

Syllabus: General Chemistry II Course Number: Chemistry 1312

Instructor Information: Karin Grisham, Assoc, Professor

Office Location: Biology Building Room 111 Phone Number: 903-838-3293 Email Address: <u>karin.grisham@texarkanacollege.edu</u>

Important Websites:

Student Grades & Attendance: Located through the my TC website <u>www.texarkanacollege.edu</u> Student Handouts: Located on the Moodle Course Page through my TC website Openstax Textbook: <u>https://openstaxcollege.org/textbooks/chemistry</u> Sapling Learning Homework Site: <u>http://www2.saplinglearning.com/</u>

Required Materials:

Internet Access (you are welcome to use the computers in the library and computer labs on campus) Scientific Calculator (please do <u>not</u> purchase a Casio Model that says "Chemistry Calculator". Chemical Splash Goggles (Laboratory)

Class Schedule:		
Chem 1312 (Lecture)	Room:	
Chem 1112 (Lab)	Room:	

Course Description: Chemistry 1311 covers chemical equilibrium, phase diagrams and spectrometry, acid-base concepts, thermodynamics, kinetics, electrochemistry, nuclear chemistry, an introduction to organic chemistry and descriptive inorganic chemistry. Chemistry 1312 is only a lecture session and laboratory sessions. Students who enroll in Chemistry 1312 are only enrolling in a lecture section.

Prerequisites: Students should have completed Chemistry 1311/1111 with a minimum grade of "C" or have consent of the professor.

<u>Required</u>

Textbooks: The Chemistry 1312 textbook is <u>Openstax Chemistry</u>. The ISBN number is 1938168399. This book can be acquired for FREE at the link provided above in PDF or web version. A print version is currently not available.

Homework Site: You will have homework that will be assigned through the Sapling Learning website (see above for the website). The homework be part of your grade in this course.

Lecture: Chemistry 1312 lecture meets for 150 minutes four times a week for five weeks. The format involves typical lecture presentations supported by electronic displays and numerous live chemical demonstrations that support the topics under discussion. The lecture electronic material is available on the campus Moodle Page along with other activities that support many concepts. The grade for the lecture portion of the course is determined from a combination of scores from Chapter Tests, Online Homework, Daily Quizzes and a Final Exam.

Tentative Schedule:

WEEK	LECTURE CONTENT & TEST SCHEDULE	QUIZZES	HOMEWORK ASSIGNMENT	LAB 10:30-11:15 PRACTICE	LAB ACTIVITY 11:15-12:50
	8:00-10:20 Break ~ 9:10			PROBLEM SESSION	Break ~ as lab allows
Week 1	M – Ch 9 – Gas Laws		Sapling Homework #1	TBD	Lab Drawer Set Up Equipment Identification EQUIPMENT HOMEWORK – SAPLING SITE
	T – Ch 9 – Gas Laws	Daily Quiz #1	Sapling Homework #2	TBD	Safety Video SAFETY CONTRACT
	W – Test 1 Ch 9 ; Ch 10 – Liquids & Solids		Sapling Homework #3	TBD	SAFETY QUIZ Pre-Lab Activity #1
	R – Ch 10 – Liquids & Solids	Daily Quiz #2	Sapling Homework #4	TBD	Lab Activity #1
Week 2	M – Test 2 Ch 10 ; Ch 12 – Kinetics		Sapling Homework #5	TBD	Pre-Lab Activity #2
	T – Ch 12 – Kinetics	Daily Quiz #3	Sapling Homework #6	TBD	Lab Activity #2
	W – Test 3 Ch 12 ; Ch 13 – Equilibrium		Sapling Homework #7	TBD	Pre-Lab Activity #3
	R – Ch 13 – Equilibrium	Daily Quiz #4	Sapling Homework #8	TBD	Lab Activity #3
Week 3	M – Ch 13 – Equilibrium	Daily Quiz #5	Sapling Homework #9	TBD	Pre-Lab Activity #4
	T – Test 4 Ch 13 ; Ch 14 – Acid-Base Equilibrium		Sapling Homework #10	TBD	Lab Activity #4
	W – Ch 14 – Acid-Base Equilibrium	Daily Quiz #6	Sapling Homework #11	TBD	Pre-Lab Activity #5
	R – Test 5 Ch 14 ; Ch 16 - Thermodynamics		Sapling Homework #12	TBD	Lab Activity #5

