**Syllabus:** Introductory Chemistry   
**Course Number:** CHEM 1305/1105  
**Semester & Year:** generic

**Instructor Information**

Name: Dr. Catherine Howard (Dr. Cat.)  
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 Office Hours: by appointment

**Textbook Information/Materials needed**

* An Introduction to Chemistry Atoms First, Mark Bishop, ISBN 978-0-9778105-9-8. Available from the TC Bookstore and **free** online at prepatorychemistry.com/Bishop\_Atoms\_First.htm
* Safety goggles
* Scientific calculator (TI-30 preferred)

**Student Learning Outcomes for the Course**

1. Explain what chemistry is, how it is conducted, and what its usefulness is.
2. Be able to recognize and define basic chemical terminology involving matter and energy.
3. Be able to define the characteristics of measurement and be able to perform calculations involving density, unit conversion, and heat.
4. Understand the structure of the periodic table and be able to use the information it provides.
5. Explain the historical evolution of the concept of the atom and the current understanding of atomic structure.
6. Write the names and formulas for inorganic compounds.
7. Compare and contrast ionic and covalent bonding.
8. Perform calculations involving the mole.
9. Balance and characterize chemical equations.
10. Perform stoichiometry calculations.
11. Explain the various types of radioactive decay, predicting products, and discussing uses.
12. Describe and solve problems related to the behavior of gases.
13. Explain solvation and solve problems relating to solution concentration and dilution.
14. Describe, define, and characterize acids and bases.

**Student Requirements for Completion of the Course and Due Dates**

Both the lecture and lab portions of this class are hybrid: each meeting 50% of the traditional face-to-face class time through teams. The other 50% of course time is taught online. Students will meet each week on teams for three hours (1.5 hours for lecture and 1.5 hours for lab) during which time the homework problems will be discussed, difficult topics explained, and lab experiments conducted. Lecture material in the form of videos, Powerpoints, assigned readings and homework problems will be provided for students to view, read, complete on their own time outside of class. A brief quiz over the online component of the class may be administered at any time without warning to ensure that students have done the necessary work to prepare for class meetings. Besides the reading, videos, homework, quizzes, and tests, students may be required to participate in activities, discussions, and prepare presentations at various times during the semester. Powerpoint slides used in the course, as well as, audio files, handouts, etc. are available for students through Moodle on the TC website. Go to the TC homepage, then click on the student tab at the top and select TConlineLMS. Log in with your TC credentials and you should see our course. Students are encouraged to follow their instructor and class on Twitter. Instructions for signing up will be provided in class.

Lab sections are scheduled to be 1.5 hours in length. During these sessions, experiments will be conducted, occasionally tests given, pre and posttest reviews made, and homework questions addressed. In short, these sessions are intended to provide time for experimentation and hands on learning as well as serve as study sessions for the course. Each student will be assigned a lab partner to work with during the semester. The majority of our labs will be performed virtually—but

Effectively, this course will cover most of the textbook concepts, generally in sequence. Only the topics involving details about states of matter—the chapter on gases and the one on liquids and solids, and the organic chemistry chapters at the end of the book will be not be discussed.

Four unit tests will be given:

Test 1 will cover chapters 1 and 2

Test 2 covers chapter 3 and 4

Test 3 will be over chapter 5 and 6

Test 4 will address chapter 7, 8, and 10

**Student Assessment**

The student’s grade for CHEM 1305 will be taken from 4 unit test grades, quizzes from online material, discussion posting grades, homework grades, and a final exam. In averaging grades, I will count the quiz average as one test grade, the homework average as one test grade, each unit test as one test grade, and the final exam as two test grades. This gives a total of 8 grades. However, the student will be allowed to drop one test grade—either one of the unit grades or one of the final exam grades. Therefore, at the end of the term, the student’s grade will be based on 7 grades. Students are encouraged to keep track of their grades using the Jenzabar gradebook available through myTC.

The student’s grade for CHEM 1105 will be an average of all lab grades. Labs and lab activities must be completed on the scheduled date. Missed labs will count as zeros.

**Grading Scale**

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| **Grade** |  |
| **A** | 90-100 |
| **B** | 80-89 |
| **C** | 70-79 |
| **D** | 60-69 |
| **F** | 59-below |

**Class Schedule**—Tentative!!!

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| --- | --- | --- | --- | --- |
| Week | Lecture Date | Lecture Topic | Lab Date | Lab Topic  Virtual (V) on campus (C) |
| 1 |  | Chapter 1 |  | Orientation (V) |
| 2 |  | Chapter 1 |  | Scientific Method (V) |
| 3 |  | Chapter 2 |  | Dimensional Analysis (V) |
| 4 |  | Test #1, chapter 3 |  | Atomic Structure (C) |
| 5 |  | Chapter 3 |  | Atoms (V) |
| 6 |  | Chapter 4 |  | Modern Atomic Theory (V) |
| 7 |  | Test #2, chapter 5 |  | Nomenclature (V) |
| 8 |  | Chapter 5 and 6 |  | Nomenclature (V) |
| 9 |  | SPRING BREAK |  |  |
| 10 |  | Chapter 5 and 6 |  | Lewis Dot Diagrams (V) |
| 11 |  | Test #3, chapter 6 |  | Moles (C) |
| 12 |  | Chapter 6 |  | Empirical and Molecular Formulas (C) |
| 13 |  | Chapter 7 |  | Balancing Equations (V) |
| 14 |  | Chapters 7 and 8 |  | Types of Reactions (V) |
| 15 |  | Chapters 9 and 10 |  | Stoichiometry (C) |
| 16 |  | Test #4, Chapter 16 |  | No lab |
| 17 |  | Final Exam |  |  |

**Attendance Policy**

Role will be taken each day. If a student stops attending class, the date of the last attendance will be submitted to the Registrar, and a grade of “F” will be recorded. As a result the student may lose scholarships or grants or have to repay funds already rewarded. Below please find the official Texarkana College Absentee Policy:

**ABSENTEE POLICY**Texarkana College’s absentee policy allows instructors to withdraw a student from a course due to excessive absences. If a student leaves and returns during class or leaves the class before the class is over, he/she **may** be considered absent. Three tardies constitute one absence. It is the student’s responsibility to check the syllabus for each instructor’s tardy policy.

