Chemistry 4 Course Information – Fall 2009

Chemistry 4 Beginning Chemistry **Professor Dr. Drew**
Email: idrew@elcamino.edu Office hours 5:00 to 5:50pm Tues, Wed, Thurs
Office: Chem 132 ph 310-660-3593 extension 6574
(ALL ECC ADD SLIPS MUST BE PROCESSED BY FRIDAY – September 11th)

Purpose of Chemistry 4 course: and Student Learning Outcomes (SLO's)

- Provide you with the skills and knowledge necessary to succeed in General College Chemistry (Chem 1A)
- Develop the types of study skills and self-discipline essential for success in college level science courses
- A review of a year long High School Chemistry Class which you may or may not have taken.

SLOS The Chemistry 4 SLO is, "Equation Writing." Writing chemical equations is integral to this course. Given the chemical reactants, students are asked to predict the products, write the complete equation, and balance the reaction.

Prerequisites:

- Mathematics 70 (80) with a minimum grade of C or equivalent (must be qualified to enter Math 170 Trigonometry)
- A good oral and written command of the English language is necessary.

Required Materials

1. Cracolice and Peters, Introductory Chemistry – An Active Learning Approach- 3nd Edition 2007 or 4th ed (2010)
2. Chemistry 4 supplement and Laboratory Manual- (available in the ECC bookstore) **Bring this to lab**
3. Scientific Calculator**---bring to class everyday**
4. Safety Goggles (Instructor Approved ones only- available at the bookstore)
5. Laboratory Coat or Apron (optional)
6. Scantron for quiz and test days
7. Two notebooks – one for homework problems you have worked on (I will "check" this on exam days and you will pick up when you turn in your test.
   A second notebook for lecture notes.

Daily plan for first class of the week -Monday or Tuesday **In Lecture room - Chemistry 101** 6:00pm

1. New material presentations on the Chapter we are studying
2. Review previous material including homework questions
3. Feedback exercise also called an exam (Test) — 30- 40 minutes
4. Break – twenty minutes – every two hours
5. Group Activities or Discussing HW problems or lab.
6. Real world applications/ examples or environmental concerns related to chemistry or lab preview

LAB day for Wed or Thursdays-Meet first in room Chemistry 101 and then we go to **lab room Chemistry 164 around 7:00 pm**. Read the lab experiment before the lab day. All the labs are in the ECC green lab Chem. 4 Supplement.

Grading Procedures:

Grading points (approximately)

		Grade	Percent
Exam (9 exams at approx 50 points each)	490 points	A	100% to 90%
Laboratory (13 labs @15pts)……	195 points	B	89% to 80%
Homework & Workbook checks …(5 each)	55 points	C	79% to 67%
Class attendance and participation points	60 points (30 meetings)	D	66% to 56%
Final exam ……	200 points	F	below 55%
Total Points Maximum	1000 points (Approximately -Subject to modifications)		

Grading Scale

Extra Credit points - Attend MESA workshops for Chem 4. (Verification from MESA workshop facilitator)
Special projects to be determined.

THERE ARE NO MAKE UP DAYS FOR MISSED LABS OR EXAMS.

If you miss an exam you will receive your average on the final exam for the missed test.
If you drop the course before Friday Sept .13th there is no notation on your record. Students dropping before November 20th (last date to drop) will receive a "W" grade. After this a letter grade must be assigned based on the number of points earned. It is your responsibility to officially drop the course. Failure to do so could result in a grade of F. In order to drop a chemistry course, you must check out of your laboratory drawer and have clearance card signed by a chemistry stockroom technician.

Important; I expect every student to study chemistry 10 hours a week outside of class. That is two hours a day; five days a week. You pick the days and the hours. Here is your first assignment:

1. READ Chapter 1. Especially:
2. Chapter 1.**4 Learning How to Learn Chemistry;** Chapter 1.5 **Your Textbook** Chapter 1.6 **A Choice**. *"Discipline is the bridge between goals and accomplishments"*
3. Look at the **Chapter in Review** at the end of each chapter. It has the goals you need to know for that Chapter
4. Look at the **Key Terms** and concepts at the end of each Chapter.
5. Read the **Study Hints and Pitfalls to Avoid** at end of each Chapter.-very useful
6. Do the HOMEWORK, HOMEWORK, HOMEWORK assigned. This is major part of the course.
7. Chapter two Matter and Energy
8. Chapter three Measurements and Calculations

(Before you start your homework, review concepts in your notes first. Does it make sense to you? Use the textbook to supplement the notes. Go over the Examples in the text for that Chapter. There are many Examples in each Chapter.)