Week 4	M – Ch 16 – Thermodynamics	Daily Quiz #7	Sapling Homework #13	TBD	Pre-Lab Activity #6
	T – Test 6 Ch 16 ; Ch 17 – Electrochemistry		Sapling Homework #14	TBD	Lab Activity #6
	W – Ch 17 – Electrochemistry	Daily Quiz #8	Sapling Homework #15	TBD	Pre-Lab Activity #7
	R – Ch 17 – Electrochemistry	Daily Quiz #9	Sapling Homework #16	TBD	Lab Activity #7
Week 5	M – Test 7 Ch 17 ; Ch 20 – Organic Chemistry		Sapling Homework #17	TBD	Lab Drawer Break Down Learning Objective Test
	Ch 21 – Nuclear Chemistry	Daily Quiz #10	Sapling Homework #18	TBD	
	W – Test 8 Ch 20 & 21 Final Review			TBD	
	R – Test 9 - Comprehensive Final Exam				

Homework: Students are expected to complete homework assignments. The assignments are available through the Sapling Learning Website. Each homework assignment is to be completed prior to the subject area examination in order to help best prepare for the test. The home work will be assigned a grade and the average grade on the homework assignments counts as 20% of the total course grade.

Quiz: Students are required to take quizzes over content that has been presented in class. Some quizzes will be IN CLASS while others will be on the MOODLE page. Quizzes will be announced well in advance and students will be allowed to use notes and textbooks on most but not all quizzes. Quizzes will count 30% of the total course grade.

Final Course Grade: The final course grade is determined by combining the test, quiz and homework grade together in the following manner:

Grade Category
Chapter Tests & Final (50%)
Homework (20%)
Quiz (30%)

Tutoring: Texarkana College Student Support Services has tutors available to assist chemistry students that need help with the course. They can help with the completion of homework assignments and pre-laboratory assignments.

Learning Outcomes: The learning outcomes for Chemistry 1311 are published by the Texas Higher Education Coordinating Board and are available from the Lower-Division Academic Course Guide Manual (ACGM). The learning outcomes are as follows:

- 1. State the characteristics of liquids and solids, including phase diagrams and spectrometry.
- 2. Articulate the importance of intermolecular interactions and predict trends in physical properties.
- 3. Identify the characteristics of acids, bases, and salts, and solve problems based on their quantitative relationships.
- 4. Identify and balance oxidation-reduction equations and solve re-dox titration problems.
- 5. Determine the rate of a reaction and its dependence on concentration, time and temperature.
- 6. Apply the principles of equilibrium to aqueous systems using LeChatelier's Principle to predict the effects of concentration, pressure, and temperature changes on equilibrium mixtures.
- 7. Analyze and perform calculations with the thermodynamic functions, enthalpy, entropy, and free energy.
- 8. Discuss the construction and operation of galvanic and electrolytic electrochemical cells and determine standard and non-standard potentials.
- 9. Define nuclear decay processes.
- 10. Describe basic principles of organic chemistry and descriptive inorganic chemistry.

GENERAL COURSE POLICIES

Attendance Policy: You are required to attend lecture sessions. Success in college level courses is often closely correlated with classroom attendance and participation. Role will be called and a list of those absent maintained. You can check your attendance in myTC under "Grades and Attendance". If you make a grade of "F" for whatever reason the last day you attended class based on the class role will be recorded on the final grade sheet. This may impact your scholarships and future funding. It is possible that you will be asked to return money based on this date. <u>Attendance is mandatory</u>. Students who miss more than four lectures will be dropped from the class unless other arrangements are made with the instructor. You may keep track of your absences via myTC.

