

Detailed Licensing

Overview

Title: CHEM 110: Introductory Chemistry (Sharpe Elles) SP25

Webpages: 166

Applicable Restrictions: Noncommercial

All licenses found:

- [CC BY-NC-SA 4.0](#): 50% (83 pages)
- [CC BY-NC-SA 3.0](#): 38% (63 pages)
- [Undeclared](#): 9% (15 pages)
- [CC BY 4.0](#): 2.4% (4 pages)
- [CK-12 License](#): 0.6% (1 page)

By Page

- CHEM 110: Introductory Chemistry (Sharpe Elles) SP25 - *Undeclared*
 - Front Matter - *Undeclared*
 - [TitlePage](#) - *Undeclared*
 - [InfoPage](#) - *Undeclared*
 - [Table of Contents](#) - *Undeclared*
 - [Licensing](#) - *Undeclared*
 - 1: Chemistry, Matter, and Measurement - [CC BY-NC-SA 4.0](#)
 - [1.0: Prelude to Chemistry, Matter, and Measurement](#) - [CC BY-NC-SA 3.0](#)
 - [1.1: What is Chemistry?](#) - [CC BY-NC-SA 4.0](#)
 - [1.2: The Classification of Matter](#) - [CC BY-NC-SA 4.0](#)
 - [1.3: Measurements](#) - [CC BY-NC-SA 4.0](#)
 - [1.4: The International System of Units](#) - [CC BY-NC-SA 4.0](#)
 - [1.5: Measurement Uncertainty, Accuracy, and Precision](#) - [CC BY 4.0](#)
 - [1.6: Expressing Numbers - Scientific Notation](#) - [CC BY-NC-SA 4.0](#)
 - [1.7: Converting Units](#) - [CC BY-NC-SA 4.0](#)
 - [1.8: Dosage Calculations](#) - [CC BY-NC-SA 3.0](#)
 - [1.E: Chemistry, Matter, and Measurement \(Exercises\)](#) - [CC BY-NC-SA 3.0](#)
 - [1.S: Chemistry, Matter, and Measurement \(Summary\)](#) - [CC BY-NC-SA 4.0](#)
 - 2: Elements, Atoms, and the Periodic Table - [CC BY-NC-SA 4.0](#)
 - [2.0: Prelude to Elements, Atoms, and the Periodic Table](#) - [CC BY-NC-SA 3.0](#)
 - [2.1: Chemical Elements and Symbols](#) - [CC BY-NC-SA 3.0](#)
 - [2.2: The Periodic Table](#) - [CC BY-NC-SA 3.0](#)
 - [2.3: Early Ideas in Atomic Theory](#) - [CC BY 4.0](#)
 - [2.4: Evolution of Atomic Theory](#) - [CC BY 4.0](#)
 - [2.5: Atomic Structure and Symbolism](#) - [CC BY 4.0](#)
 - [2.6: Electronic Structure of Atoms](#) - [CC BY-NC-SA 3.0](#)
 - [2.7: Electron Configurations](#) - [CC BY-NC-SA 3.0](#)
 - [2.8: Electron Configurations and the Periodic Table](#) - [CC BY-NC-SA 3.0](#)
 - [2.9: Periodic Trends](#) - [CC BY-NC-SA 3.0](#)
 - [2.E: Elements, Atoms, and the Periodic Table \(Exercises\)](#) - [CC BY-NC-SA 3.0](#)
 - [2.S: Elements, Atoms, and the Periodic Table \(Summary\)](#) - [CC BY-NC-SA 4.0](#)
 - 3: Ionic Bonding and Simple Ionic Compounds - [CC BY-NC-SA 4.0](#)
 - [3.0: Prelude to Ionic Bonding and Simple Ionic Compounds](#) - [CC BY-NC-SA 3.0](#)
 - [3.1: Two Types of Bonding](#) - [CC BY-NC-SA 4.0](#)
 - [3.2: Ions](#) - [CC BY-NC-SA 4.0](#)
 - [3.3: Formulas of Ionic Compounds](#) - [CC BY-NC-SA 3.0](#)
 - [3.4: Naming Ionic Compounds](#) - [CC BY-NC-SA 3.0](#)
 - [3.5: Formula Mass](#) - [CC BY-NC-SA 4.0](#)
 - [3.6: Some Properties of Ionic Compounds](#) - [CC BY-NC-SA 3.0](#)
 - [3.E: Ionic Bonding and Simple Ionic Compounds \(Exercises\)](#) - [CC BY-NC-SA 3.0](#)
 - [3.S: Ionic Bonding and Simple Ionic Compounds \(Summary\)](#) - [CC BY-NC-SA 4.0](#)
 - 4: Covalent Bonding and Simple Molecular Compounds - [CC BY-NC-SA 4.0](#)
 - [4.0: Prelude to Covalent Bonding and Simple Molecular Compounds](#) - [CC BY-NC-SA 3.0](#)
 - [4.1: Covalent Bonds](#) - [CC BY-NC-SA 4.0](#)
 - [4.2: Covalent Compounds- Formulas and Names](#) - [CC BY-NC-SA 3.0](#)

