



*“Chemistry is great, but eventually your relationship moves out of the laboratory.”
— Tim Fargo*

Chemistry 1311: General Chemistry I
Spring 2017
Lecture Schedule: TR 12:45-2:05 pm

Instructor: Dr. Roland Barbosa
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Office Hours: M 10-12 pm, W 2-4 and by appointment

Course Description: Mathematics-based review of chemical laws and theory for science, engineering and pre-professional majors.

Required Text: Chemistry: The Central Science, 13th custom edition for Lamar University by Brown, LeMay, Jr., Bursten, Murphy and Woodward. Access to Modified Mastering Chemistry form Pearson Publications (pearsonmylabandmastering.com).

Prerequisite: (1) College Algebra (MATH 1314 or equivalent)
(2) High School Chemistry and/or CHEM 1375 is strongly recommended

Course Material: The topics to be covered are listed below, with indication of the chapter in the text book that pertains to each topic.

Chapter	Topics
Appendix A	Mathematical Operations
1	Introduction: Matter and Measurement
2	Atoms, Molecules, and Ions
3	Stoichiometry
4	Aqueous Reactions and Solution Stoichiometry
5	Thermochemistry
6	Electronic Structure of Atoms
7	Periodic Properties of the Elements
8	Basic Concepts of Chemical Bonding
9	Molecular Geometry and Bonding Theories

Grading: A = 90-100%; B = 80-89%; C = 70-79%; D = 60-69%; F = 0-59% Grades are based on homework, class tests, and comprehensive final.

Exams	Percentage	Date/Time
Homework (6/9)	10%	Follow Modified Mastering Chemistry
Quizzes (4/6)	5%	Unannounced
Exam # 1	20%	TBA/12:45-2:05 pm
Exam # 2	20%	TBA/12:45-2:05 pm
Exam # 3	20%	TBA/12:45-2:05 pm
Final (Chapters 1-9)	25%	9-May/11:00-12:30 pm

The exam schedule is subject to change. Occasional quizzes will be given covering the material from **previous class, homework or preparatory material** for class. Final exam is officially set as above. No make up for quizzes, tests, however, special accommodations will be made in the event of **personal/family emergencies, illness, or required participation in university activities. These events must be documented for accommodations.**

Cell phones are prohibited during class. Turn them off and leave them in your bag. Only calculators are permitted during exams. **All other electronic devices such as cell phones, tablets, computers, etc. are not allowed.**

Learning Outcomes:

Students who successfully complete the course will emerge with knowledge, experience and understanding of:

1. Define the fundamental properties of matter.
2. Classify matter, compounds, and chemical reactions.
3. Determine the basic nuclear and electronic structure of atoms.
4. Identify trends in chemical and physical properties of the elements using the Periodic Table.
5. Describe the bonding in and the shape of simple molecules and ions.
6. Solve stoichiometric problems.
7. Write chemical formulas.
8. Write and balance equations.
9. Use the rules of nomenclature to name chemical compounds.
10. Define the types and characteristics of chemical reactions.
11. Determine the role of energy in physical changes and chemical reactions.
12. Convert units of measure and demonstrate dimensional analysis skills.

Academic Honesty:

Engaging in academic dishonesty as defined and described under Academic Affairs in the student handbook will result in immediate suspension from class and a course grade of F. Use of any wireless devices during tests and exams will be treated as an academic dishonesty.

Students with Disabilities:

For students with disabilities, this course will comply with all accommodations prescribed by the Lamar University Office of Services for Students with Disabilities. It is the responsibility of the student to insure that the instructor has been informed of all prescribed accommodations.

Attendance:

Regular class attendance is important to the attainment of the educational objectives of the University. Attendance will be checked daily (see federal policies).

Federal Policies:

Title IV Policy: Each semester, every faculty member will be required to check attendance records, and then indicate any student who is no longer attending the class. The checked rolls will be signed by the faculty member and returned to the Registrar's office.

FERPA (Family Education Rights Privacy Act of 1972): Due to the privacy laws regarding student grades in FERPA, a student's grade cannot be discussed with anyone other than student – no one else including parents and/or friends. This includes emails, voice mails, over the phone, answering services, etc. Therefore the student must appear in person to insure identity and can only access their grade.

Emergency Preparedness

As we begin this semester, I want to take a few minutes and discuss emergency preparedness. Lamar is a very safe campus and there is a low probability that a serious incident will occur here. However, we want to emphasize our emergency procedures for evacuation and shelter in place incidents. Our preparedness will be critical IF an unexpected event occurs!

Instructions for specific emergencies, such as severe weather, chemical release, active shooter, or fire can be found at: <http://www.lamar.edu/aboutlu/administration/risk-management/index.html>

Here are some simple things you should do in the event an emergency occurs during our class.

- Always follow the directions of the instructor or emergency personnel
- If told to evacuate, do so immediately.
- If told to shelter-in-place, find a room, in the center of the building with few windows, on the lowest level of the building.
- If told to lockdown, lock and barricade the door if possible. Turn off the lights and wait for police to arrive.

Emergency Procedures

Many types of emergencies can occur on campus; instructions for severe weather or violence/active shooter, fire, or chemical release can be found at: <http://www.lamar.edu/about-lu/administration/risk-management/index.html>

Following are some of the procedures:

Campus Closure:

In the event of an announced campus closure in excess of four days due to a hurricane or other disaster, students are expected to login to Lamar University's website's home page for instructions about continuing courses remotely

Severe Weather:

- Follow the directions of the instructor or emergency personnel.
- Seek shelter in an interior room or hallway on the lowest floor, putting as many walls as possible between you and the outside.
- If you are in a multi-story building, and you cannot get to the lowest floor, pick a hallway in the center of the building.
- Stay in the center of the room, away from exterior walls, windows, and doors.

Violence/Active Shooter (CADD):

- CALL - 8-3-1-1 from a campus phone (880-8311 from a cell phone). Note: Calling 9-1-1 from either a campus phone or cell phone will contact Beaumont City Police Dispatch rather than University Police.
- AVOID- If possible, self-evacuate to a safe area outside the building. Follow directions of police officers.
- DENY- Barricade the door with desks, chairs, bookcases or any other items. Move to a place inside the room where you are not visible. Turn off the lights and remain quiet. Remain there until told by police it is safe.
- DEFEND- Use chairs, desks, cell phones or whatever is immediately available to distract and/or defend yourself and others from attack.