



TEXAS A&M UNIVERSITY

COMMERCE

CHEM 1111 General and Quantitative Chemistry Laboratory I

COURSE SYLLABUS: Summer I 2022

INSTRUCTOR INFORMATION

Instructor: Mrs. Qianying Zhang (Joy)

Office Location: Science 336

Office Hours: Virtual office at D2L or by appointment

Office Phone: 903-468-8140

University Email Address: Qianying.Zhang@tamuc.edu (The instructor will try to respond the student's email within 48 hours not including the weekend.)

Students are strongly encouraged to set up text and email notifications in the settings in Brightspace so you will receive emails and texts about important announcements, due dates of assignments, quizzes, and exams.

COURSE INFORMATION

Laboratory I (Web Based Class): Meets 6/6/2022 through 7/7/2022

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

General and Quantitative Chemistry Lab I. This course is part of the University Studies core courses and will meet criteria for laboratory science credits. It is the introduction to methods and techniques of chemical experimentation using quantitative and semi-quantitative procedures to exploring problems in chemistry.

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) Communication in the form of laboratory reports will be clear, purposeful, and make appropriate use of evidence, data and technology as applicable.
- (5) 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.

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 | 25% |
| Post-lab | 75% |
| 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. 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 6 | Lab Safety |
| | June 7 | 1. Some Measurements of Mass and Volume |
| | June 8 | 2. Identification of an Unknown Compound |
| | June 9 | 3. Isotopes and Mass Spectrometry |
| 2 | June 13 | No lab-Exam 1 |
| | June 14 | 4. The Empirical Formula of an Oxide |
| | June 15 | 5. Hydrates and Their Thermal Decompositions |
| | June 16 | 6. The Absorption Spectrum of Cobalt(II) Chloride |
| | June 20 | No lab-Exam 2 |
| | June 21 | 7. Solubility Within a Family |

| | | |
|---|---------------|--|
| 3 | June 22 | 8. The Identity of an Insoluble Precipitation |
| | June 23 | 9. geometric Isomers |
| 4 | June 27 | No lab-Exam 3 |
| | June 28 | 10. Ionic Reactions in Aqueous Solutions |
| | June 29 | 11. The Decomposition of Potassium Chlorate |
| | June 30 | 12. Thermochemistry and Hess's Law (last lab) |
| 5 | July 4-July 7 | No lab |

TECHNOLOGY REQUIREMENTS

Browser support

D2L is committed to performing key application testing when new browser versions are released. New and updated functionality is also tested against the latest version of supported browsers. However, due to the frequency of some browser releases, D2L cannot guarantee that each browser version will perform as expected. If you encounter any issues with any of the browser versions listed in the tables below, contact D2L Support, who will determine the best course of action for resolution. Reported issues are prioritized by supported browsers and then maintenance browsers.

Supported browsers are the latest or most recent browser versions that are tested against new versions of D2L products. Customers can report problems and receive support for issues. For an optimal experience, D2L recommends using supported browsers with D2L products.

Maintenance browsers are older browser versions that are not tested extensively against new versions of D2L products. Customers can still report problems and receive support for critical issues; however, D2L does not guarantee all issues will be addressed. A maintenance browser becomes officially unsupported after one year.

Note the following:

- Ensure that your browser has JavaScript and Cookies enabled.
- For desktop systems, you must have Adobe Flash Player 10.1 or greater.
- The Brightspace Support features are now optimized for production environments when using the Google Chrome browser, Apple Safari browser, Microsoft Edge browser, Microsoft Internet Explorer browser, and Mozilla Firefox browsers.

