CHEM 1312 General and Quantitative Chemistry II
COURSE SYLLABUS: FALL 2019

INSTRUCTOR INFORMATION

Instructor: Mrs. Qianying Zhang (Joy)
Office Location: Science 336
Office Hours: M 10:00-12:00 pm & R 11:00-12:00 pm & MW 3:00-4:00 pm
Office Phone: 903-468-8140
University Email Address: Qianying.Zhang@tamuc.edu

COURSE INFORMATION

Section 001: TR 9:30-10:45 am Room: STC123


Non-programmable Calculator (bring to class)

COURSE DESCRIPTION

General and Quantitative Chemistry II. 3 Semester Hours. 2 hours and 30 minutes lecture per week. This course is part of the University Studies core courses and will meet criteria for laboratory science credits.

This is the second part of a two-course sequence of general chemistry. The course is designed primarily for the students majoring in sciences or in pre-professional programs. By the end of the course you will be familiar with a range of fundamental chemistry topics including chemical reaction rates, chemical equilibrium, acid-base chemistry, solubility, thermodynamics, electrochemistry, nuclear chemistry, organic chemistry, inorganic chemistry and biochemistry. Chemists deal with these subject areas every day, but these concepts are also crucially important to other branches of science and technology. Prerequisites: CHEM 1311 and CHEM 1111 with a minimum grade of C, and CHEM 101 with a minimum grade of C, or CHEM 14111 with a minimum grade of C, and MATH 1314 with a minimum grade of C or MATH 141 with a minimum grade of C. Corequisites: CHEM 102, CHEM 1112.

Student Learning Outcomes

1. Students will be able to analyze, evaluate, or solve problems when given a set of circumstances or data. Such as use LeChateliers Principle to predict the effects of concentration, pressure and temperature changes on equilibrium mixtures.
2. Student communication will be clear, purposeful, and make appropriate use of evidence, data and technology as applicable. Such as show the detail procedure how to solve the equilibrium problems.
3. Students will be able understand and utilize mathematical functions and empirical principles and processes. Such as use the Henderson-Hasselbalch equation to find the PH for the buffer solution.
4. Students will be able to work together toward a shared purpose relevant to the course or discipline with a sense of shared responsibility for meeting that purpose.

COURSE REQUIREMENTS

Student Responsibilities or Tips for Success in the Course

Pointers to Succeed in CHEM 1312:
1. The lectures in this course will cover topics from Chapters 12 through 23 of the assigned textbook. This material will be covered at the rate indicated by the Tentative Class Schedule. Be sure to read the textbook before coming to the lectures. The lectures will focus on important chemistry concepts but will not serve as a substitute for reading the textbook. The textbook is a more detailed presentation with a more extensive set of example problems. Chemistry is a physical science and it is imperative to master calculations to pass the course.

2. Use your homework to practice the concepts you learned in lecture. Even though the homework is not turned in or graded, working the problems will help you succeed in the course. The more problems that you work the better prepared you will be for exams.

3. Review the class notes after each class. Write down the questions you have and ask the instructor in her office hour or make an appointment with her. Or you may get help from tutors in the Jamp room.

GRADING

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

A = 86%-100%
B = 73%-85%
C = 60%-72%
D = 45%-59%
F = 45% or Below

The grade for this course will be derived as follows:

Four examinations 80 %
Final Exam 20 %

Late work will not be accepted, and makeup quizzes or exams will not be given. If you miss one exam, for whatever reason, the points for the missed exam will be placed on your final exam, making your final exam count for a greater percentage of your grade. If you miss more than two exams, for whatever reason, you will not be allowed to take the final exam and you will receive F for your grade. The final exam will be comprehensive and cover material from Chapters 12-23. The last drop date for the course is October
**31, 2019.** 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 \( \geq 70\% \) and is precluded from completion of the course by a documented illness or family crisis. **If you miss 5 or more class periods and do not have a passing grade in the class, you may be administratively dropped from the class.**

**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

**COMMUNICATION AND SUPPORT**

**Communication:** If the instructor needs to contact an individual student, it will be via the student's Texas A&M –Commerce email account.
COURSE AND UNIVERSITY PROCEDURES/POLICIES

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

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
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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<td><strong>Final Examination</strong></td>
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**Recommended HW problems and examples (10th edition book)**

| Chap. 12: | 47, 49, 53, 55, 57, 69 |
| Chap. 13: | 43, 45, 46, 51, 55, 63, 77 |
| Chap. 14: | 35, 43, 51, 65, 73 |
| Chap. 15: | 36, 51, 53, 59, 67, 79 |
| Chap. 16: | 33, 35, 38, 50, 52, 75 |
| Chap. 17: | 27, 29, 37, 41, 47, 59, 61 |
| Chap. 18: | 31, 35, 39, 41, 45, 59 |
| Chap. 19: | 35, 37, 49, 54, 57, 63, 66, 76, 82, 86 |
| Chap. 20: | 19, 33, 35, 37, 39, 41, 43 |
| Chap. 23: | 27, 37, 38, 39 |