Start your homework problems in your Homework Notebook.- a separate notebook.
(Please note: Your HW notebook is yours, not mine. It may have errors, cross outs, 2nd and 3rd attempts at the same problem. It may not be neat. However, check your answers with the end of the chapter for numbers printed in blue. If you got it right put a check by the number. If you got it wrong, put an X by the number. You can turn it in with X's by wrong answers. But then find out how to do the problem correctly. PROBLEMS YOU DON'T UNDERSTAND ASK ABOUT IN CLASS. Do not recopy your homework. I would rather see you cross out the mistakes and where you started over. More challenging problems may be assigned, but not reviewed in class.

For this course, it acceptable to include in your HW notebook the problems we go over in class. And we will do many problems in class- Which ones? Mostly the problems you started but couldn't finish.. If you have question about it, someone else will too. For some of the problems you will go to the board as a group to work them out on the chalkboard/whiteboard.. Working collaboratively on Homework problems is acceptable if you ask questions and attempt to understand the problem and solution.

COPYING HOMEWORK IS NOT ACCEPTABLE. IT ONLY EXCERCISES YOUR PENCIL FINGER AND DULLS YOU BRAIN. It is a waste of your time and mine.

HOMEWORK CHECK on Test day: Turn in your homework notebook on the day of a quiz or test.

1. Leave the book open to the Chapter you worked on with your name (last name first) on the top of the page.
2. I will visually inspect your workbook, but not correct the answers while you taking the quiz or test.
3. Pick up your notebook at the end of that class period. I will not carry your HW notebook out of the room. If you don't pick it up it will be stored in the room and it may be lost.
4. I surveyed previous Chem 4 students and asked them: "What would have helped you get a better grade in class?" **Nine out of ten said: "If I had spent more time on the homework"**

Chemistry takes time to learn. If you don't have the time or commitment, don't take the class.

We will also have free MESA workshops for Chem 4. These are small groups of 3 to 8 students to help you with Chem 4. This is free of charge to you. MESA and pays the group facilitator, who is current chem. student. More information about the time and location of MESA workshops will be available in class.

STUDY HINTS AND GUIDELINES—STUDY SMARTER!

1. **Never miss a class intentionally. Your job is much harder if you don't show up for class.** Be there! Never miss a lecture intentionally. ASK QUESTIONS DURING THE LECTURE IF YOU DON'T UNDERSTAND. Be involved. I want your feedback if concepts are not clear to you.
2. **Study more frequent and for shorter periods of time (ex. 4-5 times/week, 1-2 hours/night).**
3. When you study, your brain can't handle more that 2 hours per session!
4. **Maximize your understanding, minimize your memorization**.
5. Try to associate concepts to your life experiences.
6. **Take good notes in the classroom and review your lecture notes soon after lecture when all ideas are fresh in your mind. – BEST ADVICE: COPY YOUR NOTES OVER THE SAME DAY.**
7. Ask questions even the stupid ones. :)
8. **Learn from your mistakes and do not bury them. Observe mistakes very carefully.**
9. Help each other. Form a study group with your classmates.
10. ATTEND MESA WORKSHOPS
11. Don't procrastinate.
12. Do your homework in the spirit of learning and the grade will follow
13. Keep your work; social life and school work in balance.
14. Think about pursuing a life goal that energizes your soul and makes you happy independent of the money, power and fame it may bring to your life. Success will follow a happy individual but happiness may not follow a successful individual.

DON'T CHEAT….YOU ONLY CHEAT YOURSELF **What is Cheating?**

1. Talking to anyone - about anything - during the test except for the teacher is cheating
2. Talking to a friend about anything during the test. Don't even ask a friend what day it is.
3. Any talking during a test will be considered cheating.
4. Putting your name on someone else's work.
5. Copying your homework from someone else.
6. Using your textbook during a test (unless it is an open book test)
7. Using notes (unless given permission to do so)
8. Copying another student's answers
9. Using any electronic devices not approved for tests. Cell phones, photos, cheat sheets-ipods

An incident of cheating will lower your grade one letter. A second incident is reported to the Dean of Students and you may be dropped from the class.