Principles of Chemistry I

CHEM 1210

Spring 2026

Instructor:	Matthew Rowley	**Office Hours:**	MWRF 11:00 am – 12:00 pm
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Please include the course number in the subject line of all correspondence.

Tentative Schedule

This class will meet on Mondays, Tuesdays, Wednesdays, and Fridays in room 130 of the Science Center (SC).

- Section 03 meets from 3:00 – 3:50
- Section 04 meets from 2:00 – 2:50

For the best lecture experience, read the indicated textbook chapter *before* each lecture.

	Date	Topic	Chapter
Week 1	W, Jan. 7	Chemistry in Context	1.1
	F, Jan. 9	Phases and Classification of Matter	1.2
Week 2	M, Jan. 12	Physical and Chemical Properties	1.3
	T, Jan. 13	Measurements	1.4
	W, Jan. 14	Measurement Uncertainty, Accuracy, and Precision	1.5
	F, Jan. 16	Mathematical Treatment of Measurement Results	1.6
Week 3	M, Jan. 19	**Martin Luther King Day - No Class!**	
	T, Jan. 20	Early Ideas in Atomic Theory	2.1
	W, Jan. 21	Evolution of Atomic Theory	2.2
	F, Jan. 23	Atomic Structure and Symbolism	2.3

	Date	Topic	Chapter
Week 4	M, Jan. 26	Chemical Formulas	2.4
	T, Jan. 27	The Periodic Table	2.5
	W, Jan. 28	Ionic and Molecular Compounds	2.6
	F, Jan. 30	Chemical Nomenclature	2.7
Week 5	M, Feb. 2	**Catch-up/Review Day for Exam 1: Chapters 1 and 2**	
	T, Feb. 3	Formula Mass and the Mole Concept	3.1
	W, Feb. 4	Determining Empirical and Molecular Formulas	3.2
	F, Feb. 6	Molarity	3.3
Week 6	M, Feb. 9	Other Units for Solution Concentration	3.4
	T, Feb. 10	Writing and Balancing Chemical Equations	4.1
	W, Feb. 11	Classifying Chemical Reactions	4.2
	F, Feb. 13	Reaction Stoichiometry	4.3
Week 7	M, Feb. 16	**President's Day - No Class!**	
	T, Feb. 17	Reaction Yields	4.4
	W, Feb. 18	Quantitative Chemical Analysis	4.5
	F, Feb. 20	**Catch-up/Review Day for Exam 2: Chapters 3 and 4**	
Week 8	M, Feb. 23	Energy Basics	5.1
	T, Feb. 24	Calorimetry	5.2
	W, Feb. 25	Enthalpy	5.3
	F, Feb. 27	Electromagnetic Energy	6.1
Week 9	M, Mar. 2	The Bohr Model	6.2
	T, Mar. 3	Development of Quantum Theory	6.3
	W, Mar. 4	Electronic Structure of Atoms (Electron Configurations)	6.4
	F, Mar. 6	Periodic Variations in Element Properties	6.5

	Date	Topic	Chapter
Week 10	M, Mar. 9	**Spring Break - No Class!**	
	T, Mar. 10	**Spring Break - No Class!**	
	W, Mar. 11	**Spring Break - No Class!**	
	F, Mar. 13	**Spring Break - No Class!**	
Week 11	M, Mar. 16	**Catch-up/Review Day for Exam 3: Chapters 5 and 6**	
	T, Mar. 17	Ionic Bonding	7.1
	W, Mar. 18	Covalent Bonding	7.2
	F, Mar. 20	Lewis Symbols and Structures	7.3
Week 12	M, Mar. 23	Formal Charges and Resonance	7.4
	T, Mar. 24	Strengths of Ionic and Covalent Bonds	7.5
	W, Mar. 25	Molecular Structure and Polarity	7.6
	F, Mar. 27	Valence Bond Theory	8.1
Week 13	M, Mar. 30	Hybrid Atomic Orbitals	8.2
	T, Mar. 31	**Festival of Excellence - No Class!**	
	W, Apr. 1	Multiple Bonds	8.3
	F, Apr. 3	Molecular Orbital Theory	8.4
Week 14	M, Apr. 6	Gas Pressure	9.1
	T, Apr. 7	Relating Pressure, etc.: The Ideal Gas Law	9.2
	W, Apr. 8	Stoichiometry of Gaseous Substances, etc.	9.3
	F, Apr. 10	Effusion and Diffusion of Gases	9.4
Week 15	M, Apr. 13	The Kinetic-Molecular Theory	9.5
	T, Apr. 14	Non-Ideal Gas Behavior	9.6
	W, Apr. 15	**Catch-up/Review Day for Exam 4: Chapters 7–9**	
	F, Apr. 17	Intermolecular Forces	10.1
Finals Week	M, Apr. 20	**Section 03 Final Exam** 3:00-4:50 Bring a pencil and a scantron sheet	
	R, Apr. 23	**Section 04 Final Exam** 11:00-12:50 Bring a pencil and a scantron sheet	