- 4.3: Drawing Lewis Structures - CC BY-NC-SA 3.0
- 4.4: The Shapes of Molecules - CC BY-NC-SA 3.0
- 4.5: Polar Covalent Bonds and Electronegativity - CC BY-NC-SA 3.0
- 4.6: Polar Molecules - CC BY-NC-SA 3.0
- 4.7: Organic Chemistry - CC BY-NC-SA 4.0
- 4.E: Covalent Bonding and Simple Molecular Compounds (Exercises) - CC BY-NC-SA 3.0
- 4.S: Covalent Bonding and Simple Molecular Compounds (Summary) - CC BY-NC-SA 4.0
- 5: Introduction to Chemical Reactions - CC BY-NC-SA 4.0
 - 5.0: Prelude to Introduction to Chemical Reactions - CC BY-NC-SA 3.0
 - 5.1: The Law of Conservation of Matter - CC BY-NC-SA 4.0
 - 5.2: Chemical Equations - CC BY-NC-SA 4.0
 - 5.3: Quantitative Relationships Based on Chemical Equations - CC BY-NC-SA 4.0
 - 5.4: Some Types of Chemical Reactions - CC BY-NC-SA 3.0
 - 5.5: Oxidation-Reduction (Redox) Reactions - CC BY-NC-SA 4.0
 - 5.6: Redox Reactions in Organic Chemistry and Biochemistry - CC BY-NC-SA 4.0
 - 5.E: Introduction to Chemical Reactions (Exercises) - CC BY-NC-SA 3.0
 - 5.S: Introduction to Chemical Reactions (Summary) - CC BY-NC-SA 4.0
- 6: Quantities in Chemical Reactions - CC BY-NC-SA 4.0
 - 6.0: Prelude to Quantities in Chemical Reactions - CC BY-NC-SA 3.0
 - 6.1: The Mole and Avogadro's Number - CC BY-NC-SA 3.0
 - 6.2: Gram-Mole Conversions - CC BY-NC-SA 3.0
 - 6.3: Mole Relationships in Chemical Reactions - CC BY-NC-SA 4.0
 - 6.4: Mass Relationships and Chemical Equations - CC BY-NC-SA 3.0
 - 6.5: Limiting Reagent and Percent Yield - CC BY-NC-SA 3.0
 - 6.E: Quantities in Chemical Reactions (Exercise) - CC BY-NC-SA 3.0
 - 6.S: Quantities in Chemical Reactions (Summary) - CC BY-NC-SA 4.0
- 7: Energy and Chemical Processes - CC BY-NC-SA 4.0
 - 7.0: Prelude to Energy and Chemical Processes - CC BY-NC-SA 3.0
 - 7.1: Energy and Its Units - CC BY-NC-SA 4.0
 - 7.2: Heat and Temperature - CC BY-NC-SA 4.0
 - 7.3: Phase Changes - CC BY-NC-SA 4.0