Classroom Behavior: In general, lectures and laboratories are conducted in a rather open fashion with adequate opportunity for students to interact with their instructors and with each other about <u>chemistry</u>. Excessive talking between students or other behavior that becomes a distraction to the instructor or class members will result in the student(s) being asked to leave the class. Please mute any electronic devices before attending course lectures. General behavior for students on campus is reviewed in the <u>Texarkana College Catalogue</u> and the <u>Texarkana College-Student Handbook (https://www.texarkanacollege.edu/</u>)

There will be a *ZERO TOLERANCE* policy for any behavior that is disruptive and prevents or deters classroom learning. This includes, but is not limited to, ANY use of vulgar language or rude behavior towards the instructor or any other student in the class. Violation could result in being asked to leave the class, withdrawal from the course, &/or investigation by the Dean of Students.

Missed Assignments: If you know in advance that you are going to miss an examination it is best to arrange with the instructor to take the examination early. If you miss an examination for reasons beyond your control, you should contact the instructor as soon after as feasible to make arrangements to take the examination. All missed or make-up tests and assignments will be put in the testing center and should be taken as soon as feasibly possible. Assignments will be picked

up once a week (usually on Thursday after class) from the testing center. As a result, there will be a delay in when the missed assignment will be posted in the gradebook.

Withdrawal Policy: If you wish to drop the class, please do so yourself. The instructor will not be responsible, unless you make a specific request prior to the drop deadline. The drop deadline for each semester is can be found in the <u>Texarkana College Catalogue</u> (https://www.texarkanacollege.edu/). After the drop deadline the student that fails to complete the class with a satisfactory grade will receive a grade of "F". The student's final attendance date will be reported with the grade of "F".

Testing Center Policy: During the semester you may be asked to take examinations in the Texarkana College Assessment and Testing Center located in Room 11 of the Business and Computer Technology Building. The hours of operation, policies and procedures for the testing center can be found on the Texarkana College Web Page at https://www.texarkanacollege.edu/. The policies of the Texarkana College Assessment and Testing Center must be studied and closely followed.

Academic Integrity Statement: 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 the TC Testing Center, as well as off-campus classrooms or lab sites. For more information students should refer to TC Student Handbook.

Cell Phone Policy: During lecture, please put cell phones on silent in order to prevent others from being distracted. During tests and quizzes, cell phones MUST NOT BE VISIBLE. During tests and quizzes, if a student has a cell phone visible or is seen using a cell phone or other electronic device, the student will receive a grade of zero and will be turned in for academic dishonesty. It is possible that the student may be automatically withdrawn from the course with a grade of "F".

Disability Act Statement: Texarkana College complies with all provisions of the Americans with Disabilities Act and makes reasonable accommodations upon request. Please contact Larry Andrews at 903.823.3283, or go by the Recruitment, Advisement, and Retention Department located in the Administration building for personal assistance.

If you have an accommodation letter from their office indicating that you have a disability which requires academic accommodations, present it the instructor 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. See Texarkana College Catalogue at: <u>https://www.texarkanacollege.edu/</u>

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

General Chemistry

Grade Minder



To calculate an average of any category you take the number of grades in that category, add them up, and then divide by the number of grades.

If you want to calculate your grade at any time follow this procedure:

Chapter test average x 0.5 Daily quiz average x 0.3	
Sapling Homework Average x 0.2	
Find the sum of previous three to determine your numerical score for General Chemistry	

A numerical score of 90 or above equates with an "A", 80 or above with a "B", 70 or above with a "C", 60 or above a "D", and grades below 60 equate with a grade of "F".

General Chemistry II

I, (print your name) ______ have read and understand the above information regarding what is expected of me, the grading scale, attendance policy, and financial aid. If any concerns arise, I understand the first person I need to speak with is my instructor, Karin Grisham.

Student signature

CLASS TIME: _____

COURSE & SECTION _____