Syllabus--- Chemistry 3A

King's River Community College SPRING 1998

Instructor's Name: Saihong Chen Office: PS 81,
Phone: (209) 638-3641 Ext.353
(209) 299 8956 (H)

Course Title: **Introduction to General Chemistry**

Meeting Days & Times:

Lectures: MW 1:00 pm--2:15 pm Room: FE 12
Lab: W 2:30 pm-- 5:20 pm Room PS 82

Texts & Materials:

1. **Introductory Chemistry** , FlexText , by Peters & Cracolice.
2. **Introduction to Chemical Principles.** A Laboratory approach 4th Ed. by Weiner / Peters
3. **Chemical Calculations series B** 16th Ed. by G. Sachheim
4. You will need materials to take notes, and you always need to bring to class a **calculator** with exponential notation and logarithmic functions.

Course objectives. Chemistry 3A is an elementary survey course in chemistry including lab work. It is designed to give the student a chemistry background for a wide variety of careers including forestry, nutrition, nursing, physical therapy, and other biological and health related fields.

Requirements:

1. Attendance. Attendance in lecture and lab is mandatory, and it will be recorded on a daily basis. The student will be dropped automatically if she/he misses two consecutive lab sessions or four consecutive lectures without prior consent of the instructor. Always inform the instructor ahead of time if you have to miss a quiz or exam. Without prior notification , your grade is a 0 (zero).

2. Lecture notes. The ability to listen effectively and to take good lecture notes represents an essential college skill. Taking notes in this class is not only, but also required to know what topics are emphasized, and what will be asked to reproduce on quizzes and exams.

3. Laboratory work. Lab work will follow as closely as possible the material discussed in lecture. The student is required to complete all the assigned experiments. Occasionally, the lab instructor might deem it necessary to give a pop quiz. 50% of the final lab grade will include the average of the graded lab reported sheets, the efforts to

reach the goal of the experiment, the accuracy of measurements and calculations. and the lab technique shown during the experiments. The other 50% of your lab grade is determined by the average of three lab quizzes. Please, refer to the lab schedule.

4. Homework. Homework will be assigned very often. It is essential to your success in this class that you do all the assigned homework and the reading. Randomly homeworks will be collected and selected problems graded. You are encouraged to correct you homework. Late homeworks may not be acceptable . A pop quiz in lecture counts as a homework.

Quizzes & Exams.

In lecture: 1. There will be three Quizzes Covering the material of previous lectures.
2. There will be three exams. All dealing with more material than the quizzes. Each exam will be equally weighted.

In lab: After every experiment you will have to submit a brief lab report to your lab instructor. A pop quiz in lab counts as a lab report.

Grading. The final grade is calculated as follows:
Exams 40%, Quizzes 20%, Homework 15%, Lab 25%

The lowest grade obtained for a quiz in lecture, and a lab report will be dropped if you have fulfilled all your assignments properly and submitted to the instructor in time. To achieve this incentive, your attendance has to be 90%.

Please be aware of the following rules:

1. Tardiness, early leaving, and sleeping during lecture or lab sessions are considered disruptive behavior and are punished with an absence.
2. Fraudulent behavior during quizzes and exams is graded with a 0 (zero).
3. Copying of experimental data and lab reports is considered fraudulent behavior for the copier and originator. 4.Turning in lab reports after the due date (due time) will result in deduction of points at the discretion of the instructor.

Important Dates:

Drop deadline: Friday, March 13 (end of 9th week). After that date , the instructor is required to assign a letter grade that will appear on your transcripts.

Exam dates: 1st exam--after 6 weeks,
2nd exam--after 12weeks
Final exam--May 20 (W)

Holidays: Martin Luther King Jr. --- Jan. 19 (M)
Lincoln's day --- Feb.13 (F)
Washington's day --- Feb. 16 (M)
Spring Recess --- April 6- 10 (M-- F)

Lecture Topics. Each topic takes approximately two to three weeks. (The chapters mentioned here are from Flextext).

1. Matter and Energy(M) & Measurement and Calculations(C).

2. The Gas Law (G) & Atomic Theory: the Nuclear Model of the Atom (A).

3. Chemical Nomenclature (N) & Chemical Formula Problems (F)

4. Reactions and Equations.(R) & Quantity Relationships in Chemical Reactions (H)

5. Chemical Bonding (B) & Structure and Shape (D).

6. The Ideal Gas Law and Its Applications (I) & Solutions (S)).

7. A choice from the following topics Net Ionic Equation (Z) & The pH Concept (P).

Suggested computer programs and readings available in the Chem Labs.

1. Applying, Math Survival Guide. Tips for Science Structures.
2. Lewis Structures. Program available in the lab.
3. Gebelein, Chemistry and our world.
4. Stoker, Introduction to Chemical Principles.
5. Falcon Software. Smith et al. General Chemistry.
6. Wynn, Inorganic Nomenclature Flashcards.