 - 7.4: Bond Energies and Chemical Reactions - CC BY-NC-SA 4.0
 - 7.5: The Energy of Biochemical Reactions - CC BY-NC-SA 4.0
 - 7.6: Reversible Reactions and Chemical Equilibrium - *Undeclared*
 - 7.7: Equilibrium Equations and Equilibrium Constants - *Undeclared*
 - 7.8: Le Chatelier's Principle- The Effect of Changing Conditions on Equilibria - CC BY-NC-SA 3.0
 - 7.E: Energy and Chemical Processes (Exercises) - CC BY-NC-SA 3.0
 - 7.S: Energy and Chemical Processes (Summary) - CC BY-NC-SA 4.0
- 8: Solids, Liquids, and Gases - CC BY-NC-SA 4.0
 - 8.0: Prelude to Solids, Liquids, and Gases - CC BY-NC-SA 3.0
 - 8.1: Intermolecular Interactions - CC BY-NC-SA 4.0
 - 8.2: Solids and Liquids - CC BY-NC-SA 4.0
 - 8.3: Gases and Pressure - CC BY-NC-SA 4.0
 - 8.4: Gas Laws - CC BY-NC-SA 4.0
 - 8.E: Solids, Liquids, and Gases (Exercises) - CC BY-NC-SA 3.0
 - 8.S: Solids, Liquids, and Gases (Summary) - CC BY-NC-SA 4.0
- 9: Solutions - CC BY-NC-SA 4.0
 - 9.0: Prelude to Solutions - CC BY-NC-SA 3.0
 - 9.1: Solutions - CC BY-NC-SA 4.0
 - 9.2: Concentration - CC BY-NC-SA 4.0
 - 9.3: The Dissolution Process - CC BY-NC-SA 4.0
 - 9.4: Properties of Solutions - CC BY-NC-SA 4.0
 - 9.5: Osmosis and Diffusion - *CK-12 License*
 - 9.E: Solutions (Exercises) - CC BY-NC-SA 3.0
 - 9.S: Solutions (Summary) - CC BY-NC-SA 4.0
- 10: Acids and Bases - CC BY-NC-SA 3.0
 - 10.0: Prelude to Acids and Bases - CC BY-NC-SA 3.0
 - 10.1: Acids and Bases Definitions - CC BY-NC-SA 3.0
 - 10.2: Acid and Base Strength - CC BY-NC-SA 3.0
 - 10.3: Water as Both an Acid and a Base - CC BY-NC-SA 3.0
 - 10.4: Measuring Acidity in Aqueous Solutions- The pH Scale - CC BY-NC-SA 3.0
 - 10.5: Working with pH - CC BY-NC-SA 3.0
 - 10.6: Buffers - CC BY-NC-SA 4.0
 - 10.7: Titration - CC BY-NC-SA 3.0
- 11: Organic Chemistry - CC BY-NC-SA 4.0
 - 11.0: Prelude to Organic Chemistry - CC BY-NC-SA 3.0
 - 11.1: Hydrocarbons - CC BY-NC-SA 3.0
 - 11.2: Branched Hydrocarbons - CC BY-NC-SA 3.0

