CHEM 2285 QUANT LAB SYLLABUS – Spring 2014

Instructor: Dr. Saiful Chowdhury Office: CPB 352 Phone: 817-272-5439
Office Hours: WF 12:00—1:00 pm Email: schowd@uta.edu,

TAs and Meeting Times

Section*	Meeting Time/Place*	TA	Office/ Ofc hrs	Contact
001 MW	1-5 pm CPB 212	Ruchika Bhawal	CPB 309 T, Th : 11 am – 1 pm	ruchika.bhawal@mavs.uta.edu
002 TR	1-5 pm CPB 212	Maheshika Wanigasekara	CPB 309 T, Th : 11 am – 1pm	Maheshika.wanigasekara@mavs.uta.edu

*If there is section three, the TA name and email will be provided

Text: Laboratory Manual, will be distributed electronically
Gary Christian, *Analytical Chemistry*, 7th Edition
Other materials: Scientific calculator, Laboratory notebook, USB portable storage drive

Grading:	Lab Reports (9)	400 pts.	(8 x 50, one lab dropped)
	Quizzes (4)	200 pts.	(4 x 50)
	Attendance/Lab Technique	40 pts.	

Each student will be rated during the course of each experiment by the TA for attendance (including punctuality and being on-task) and laboratory technique.

Description and Goals of the Course: Develop proficiency with both theoretical basis and practical laboratory methods of quantitative chemical analysis including the usage of computers for data analysis and presentation. The techniques include: sampling, statistics, spectrophotometry, calibration, and titrations.

Recipe for success

1) **Attendance is a must! Because most of the experiments build on one another, missing one lab can mean the difference between success and failure in the course.**
2) **Prior to lab, read the laboratory manual and suggested textbook chapters/sections for the experiment which will be done that day.**

3) **Don't procrastinate! You have to read and plan many days before for the successful completion of each experiment.**
4) **Be able to communicate with your partner/partners and form a study group.**

> **Use of a computer (spreadsheets and word processors) an essential component of this course. The university provides numerous sites for free student computer usage with access to various software. It is your responsibility to practice and familiarize yourself with the software. Ask your TA if you need extra guidance.**

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 will be notified via MavMail when their online training is available. Once notified, 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. You should have received an email from the UTA Compliance Department. Click on the link in the email (or navigate to https://training.uta.edu for the login page)
2. Log on using your network log-on ID and password (what you use to access email). If you do not know your NetID or need to reset your password, visit http://oit.uta.edu/cs/accounts/student/netid/netid.html.
3. The available courses for completion will be listed. For Chemistry 1441, complete the course entitled 'Student Lab Safety Training'
4. Go to 'Training I've Completed', and print this displayed page for your TA. Verify that it shows clearly your name, that the training is completed/passed and the date when the training was completed. If you have just completed the training but it is not updated on the 'Training I've Completed' page, try the training again (you should get to the Certificate page). If this does not work, call the training helpline at 817-272-5100.
5. If you did not receive the training email and you have not already completed the training you will need to contact the training helpline (817-272-5100) or email compliance@uta.edu.
6. Students who have not completed the training by census date may be dropped from the lab (and consequently the lecture).

Once completed, Lab Safety Training is valid for the remainder of the same academic year (i.e. through next August) for all 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.

All questions/problems with online training should be directed to the University Compliance Services Training Helpline at 817-272-5100 or by emailing compliance@uta.edu.

Policies and Notes:

Dropping: When dropping the course, You are responsible to see that all the proper paperwork is done by checking with the Chemistry Department office and, **YOU MUST properly check out of the lab**, and

account for any missing, broken, or dirty apparatus. Failure to follow these instructions will result in a grade of 'F'.

Drop for non-payment of tuition: If you are dropped from this class for non-payment of tuition, you may secure an Enrollment Loan through the Bursar's office. You may not continue to attend class until your enrollment Loan has been applied to outstanding tuition fees.

Grade Replacement: Students enrolling in the course with the intention of replacing a previous grade earned in the same course must declare their intention to do so at the registrar's office **by Census Date of the same semester in which they are enrolled**.

Pass/Fail: If P or F is a grade option in this class and you intend to take this class for a pass/fail grade instead of a letter grade, you MUST inform me, through the necessary paperwork, BEFORE the census date.