Desktop Support

| Browser | Supported Browser Version(s) | Maintenance Browser Version(s) |
|---------------------|------------------------------|--------------------------------|
| Microsoft® Edge | Latest | N/A |
| Microsoft® Internet | N/A | 11 |

| Browser | Supported Browser Version(s) | Maintenance Browser Version(s) |
|----------------------|------------------------------|--------------------------------|
| Explorer® | | |
| Mozilla® Firefox® | Latest, ESR | N/A |
| Google® Chrome™ | Latest | N/A |
| Apple® Safari® | Latest | N/A |

Tablet and Mobile Support

| Device | Operating System | Browser | Supported Browser Version(s) |
|----------|------------------|-----------------------------|---|
| Android™ | Android 4.4+ | Chrome | Latest |
| Apple | iOS® | Safari, Chrome | The current major version of iOS (the latest minor or point release of that major version) and the previous major version of iOS (the latest minor or point release of that major version). For example, as of June 7, 2017, D2L supports iOS 10.3.2 and iOS 9.3.5, but not iOS 10.2.1, 9.0.2, or any other version. Chrome: Latest version for the iOS browser. |
| Windows | Windows 10 | Edge, Chrome, Firefox | Latest of all browsers, and Firefox ESR. |

- You will need regular access to a computer with a broadband Internet connection. The minimum computer requirements are:
 - 512 MB of RAM, 1 GB or more preferred
 - Broadband connection required courses are heavily video intensive
 - Video display capable of high-color 16-bit display 1024 x 768 or higher resolution

- You must have a:
 - Sound card, which is usually integrated into your desktop or laptop computer
 - Speakers or headphones.
 - *For courses utilizing video-conferencing tools and/or an online proctoring solution, a webcam and microphone are required.
- Both versions of Java (32 bit and 64 bit) must be installed and up to date on your machine. At a minimum Java 7, update 51, is required to support the learning management system. The most current version of Java can be downloaded at: [JAVA web site http://www.java.com/en/download/manual.jsp](http://www.java.com/en/download/manual.jsp)
- Current anti-virus software must be installed and kept up to date.

Running the browser check will ensure your internet browser is supported.

Pop-ups are allowed.

JavaScript is enabled.

Cookies are enabled.

- You will need some additional free software (plug-ins) for enhanced web browsing. Ensure that you download the free versions of the following software:
 - [Adobe Reader https://get.adobe.com/reader/](https://get.adobe.com/reader/)
 - [Adobe Flash Player \(version 17 or later\) https://get.adobe.com/flashplayer/](https://get.adobe.com/flashplayer/)
 - [Adobe Shockwave Player https://get.adobe.com/shockwave/](https://get.adobe.com/shockwave/)
 - [Apple Quick Time http://www.apple.com/quicktime/download/](http://www.apple.com/quicktime/download/)
- At a minimum, you must have Microsoft Office 2013, 2010, 2007 or Open Office. Microsoft Office is the standard office productivity software utilized by faculty, students, and staff. Microsoft Word is the standard word processing software, Microsoft Excel is the standard spreadsheet software, and Microsoft PowerPoint is the standard presentation software. Copying and pasting, along with attaching/uploading documents for assignment submission, will also be required. If you do not have Microsoft Office, you can check with the bookstore to see if they have any student copies.

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

Brightspace Support

Need Help?

Student 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 or click on the **Live Chat** or click on the words "[click here](#)" to submit an issue via email.



System Maintenance

D2L runs monthly updates during the last week of the month, usually on Wednesday. The system should remain up during this time unless otherwise specified in an announcement. You may experience minimal impacts to performance and/or look and feel of the environment.

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

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 lecture. **Excessive absence is defined as missing more than 10% of lectures or more than 10% of the laboratory sessions 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. ***If you miss more than 3 lectures prior to the first exam, I reserve the right to drop you from the course. If you miss more***

than 5 lectures throughout the course of the semester, I reserve the right to drop you from the 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 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. TAMU-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. 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 Students guidebook.

<http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx>

Academic Integrity

Cheating and other Breaches of Academic Conduct: 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. 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)

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

ADA Statement

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 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/)

<http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/>

NONDISCRIMINATION STATEMENT

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.