



## **Chemistry 1305: Survey of General Chemistry**

### **Course Syllabus: Fall 2024**

#### **INSTRUCTOR INFORMATION**

Instructor: Ashley Gusukuma

Office Location: Caddo Mills High School, Room 206

Office Hours: M, T, F 3:00- 4:15 pm or by appointment

**\*Chemistry Specific Tutorials offered Monday PM and Wednesday AM\***

Office Phone: (903) 527-3164

Office Fax: (903) 527-4772

University Email Address: [agusukuma@leomail.tamuc.edu](mailto:agusukuma@leomail.tamuc.edu)

Preferred Form of Communication: email

Communication Response Time: < 24 weekday hours

#### **COURSE INFORMATION**

Materials – Textbooks, Readings, Supplementary Readings

Textbook(s) Required: Introduction to General, Organic, and Biochemistry, 11th Edition, ISBN: 9781285869759; by Bettelheim, Brown, Campbell, Farrell.

#### **Course Description**

This is a one-semester course, which covers the fundamentals of chemistry, including basic physical principles and descriptive chemistry of the metal and non-metals, with application to related fields. The course is designed to develop and improve the student's ability to think critically and solve problems. Thus, a letter grade earned in this class does not only reflect the student's knowledge of basic general chemistry, but also reflects the

*The syllabus/schedule are subject to change.*

student's ability to solve scientific problems based on available information, and to become a better scientist.

## **Student Learning Outcomes**

1. Students will be able to analyze, evaluate, or solve problems when given a set of circumstances, data, texts, or art.
2. In written, oral, and/or visual communication, A&M-Commerce students will communicate in a manner appropriate to the audience and occasion, with an evident message and organizational structure.
3. Students will be able to interpret, test and demonstrate principles revealed in empirical data and/or observable facts.
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.

Prerequisite: Math 1314 or Math 1324 or Math 179

## **COURSE REQUIREMENTS**

### **Online Vs. Face to Face**

In the event face to face meetings are not possible due to COVID all students will be responsible for attending our live sessions online. Attendance will be taken.

Coronavirus Protection Measures A&M-Commerce may require the use of face-coverings in all instructional and research classrooms/laboratories. Exceptions may be made by faculty where warranted. Faculty have management over their classrooms. Students not using face-coverings or wearing them inappropriately can be required to leave class. Repetitive refusal to comply can be reported to the Office of Students' Rights and Responsibilities as a violation of the student Code of Conduct.

**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.**

### **Minimal Technical Skills Needed**

Students must be able to use Microsoft office, PowerPoint, D2L, and Google Classroom.

### **Instructional Methods**

This course is mainly lecture oriented and 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 more extensive examples and problem sets. You are expected to read all handouts and to allot adequate time to study the material on your own. If you miss a

*The syllabus/schedule are subject to change.*

lecture, you are still responsible for that day's material-read the chapter, get notes from someone in class, and see the instructor for any clarification. If you have difficulty with the material feel free to see the instructor as soon as you can for advice on how best to improve your understanding of the material. It is recommended that you remain active in our online classroom as well.

## **Student Responsibilities or Tips for Success in the Course**

1. Read the chapter before class.
  - **Read the chapter we are covering when it is assigned.** This helps you in at least two ways: (1) it exposes you to the material before the lecture, making it easier for you to understand the lecture or supplemental material and thus get more out of it; and (2) it prepares you to complete the homework assignment
2. Attend all lectures and problem sessions.
3. Take good class notes.
4. Ask questions in the class if the material is not understood or ask after the class.
5. Actively read the chapters several times.
6. Correct ALL quizzes and exams & review them!!!
7. Work all of the in-text problems.
8. Work ALL of the chapters end problems.
9. Study consistently!!
10. Use supplemental material questions (online classroom, other textbooks, etc.)
11. Use flash cards.
12. Use a study group (3-5 people).
13. Take advantage of the instructor's office hours.
14. Take notes as you read the chapters
15. Summarize your lecture notes.
  - It is a good study habit to go over your notes at the end of each week, filling in the blanks from the supplemental video(s) and assignment. It is also a good idea to make friends in the course and get the phone numbers of a couple of people who you can clarify notes with
16. Complete all assignments, both in person and online.
17. Get a tutor.

