COURSE CHEM 1111-01L & -02L GENERAL CHEMISTRY I LABORATORY

COURSE SYLLABUS: SPRING 2019

INSTRUCTOR INFORMATION

Instructor: Ms. Patricia Leach
Office Location: STC 344
Office Hours: M 9:00am-1:00pm
Office Phone: 903-886-8765
Office Fax: 903-468-6020
University Email Address: patricia.leach@tamuc.edu
Preferred Form of Communication**:** e-mail
Communication Response Time: 24 hours

COURSE INFORMATION

Materials – Textbooks, Readings, Supplementary Readings

- **Custom Lab Manual:** *Laboratory Experiments – General Chemistry I*, Wentworth|Munk ISBN: 978-1-337-90336-3 (Available in the bookstore).
- **Safety Goggles** (available for purchase in the chemistry office)
- **Padlock** (must be brought the first day of class)
- **Scientific Calculator**
- **Appropriate Lab Attire** (long pants-no holes, no open-toed shoes, long hair tied back, no sleeveless or cold shoulder shirts)
- **Lab Coat** (optional)

Course Description

An introduction to methods and techniques of chemical experimentation using quantitative and semi-quantitative procedures for exploring problems in chemistry.

Prerequisites: MATH 1314 (concurrently or adequate high school mathematical preparation). Co-requisites: CHEM 101, CHEM 1311.

The *syllabus/schedule are subject to change.*

Student Learning Outcomes

1. Identify equipment (including glassware) commonly used in chemistry laboratories and demonstrate their proper use.
2. Be familiar with and abide by safety equipment and procedures necessary to work safely in the chemistry laboratory.
3. Demonstrate basic chemistry techniques, such as:
    - Using balances, graduated cylinders, pipettes and other commonly used chemical equipment
    - Stoichiometry of reactions, including percent yield
4. Develop the ability to follow procedures to perform chemical experiments and communicate the details and results effectively.
5. In laboratory experiments, students will individually, and within a group, conduct experiments, critically analyze data, draw conclusions from the data, and clearly and concisely report the observations and conclusions drawn from the experiments.

COURSE REQUIREMENTS

Minimal Technical Skills Needed

1. Students should be familiar with the use of their own scientific calculator.
2. Students should be able to use the communication tools in the D2L Brightspace LMS.

Instructional Methods

This is a laboratory based course. Students will prepare for each laboratory assignment by completing a pre-lab assignment and reading the laboratory procedure in detail. Laboratory techniques will be taught by a combination of lecture, video, demonstration, and the performance of the techniques within a laboratory procedure supervised by the instructor and graduate teaching assistants. A post-lab report will then be completed.

Student Responsibilities or Tips for Success in the Course

In order to be successful, the student must:

- Read the complete laboratory ahead of time, paying particular attention to the laboratory procedure.
- Attend laboratory regularly.
- Complete the pre-lab assignment and hand it in at the beginning of the laboratory period.
- Attend the pre-lab lecture is mandatory on time. Note-taking during the lecture portion is highly recommended.
- Write in full sentences.
- Hand in assignments on time.

GRADING

Final grades in this course will be based on the following scale:

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A = 90%-100%
B = 80%-89%
C = 70%-79%
D = 60%-69%
F = 59% or Below

Assessments

The lab report with the lowest score will be dropped. The average of the remaining ten laboratory exercises will be averaged to determine the final grade. Each laboratory exercise will be evaluated as follows:

Individual Pre-Lab	25%
Individual Post-Lab	75%
Total	100%

Incomplete grades will be considered only if the student has completed 70% of the coursework and cannot complete the remainder because of a documented medical or legal excuse or family crisis.

TECHNOLOGY REQUIREMENTS

LMS

All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements

LMS Requirements:
https://community.brightspace.com/s/article/Brightspace-Platform-Requirements

LMS Browser Support:
https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm

YouSeeU Virtual Classroom Requirements:
https://support.youseeu.com/hc/en-us/articles/115007031107-Basic-System-Requirements

ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@tamuc.edu.

Note: Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary

use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

COMMUNICATION AND SUPPORT

If you have any questions or are having difficulties with the course material, please contact your Instructor.

Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here:

https://community.brightspace.com/support/s/contactsupport

Interaction with Instructor Statement

The instructor will respond to student e-mails within 24 hours. E-mail is the preferred method of communication.

Teaching assistants will return graded laboratory write-ups within one week of the post-lab assignment being handed in. Both pre- and post- lab write-ups will be graded at one time.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

- Laboratory exercises cannot be performed without safety goggles.
- There are no make-ups for labs missed.
- Attendance is mandatory at all course meetings.
- If more than 15 minutes late for the pre-lab lecture, the student forfeits the opportunity to participate in the laboratory portion of the class period, receiving a zero for that day's lab exercise.
- The top ten laboratory grades will be used to calculate the grade for the course.
- **A minimum of ten laboratory exercises with pre- and post-lab write-ups must be completed to pass the class.**
- Late work will be docked 10% a day for being late. After ten days, the student will receive a zero for that laboratory exercise.
- Students should apprise their teaching assistant of any anticipated absences. Since one laboratory exercise will not be used in the calculation of the final grade, one absence will not result in the lowering of a student's grade, however, any subsequent absences will result in a zero being factored into the final grade.
- Students must complete the pre-lab assignment **PRIOR TO ARRIVING** to lab class. If a completed pre-lab assignment is not handed in at the beginning of class, the student will not be allowed to participate in that day's laboratory exercise.

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- Data sheets must be initialed by the teaching assistant on the day the data is taken and data sheets with no initials will not be accepted.

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

University Specific Procedures

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the Student Guidebook.
http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum:
https://www.britannica.com/topic/netiquette

TAMUC Attendance

For more information about the attendance policy please visit the Attendance webpage and Procedure 13.99.99.R0.01.
http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf

Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

Undergraduate Academic Dishonesty 13.99.99.R0.03

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf

Graduate Student Academic Dishonesty 13.99.99.R0.10

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf

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Students with Disabilities-- ADA Statement

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 162
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
Email: studentdisabilityservices@tamuc.edu
Website: Office of Student Disability Resources and Services
http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/

Nondiscrimination Notice

Texas A&M University-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, or gender expression will be maintained.

Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the Carrying Concealed Handguns On Campus document and/or consult your event organizer.

Web url:
http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

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COURSE OUTLINE / CALENDAR

Date:	Experiment
1/14	Check in. Safety lecture and quiz.
1/21	NO CLASS – Martin Luther King, Jr. Day
1/28	1. Some Measurements of Mass and Volume
2/4	2. Identification of an Unknown Compound
2/11	3. Isotopes and Mass Spectrometry
2/18	4. The Empirical Formula of an Oxide
2/25	5. Hydrates and Their Thermal Decomposition
3/4	6. The Absorption Spectrum of Cobalt (II) Chloride
3/11	7. Solubility Within a Family
3/18	NO CLASS – Spring Break
3/25	8. The Identity of an Insoluble Precipitate
4/1	9. Geometric Isomers
4/8	10. Ionic Reactions in Aqueous Solutions
4/15	11. The Decomposition of Potassium Chlorate
4/22	12. Thermochemistry and Hess's Law
4/29	Check Out

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