

Course Overview	<p><i>Optional High School Course</i>; Pre-requisites: Algebra 1, Algebra 2, Pre-AP Chemistry</p> <p>AP Chemistry is a lab-based course studying various aspects of matter and energy including both aqueous and gaseous equilibrium, thermodynamics, kinetics, electrochemistry, bonding theory, atomic and electron theory, periodicity, gases and intermolecular forces. In addition, the course provides students with training for such knowledge and skills through guided inquiry labs, a focused curriculum on content relevant to today's problems, and an exam that assesses students' mental models of the particulate nature of matter instead of memorization of rules or mathematical routines to understand chemistry. The AP Chemistry Exam assesses content from both Pre-AP Chemistry and AP Chemistry courses.</p>
Course Standards	<p>AP Chemistry Course and Exam Description</p>
Instructional Materials	<p>IDEA AP Chemistry Curriculum is the approved curriculum. Educational technology such as Explore Learning Gizmos, Khan Academy, and PhET simulations are embedded into the core curriculum. The CK-12 Online Interactive Textbook is used as a supplemental resource. Wet labs and the proper facilities to conduct them are required to satisfy both the standards and the 40% lab experience required by the TEA.</p> <ul style="list-style-type: none"> Approved Instructional Materials and Supports

Scope & Sequence

Units/Modules & Instructional Days	Assessments & Scanning Deadlines	Standards
<p>Unit 1: Structure and Properties 12 Instructional Days 1 Exam Review Day 1 Unit Exam Day 1 Success Day</p> <p><i>Flex Days Vary By Region (See Unit Plan)</i></p>	<p>TX_SCI_APChemistry_F26_UE1</p> <p>Scanning Deadline: 9/17/26</p>	<p>1.5 Atomic Structure and Electron Configuration 1.2 Mass Spectroscopy of Elements 1.1 Moles and Molar Mass 1.3 Elemental Composition of Pure Substances 2.1 Types of Chemical Bonds 2.3 Structure of Ionic Solids 2.4 Structure of Metals and Alloys 2.2 Intramolecular Force and Potential Energy 2.5 Lewis Diagrams 2.6 Resonance and Formal Charge 2.7 VSEPR and Bond Hybridization</p>

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Instructional Plan

Units/Modules & Instructional Days	Assessments & Scanning Deadlines	Standards
Unit 2: Stoichiometry 8 Instructional Days 1 Exam Review Day 1 Unit Exam Day 1 Success Day <i>Flex Days Vary By Region (See Unit Plan)</i>	TX_SCI_APChemistry_F26_UE2 Scanning Deadline: 10/2/26	1.4 Composition of Mixtures 3.7 Solutions and Mixtures 3.13 Beer Lambert Law 3.8 Representations of Solutions 4.4 Physical and Chemical Changes 4.1 Introduction for Reactions 4.3 Representations of Reactions 4.2 Net Ionic Equations 4.5 Stoichiometry
Unit 3: Thermochemistry and Thermodynamics 15 Instructional Days 1 Exam Review Day 1 Unit Exam Day 1 Success Day <i>Flex Days Vary By Region (See Unit Plan)</i>	TX_SCI_APChemistry_F26_UE3 Scanning Deadline: 11/3/26	6.1 Endothermic and Exothermic Processes 6.2 Energy Diagrams 6.3 Heat Transfer and Thermal Equilibrium 6.4 Heat Capacity and Calorimetry 6.5 Energy of Phase Changes 6.6 Introduction to Enthalpy of Reaction 6.7 Bond Enthalpies 6.8 Enthalpy of Formation 6.9 Hess's Law 9.1 Introduction to Entropy 9.2 Absolute Entropy and Entropy Change 9.3 Gibbs Free Energy and Thermodynamic Favorability
Unit 4: Equilibrium 15 Instructional Days 1 Exam Review Day 1 Unit Exam Day 1 Success Day <i>Flex Days Vary By Region (See Unit Plan)</i>	TX_SCI_APChemistry_F26_UE4 Scanning Deadline: 12/4/2026	7.1 Introduction to Equilibrium 7.2 Direction of Reversible Reactions 7.3 Reaction Quotient and Equilibrium Constant 7.4 Calculating the Equilibrium Constant 7.5 Magnitude of the Equilibrium Constant 7.6 Properties of the Equilibrium Constant 7.7 Calculating Equilibrium Concentrations

