemistry that affects their daily life.

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:

- · A biographical essay on a famous chemist
- · A presentation based on the essay above; audience participation will also be evaluated
- Exam questions on cost/benefit analysis
- · Data analysis of a lab report on carbohydrates

CHEM 1360 Learning Objectives/Outcomes: At the end of this course, the student will

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1	Demonstrate the ability to report observations obtained during experiments.			
2	Be familiar with and able to safely use basic chemistry lab equipment.			
3	Develop a better understanding of the world around them.			

Course Outline

This schedule is subject to change by the instructor. Any changes to this schedule will be communicated by Blackboard and e-mail.

Topics/Experiment	Date
Syllabus/Safety	1/21
Density Layers	1/28
Atoms and Light	2/4
Solubility	2/11
Nature's Indicators	2/18
Buffers	2/25
Synthesis of Esters	3/4
Saponification	3/11
Personal Products	3/25
Fats and Iodine Number	4/1
Carbohydrates	4/8

Course Evaluation Methods

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

Pre Lab Questions – Each experiment has a group of Pre-lab questions that will be discussed at the beginning of lab. These will be checked **at the beginning of** lab and graded based on effort, i.e. students are not expected to know all the answers, but must show they have thought about the questions. The grading scale will be:

0 = no work done 10 = all questions attempted

Students are encouraged to research the questions (Google is your friend).

Report Sheet – During each experiment, you will record observations in the "Report Sheets" provided in your text. These "Report Sheets" also have calculations to perform and additional questions about the topic. Once an experiment is completed, reports will be **due the following week after experiment completion**.

Lab Safety – Working safely in the lab is more important than any grade. However, as a reminder of this you will be evaluated during each experiment on how safely you work. The grading scale will be 0-5, with a starting score of 5. Points will be deducted if safety instructions are not followed (e.g. not wearing eye protection), or a lab area is left dirty.

Intentional safety violations (e.g. pulling the safety shower without a need) will result in <u>failure of the</u> entire lab portion of the course.

Grading Matrix:

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Instrument	Total			
Pre-Lab Questions	10%			
Report Sheets	85%			
Lab Safety	5%			

Grade Determination:

Separate letter grades will not be assigned for the lab. As mentioned in the syllabus, the lab is worth 20% of the total course grade. This is a large component of your course should be an opportunity to improve your grade.

If you ever have a question about your grades, please contact me and I would be glad to discuss it with you.

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.

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:

As mentioned above, pre lab questions are due before the experiment is performed, and lab reports are due the following lab period. You can only turn in lab reports for experiments that you compete in lab.

Classroom policies

- Students are expected to arrive to the class on time.
- Students are required to check eCampus on a regular basis for any announcements.
- Grades will not be provided over the phone or by e-mail.
- No work or lab report will be accepted by e-mail.
- No late work will be accepted without prior written approval.
- Cell phones and/or pagers need to be turned off during the lab and no texting is allowed.

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-

<u>dallas/policies/Chapter%2007%20Student%20Affairs,%20Education,%20and%20Funding/7.002%20Code%20of%20Academic_Integrity.pdf</u> for complete provisions of this code.

In addition, all academic work submitted for this class, including exams, papers, and written assignments should include the following statement:

On my honor, I have not given, nor received, nor witnessed any unauthorized assistance that violates the UNTD Academic Integrity Policy.

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:

You must be punctual or you will delay your group and the class, and lose points for pre-lab assignments. **You are allowed to drop one lab grade**, so you can miss one lab without affecting your grade. Make-up labs may be arranged with an excused absence (if you miss more than one lab). Excused absences are given only for illness (requires a physician's note), death/serious illness of a family member (requires documentation), and official University activity (requires advance planning and documentation).

Communication

I will use Blackboard to post power points, homework assignments, answer keys and supplemental information. I also email the class occasionally, so please check your university email and blackboard regularly. Make sure to communicate using university email and I will respond within 24 h. on weekdays and by the next business day on weekends.

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 Center for Student Rights and Responsibilities as the instructor deems appropriate.

Safety

A list of safety guidelines will be provided for you before the first experiment. You are responsible for reading and knowing the safety rules.

Instructor reserves the right to amend this Syllabus as necessary.