CHEM 1A
General Chemistry
San Joaquin Delta College – Fall 2004
The Instructor reserves the right to alter or amend this syllabus to meet instructional goals.

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Office Hours: MWF 10:00 am to 11:00 am
TTh 9:00 am to 10:00 am
Lecture Room: Cunningham 416
MWF 9:00 am to 10:00 am
Lab Room: Cunningham 301
MW 2:00 pm to 5:00 pm (66796)
TTh 10:00 am to 1:00 pm (25674)
TTh 1:00 pm to 4:00 pm (60690)
Website: http://www.deltacollege.edu/emp/ckim

Materials

Required Materials:
• Chemistry by Zumdahl & Zumdahl, current edition
• Chemical Principles in the Laboratory by Slowinski, Wolsey, & Masteron, current edition
  o Copies will not be accepted and will receive an automatic zero
• Scientific Calculator (Storage calculators will NOT be allowed during quizzes or exams.)
• Periodic Table (printable version from http://www.webelements.com)
• Lab Goggles
• Lock
• Scantrons (100 question type)

Recommended Materials:
• ACS General Examination Study Guide
  o http://www3.uwm.edu/dept/chemexams/
• Lecture Printouts from Bookstore
Course Outline

Prerequisites: Reading Level Two, Chemistry 3A, and Math 82, both with a grade of “C” or better.

College Statement: This course is designed as a technical introduction to chemistry for students intending to major in chemistry, medicine, dentistry, pharmacy, etc., which require a rigorous understanding of the fundamental principles of chemistry.

General Aims: Upon successful completion of this course, the student will be able to demonstrate an understanding of the principles of general chemistry and apply them to different scientific fields of study and laboratory work.

Specific Objectives: The student will be able to:
1. Demonstrate the ability to apply dimensional analysis to chemical problems.
2. Demonstrate theoretical principles in atomic structure and how they relate to the Periodic Table and thermochemistry including heats of formation and applications.
3. Demonstrate an understanding of inorganic nomenclature, chemical reactions, and molar relationships.
4. Describe and apply the physical laws of gases in both chemical and biological systems.
5. Describe, discuss and apply theoretical principles concerning the physical states of matter.
6. Demonstrate an understanding of the nature of chemical bonding.
7. Demonstrate an understanding of introductory organic nomenclature and reactions with emphasis upon functional groups related to both chemistry and biology.
8. Demonstrate theoretical principles in solution chemistry with emphasis upon concentration units, dilutions, and chemical reactions.
9. Demonstrate a basic understanding of laboratory procedure and chemical safety.
10. Demonstrate skills in analytical and physical techniques in the laboratory.
11. Demonstrate skills in observation and interpretation of chemical changes.
Grading

Lecture Material (subject to change):
- The four hourly exams will be worth 100 points each.
- The comprehensive final exam will be worth 200 points.
- Quizzes will be worth 10 points each. Approximately 11 quizzes will be given. The lowest quiz will be dropped giving a total of 100 quiz points.
- Total Points = 700
- You will be assigned a Lecture Percentage Grade

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<tr>
<th>Exam</th>
<th>Textbook Chapters</th>
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<tbody>
<tr>
<td>1</td>
<td>1, 2.1 – 2.7, 7</td>
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<td>2</td>
<td>2.8, 3, 4, 5</td>
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<td>3</td>
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<td>4</td>
<td>10, 11</td>
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<td>Final</td>
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Laboratory Material (subject to change):
- There will be approximately 10 laboratory exercises will be performed.
- Each lab will be worth 20 point each.
- A 50-point lab exam may be given at the end for the semester and is considered part of the overall lab grade.
- Total Points = 200 or 250
- You will be assigned a Laboratory Percentage Grade

Overall Point Breakdown:
- Your Overall Point Percentage is what determines your grade.

APPROXIMATE point breakdown (subject to change):

- Lecture Material: 70% of your grade
- Lab Material: 30% of your grade

Grade assignments will be made based on the following scale:

- **A** = 90.0 % - 100 %
- **B** = 78.0 % - 89.9 %
- **C** = 65.0 % - 77.9 %
- **D** = 50.0 % - 64.9 %
- **F** = 0 % - 49.9 %
Classroom and Laboratory Expectations:

Succeeding in this course:
1) Two important things you can do to help yourself succeed in this course are to attend all lectures and actively engage in laboratory exercises. Lecture material builds upon itself; therefore falling behind in attendance can be difficult to overcome. The laboratory exercises mesh with the lecture material and will help demonstrate and expand on concepts. In addition, the exercises will help you appreciate the connection between observations and the development of the concepts. You need to be consistently engaged in both formats to pass this class.