- 11.3: Alkyl Halides and Alcohols - *CC BY-NC-SA 3.0*
- 11.4: Other Oxygen-Containing Functional Groups - *CC BY-NC-SA 3.0*
- 11.5: Other Nitrogen and Sulfur-Containing Functional Groups - *CC BY-NC-SA 3.0*
- 11.6: Polymers - *CC BY-NC-SA 3.0*
- 11.E: Organic Chemistry (Exercises) - *CC BY-NC-SA 3.0*
- 12: Biomolecules - *Undeclared*
 - 12.0: An Introduction to Biochemistry - *CC BY-NC-SA 3.0*
 - 12.1: Carbohydrates - *CC BY-NC-SA 4.0*
 - 12.1.0: Classes of Monosaccharides - *CC BY-NC-SA 4.0*
 - 12.1.1: Important Hexoses - *CC BY-NC-SA 4.0*
 - 12.1.2: Properties of Monosaccharides - *CC BY-NC-SA 4.0*
 - 12.1.3: Disaccharides - *CC BY-NC-SA 4.0*
 - 12.1.4: Polysaccharides - *CC BY-NC-SA 4.0*
 - 12.2: Lipids - *CC BY-NC-SA 4.0*
 - 12.2.0: Fatty Acids - *CC BY-NC-SA 4.0*
 - 12.2.1: Fats and Oils - *CC BY-NC-SA 4.0*
 - 12.2.2: Membranes and Membrane Lipids - *CC BY-NC-SA 4.0*
 - 12.2.3: Steroids - *CC BY-NC-SA 4.0*
 - 12.2.E: Exercises - *CC BY-NC-SA 3.0*
 - 12.3: Amino Acids and Proteins - *CC BY-NC-SA 3.0*
 - 12.3.0: Properties of Amino Acids - *CC BY-NC-SA 4.0*
 - 12.3.1: Reactions of Amino Acids - *CC BY-NC-SA 4.0*
 - 12.3.2: Peptides - *CC BY-NC-SA 4.0*
 - 12.4: Nucleic Acids - *CC BY-NC-SA 4.0*
 - 12.4.0: Nucleotides - *CC BY-NC-SA 4.0*
 - 12.4.1: Nucleic Acid Structure - *CC BY-NC-SA 4.0*
 - 12.4.E: Nucleic Acids (Exercises) - *CC BY-NC-SA 3.0*
- 13: Energy Metabolism - *CC BY-NC-SA 4.0*
 - 13.0: Prelude to Energy Metabolism - *CC BY-NC-SA 3.0*
 - 13.1: ATP- the Universal Energy Currency - *CC BY-NC-SA 4.0*
 - 13.2: Stage I of Catabolism - *CC BY-NC-SA 4.0*
 - 13.3: Overview of Stage II of Catabolism - *CC BY-NC-SA 4.0*
 - 13.4: Stage III of Catabolism - *CC BY-NC-SA 4.0*
 - 13.5: Stage II of Carbohydrate Catabolism - *CC BY-NC-SA 4.0*
 - 13.6: Stage II of Lipid Catabolism - *CC BY-NC-SA 4.0*
 - 13.7: Stage II of Protein Catabolism - *CC BY-NC-SA 4.0*
 - 13.E: Energy Metabolism (Exercises) - *CC BY-NC-SA 3.0*
 - 13.S: Energy Metabolism (Summary) - *CC BY-NC-SA 4.0*
- 14: Nuclear Chemistry - *CC BY-NC-SA 4.0*
 - 14.0: Prelude to Nuclear Chemistry - *CC BY-NC-SA 3.0*
 - 14.1: Radioactivity - *CC BY-NC-SA 4.0*
 - 14.2: Half-Life - *CC BY-NC-SA 4.0*
 - 14.3: Units of Radioactivity - *CC BY-NC-SA 4.0*
 - 14.4: Uses of Radioactive Isotopes - *CC BY-NC-SA 4.0*
 - 14.5: Nuclear Energy - *CC BY-NC-SA 4.0*
 - 14.E: Nuclear Chemistry (Exercises) - *CC BY-NC-SA 3.0*
 - 14.S: Nuclear Chemistry (Summary) - *CC BY-NC-SA 4.0*
- Back Matter - *Undeclared*
 - Index - *Undeclared*
 - Glossary - *Undeclared*
 - Detailed Licensing - *Undeclared*
 - Detailed Licensing - *Undeclared*
 - Detailed Licensing - *Undeclared*