CHEM 1220 Lecture Notes
OpenStax Chemistry 2e

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COURSE ADMINISTRATIVE DETAILS

- My office hours
- Intro to my research
- Introductory Quiz
- Grading details
    - Exams - 40, Final - 20, Online Homework - 15, Book Homework - 15, Quizzes - 10
    - Online homework
    - Frequent quizzes
- Importance of reading and learning on your own
- Learning resources
    - My Office Hours
    - Tutoring services - https://www.suu.edu/academicsuccess/tutoring/
- Show how to access Canvas
    - Calendar, Grades, Modules, etc.
    - Quizzes
    - Textbook
- Introduction to chemistry
    - Ruby fluorescence
    - Levomethamphetamine
    - Rubber band elasticity
    - Structure of the periodic table
    - Salt on ice and purifying hydrogen peroxide

CHAPTER 0

1210 REVIEW

There is a whole semester of material from 1210, and these are only the topics which are *most* important for success in 1220

- Composition of atoms and ions (protons, neutrons and electrons)
- Chemical formulas and names
    - Formulas and molar masses
    - Polyatomic ion names
    - Naming ionic compounds
    - Naming binary molecular compounds
    - Naming acids
- Balancing molecular equations
- Solubility rules
- Fundamentals of acid/base chemistry
- Measurements vs. chemistry
    - Converting from measurements to moles and back
    - Stoichiometry and predicting amounts
    - Limiting reactants
- Enthalpy of reaction and heat equations
- Lewis structures

CHAPTER 10

LIQUIDS AND SOLIDS

CHAPTER 11

SOLUTIONS AND COLLOIDS

CHAPTER 12

KINETICS

CHAPTER 13

FUNDAMENTAL EQUILIBRIUM CONCEPTS

CHAPTER 14

ACID-BASE EQUILIBRIA

CHAPTER 15

EQUILIBRIA OF OTHER REACTION CLASSES

CHAPTER 16

THERMODYNAMICS

CHAPTER 17

ELECTROCHEMISTRY

CHAPTER 21

NUCLEAR CHEMISTRY

ERRATA