In some workforce/vocational areas, such as nursing and cosmetology, certification requirements necessitate an absentee policy that is more stringent than the institutional policy. In these instances, the matter of certification takes precedence over local policies, since certification policies are established by the State of Texas.

Faculty members **are not** obligated to provide opportunities for students to make-up missed assignments and tests as a result of a student’s absence from class. The institution is not required to take attendance with the exception of workforce/vocational areas, where certification requirements require taking attendance. However, experience demonstrates that regular attendance enhances academic success. As such, students are expected to attend each meeting of their registered courses.

A student should not stop attending a class without formally withdrawing from the course by the institutions published Last Day for Students to Drop. If a student stops attending class after the published Last Day for Students to Drop, the student **may** receive a grade of “F” in the class. The instructor will submit the last date of attendance for students receiving a grade of “F” or “W”.

Withdrawal from a course(s) **may** affect a student’s current or future financial aid eligibility. Students should consult the Financial Aid Office to learn both short and long term consequences of a withdrawal.

**EXCUSED ABSENCES**A student’s absence due to school trips and/or school business will not be counted against a student’s allowable number of absences. Military duty and absences for Holy Days (FBD LEGAL) are covered in a separate section of the catalog and the student handbook. These are the only excused absences that are considered by Texarkana College. Responsibility for work missed for any absence is placed on the student. Instructors are required to allow students to make up work missed if the absence is due to military duty\* or religious holy days when students follow the correct notification procedures. Instructors are not required to allow students to make up work for absences due to other reasons. Make-up policies are listed in each individual instructor’s syllabus.

*\*Students interested in Health Occupations should check with the division chair prior to entering the program.*

**ONLINE/HYBRID COURSE ABSENCES**Absence in an **online course** is defined as the lack of an active post or submission within the course including discussion board posts, written assignments, and tests. This standard will be used to determine all absentee issues, including but not limited to, 12th Day Census Reports, last date of attendance, and involuntary withdrawal from a course due to absences. All online students must complete an Enrollment Verification activity within the first week of class (activity depends upon the professor); otherwise the professor **may** drop the student for not having attended. Students must complete at least one activity in their online class per week. Each week in which a student does not complete an activity will be counted as an absence.

If a student is taking a hybrid course, and it does not meet during the first week of class, the student must also complete an Enrollment Verification activity within the first week of class; otherwise the student **may** be dropped for not having attended.

**MAXIMUM ALLOWABLE ABSENCES**After official registration, the following number of unexcused absences will be the maximum allowable before a student **may** be dropped from the class. Mandated program certification requirements detailed for certain programs regarding the maximum allowable unexcused absences takes precedence over the following information.

**Academic Classes**

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| --- | --- |
| **A COURSE THAT MEETS FOR THE FULL 16 WEEK SEMESTER** | |
| Class or Lab Meets:  Once a week (Night classes or Friday classes)  Twice a week (MW or TR classes)  Three times a week (MWF or TRF classes)  Four times a week (MTWR classes) | An instructor **may** withdraw a student from a course if absences exceed:  2  4  6  8  Three tardies count as one absence |
| **A COURSE THAT MEETS FOR 14 WEEKS OF THE SEMESTER** | |
| Class or Lab Meets:  Twice a week (MW or TR classes) | An instructor **may** withdraw a student from a course if absences exceed:  4  Three tardies count as one absence. |
| **A COURSE THAT MEETS FOR 8 WEEKS OF THE SEMESTER (Fast-Track)** | |
| Class or Lab Meets:  Four times a week (MTWR classes) | An instructor **may** withdraw a student from a course if absences exceed:  4  Three tardies count as one absence. |
| **A COURSE THAT MEETS FOR 5 WEEKS OF THE SEMESTER (Summer Sessions)** | |
| Class or Lab Meets:  3 times a week (MTW) (evening classes)  4 times a week (MTWR) (day classes) | An instructor **may** withdraw a student from a course if absences exceed:  2  2  Three tardies count as one absence. |

**Workforce Classes** (**This does not include Health Occupations. See Health Occupations Handbook regarding absences for that program.)**

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| Day Classes | Evening Classes |
| Class meets:  5 days a week (MTWRF)  The instructor **may** withdraw a student from a course if absences exceed five (5) up until the published Last Day for Students to Drop. Absences that exceed this number after the drop day may result in the student receiving an “F” in the program for that semester.  Three tardies count as one absence.  You are considered tardy from the designated class start time through the first 15 minutes of class. After that you will be counted absent. | Class Meets:  4 evenings a week (MTWR)  The instructor **may** withdraw a student from a course if absences exceed five (5) up until the published Last Day for Students to Drop. Absences that exceed this number after the drop day may result in the student receiving an “F” in the program for that semester.  Three tardies count as one absence.  You are considered tardy from the designated class start time through the first 15 minutes of class. After that you will be counted absent. |

**Make-up Policy**

As a general policy, **I DO NOT GIVE MAKE UP EXAMS**. If you anticipate missing a test, or if something urgent comes up, you must contact me as soon as possible!!!! Exams are returned and discussed the following class period. **If you have not made arrangements with me before the next class period following the exam, your exam grade will be a zero.**

**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://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 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, 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.