

**CHEM 1107 GENERAL CHEMISTRY LABORATORY***COURSE SYLLABUS SPRING 2024***INSTRUCTOR INFORMATION**

Instructor: Olga Savina

Office Location: STC 344

Office Hours: TBA at a later day

Office Phone: 903-468-8765

University Email Address: Olga.Savina@tamuc.edu

Preferred Form of Communication: 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 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 1107 laboratory sections meet:**

Section 01L: Thursday 6:00 –8:50 pm, STC310

Section 02L: Thursday 6:00 –8:50 pm, STC311

Text/Manual and other required material

- Custom Laboratory Manual – Lab Experiments Survey of Organic & Biochemistry CHEM 1107L; ISBN: 9781337907347. This custom lab manual is available **at the campus bookstore.**
The instructions of purchasing the eBook are available in the LMS (Brightspace/ D2L)
- 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)

The syllabus/schedule are subject to change.

Course Description

A one semester experimental survey of the fundamentals of organic and biochemistry. The course explores the principles, nomenclature, reactions, and synthesis of organic compounds and the chemistry of biological processes. 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).

Corequisites: CHEM 1307

Prerequisites: CHEM 1305 or CHEM 1405 or CHEM 1311 or CHEM 1411 or CHEM 1312 or CHEM 1412

Student Learning Outcomes

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

- Students will be able to apply knowledge and skills to safely operate lab equipment, handle, utilize and dispose of chemicals and properly organize and return equipment at the end of experiments.
- Students will be able to apply knowledge and skills to obtain accurate data needed to complete the experiments.
- Students will be able to use chemical theories and principles to interpret and discuss data to draw sensible conclusions.
- Students will be able to apply the conclusions drawn from experiments to strengthen the concepts learned from lectures.
- Students will be able to perform techniques for the isolation and purification of organic molecules such as recrystallization, chromatography (column and TLC), and extraction.
- 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.
- 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.

Instructional Methods

- In the lab, you will work **in small groups (2-3 students)** to complete the lab experiment for that day. **Groups made of more than 3 students will not be allowed.**
- The observation section (Results) of the report must be the original notes taken during the experiment. No typed or photocopied reports will be accepted. You will work in groups, but every student will write his/her individual pre- and post lab reports.
- Your laboratory will report consist of the **pre-lab report (Pre-Lab Questions)** and **post-lab report (Report Sheet and Post-Lab Questions)**. The pre-lab report should be prepared prior to the day of experiment and submitted before the instructor's pre-lab lecture. **The post-lab report is due one week after completion of the experiment.**

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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 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, the procedure of the experiment in the lab manual.
 - 2) submit the pre-lab report (Pre-Lab Questions) before the instructor's pre-lab lecture. Performing lab experiment without pre-lab report is not allowed.
- Attend the pre-lab lecture is mandatory on time. Late arrival (more than 20 minutes) will result in forfeit of the grade for that lab.
- Note-taking during the lecture portion is highly recommended.
- 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 his/her 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

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There will be twelve 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 eleven 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

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.

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. 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>

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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.

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

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.

Tentative Laboratory Calendar

Week	Date of the Experiment	Experiment
1	01/18	Safety requirements; Syllabus; Check in Equipment
2	01/25	Structure of Organic Compounds: Use of Molecular Models
2	02/01	Classification and Identification of Hydrocarbons
3	02/08	Column and Paper Chromatography: Separation of Plant Pigments
4	02/15	Polymerization Reactions
5	02/22	Preparation of Acetylsalicylic Acid (Aspirin)
6	03/29	Classification and Identification of Alcohols and Phenols
7	03/07	Isolation of Caffeine from Tea Leaves
8	03/14	Spring Break: No Classes
9	03/21	Classification and Identification of Aldehydes and Ketones, Part I
10	03/28	Classification and Identification of Aldehydes and Ketones, Part II
11	04/04	Preparation of Carboxylic Acid and Esters
12	04/11	Preparation and Properties of a Soap
13	04/18	Carbohydrates
14	04/25	Check out, Return Equipment to Stockroom

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