CHEM 1111 General and Quantitative Chemistry Laboratory I

Course: Chemistry 1111 meets: Section 01: Monday 2:00 –5:50 p.m., STC310
Section 02: Monday 2:00 –5:50 p.m., STC311
Section 03: Wednesday 9:00 – 12:50 p.m., STC311

Faculty contact:

Mrs. Qianying Zhang Office: Science 336
Email: Qianying.Zhang@ tamuc.edu Phone: 903-468-8140

Office Hours: MWF 10:00-11:00 am& W 2:00-4:00 pm

Introduction: ***General and Quantitative Chemistry Lab*** *I.* 4 hours of laboratory per week. This course is part of the University Studies core courses and will meet criteria for laboratory science credits.

Course Materials*:*

Experiments in General Chemistry, 10th Edition, by R.A.D. Wentworth, published by Houghton Mifflin Company, New York, NY.

A pair of safety goggles and a padlock

Course Description

You must write down what you observe and measure during the time of the experiment. Compose the laboratory report in sufficient detail to allow someone else to report the experiment exactly. The observations section of the report must be the original notes taken during the course of the experiment (take detailed, legible notes during the experiment). You can also submit a typed version of your observations if you wish, but you must submit your original notes taken during the experiment.

Student Learning Outcomes

By the end of the semester I intend my students to have realized a number of objectives.
(1) All students must be able to readily identify glassware commonly used in the chemistry laboratory and know how to properly utilize the glassware.
(2) Learn basic chemistry techniques, such as how to calculate percent yields, how to properly use measuring devices, how to properly clean glassware at the end of an experiment.
(3) Learn the safety requirements and methods needed to work in a chemistry laboratory. Learn how to safely handle, utilize and dispose of chemicals.
(4) Learn how to document laboratory experiments, how to maintain a scientific notebook.
(5) Communication in the form of laboratory reports will be clear, purposeful, and make appropriate use of evidence, data and technology as applicable.
(6) In laboratory experiments, you should be able to individually and within a team with fellow classmates, conduct laboratory experiments, critically analyze data, draw conclusions from the data, and clearly and concisely report the observations and conclusions drawn from the laboratory experiments.

Lab Cleanliness

You will be expected to maintain a clean and orderly lab. At the end of every experiment, your bench space and hood space must be cleaned. Any equipment utilized during the experiment must be cleaned as well (balances, rotovaps, etc.). You should ensure that sinks and floors are also clean. If the lab space and equipment that you utilized during the experiment is left dirty and unorganized, you will be penalized 20% on your lab report. The lab report has to be typed for grading.

Grading/Evaluation

The lab report with the lowest score will be dropped. The average of the grade for the rest of the eleven laboratories will constitute the laboratory grade.

Prelab	25%
Lab report	75%
Total	100%

You are required to submit Data and Post Lab /Lab Report in a timely manner. You will incur a 10% penalty for every day that your lab report is late; thus, if a lab report is 10 days late, you will receive a zero for that report. There will be absolutely no make-ups for laboratory experiments. If you miss a laboratory experiment that will be your dropped laboratory write-up. If you miss more than one laboratory experiment, you will be assigned a grade of zero for that assignment. **The last drop date for the course is October 31, 2015**. Grading will be based on a standard percentage scale: 100-90 = A; 89-80 = B; 79-70 = C; 69-60 = D; 59-below =F. Dishonest scholarship will earn an automatic zero (0) and initiate prosecution to the fullest extent. Incomplete grades may be given only if the student has a current average above 70% and is precluded from completion of the course by a documented illness or family crisis.

Attendance and Class Participation

All students are expected to attend classes on a regular basis and attendance will be recorded. The Department of Chemistry adheres to the attendance policy set by the University as stated in the most current Undergraduate Catalog. Being late by more than 5 minutes is equivalent to missing a lecture. Excessive absence will be reported to the Dean of the College and Dean of students. In addition, according to the TAMU-Commerce Procedure A13.02, Good class attendance will be necessary in order to pass this course.

Student Conduct Policy:

In order to create a "learning environment" free of disruption, you MUST TURN OFF your cell phones, MP3 players, PDA's, Pagers, and any other electronic devices before entering the class. Students are expected to comply with the student code of conduct as stated Student's Guidebook, Policies and Procedures, Conduct. If the student is failed to comply with the code of conduct and being disrespectful, disruptive to the instructor or the students of the class, the instructor reserves the right to dismiss the student from the class on the first offense. A second offense may constitute dismissal from the course with a failing grade. A and M-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity expression will be maintained.

Academic Integrity and Honesty Policy:

Academic cheating, plagiarism, and other forms of academic misconduct may result in removal of the student from class with a failing grade or may in extreme cases result in suspension or expulsion from the University as described in the Code of Student Conduct section of the Student1s Guidebook A&M-Commerce Procedure 13.99.99.R0.10

Students with Disabilities

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services
Texas A&M University-Commerce
Gee Library- Room 132
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
StudentDisabilityServices@tamuc.edu

Tentative Laboratory Calendar

Week	Date	Experiment
1	August 31-Sep. 4	Check in equipment, Safety lecture & quiz
2	Sept. 8-14	1C. Some Measurements of Mass and Volume
3	Sept. 15-21	2. Isotopes and Mass Spectrometry
4	Sept. 22-28	7. The Absorption Spectrum of Cobalt(II) Chloride
5	Sept. 29-Oct.5	1A. Identification of an Unknown Compound
6	Oct. 6- 12	10A. geometric Isomers
7	Oct. 13-19	8. Solubility Within a Family
8	Oct. 10-26	3A. The Empirical Formula of an Oxide
9	Oct. 27-Nov. 2	5B. The Decomposition of Potassium Chlorate
10	Nov. 3-9	3B. Hydrates and Their Thermal Decompositions
11	Nov. 10-16	4B. Ionic Reactions in Aqueous Solutions
12	Nov. 17-23	9A. The Identity of an Insoluble Precipitata
13	Nov. 24-27	No classes- Thanksgiving break
14	Nov. 30-Dec.4	6. Thermochemistry and Hess's Law
15	Dec. 7-11	Laboratory Check-Out, Return Equipment to Stockroom