

CHEMISTRY 103

Lecture: S, Room 126.
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Text: **World of Chemistry-Joesten and Wood. *Second edition.***

Exams There will be two one hour exams (100 points each) and one two hour exam (150 points), 8 quizzes-15 points each. Grade will be calculated from 470 points.

Extra credit (20 points) - for different assignments.

Actual exam dates will be announced in the class one week prior to the exam date.

Tentative cutoff points for course exams are A-90%, B-80%, C-65%, and D-50%

Course Outline

- 1) Introduction – Chapter 1 & 2 - Chemistry, matter, pure substances, mixtures (heterogeneous and homogeneous), elements, compounds, symbols, chemical reactions (reactants and products), and states of matter.
- 2) Atoms and the Periodic Table - Chapter 3 & 4 - Daltons atomic theory, conservation of mass, divisible atom, static electricity, electron, neutron, proton, atomic number, nuclear atom, isotopes, ions, Periodic Law, Bohr model, quantum mechanics, orbital and electron configuration.
- 3) Chemical Bonding and States of Matter– Chapter 6 & 7 – Ionic bonds, stable ions, covalent bonds, naming compounds, dot structures, electronegativity and polarity of molecules, and shapes of molecule. States of matter and Solutions.
- 4) Chemical Reactivity, Acid-Base Reactions –Chapter 8. Balancing chemical equations, moles, collisions and rate of reaction.
- 5) Chapter 9. Acid base reactions, weak and strong acids, antacids, oxidation reduction reactions.
- 6) Energy and Hydrocarbons-Chapter 12

FINAL EXAM