**Communication:** If the instructor needs to contact an individual student, it will be via the student's email account. Students should check email frequently, especially after an absence. Email is the best, easiest and fastest way to communicate with me. Remind 101 is also an option.

**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. All the students enrolled at the university shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment (this includes online classes). (See current Student Guidebook). If the student fails to comply with the code of conduct and is disrespectful,

*The syllabus/schedule are subject to change.*

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. A & M-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.

## **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 instructor reserves the right to assign extra credit at her discretion, but it will not exceed 10% of a student's final score.

\*An extra credit assignment will be discussed by the instructor that requires a team paper, flyer and presentation.

## **Assessments**

The start of the semester is August 29th. The last class day is December 16th. Finals week is December 12-16.

Exam 1: Week of September 19<sup>th</sup>

Exam 2: Week of October 17<sup>th</sup>

Exam 3: Week of November 14<sup>th</sup>

Final Examinations: TBD, Week of December 12<sup>th</sup>

Your course grade will be based on your exams, homework, and quizzes. Each course exam is 20% of your final grade. Homework will be 15% and the average of your quizzes will be worth 15%. A comprehensive final exam is worth 10% of your final grade.

**Make-Up Exams:** NONE. No Makeup exams will be offered. Exams may be rescheduled, without penalty, only when arrangements have been made in advance of the testing date. Please come to me within the first week of class if they have conflicts with the exam dates. Make-up exams will only be given in the case of verifiable medical or legal emergencies. Verifiable means that written documentation is provided (e.g., signed doctors' notes, court appearance tickets, newspaper obituaries). The final decision concerning make-up exams rests with me, the instructor. If no valid excuse is presented your exam grade is a

*The syllabus/schedule are subject to change.*

zero. In that situation, the points for the missed exam will be replaced by the final exam grade making the final exam count for a larger percentage of your grade. Exams cover lectures, quizzes and online homework problems. The final comprehensive exam will comprise all the subject matter discussed during the semester \*Note Mrs. Gusukuma can work with students with COVID19 related concerns and create unique exams for students in that circumstance. Communication with Mrs. Gusukuma will be crucial to ensuring this happens. It must be arranged before NOT after an exam.

**Make up Quizzes:** NONE. There are NO make-up quizzes. There will be weekly quizzes covering the reading assignment and lecture material for the week.

**Homework late policy:** There will be mandatory online and paper-based homework, which needs to be completed by the due time to receive grades. There will be homework for each chapter.

**Suggested Additional Chapter Problems:**

Chapter 1: 13, 16, 17, 18, 20, 25, 26, 30, 35, 38, 43, 47, 57, 59, 66, 74, 80, 88, 90, 100, 101.

Chapter 2: 9, 10, 15, 16, 18, 20, 22, 24, 30, 32, 43, 45, 53, 75, 76, 79, 82.

Chapter 3: 18, 21, 22, 24, 28, 30, 32, 34, 42, 48, 50, 54, 56, 59, 75, 83, 88.

Chapter 4: 17, 19, 23, 26, 31, 32, 39, 42, 45, 46, 55, 57, 64, 67, 70, 74, 83, 87.

Chapter 5: 12, 15, 18, 20, 23, 30, 46, 50, 53, 62, 64, 70, 75, 82, 93, 96.

Chapter 6: 17, 23, 25, 28, 35, 37, 40, 44, 48, 59, 60, 67, 69, 76.

Chapter 7: 10, 16, 19, 26, 30, 33, 37, 38.

Chapter 8: 14, 16, 19, 20, 22, 30, 33, 37, 43, 45, 56, 66.

Chapter 9: 8, 10, 12, 15, 25, 26, 28, 31, 33, 39, 40, 53, 55.

Chapter 10: 15, 17, 24, 27, 29, 35, 54.

