

CFISD Integrated Physics & Chemistry

Scope and Sequence 2024-2025

Course Description:

In Integrated Physics and Chemistry, students conduct laboratory and field investigations, use engineering practices, use scientific practices during investigation, and make informed decisions using critical thinking and scientific problem solving. This course integrates the disciplines of physics and chemistry in the following topics: force, motion, energy, and matter. • Required prerequisite : Biology

Texas Essential Knowledge and Skills: [IPC](#)

Instructional Units	Days**	Date Range	
First Semester	81	Start Date	End Date
1st Grading Period (8/19/24 - 10/18/24)			
Unit 1: Graphing and Analyzing Motion*	14	8/19/24	9/6/24
Unit 2: Momentum in Collisions	12	9/9/24	9/24/24
Unit 3: The Four Fundamental Forces	7	9/25/24	10/3/24
Unit 4: Gravity and Electromagnetism	7	10/4/24	10/15/24
2nd Grading Period (10/21/24 - 12/20/24)			
Unit 5: Series and Parallel Circuits	9	10/16/24	10/28/24
Unit 6: Generating Electricity	9	10/29/24	11/12/24
Unit 7: Conservation of Energy	8	11/18/24	11/22/24
Unit 8: Transferring Energy and Information	10	12/2/24	12/13/24
Review & Final Exams	5	12/16/24	12/20/24
Second Semester			
	92	Start Date	End Date
3rd Grading Period (1/7/25 - 3/7/25)			
Unit 9: Renewable Energy	10	1/7/25	1/21/25
Unit 10: Elements and the Periodic Table	10	1/22/25	2/4/25
Unit 11: Using Properties of Substances	10	2/5/25	2/20/25
Unit 12: Atomic Emission Spectra	11	2/21/25	3/7/25
4th Grading Period (3/17/25 - 5/29/25)			
Unit 13: Investigating Reactions & Solution Rates	8	3/17/25	3/26/25
Unit 14: Changes in Chemical Reactions	9	3/27/25	4/8/25
Unit 15: Balancing Reactions	9	4/9/25	4/23/25
Unit 16: Nuclear Reactions	10	4/24/25	5/7/25
Unit 17: Chemistry's Impact on the Environment	11	5/8/25	5/22/25
Review & Final Exams	5	5/22/25	5/29/25

*3 days added for beginning of the year and Safety

**The length of each unit is a specific number of days, but it is understood that there is a range of +/- a day. The purpose of the flexibility is meant to allow teachers the opportunity to plan for the needs of their students and to accommodate re-teaching or review when necessary. If pre-assessment indicates student mastery could be obtained in a fewer number of days, the additional time could be used for extension or carried into the next unit.

Instructional Material(s): [Accelerate Learning - Stemscores](#)