

Chemistry 102 – Chemistry for the Citizens  
Lecture MWF 3:20 pm – 5:00 pm in Bldg-300/Room-332  
Laboratory: Not yet but soon!!

**Instructor:** Dr. Kenneth R. Rodriguez  
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Office Hours: By Appointment/Arrangement

**Textbooks and Supplies:**

Joesten, Castellion, & Hogg, “The World of Chemistry Essentials”, Thomson Brooks/Cole, 2007, 4<sup>th</sup> Edition.  
Handheld Calculator (Non-programmable)

**Prerequisites:** None but pre-algebra would be useful.

**Exams:** There will be 4 examinations given in the semester and each exam will be worth 100 points.

Exam 1: Chapters 1-3,5	Scale: A	91 – 100%
Exam 2: Chapters 8-10,12	A-	89 – 90%
Exam 3: Chapters 13-16	B+	87 – 88%
Exam 4: Chapters (4,6,7,11),17,& Chemistry and Crime	B	82 – 86%
	B-	80 – 81%
	C+	77 – 79%
	C	73 – 76%
	C-	70 – 72%
	D+	66 – 69%
	D	60 - 69%
	F	0 - 59%

**Grading:**

Exams	400 points
Final	200 points
Daily Quizzes	100 points
<u>Homework</u>	<u>50 points</u>
Total	750 points

\*\*\* **IMPORTANT NOTE:** Any “excusable” absence for an exam MUST be substantiated by a WRITTEN note; a grade for “excused” missing exam or work will be assigned as determined appropriate by the Instructor, on a case by case basis. Otherwise, missed work = zero points!

**Final:** The final examination is worth 200 points and is cumulative. You must take the final examination to receive credit for the class. The final will be given on Wednesday, May 21<sup>st</sup>, 2008 in Bldg-300/Room-332 from 3:20 pm to 5:20 pm.

**Daily Quizzes:** There will be daily quizzes given in the first 5 minutes of lecture worth 5 points each. The daily quizzes will be worth a total of 100 points towards your score. There will absolutely be no makeup on any of the daily quizzes. So, it is your responsibility to be on time for each lecture. The 2 lowest quiz scores will be dropped throughout this semester.

**Homework:** 10 homework assignments will be collected during the semester. Each homework assignment is worth 5 points. Homework assignments will be given approximately every week and a half. You will have one week to complete the homework assignments. Solutions to the homework will be either handed out or posted after the due date of each assignment. Late homework will not be accepted.

**Course Objective:** This course is a 3-unit introductory level chemistry course. This course explores the properties and reactions of matter, focusing on chemical applications of social concern. Students will investigate elementary principles of chemistry, including chemical and physical properties of the elements, the states of matter, nomenclature, basic atomic theory, acids and bases, organic chemistry biochemistry, and nuclear chemistry. Supplementary topics will be selected from the topic of current social interest, including air and water pollution; chemical, nuclear and alternative energy, sources; chemical and biological warfare etc... Emphasis will be placed on the construction of effective and informed arguments, both verbal and written.

### **Course Content:**

#### **General Chemistry Topics**

Chapter 1: Living in a World of Chemistry

Chapter 2: The Chemical View of Matter

Chapter 3: Atoms and The Periodic Table

Chapter 4: The Air We Breathe

Chapter 5: Chemical Bonding and States of Matter

Chapter 6: Carbon Dioxide and the Greenhouse Effect

Chapter 7: Chlorofluorocarbons and the Ozone Layer

Chapter 8: Chemical Reactivity: Chemicals in Action

Chapter 9: Acid-Base Reactions

Chapter 10: Oxidation-Reduction Reactions

Chapter 11: Water and Acid Rain

Chapter 12: Energy and Hydrocarbons

Chapter 13: Nuclear Changes and Nuclear Power

Chapter 14: Organic Chemicals and Polymers

#### **Health & Societal Applications of Chemistry**

Chapter 15: The Chemistry of Life

Chapter 16: Nutrition: The Basis of Healthy Living

Chapter 17: Chemistry and Medicine

Chapter 18: The Chemistry of Useful Materials

Chapter 19: Feeding the World

**Academic Misconduct:** Cheating and/or plagiarism will result in an F grade for the course. Dishonest students will be reported to the administration for further disciplinary action. No programmable calculators or devices with alphanumeric text storage capacity will be allowed in the exams (including language translators and cell phones). Communicating with another student during the exam will result in a zero.

**Attendance Policy:** It is the responsibility of the student to attend lectures. Failure to attend lectures may result in zeros on quizzes, homework, and exams due on those days. Be PROMPT and regular in attendance. Quizzes and tests are “lecture-based” and may include questions on material covered only in lecture (i.e. not discussed in the texts). Consistent late arrival may result in a lower grade; MORE THAN FOUR ABSENCES may result in being dropped from the class.

**Classroom Etiquette:** Please arrive to lectures on time. **Turn off all cell phones and pagers when in class!** Points may be deducted for such interruptions - is that incoming call worth it? Be respectful of others. Do not bring visitors to the class.

**Extra Credit:** There are no extra credit assignments. There is plenty of non-extra credit work to complete. For chemistry practice problems online that will help you out for this course, please visit <http://proton.csudh.edu/homeworkcs/hwintrocsn7.html>. Bonus problems may be given on the exams for extra credit.

**Re-grading Policy:** No re-grades unless there is a clear error in the adding of points..