2) There is a large amount of information you will need to manage and master over the semester, including new terms, names of structures and the functions of those structures. The best way to deal with any course that has this volume of information is to study the material on a regular basis. As stated above, the course builds upon itself, so it is particularly important to stay current from the start. Students with normal college level skills (i.e., reading level III or higher on SJDC’s evaluation) can expect to study 3 hours outside-class time for every hour or lecture, and approximately 2 hours for every unit of laboratory. On average, 12 hours/week of outside study time is expected for a student with good reading skills; prepare yourself for this workload!

3) Ask questions! As instructor, my responsibility is to help the learner (you) to learn. If you are willing to learn, then I can only help you if you indicate when or where you are having difficulty. When you are confused, seek clarification. An important corollary here is if you are not willing to do the work that learning requires, I can do little to help you succeed in this course.

Obligations of the student:
- Prompt and regular attendance is expected. REGULAR ATTENDANCE to lecture and laboratory periods is expected. Time lost to tardiness to lab, quizzes, or exams cannot be made up. Other classes are scheduled into our lab and lecture rooms immediately after our class ends. Exams, quizzes, and lab exercises may not be made-up. If an unavoidable conflict exists, for example a death in the family, arrangements may be made. Keep in touch with me if a problem arises. Use email or use the phone!
- The material presented in lecture and laboratory is the material upon which I construct the test/quiz questions. In addition, test material may be also taken from outside material (e.g. handout, other textbooks) given during lecture and/or laboratory.

Be advised: If you miss lecture and/or laboratory, it is your obligation to obtain all information regarding the announcements, material presented and reading assignments. You will be held responsible for what is presented; missing class for any reason does not relieve you of this responsibility.

Sometime during the lab, I will sign or initial your data page. Make sure you do not leave the lab without it! You must submit this data page with your lab report/hand in. If you do not hand this page in it is an automatic zero. If you try to hand in a report with a data page without my signature or initials it will be an automatic zero and be considered cheating. The lab report/hand in is due one week from completion of the lab, after that the lab will be considered late and half of the points will be deducted. If the lab is more than one week late the lab is considered a zero.

All students are expected to RESPECT themselves, one another, the instructor, the room, and the equipment. In turn, I will respect students and their academic needs and progress.

Academic Integrity and Rules:
- Cheating or academic dishonesty of any kind will not be tolerated!

- Students are expected to uphold the honor code. This means that: 1) receiving or providing unauthorized help on an examination, 2) taking an exam for another person, 3) having another person take the exam for you, 4) talking during an examination, 5) using unauthorized materials during an examination, 6) altering an exam and submitting it for a re-grade, and 7) providing false excuses for late or missing assignments are all considered to be instances of academic dishonesty. Violation of any of these criteria will merit a zero on that assignment. In addition, I am obligated to report all cases to the appropriate judicial body.
• The FIRST offense will result in the most severe consequences as outlined in the Student Handbook. The FIRST offense will result in a grade of zero on the item in question (will NOT be dropped). The SECOND offense will result in course failure. Please see the Student Handbook or Course Catalog for the college's definition of academic dishonesty and its consequences. Please be aware that I may be implementing a new system to deter cheating.

• Restroom breaks during exams will not be allowed.

• Graded Exams may be photocopied prior to being returned to students.

• Any student contesting a score given on an exam question must do so within 7 days of the time the exam was returned. The instructor will not consider arguments submitted beyond the 7 days. To contest a score, the student must document with factual information why their answer contains the pertinent information asked by the test question. This must be typewritten and attached to the exam. Hand-written and verbal arguments will not be accepted.

• Pagers and cell phones in the classroom are inappropriate. Such devices should be turned off prior to the start of class. Any student receiving incoming calls will be required to leave the classroom or laboratory.

• Food and/or drink in the laboratory are forbidden.

• Only students enrolled in the class are allowed in the laboratory. Visitors will be asked to leave.

• Talking during lecture and lab presentations is rude. It impedes on the learning of others and is distracting to the instructor. Students who converse during lecture or lab presentations will be asked to leave. The first request to leave is the only warning given that deduction of subjective points will follow the next time that student is asked to stop talking in class.

• Late assignments, unless otherwise noted, are unacceptable.

• The instructor reserves the right to make modifications of this syllabus if, in his opinion, such modifications enhance the learning experience on behalf of the whole class.

• SAFETY: All students are expected to abide by the safety rules in the laboratory. Contact lens are not to be worn in lab. Note that safety glasses or goggles are required at all times in the laboratory.

• Special Needs
If you have any special needs for accessibility or any other issues (ex: asthma or pregnancy) please discuss with me so that appropriate accommodations may be made.

• Other important dates: Last drop date without a W: 9/10/2004
  Last drop date with a W: 11/16/2004

IT IS THE STUDENT’S RESPONSIBILTY TO DROP THE CLASS