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Instructional Plan

Units/Modules & Instructional Days	Assessments & Scanning Deadlines	Standards
		7.8 Representations of Equilibrium 7.9 Introduction to Le Châtelier's Principle 7.10 Reaction Quotient and Le Châtelier's Principle 7.11 Introduction to Solubility Equilibria 7.12 Common-Ion Effect 9.4 Thermodynamic and Kinetic Control 9.5 Free Energy and Equilibrium 9.6 Free Energy of Dissolution
Semester Exam Window: December 14-18, 2026 Scanning Deadline: December 18, 2026		
Unit 5: Kinetics 12 Instructional Days 1 Exam Review Day 1 Unit Exam Day 1 Success Day <i>Flex Days Vary By Region (See Unit Plan)</i>	TX_SCI_APChemistry_F26_UE5 Scanning Deadline: 1/22/27	5.1 Reaction Rates 5.2 Introduction to Rate Law 5.3 Concentration Changes Over Time 5.4 Elementary Reactions 5.5 Collision Model 5.6 Reaction Energy Profile 5.7 Introduction to Reaction Mechanisms 5.8 Reaction Mechanism and Rate Law 5.9 Steady-State Approximation 5.10 Multistep Reaction Energy Profile 5.11 Catalysis
Unit 6: Acids and Bases 16 Instructional Days 1 Exam Review Day 1 Unit Exam Day 1 Success Day <i>Flex Days Vary By Region (See Unit Plan)</i>	TX_SCI_APChemistry_F26_UE6 Scanning Deadline: 2/25/27	8.1 Introduction to Acids and Bases 8.2 pH and pOH of Strong Acids and Bases 4.8 Introduction to Acid-Base Reactions 4.6 Introduction to Titration 8.3 Weak Acid and Base Equilibria 8.4 Acid-Base Reactions and Buffers 8.5 Acid-Base Titrations 8.6 Molecular Structure of Acids and Bases

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Units/Modules & Instructional Days	Assessments & Scanning Deadlines	Standards
		8.7 pH and pK_a 8.8 Properties of Buffers 8.9 Henderson-Hasselbalch Equation 8.10 Buffer Capacity 8.11 pH and Solubility
Unit 7: Electrochemistry 12 Instructional Days 1 Exam Review Day 1 Unit Exam Day 1 Success Day <i>Flex Days Vary By Region (See Unit Plan)</i>	TX_SCI_APChemistry_F26_UE7 Scanning Deadline: 3/30/27	1.6 Photoelectron Spectroscopy 1.7 Periodic Trends 1.8 Valence Electrons and Ionic Compounds 4.7 Types of Reactions 4.9 Oxidation-Reduction (Redox) Reactions 9.7 Coupled Reactions 9.8 Galvanic (Voltaic) and Electrolytic Cells 9.9 Cell Potential and Free Energy 9.10 Cell Potential Under Nonstandard Conditions 9.11 Electrolysis and Faraday's Law
Mock Exam Window: 3/22/2027 – 4/2/2027		
Unit 8: Intermolecular Forces 11 Instructional Days 1 Exam Review Day 1 Unit Exam Day 1 Success Day <i>Flex Days Vary By Region (See Unit Plan)</i>	TX_SCI_APChemistry_F26_UE8 Scanning Deadline: 4/22/27	3.1 Intermolecular Forces 3.2 Properties of Solids 3.3 Solids, Liquids, and Gases 3.5 Kinetic Molecular Theory 3.4 Ideal Gas Law 3.6 Deviation from Ideal Gas Law 3.8 Representations of Solutions (IMFs) 3.9 Separation of Solutions and Mixtures Chromatography 3.10 Solubility 3.11 Spectroscopy and the Electromagnetic Spectrum 3.12 Photoelectric Effect
AP Exam Window: May 3-14, 2027 (Specific Date Not Yet Published)		

TEKS Alignment

Instruction in this course is aligned to the Texas Essential Knowledge and Skills (TEKS) as adopted by the State Board of Education and implemented in accordance with Texas Education Code Chapter 28.

Instructional Materials

Primary Texts (if applicable)

Supplemental instructional materials may be used to support instruction. Supplemental materials do not replace board-approved core instructional materials.

Additional information regarding instructional programs, assessments, and parent access to instructional materials is available on the district website.

Instructional Expectations

Instruction is delivered using board-approved instructional materials and aligned to the scope and sequence outlined above. Teachers are expected to ensure all required standards are taught within the course timeframe.

Assessment Overview

Student learning is monitored through formative and summative assessments aligned to course standards. Assessment results are used to inform instruction and student supports. Students participate in required state assessments when applicable.