I. Solution
   a. Solute
   b. Solvent

II. Molecular View of the Solution Process
   a. Types of interactions
      i. 
      ii. 
      iii. 
   b. Solvation

III. Types of Solutions
   a. Solubility
      i. Saturated
      ii. Unsaturated
      iii. Supersaturated
         1. Crystallization
      iv. Liquid-liquid solutions
         1. Miscible
         2. Immiscible
   b. Aqueous Solution
      i. Hydration
      ii. Electrolyte
         1. Strong
         2. Weak
         3. Nonelectrolyte
WHS • AP Chemistry
c. [Physical] Separation Techniques
   i. Filtration
   ii. Chromatography
      1. Paper
      2. Column
   iii. Distillation (repeated; see below)

IV. Concentration
   a. Percent by Mass
   b. Percent by Volume
   c. Mole Fraction
   d. Molarity
      i. How to prepare a solution
      ii. Dilution
   e. Molality

V. The Effect of Temperature on Solubility
   a. Solid Solubility and Temperature
      i. Fractional Crystallization
   b. Gas Solubility and Temperature

VI. The Effect of Pressure on the Solubility of Gases
   a. Henry’s Law

VII. Colligative Properties
    i. Nonelectrolyte vs Electrolyte solutions
       a. Vapor-pressure lowering
          ii. Nonvolatile
          iii. Volatile
iv. Fractional Distillation
   b. Boiling-Point Elevation
   c. Freezing-Point Depression

VIII. Colloids
   a. Tyndall effect
   b. Hydrophobic vs hydrophilic