TEXARKANA COLLEGE

Syllabus: General Chemistry I Lab (Dual Credit)

Course Number: CHEM 1111

Semester & Year: Instructor Information Name: John Baker

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Office Hours: (my conference period A-days and B-days)

Required materials

Composition notebook for labs

Textbook Information

Excerpts from a lab manual will be provided prior to the lab.

Student Learning Outcomes for the Course

At the conclusion of this course students should be able to:

- 1. Use basic apparatus and apply experimental methodologies used in the chemistry laboratory.
- 2. Demonstrate safe and proper handling of laboratory equipment and chemicals.
- 3. Conduct basic laboratory experiments with proper laboratory techniques.
- 4. Make careful and accurate experimental observations.
- 5. Relate physical observations and measurements to theoretical principles.
- 6. Interpret laboratory results and experimental data, and reach logical conclusions.
- 7. Record experimental work completely and accurately in laboratory notebooks and communicate experimental results clearly in written reports.
- 8. Design fundamental experiments involving principles of chemistry.
- 9. Identify appropriate sources of information for conducting laboratory experiments involving principles of chemistry.

Student Requirements for Completion of the Course

Student Assessment

Pre-lab questions will be assigned to answer prior to starting a lab. Lab notebook entries will be completed before, during, and after a lab. Post-lab questions will be answered after a lab.

The course grade will be calculated from the following schedule:

Pre-Lab Questions	30%
Lab Notebook Entries	50%

Post-Lab Questions	20%

Grading Scale

IMPORTANT NOTE: While students earn numerical grades for high school credit, only letter grades will appear on Texarkana College transcripts. The conversions from numerical grades to letter grades used by Texarkana College are shown in Table I below. Numerical grades will appear on Texas High School transcripts for the local credit earned in this course. The corresponding letter grades for Texas High School are shown in Table II. Because Texarkana College uses the grade of "D" for numerical averages 60-69, students earning semester average grades of 60-69 will earn credit (a "D") on their Texarkana College transcripts but will earn a failing grade (an "F") on their Texas High School transcripts and WILL NOT earn high school credit for this course.

Texarkana College

Semester Grade	Course Average
Α	90-100
В	80-89
С	70-79
D	60-69
F	59-below

Table I. Semester Letter Grade Equivalents for <u>Texarkana College</u>

Texas High School

Numerical Grade	Letter Grade
90 - 100	Α
80 - 89	В
70 - 79	C
0 - 69	F

Table II. Semester Letter Grade Equivalents for <u>Texas High School</u> (Texarkana Independent School District (TISD) policy)

Class Schedule

Topics will be covered in the approximate order outlined below. Chemistry topics often contain overlapping material.

- i. Safety in the laboratory, Safety Constructs
- 1. Volume measurements
- 2. Identification of substances by physical properties
- 3. The density of a liquid and a solid
- 4. Paper chromatography: Separation of cations and dyes
- 5. Determining the chemical formula of a hydrate
- 6. Determining the empirical formulas of ZnCl₂ and Cu₂S
- 7. Studying chemical reactions
- 8. Chemical reactions of copper (Cu) and percent yield
- 9. Colorimetric determination of an equilibrium constant in aqueous solution

- 10. Chemical equilibrium: LeChâtelier's principle
- 11. Determination of the dissociation constant of a weak acid, Part I:

Standardization of sodium hydroxide (NaOH) solution

Determination of the dissociation constant of a weak acid, Part II:

Determination of pK_a and concentration of unknown acid using the standardized NaOH solution

- 12. Oxidation-Reduction titrations: Determining the percent sodium hypochlorite in commercial bleach.
- 13. Molecular geometries of covalent molecules: Lewis structures and the VSEPR model.

Attendance Policy

In accordance with Texarkana Independent School District (TISD) policy, the attendance policy will be as follows:

Attendance for Credit: To receive credit in a class, a student must attend at least 90 percent of the days the class is offered. A student who attends at least 75 percent but fewer than 90 percent of the days the class is offered may receive credit for the class if he or she completes a plan approved by the principal that allows the student to fulfill the instructional requirements for the class. If a student is involved in a criminal or juvenile court proceeding, the approval of the judge presiding over the case also will be required before the student receives credit for the class.

If a student attends less than 75 percent of the days a class is offered or has not completed a plan approved by the principal, then the student will be referred to the attendance review committee to determine whether there are extenuating circumstances for the absences and how the student can regain credit, if appropriate. [See policies at FEC.]