Americans with Disabilities Act: The University of Texas at Arlington in on record as being committed to both the spirit and letter of federal equal opportunity legislation; reference Public Law 93112-The Rehabilitation Act of 1973 as amended. With the passage of new federal legislation entitled Americans with Disabilities Act-(ADA), pursuant to section 504 of The rehabilitation Act, there is renewed focus on providing this population with the same opportunities enjoyed by all citizens.

As a faculty member, I am required by law to provide "reasonable accommodation" to students with disabilities, so as not to discriminate on the basis of that disability. Student responsibility primarily rests with **informing faculty at the beginning of the semester and in providing *authorized* documentation through designated administrative channels.**

Bomb Threat Policy: In the event of a bomb threat to a specific facility, University Police will evaluate the threat. If required, exams may be moved to an alternate location, but **they will not be postponed**. UT-Arlington will prosecute those phoning in bomb threats to the fullest extent of the law.

Students with Pregnancies: For students who are pregnant, it is recommended by the Chemistry and Biochemistry Department 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 later date. **Please see your faculty instructor for assistance.**

IMPORTANT:
Academic Dishonesty: Enrollment in this course implies acceptance of the university policy as outlined in the Regents' Rules and Regulations and on this course syllabus.

"Scholastic dishonesty includes but is not limited by cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts." (Regents' Rules and Regulations, Par One, Chapter VI, Section e, subsection 3.2, Subdivision 3.22).

It is the students' responsibility to be aware of what constitutes academic dishonesty.

Any and all accusations or situations which may involve academic dishonesty will be directed to the Office of Judicial Affairs. No warnings will be given. Discipline may range from loss of credit on an exam/quiz/assignment to expulsion from the university.

Spring 2014 Schedule for CHEM 2285 Quant Lab

Week starting	Mon/Tues	Wed/Thurs	Friday
Mon, 1/13/14	No lab; Complete on-line safety training (see p. 7)		
Mon, 1/20/14	No lab; Complete on-line safety training (see p. 7)		
Mon, 1/27/14	**Lab check-in; Group assignments (CPB 212)**	**Prelab 1** *Measurement & Statistics* **Begin Exp. 1** (CPB 212)	
Mon, 2/3/14	**Begin Exp. 2** (CPB 212)	Quiz 1: *Measurement & Statistics* (CPB 212)	**Exp. 1 Report Due**
Mon, 2/10/14	**Begin Exp. 3** (CPB 212)	**Begin Exp. 4** (CPB 212)	**Exp. 2 Report Due**
Mon, 2/17/14	**Prelab 2: *Spectroscopy*** **Begin Exp. 5** (CPB 212)	**Exp. 5** continued	**Exp. 3 Report Due**
Mon, 2/24/14	**Begin Exp. 6** (CPB 212)	**No Lab**	**Exp. 4 Report Due**
Mon, 3/3/14	Quiz 2: *Spectroscopy* (CPB 212)	**Prelab 3** *Equilibria & Titrations* Overview of titrations (CPB 212)	**Exp. 5 Report Due**
Mon, 3/10/14	**Spring Break**		
Mon, 3/17/14	Quiz 3: *Equilibria & Titrations* (CPB 212) **Begin Exp. 7**	**Exp. 7 continued** CPB 212)	**Exp. 6 Report Due**
Mon, 3/24/14	**Begin Exp. 8**	**Exp.8 continued**	**Exp. 7 Report Due**
Mon, 3/31/14	**Begin Exp 9**	**Exp 9 continued**	**Exp. 8 Report Due**
Mon, 4/7/14	**Final Quiz**	No Lab	**Exp. 9 Report Due**
Mon, 4/14/14	**Checkout**	**Checkout**	

Laboratory Exercises

Expt. No.	Title	# Lab Periods
1	Statistical Penny Pinching	1
2	Memo from Corporate	1
3	Calibration of Volumetric Glassware	1
4	Sources of Variance – The Weakest Link	1
5	Fe in Vitamin Tablets	2
6	Two Component Colorimetry	1
7	Quantitative Determination of M&M Dyes	2
8	Acid-Base Titrations	2
9	Potentiometric Titration of Chloride and Iodide	2

As the instructor for this course, I reserve the right to adjust this schedule in any way that serves the educational needs of the students enrolled in this course. – Dr. Saiful M Chowdhury."

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