CHEM 1105: Survey of General Chemistry Laboratory

COURSE SYLLABUS: Summer I 2024

INSTRUCTOR INFORMATION

Instructor: Mrs. Qianying Zhang (Joy)
Office: Science 336
Office Hours: Virtual office at D2L or by appointment
Contact information: Tel: 903-468-8140; Qianying.Zhang@tamuc.edu

COURSE INFORMATION

Laboratory I (Web Based Class): Meets 6/3/2023 through 7/3/2023
Textbook: The custom lab manual for general chemistry I is available at the campus bookstore or the e-book is available for purchase in D2L.

COURSE DESCRIPTION

A one semester experimental survey of the fundamentals of chemistry, exploring the basic physical principles and the descriptive chemistry of metals and non-metals, with applications to related fields. This course is not suitable for biological science majors or minors. (Students planning to enter professional and/or graduate schools should elect Chemistry 1311-1312.).

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) You should be able to critically analyze data, draw conclusions from the data, and clearly and concisely report the observations and conclusions drawn from the laboratory experiments.
(7) Students will develop and execute effective processes for completing tasks.
(8) Students will be able to interpret, test and demonstrate principles revealed in empirical data.

GRADING

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

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

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	40%
Post-lab	60%
Total	100%

You are required to submit pre-Lab/post-Lab Reports 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. **The last drop date for the course, please check the university website:**
http://www.tamuc.edu/Admissions/registrar/academiccalendars/.
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.

COURSE OUTLINE / CALENDAR

Week	Date	Experiment
1	June 3	**Lab safety**
	June 4	**Experiment 1:** Laboratory techniques: using the laboratory gas burner; making laboratory measurement
	June 5	**Experiment 2:** Density determination
	June 6	**Experiment 3:** Separation of the components of a mixture

2	June 10	**No lab**
	June 11	**Experiment 5:** The empirical formula of a compound: the law of constant composition
	June 12	**Experiment 6:** Determination of the formula of a metal oxide
	June 13	**Experiment 7:** Gases of chemical reactions
3	June 17	**No lab**
	June 18	**Experiment 8:** Chemical properties of consumer products
	June 19	**Experiment 11:** Charles law: the volume-temperature relationship of a gas
	June 20	**Experiment 14:** Solubility and solution
4	June 24	**Experiment 15**: Water of Hydration
	June 25	**Experiment 17:** The law of chemical equilibrium and Le Chatelier's principle
	June 26	**Experiment 19:** Analysis of vinegar by titration
	June 27	**No lab**
5	July 1-July 3	**No lab**

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
Zoom Requirements:
https://support.zoom.us/hc/en-us/articles/201362023-Zoom-system-requirements-Windows-macOS-Linux

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

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

Attendance Policy: All students are expected to attend classes on a regular basis. The Department of Chemistry adheres to the attendance policy set by the University as stated in the most current Undergraduate Catalog. The attendance record is taken from the **daily sign-in sheet**. A student who is late by more than 5 minutes or fails to sign the sign-in sheet will be counted as missing a class. **Excessive absence is defined as missing more than 10% of the class without excusable reasons.** Excessive absence will be reported to the Dean of the College and the Dean of Students. In addition, **according to the TAMU-Commerce Procedure 13.99.99.R0.001, if a student has excessive absences, the instructor may drop the student from the course**. The instructor will only excuse an absence if the student provides, with appropriate document, an excusable reason allowed by the TAMU-Commerce Procedure **13.99.99.R0.001**. Good class attendance will be necessary in order to pass this course.

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
Undergraduate Student Academic Dishonesty Form
http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf
Graduate Student Academic Dishonesty Form
http://www.tamuc.edu/academics/graduateschool/faculty/GraduateStudentAcademicDishonestyFormold.pdf
http://www.tamuc.edu/academics/graduateschool/faculty/GraduateStudentAcademicDishonestyFormold.pdf

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
Velma K. Waters 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.

A&M-Commerce Supports Students' Mental Health

The Counseling Center at A&M-Commerce, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit **www.tamuc.edu/counsel**

AI Use Policy

Texas A&M University-Commerce acknowledges that there are legitimate uses of Artificial Intelligence, ChatBots, or other software that has the capacity to generate text, or suggest replacements for text beyond individual words, as determined by the instructor of the course.

Any use of such software must be documented. Any undocumented use of such software constitutes an instance of academic dishonesty (plagiarism).

Individual instructors may disallow entirely the use of such software for individual assignments or for the entire course. Students should be aware of such requirements and follow their instructors 'guidelines. If no instructions are provided the student should assume that the use of such software is disallowed.

In any case, students are fully responsible for the content of any assignment they submit, regardless of whether they used an AI, in any way. This specifically includes cases in which the AI plagiarized another text or misrepresented sources.

13.99.99.R0.03 Undergraduate Academic Dishonesty
13.99.99.R0.10 Graduate Student Academic Dishonesty