

CHEM2300 Thermodynamics and Chemical Equilibrium

Course Description:

This course builds on fundamental concepts in thermodynamics. Topics covered include state equations of ideal and real gases, the first law of thermodynamics, heat, work and thermochemistry. This course also contains a discussion of the second and third laws, entropy and spontaneous reactions, Gibbs free and equilibria, phase diagrams for one and two component systems, chemical equilibria, and solutions.

Main Course Outline:

1. Gases and the Zeroth Law of Thermodynamics
2. The First Law of Thermodynamics
3. The Second and Third Laws of Thermodynamics
4. Discussion on Free Energies
5. Introduction to Chemical Equilibria
6. Thermodynamics of solutions