

Detailed Licensing

Overview

Title: CHEM 2141: Survey of Physical Chemistry

Webpages: 71

Applicable Restrictions: Noncommercial

All licenses found:

- [CC BY-NC-SA 4.0](#): 45.1% (32 pages)
- [CC BY 4.0](#): 32.4% (23 pages)
- [Undeclared](#): 22.5% (16 pages)

By Page

- CHEM 2141: Survey of Physical Chemistry - *Undeclared*
 - Front Matter - *Undeclared*
 - TitlePage - *Undeclared*
 - InfoPage - *Undeclared*
 - Table of Contents - *Undeclared*
 - Licensing - *Undeclared*
 - 1: Introduction - *CC BY 4.0*
 - 1.1: Units - *CC BY 4.0*
 - 1.2: Quantity Calculus - *CC BY 4.0*
 - 1.3: Dimensional Analysis - *CC BY 4.0*
 - 1.4: Chapter 1 Problem - *CC BY 4.0*
 - 2: General Chemistry Review - *Undeclared*
 - 2.1: Gases - *Undeclared*
 - 2.1.1: Relating Pressure, Volume, Amount, and Temperature - The Ideal Gas Law - *CC BY 4.0*
 - 2.1.2: Stoichiometry of Gaseous Substances, Mixtures, and Reactions - *CC BY 4.0*
 - 2.1.3: The Kinetic-Molecular Theory - *CC BY 4.0*
 - 2.1.4: Non-Ideal Gas Behavior - *CC BY 4.0*
 - 2.2: Thermodynamics - *Undeclared*
 - 2.2.1: Energy Basics - *CC BY 4.0*
 - 2.2.2: Enthalpy - *CC BY 4.0*
 - 2.2.3: Spontaneity - *CC BY 4.0*
 - 2.2.4: Entropy - *CC BY 4.0*
 - 2.2.5: The Second and Third Laws of Thermodynamics - *CC BY 4.0*
 - 2.2.6: Free Energy - *CC BY 4.0*
 - 2.3: Kinetics - *Undeclared*
 - 2.3.1: Chemical Reaction Rates - *CC BY 4.0*
 - 2.3.2: Factors Affecting Reaction Rates - *CC BY 4.0*
 - 2.3.3: Rate Laws - *CC BY 4.0*
 - 2.3.4: Integrated Rate Laws - *CC BY 4.0*
 - 2.3.5: Collision Theory - *CC BY 4.0*
 - 2.3.6: Reaction Mechanisms - *CC BY 4.0*
 - 2.3.7: Catalysis - *CC BY 4.0*
 - 3: The First Law of Thermodynamics - *CC BY-NC-SA 4.0*
 - 3.1: Overview of Classical Thermodynamics - *CC BY-NC-SA 4.0*
 - 3.2: Pressure-Volume Work - *CC BY 4.0*
 - 3.3: Work and Heat are not State Functions - *CC BY-NC-SA 4.0*
 - 3.4: Energy is a State Function - *CC BY-NC-SA 4.0*
 - 3.5: An Adiabatic Process is a Process in which No Energy as Heat is Transferred - *CC BY-NC-SA 4.0*
 - 3.6: The Temperature of a Gas Decreases in a Reversible Adiabatic Expansion - *CC BY-NC-SA 4.0*
 - 3.7: Pressure-Volume Work - *CC BY-NC-SA 4.0*
 - 3.8: Heat Capacity is a Path Function - *CC BY-NC-SA 4.0*
 - 3.9: Relative Enthalpies Can Be Determined from Heat Capacity Data and Heats of Transition - *CC BY-NC-SA 4.0*
 - 3.10: Enthalpy Changes for Chemical Equations are Additive - *CC BY-NC-SA 4.0*
 - 3.11: Heats of Reactions Can Be Calculated from Tabulated Heats of Formation - *CC BY-NC-SA 4.0*
 - 3.12: The Temperature Dependence of ΔH - *CC BY-NC-SA 4.0*
 - 3.13: Enthalpy is a State Function - *Undeclared*
 - 3.E: The First Law of Thermodynamics (Exercises) - *CC BY-NC-SA 4.0*
 - 4: Entropy and The Second Law of Thermodynamics - *CC BY-NC-SA 4.0*
 - 4.1: Energy Does not Determine Spontaneity - *CC BY-NC-SA 4.0*
 - 4.2: Nonequilibrium Isolated Systems Evolve in a Direction That Increases Their Energy Dispersal - *CC BY-NC-SA 4.0*
 - 4.3: Unlike heat, Entropy is a State Function - *CC BY-NC-SA 4.0*

- 4.4: The Second Law of Thermodynamics - *CC BY-NC-SA 4.0*
- 4.5: We Must Always Devise a Reversible Process to Calculate Entropy Changes - *CC BY-NC-SA 4.0*
- 4.E: Entropy and The Second Law of Thermodynamics (Exercises) - *CC BY-NC-SA 4.0*
- 5: Entropy and the Third Law of Thermodynamics - *CC BY-NC-SA 4.0*
 - 5.1: Entropy Increases With Increasing Temperature - *CC BY-NC-SA 4.0*
 - 5.2: The 3rd Law of Thermodynamics Puts Entropy on an Absolute Scale - *CC BY-NC-SA 4.0*
 - 5.3: The Entropy of a Phase Transition can be Calculated from the Enthalpy of the Phase Transition - *CC BY-NC-SA 4.0*
 - 5.4: Standard Entropies Can Be Used to Calculate Entropy Changes of Chemical Reactions - *CC BY-NC-SA 4.0*
 - 5.E: Entropy and the Third Law of Thermodynamics (Exercises) - *CC BY-NC-SA 4.0*
- 6: Helmholtz and Gibbs Energies - *CC BY-NC-SA 4.0*
 - 6.1: Gibbs Energy Determines the Direction of Spontaneity at Constant Pressure and Temperature - *CC BY-NC-SA 4.0*
 - 6.2: Thermodynamic Functions have Natural Variables - *CC BY-NC-SA 4.0*
 - 6.3: The Standard State for a Gas is an Ideal Gas at 1 Bar - *CC BY-NC-SA 4.0*
 - 6.4: The Gibbs-Helmholtz Equation - *CC BY-NC-SA 4.0*
 - 6.E: Helmholtz and Gibbs Energies (Exercises) - *CC BY-NC-SA 4.0*
- Back Matter - *Undeclared*
 - Index - *Undeclared*
 - Glossary - *Undeclared*
 - Detailed Licensing - *Undeclared*
 - Detailed Licensing - *Undeclared*