In determining whether there were extenuating circumstances for the absences, the attendance committee will use the following guidelines:

- All absences will be considered in determining whether a student has attended the required percentage of days. State-allowed exemptions to the compulsory attendance requirements also will be considered, if make-up work is completed. [See policies at FEA.]
- A transfer or migrant student begins to accumulate absences only after he or she
 has enrolled in the district. For a student transferring into the district after school
 begins, including a migrant student, only those absences after enrollment will be
 considered.
- In reaching a decision about a student's absences, the committee will attempt to ensure that it is in the best interest of the student.
- The committee will consider the acceptability and authenticity of documented reasons for the student's absences.
- The committee will consider whether the absences were for reasons over which the student or the student's parent could exercise any control.
- The committee will consider the extent to which the student has completed all assignments, mastered the essential knowledge and skills, and maintained passing grades in the course or subject.

 The student or parent will be given an opportunity to present any information to the committee about the absences and to talk about ways to earn or regain credit.

If the committee determines that there have been extenuating circumstances, it will decide how the credit may be regained. If the committee determines, however, that there are no extenuating circumstances, credit will be denied in the classes in which the excessive absences occurred. Parents will receive notice that the student has lost credit due to excessive absences.

The student or parent may appeal the committee's decision to the board of trustees by filing a written request with the superintendent in accordance with policy FNG(LOCAL).

The actual number of days a student must be in attendance in order to receive credit will depend on whether the class is for a full semester or for a full year.

Make Up Hours for Excessive Absences: Students will have the opportunity to make up excessive absences by attending morning and afternoon detentions, Night Library, and designated after school and Saturday tutorials. These opportunities will be the only means that student may use to regain credit.

Requirements for all of these opportunities are as follows:

- Students must have books and materials to study.
- Students will be expected to work without talking to other students.
- Students must sign in and out to receive credit.
- All school rules will be followed or the student will be asked to leave the session without credit.
- No food or drinks will be allowed.
- No electronic devices, including cell phones, Walk-mans, iPods, or other electronic devices will be allowed.
- Students must provide their own transportation. (Transportation may be provided for Saturday tutorials.)

Parents and students will be notified that the student is in danger of being assigned make-up hours. They also will be notified throughout the semester as the amount of make-up hours increases. Make-up hours also will be posted by student ID.

Make-up Policy

In accordance with Texarkana Independent School District (TISD) policy, the make-up work policy will be as follows:

Make-up Work from Absences: In all high school courses, students will make up assignments and performance assessments after absences, including absences as a result of suspension, with the following requirements. If the assignment was made prior to the student's absence, the assignment will be due the first day that the student returns to the campus. If the assignment was made during the student's absence, the student will have the same number of days to complete the work as other students had who were present on the day that the assignment was made.

Academic Dishonesty Policy

Scholastic dishonesty, involving but not limited to cheating on a test, plagiarism, collusion, or falsification of records will make the student liable for disciplinary action after being investigated by the Dean of Students. Proven violations of this nature will result in the student being dropped from the class with an "F".

This policy applies campus wide, including TC Testing Center, as well as off-campus classroom or lab sites, including dual credit campuses. This information can be found in the Student Handbook at https://www.texarkanacollege.edu/.

Disability Act Statement: Texarkana College complies with all provisions of the Americans with Disabilities Act and makes reasonable accommodations upon request. Please contact Tonja Blase at (903) 823-3450 ext. 3349, or go by the Recruitment, Advisement, and Retention Department located in the Library for personal assistance. If you have an accommodation letter from their office indicating that you have a disability which requires academic accommodations, please present it to me so we can discuss the accommodations that you might need for this class. It is best to request these changes at the beginning if not before the start of class so there is ample time to make the accommodations.

Financial Aid: Attention! Dropping this class may affect your funding in a negative way! You could owe money to the college and/or federal government. Please check with the Financial Aid office before making a decision.

Disclaimer

The above syllabus, policies, schedule, and assignments in this course are subject to change in the event of extenuating circumstances or by mutual agreement between the instructor and the students.

TC Police (903) 798-3330

Luretha Loudermill (903)-823-3143 or <u>tc.counselor@texarkanacollege.edu</u> <u>https://www.texarkanacollege.edu/campus-life/counseling-services/</u>

Basic Needs Security

Any student who has difficulty affording groceries or accessing enough food to eat every day, or who lacks a safe and stable place to live and believes this may affect their performance in this course or ability to remain in school, is urged to contact Tonja Blasé, Director of Student Retention, at (903) 823-3349 for support. Furthermore, please notify the professor if you are comfortable in doing so. This will enable them to provide any resources that they may possess.