



CHEM 1105 SURVEY OF GENERAL CHEMISTRY LABORATORY

COURSE SYLLABUS SPRING 2024

INSTRUCTOR INFORMATION

Instructor: Olga Savina

Office Location: STC 344

Office Hours: TBA at a later date

Office Phone: 903-468-8765

University Email Address: Olga.Savina@tamuc.edu

Preferred Form of Communication: email

Response Time: via email. The students are expected to put the class ID and name at the beginning of the subject line of all emails, for example, Chem 1107.01L section when you send the emails to the instructor so the instructor can easily identify your email. The instructor will try to respond to 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.

COURSE INFORMATION

Course Chemistry 1105 laboratory sections meet:

Section 01 - Tuesday 6:00 – 8:50 pm, STC 310

Section 02 - Tuesday 6:00 – 8:50 pm, STC 311

Text/Manual and other required material

- **Custom Laboratory Manual:** Laboratory Experiments – Survey of General Chemistry, Bettelheim | Landesberg, ISBN: 978-1-337-90732-3 (**available in the campus bookstore**)
- A pair of safety goggles
- A combination padlock (one per a group; bring to your first laboratory meeting)
- Appropriate lab attire (long pants without holes, no open-toed shoes, long hair tied back, no sleeveless shirts)
- Calculator
- Lab coat (optional)

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.) Prerequisites: MATH 1314 with a minimum grade of C, MATH 1324 with a minimum grade of C, MATH 179 with a minimum grade of C or MATH 1332 with a minimum grade of C (concurrent or adequate high school mathematical preparation). Corequisites: CHEM 1305.

Student Learning Outcomes

By the end of the semester, I intend my students to have realized a number of objectives:

- All students must be able to readily identify glassware commonly used in the chemistry laboratory and know how to properly utilize the glassware.
- 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.
- Learn the safety requirements and methods needed to work in a chemistry laboratory. Learn how to safely handle, utilize and dispose of chemicals.
- Learn how to document laboratory experiments, how to maintain a scientific notebook.
- Communication in the form of laboratory reports will be clear, purposeful, and make appropriate use of evidence, data, and technology as applicable.
- In laboratory experiments, you should be able to understand how to 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.
- In written, oral, and/or visual communication, A&M-Commerce students will communicate in a manner appropriate to audience and occasion, with an evident message and organizational structure.
- 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

Instructional Methods

- In the lab, you will work in small groups (2-3 students) to complete the lab experiment for that day. **Groups of more than 3 students are not allowed.**
- The observation section (Report Sheet) must be original notes taken during the experiment.
- All submission of your lab report consisting of the pre-lab report (Pre-Lab Questions) and post lab report (Report Sheet and Post Lab Questions) should be done in a

timely manner. The Pre-Lab Questions should be submitted before starting the experiment. The post-lab report is due one week after completion of the experiment.

Course Specific Procedures

- **Safety Quiz: All students are required to take safety training and to pass the safety quiz with the minimum score of 90 points.**
The quiz will be held on online and technical details will be explained in the first lab meeting and/or communicated via D2L. **The safety quiz needs to be completed before the students can participate in lab activities.**
- Labs cannot be done without safety goggles and gloves.
- It is essential to be prepared for the lab, which means students must:
 - 1) read the background information and the procedure of the experiment in the lab manual.
 - 2) **submit the pre-lab report (Pre-Lab Questions) before starting the instructor's pre-lab lecture.**
- Attend the pre-lab lecture is mandatory on time.
- Note-taking during the lecture portion is highly recommended.
- 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.
- Data sheets must be initialed by the teaching assistant/instructor on the day the data is taken and data sheets with no initials will not be accepted.
- You will incur a 10% penalty for every day that your lab report is late; thus, if a lab report is more than 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 report. If you miss more than one laboratory experiment, you will be assigned a grade of zero for that assignment.
- It is the student's responsibility to inform the instructor of their absence before class starts.
- **No phones are allowed!**

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, equipment from the Stockroom and your drawers). 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.

GRADING

Methods of Student Evaluation and Grading Scale

Individual Pre-laboratory Report (Pre-Lab Questions) – 25 points

Individual Post-lab Report (Report Sheet and Post-Lab Questions) – 75 points

Total – 100 points

There will be eleven labs assigned with written lab reports. The lab report with the lowest score will be dropped. Your final grade will be the arithmetic average of the remaining ten lab reports.

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.

TECHNOLOGY REQUIREMENTS

LMS – my Leo Online – D2L Brightspace

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

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

If you have any questions or are having difficulties with the course material, please contact your instructor. Students are encouraged to use their professor's weekly office hours to ask questions.

Communicating via email, students are expected to put the class ID (the course prefix, number and the lab section, e.g., Chem 1111.03L) and name at the beginning of the subject line of all emails, so the instructor can easily identify your email.

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 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.

Class Attendance Policy

All students are expected to attend class 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. You must be on time in order to take an exam. Excessive absence is defined as missing more than 10% of the laboratory sessions without excusable reasons. Good class attendance will be necessary in order to pass the course.

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>

Student Conduct Policy

Students are required to turn off all cell phones, MP3 players, PDA's, Pagers, computers and any other electronic devices before entering the class or in the laboratory that might disrupt class or disturb others.

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment.

Disruptive and disrespectful behavior will not be tolerated by the instructor. The instructor is the judge of such behavior and has the initial authority to remove the student from the class. Disorderly conduct will equate to non-attendance for that day.

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>

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>

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.

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

**Tentative Lab Schedule for CHEM1105
Spring 2024**

Week	Dates of Experiment	Assignment/ Experiment
1	01/16	Syllabus, Safety lecture, Check in equipment
2	01/23	Experiment 1: Laboratory Techniques: Using the Laboratory Gas Burner; Making Laboratory Measurement
3	01/30	Experiment 2: Density Determination
4	02/06	Experiment 3: Separation of the Components of a Mixture
5	02/13	Experiment 5: The Empirical Formula of a Compound: The Law of Constant Composition
6	02/20	Experiment 6: Determination of the Formula of a Metal Oxide
7	02/27	Experiment 7: Classes of Chemical Reactions (I part)
8	03/05	Experiment 7: Classes of Chemical Reactions (II part)
9	03/12	Spring Break: No Classes
10	03/19	Experiment 8: Chemical Properties of Consumer Products
11	03/26	Experiment 11: Charles Law: The Volume –Temperature Relationship of a Gas
12	04/02	Experiment 14: Solubility and Solution
13	04/09	Experiment 15: Water of Hydration
14	04/16	Experiment 19: Analysis Vinegar by Titration
15	04/23	Check out, Return Equipment to the Stockroom

Students should not attend class when ill or after exposure to anyone with a communicable illness. Communicate such instances directly with your instructor. Faculty will work to support the student getting access to missed content or completing missed assignments.