

# CLARENDON COLLEGE

## Chemistry Department

P.O. Box 968; Clarendon, Texas 79226

Summer II 2011

**Course:** General College Chemistry, CHEM 1312, is a 3 hour credit course.

**Instructor:** 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:** A continuation of Chemistry 1311. Areas of study include solutions, chemical and ionic equilibria, acids and bases, thermodynamics, an introduction to organic and nuclear chemistry.

**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:

- \* Display competency in working mathematical problems in chemistry.
- \* Relate knowledge of chemical vocabulary covered during the course.
- \* Explain concepts and topics progressively covered during the course.
- \* Develop a view of atomic structure and its relationship to the makeup of matter.
- \* Understand the relationship between the chemical makeup of matter and common chemicals used by society.

**Prerequisite:** General college chemistry I

**Corequisite:** CHEM 1112

**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 exams is prohibited.

**Attendance:** Clarendon College believes strongly that the greatest single predictor of student success is attendance. Class attendance is the responsibility of the student. A student which has 6 clock hours of unexcused absences will be, upon the discretion of the instructor, dropped from the class with an F. If an absence is unavoidable notify the instructor as soon as possible.

**Cell Phone Policy:** No cell phones are allowed during class time. If special needs exist, Please make prior arrangements.

**Final Exam Policy:** Final exams are to be given only at scheduled times during Finals Week.

**Classroom Etiquette:** Arrive on time and do not leave the room during class. No one will be allowed to leave during an exam.

**Academic Honesty:** Cheating or plagiarizing on assignments or exams will not be tolerated. Such conduct will 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 12<sup>th</sup> class week.

**Remember, a student is only allowed to drop the same class twice before he/she will be charged triple the tuition amount for taking the class a third time or more. Furthermore, beginning with the Fall 2007 semester, students in Texas may only drop a total of 6 courses throughout their entire undergraduate career. After the 6, he/she will no longer be able to withdraw from any classes.**

**Office:** Room 210 of the Academic Center.

**Office hours:** 8:00 – 10:00 MWF; 8:00 – 9:30 TTh; and 1:00 – 2:00 W

**Office phone:** 874-4828

**Home phone:** 259-3837

**e-mail:** [larry.wiginton@clarendoncollege.edu](mailto:larry.wiginton@clarendoncollege.edu)

**Course Outline:**

- (a) Gases, Liquids, & Solids
- (b) Solutions
- (c) Chemical Kinetics
- (d) Chemical Equilibrium
- (e) Acids & Bases
- (f) Ionic Equilibrium
- (g) Chemical Thermodynamics
- (h) Organic
- (i) Nuclear

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

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