BSC 1305/1105 - Survey of General Chemistry and Laboratory
Syllabus Spring 2024

Instructor: C.J. Merrill
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Office Hours: Mondays 12:10-1:00 p.m., Wednesdays & Thursdays 12:10-1:00 p.m.
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COURSE INFORMATION

Textbook Required:
Introduction to General, Organic, and Biochemistry, 11th Edition,
ISBN: 9781285869759; by Bettelheim, Brown, Campbell, Farrell.
Laboratory Experiments – Survey of General Chemistry, Bettelheim | Landesberg,
ISBN: 978-1-337-90732-3 (Available in the bookstore)

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

Course Objectives:
This course is designed as the first half of the freshman chemistry sequence and covers topics including the nature of matter, reactions of matter, equilibrium and organic chemistry. With successful competition of this course, students will be able to demonstrate understanding of the above concepts by definition, explanation, and use of these ideas in examinations and laboratory exercises.

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.

COURSE REQUIREMENTS

Student Responsibilities or Tips for Success in the Course
1. Read the chapter before class.
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.
16. Complete all assignments, both in person and online.
16. Get a tutor.

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 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 google classroom.

This course includes credit for a laboratory course. Students are expected to engage in laboratory exercises and complete laboratory reports. Lab days will be held on Tuesdays and Wednesdays, and students are expected to come to the lab dressed in appropriate attire and participate in the lab safely.

Class participation and lab work (preparedness, discussion, in-class activities)
Class participation is vital in class. Your questions and comments may help clarify the content for your peers. Group work is an integral part of this course. Collaboration of an investigative team during labs is essential to gaining the best perspective and will be considered when participation points are awarded. Everyone's attention and participation is key to this approach. In addition, this is a lab course. Attendance on lab day is mandatory. Labs may not be made up.

GRADING

Students will be given the following opportunities to demonstrate knowledge of class material. The course has a total of 1000 points.

Lecture Grades: 60% of total grade

Exams:	= 250 points (3 unit exams 50 points each; final exam 100 points)
Homework/Participation:	= 150 points (10 point/week)
Quizzes:	= 200 points (10 quizzes; 20 points each)

Lab Work: 40% of the total grade - 11 labs will be completed with the lowest lab grade dropped

Participation	= 50 points (10 labs; 5 points each)
Pre-lab work	= 100 points (10 labs; 10 points each)
Post-lab report	= 250 points (10 labs; 25 pointe each)

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

COURSE OUTLINE / CALENDAR

Course Schedule: class begins January 10 and ends May 3, 2024

1/10-1/19	Week 1	Ch 1-2 Pgs. 1-39	Matter, Energy & Measurement/Atoms (Laboratory Techniques: Using the Laboratory Gas Burner; Making Laboratory Measurement) Homework:	Quiz 1
1/22-1/26	Week 2	Ch. 2	Atoms (Density Determination)	Quiz 2
1/29-2/2	Week 3	Ch. 2-3	Atoms/Chemical Bonds (Separation of the Components of a Mixture)	Quiz 3
2/5-2/9	Week 4	Ch. 3	Chemical Bonds (No Lab - testing week)	Exam 1
2/12-2/16	Week 5	Ch. 4	Chemical Reactions (The Empirical Formula of a Compound: The Law of Constant Composition)	Quiz 4
2/19-2/23	Week 6	Ch. 4-5	Chemical Reactions/Gasses, Liquids and Solids (Determination of the Formula of a Metal Oxide)	Quiz 5
2/26-3/1	Week 7	Ch 5-6	Gasses, Liquids and Solids/Solutions and Colloids (Classes of Chemical Reactions part I)	Quiz 6
3/4-3/8	Week 8	Ch 6	Solutions and Colloids(Classes of Chemical Reactions part II)	Exam 2
3/11-3/15	Week 9		Spring Break	
3/18-3/22	Week 10	Ch 7	Reaction Rates and Chemical Equilibrium (Chemical Properties of Consumer Products)	Quiz 7
3/25-3/29	Week 11	Ch. 8	Acids and Bases (Charles Law: The volume – temperature relationship of a gas)	Quiz 8
4/1-4/5	Week 12	Ch 8	Acids and Bases (Solubility and Solution)	Exam 3
4/8-4/12	Week 13	Ch 9	Nuclear Chemistry (Water of Hydration)	Quiz 9
4/15-4/19	Week 14	Ch 9-10	Nuclear Chemistry/Organic Chemistry (Vinegar by Titration)	Quiz 10
4/22-4/26	Week 15	Ch 10	Organic Chemistry	Quiz 11
4/29-5/3	Week 16	Ch 10	Organic Chemistry and FInals	Final Exam

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

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

I will be available during the posted office hours in person. Please reach out anytime you feel the need to confer, and I can arrange a virtual meeting at other times as well.

I am always ready to answer any questions via email also.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

There will be NO opportunities for extra credit. I drop one quiz grade and one lab grade, and as a rule, I am not allowed to accept late work. Of course, extenuating circumstances will be considered so please communicate with me directly. Please be prepared for class by being on time, reading the assignment in advance, completing assigned problems and preparing for class discussions.

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

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedure

s/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf

Graduate Student Academic Dishonesty 13.99.99.R0.10

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.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.

Pandemic Response Statements

A&M-Commerce requires 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 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.