CLARENDON COLLEGE
Chemistry Department
P.O. Box 968; Clarendon, Texas 79226
Summer I 2011

Course: General College Chemistry, CHEM 1311, is a 3 hour credit course.

Instructor: Professor Larry M. Wiginton**,** M.S.

Purpose: The course is intended to prepare the student for future studies in chemistry and other related scientific areas. This course meets the core requirements of a laboratory science for the Associate in Arts or Associate in Science degree.

Scope: An introduction to chemistry for students in the sciences. Areas of study are concerned with fundamental concepts including chemical vocabulary, applicable theories which have contributed to present chemical concepts, and mathematical calculations. Topics covered include the development of present atomic theory, atomic structure, chemical bonding, and chemical reactions.

Exemplary Objectives: The learner shall:

* understand and apply method and appropriate technology to the study of natural sciences.
* recognize scientific and quantitative methods and the differences between these approaches and other methods of inquiry and to communicate findings, analyses, and interpretation both orally and in writing.
* identify and recognize the differences among competing scientific theories.
* demonstrate knowledge of the major issues and problems facing modern science, including issues that touch upon ethics, values, and public policies.
* demonstrate knowledge of the interdependence of science and technology and their influence on, and contribution to , modern culture.

Student Learning Outcomes: The learner shall:

* formulate processes for the calculation of chemically related mathematical problems.
* Relate knowledge of chemical vocabulary covered during the course.
* distinguish arrangement of the components of the atom.
* construct electron arrangements of various elements.
* predict the coefficients necessary to balance and predict the product(s) of a chemical equation.
* formulate stoichiometric calculations using molar relationships of substances.

Prerequisite: Credit or concurrent enrollment in college algebra or a similar math.

Corequisite: Concurrent enrollment in CHEM 1111.

Text: General Chemistry**,** Atoms First by John E. McMurry & Robert C. Clay
A Solutions Guide is recommended, but is not required.

Materials: A scientific calculator (nonprogrammable) is required for **each** student. Sharing of calculators during an exam is prohibited.

Attendance: Clarendon College believes strongly that the greatest single predictor of student success is attendance. While role will be taken each class, class attendance is the responsibility of the student. A student with excessive absences will be directed to the Dean of Students. If an absence is unavoidable notify the instructor as soon as possible.

Cell Phone Policy: No cell phones or electronic devices are allowed during class time, except the use of a scientific calculator. If special needs exist, please make prior arrangements.

Final Exam Policy: Final exams given only at scheduled times during Finals Week.

Classroom Etiquette:
(1) Arrive on time and prepared for class.
(2) No cell phones or electronic devices are allowed during class time, except for scientific calculators. If special needs exist, please make prior arrangements.
(3) During an exam, no one will be allowed to leave the room until his/her exam is handed in.
(4) No profane or inappropriate slogans and/or language.
(5) Disruptive behavior will result in disciplinary action.

Academic Honesty: Cheating or plagiarizing on assignments or exams will not be tolerated. Such conduct could result in the student being dropped from the class with an F. The use of any unauthorized electronic devices such as cell phones with text messaging, programmable calculators, palm pilots is not allowed.

Tests: Four to six hour exams will be given throughout the semester. Each hour exam will cover the material presented since the previous hour exam. The last hour exam will be given during finals week. Each hour exam will cover approximately two chapters from the text. Each hour exam will consist of multiple choice questions comprising 40% and a selection of mathematical problems comprising 60% of the total exam grade.

No Make-up tests: If a student is absent due to school related activities, he or she must take the test before the absence.

Grading: Grades will be calculated based on the numeric average of hour exams and the daily quiz average.
A -- 88-100 ; B – 75-87; C -- 60-74; D -- 50-59; F -- below 50

Withdrawal: If you decide that you are unable to complete this course or that it will be impossible to complete the course with a passing grade, you may drop the course and receive a "W" on your transcript instead. Withdrawal from a course is a formal procedure that you must initiate. If you do not go through the formal withdrawal procedure, you will receive a grade of "F" on your transcript.

A student is permitted to drop a course if he/she obtains an official drop slip from the office and has the instructor sign the slip before the 12th week of class.

Remember, a student is only allowed to drop the same class twice before he/she will be charged triple the tuition amount for taking a class 3 or more times. Furthermore, students in Texas may only drop a total of 6 course throughout their entire undergraduate career. After dropping 6 courses he/she will no longer be able to withdrawn from any classes.

Office: Room 210 of the Academic Center.

Office hours: Before each class

Office phone: 874-4828

Home phone: 259-3837

e-mail: larry.wiginton@clarendoncollege.edu

Americans with Disabilities Act: The instructor, upon request, is committed to rendering appropriate assistance to any student with a disability.

Course Outline:

(a) matter & measurement
(b) Structure & stability of the atom
(c) Periodicity and the electronic structure of atoms
(d) Ionic bonding
(e) Covalent bonding
(f) Molecular structure
(g) Chemical nomenclature
(h) Chemical equations
(i) Chemical stoichiometric calculations
(k) Thermochemistry

Class Contract: Please sign and return. **Display Class Contract**