Course Syllabus (4 credit hours)

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Objective:
This course is for science and science-related majors. Fundamental concepts of chemistry are presented including measurement and the metric system, the history of chemistry, the mole concept, chemical reactions and stoichiometry, energy and chemical reactions, states and properties of matter, the periodic table, chemical bonding, atomic and molecular structure, gas laws, and concentration of solutions. An understanding of organic chemistry and biochemistry depends on a sound foundation of general chemistry.

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

Core Curriculum Intellectual Competencies:
1. Reading – the ability to analyze and interpret a variety of printed materials, books, documents, and articles above the 12th grade level.
2. Listening – analyze and interpret various forms of spoken communications, possess sufficient literacy skills of writing and reading above the 12th grade level.
3. Critical thinking – think and analyze at a critical level.
4. Students are required to have demonstrated college-level “reading, writing and/or math skills” prior to enrolling in academic transfer core courses.

Course Prerequisite:
DMAT 0093 or equivalent and any one of the following: high school chemistry, Chemistry 1405 or equivalent or permission of the Instructor.

Textbook:

Grading Policy:
Hour Exams (3 or 4) worth 100 points each
Laboratory and Technical Paper/Oral Presentation (discretion of Instructor): 100 points
Comprehensive final: 200 points (discretion of Instructor)

Final grades will be assigned as follows:
90-100% A
80-89% B
70-79% C
60-69% D
0-59% F

The final grade will be sent to the student by the college registration office.

All classroom or Testing Center examinations will be closed book and closed notes. No graphing calculators or other calculators with alphanumeric text storage capability will be allowed in exams. The exams will consist of multiple choice questions, matching, and problems similar to the assigned homework and problems in the text. On problems, partial credit may be given at the option of the instructor on a case by case basis. The instructor reserves the right to modify the grading policy and/or examination procedure.

Academic Honesty:
All student conduct will support academic honesty. Any student caught cheating, aiding another student in cheating, or appropriating the works or work of others without proper citation will be subject to academic discipline.

Test Policy:
Students who miss regularly scheduled examinations may be eligible for a make-up exam. The time, content and a make-up exam will be at the discretion of the Instructor. There are no make-up exams for un-scheduled examinations.

Teaching Methodology:
The class will consist of two 80-minute teaching sessions and two 80-minute laboratory sessions each week. There will be a 10-minute break between the teaching and laboratory sessions. The Instructor reserves the right to modify teaching and laboratory sessions. The primary method of presentation will consist of lectures, which will be supplemented by in-class exercises. Other methods of presentation may include transparencies, videos, computer software, demonstrations, and student presentations. The students will be expected to take notes in class. Homework will be assigned and in-class short quizzes will be based upon homework assignments and classroom instruction. Homework assignments and in-class short quizzes will assist the student to understand the course material and to think through course concepts. Taping is prohibited during lecture and/or laboratory sessions.
Attendance Policy:
El Centro College policy requires regular attendance in classes. Therefore, students will be required to attend not only the lecture classes, but also the laboratory sessions. This laboratory work is important because a majority of the real understanding of Chemistry is embedded in the Small-Scale Chemistry Laboratory Experiences. Continued absence can result in a reduction in Grade for the semester. Continued tardiness can result in a reduction in Grade for the semester.

Withdrawing:
If a student is unable to complete a course in which he/she is enrolled, it is the student’s responsibility to withdraw from the course by the appropriate date. If the student does not withdraw, and is unable to complete a course in which he/she is enrolled, he/she will receive a performance grade of “F”. If the student is unable to appear in person, he/she may withdraw by writing to the registrar before the deadline date. The deadline for receiving a “W” is indicated in the academic calendar. Drop date for Fall Semester 2012 is November 15, 2012.

Hazardous Materials:
Chemistry 1411 will be using the Small-Scale Chemistry approach to Chemistry instruction, which is considerably less hazardous than a traditional Chemistry Laboratory. We will still be using Chemicals, only less of them. During the conduct of the course, it is likely that we will use materials deemed to be “Hazardous” by the Occupational Health and Safety Administration (OSHA) and/or by the state of Texas. Before using any “Hazardous” substance you will be given orientation by the Instructor regarding the proper handling of the substance.

Material Safety Data Sheets (MSDS) are available in the Chemistry Laboratory. These describe in detail many of the chemical properties of each hazardous substance and suggested treatment that should be taken to avoid unhealthy exposure. The MSDS are located in A721.

You may discuss with your instructor any concerns you have related to any substance used in this course. Protective gear is available as needed to insure safe handling of all substances. It is the responsibility of the student to use the appropriate protective gear and to safely handle substances as instructed.

NO FREELANCE EXPERIMENTS ARE ALLOWED!
Failure to follow all safety rules or to perform unauthorized experiments could lead to dismissal from the Laboratory Session or the Chemistry Class or both.

Classroom Etiquette:
Smoking, drinking or eating will not be permitted in the classroom or laboratory areas. Small children are not permitted above the second floor of the building. NO CHILDREN are permitted in the classroom or laboratory areas at any time. In order not to interrupt the class session, students are asked to turn off all cell telephones and pagers prior to the beginning of class. Students not conforming to this policy will be asked to leave class. Cell telephones will be collected by the Instructor at the beginning of in-class
examinations. Cell telephones will be returned to the student when the student submits his/her examination to the Instructor.

Academic Ethics:
Any violation of the Student Code of Conduct (as printed in the El Centro College Catalog and available at http://www.dcccd.edu/cat9899/conduct.htm) will be penalized accordingly. All matters of academic dishonesty (plagiarism, collusion, fabrication, cheating, etc.) will result in a failing grade for the assignment in question. All violations will be forwarded to the proper college authorities for review. The college may, at its discretion, impose additional penalties on the student including academic probation, suspension, or expulsion. ANY form of disruptive behavior will not be tolerated.

ADA Statement:
Any student who may need accommodations due to a disability should contact the Disability Services Office, Room A110, telephone number (214) 860-2411.

Financial Aid Statement:
If the student is receiving Financial Aid grants or loans, he/she must begin attendance in all classes. The student should not drop or stop attending any class without consulting the Financial Aid Office. Changes in the student’s enrollment level and failing grades may require that the student repay financial aid funds.

Religious Holy Days Statement:
A student who is absent from classes for the observance of a religious holy day shall be allowed to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence if, not later than the fifteenth day after the first day of the semester, the student notified the instructor of each class scheduled on the date that the student would be absent for a religious holy day. A “religious holy day” means a holy day observed by a religion whose places of worship are exempt from property taxation under Section 11.20, Tax Code. The notice shall be in writing and shall be delivered by the student personally to the instructor, with receipt acknowledged and dated by the instructor or by certified mail, return receipt requested, addressed to the instructor. A student who is excused under this section may not be penalized for the absence, but the instructor may apparently respond if the student fails to satisfactorily complete the assignment or examination.