**General Advice Regarding Problems**

It is assumed that a good student will be able to work through all the problems in the textbook (even the study problems in each chapter) even though only some may have been suggested. You must work on lots of problems, even from other textbooks and study guides to be sure you understand and can use the concepts studied. It is not a good idea to try to memorize solutions to problems, since identical problems will not be used again. You also should determine ways to check the answer to a problem you have solved by application of common sense. Also, ask yourself how a problem might be rearranged as a possible test item. You will find this helpful in preparing for exams. Compare your answers with other students. Remember that there are typically more than one possible solution to a problem! BE precise with your answers. On your exams you will be graded on what you write, not what you meant to write or thought you wrote. If your explanations do not make sense to your classmate, then they probably will not make sense to the exam grader.

**Class Attendance Policy**

*The syllabus/schedule are subject to change.*

All students are expected to attend class 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. Being late by more than 5 minutes is equivalent to missing a lecture or laboratory. You must be on time in order to take an exam. Excessive absence is defined as missing more than 10% of the lecture or laboratory sessions without excusable reasons. Excessive absences will be reported to the Dean of the College and the Dean of Students, in accordance with the TAMU-Commerce Procedure A13.02. Good class attendance will be necessary in order to pass the course. If you miss more than 3 lectures prior to the first exam, the instructor reserves the right to drop you from the course. If you miss more than 6 lectures throughout the course of the semester, the instructor reserves the right to drop you from the course

## 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](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](mailto: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.

*The syllabus/schedule are subject to change.*

## **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**

## **COURSE AND UNIVERSITY PROCEDURES/POLICIES**

### **Course Specific 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>

*The syllabus/schedule are subject to change.*

## **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/documents/13.99.99.R0.03UndergraduateStudentAcademicDishonestyForm.pdf>

[Graduate Student Academic Dishonesty Form](#)

<http://www.tamuc.edu/academics/graduateschool/faculty/GraduateStudentAcademicDishonestyFormold.pdf>

<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

Velma K. Waters Library Rm 162

Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

Email: [studentdisabilityservices@tamuc.edu](mailto: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.

*The syllabus/schedule are subject to change.*



## **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](http://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

*The syllabus/schedule are subject to change.*

## COURSE OUTLINE / CALENDAR

**Tentative Schedule:** Reading assignments should be done and ALL reading notes taken prior to class to ensure best understanding of the material being presented.

Week of	Chapter/Topic	Reading Assignment/Exams
August 26 <sup>th</sup>	Chapter 1 Matter, Energy & Measurements Chapter 2: Atoms	Chapter 1 & 2
September 2 <sup>nd</sup>	Chapter 2: Atoms	
September 9 <sup>th</sup>	Chapter 2 Atoms Chapter 3 Chemical Bonds	
September 16 <sup>th</sup>	Chapter 3 Chemical Bonds	Exam over Chapters 1, 2 & 3
September 23 <sup>rd</sup>	Chapter 4 Chemical Reactions	Chapter 4
September 30 <sup>th</sup>	Chapter 4 Chemical Reactions Chapter 5 Gases, Liquids and Solids	Chapter 5
October 7 <sup>th</sup>	Chapter 5 Gases, Liquids and Solids Chapter 6 Solutions and Colloids	Chapter 6
October 14 <sup>th</sup>	Chapter 6: Solutions and Colloids	Exam over Chapters 4, 5, & 6
October 21 <sup>st</sup>	Chapter 7: Reaction Rates and Chemical Equilibrium	Chapter 7
October 28 <sup>th</sup>	Chapter 8: Acids and Bases	Chapter 8
November 4 <sup>th</sup>	Chapter 8: Acids and Bases & Chapter 9: Nuclear Chemistry	Chapter 9
November 11 <sup>th</sup>	Chapter 9: Nuclear Chemistry	Exam over Chapters 7, 8, & 9
November 18 <sup>th</sup>	Chapter 10: Organic Chemistry	Chapter 10
November 25 <sup>th</sup>	Thanksgiving Break	
December 2 <sup>nd</sup>	Dead Week/Make Up	
Week of December 9 <sup>th</sup>	Final Exams	Final Covers all 10 Chapters

*The syllabus/schedule are subject to change.*