

Canyon Crest Academy: Honors Chemistry

Level of Difficulty	Estimated Homework	Recommended Prerequisites
<input type="checkbox"/> Moderate	60 minutes per day*	Successful completion of Biology (B or better)
<input checked="" type="checkbox"/> Difficult	*This is a general guideline for planning and scheduling purposes. A student's ability level may affect actual preparation time needed.	AND
<input type="checkbox"/> Very Difficult		Co-enrolled or successful completion of Integrated Math 2

Course Description

In this Next Generation Science Standards (NGSS) aligned chemistry course, students will explore physical science concepts that build comprehension around matter, its properties, and its interactions with other matter and energy. The units within this scope and sequence are presented thematically to provide a context for student learning. Students will explore concepts in chemistry and apply their understanding of these concepts in the context of earth and space science, materials science and environmental science *beyond* NGSS, including advanced topics in the areas of quantum mechanics, spectroscopy, intermolecular forces, thermodynamics, and equilibrium. The integration of relevant Earth and Space Science concepts such as stars and climate change are designed to deepen student understanding of chemistry's role in Earth's systems and society.

The identification and application of patterns and cause and effect relationships will also dominate the connections between topics/units. Articulating relationships and coming to conclusions using *quantitative* reasoning and analysis of experimental data will also be emphasized. Students will explore these topics through discussions, laboratory investigations, teacher demonstrations, and in-class assignments.

Students who successfully complete Honors Chemistry will gain a broader reasoning skill set and will have built a solid foundation for advanced level science courses.

Grading

Category	Weight
Homework	15%
Laboratory	25%
Quiz	15%
Test	30%
Final Exam	15%

The grading system is based on weighted percentages. Each assignment will have a point value and be weighed according to the category it falls under. Individual teachers may make slight modifications on the weighted percentages.

Links

- CCA Science Homepage <http://teachers.sduhsd.net/ccscience>
- Next Generation Science Standards <http://www.nextgenscience.org/>

Supplemental Information

- 10 credits
- Meets UC/CSU subject area "d" requirement

- Fulfills graduation requirement in physical science
- NOT weighted