

Carmel High School
Science Department
Honors Chemistry(NGSS), Room 34
Mr. Dooner
2019- 2020

Honors Chemistry(NGSS)

UC/CSU: Fulfills D (Physical Science requirement)

Grades: 10-12

Credits: 10 (5 per semester)

Est. Daily Homework: 30-45 minutes per night on average

Prerequisites: Successful completion of Integrated Math 1 and Biology I/Honors Biology

Course Overview:

This NGSS-aligned honors-level chemistry course is designed to be a rigorous second course in the NGSS high school sequence. The course covers advanced high school level chemistry concepts through the lens of the Earth's internal, surface, atmospheric, and oceanic processes. Throughout the year, there will be a focus on the complex chemistry and implications of anthropogenic-driven changes in Earth's atmosphere, oceans, and landforms. Students will be challenged to critically analyze competing design solutions to the local and global issues that impact the human population. This knowledge base and these skills aim to prepare students for studies in Honors Physics, AP science courses, college chemistry, and science and engineering careers.

Teacher Contact Information:

I am available to assist students or confer with parents before and after school, during my prep periods (1st and 7th), and during Office Hours on Thursdays (7:45-8:25 AM).

My email address and telephone number are:

tdooner@carmelunified.org

624-1821 ext 3734

My preferred method of communication is e-mail and I will attempt to respond to your communication within 12 hours.

Safety:

The safety of students and staff is a **top priority** and all students and their parents are required to read and sign Flinn Scientific's Student Safety Contract. The contract developed by Flinn is comprehensive in nature and addresses all of the hazardous situations which can occur in a Chemistry classroom. Our classroom is equipped with proper ventilation, fire blanket and extinguishers, and first aid kits. Students will be provided with new rubberized laboratory aprons and safety glasses for use during lab activities. Safety glasses will be sanitized between class periods with a UV Light Sanitizing Cabinet. I will always attempt to minimize student exposure to potentially hazardous substances and situations and provide them with a clean, organized, and safe laboratory environment with serviceable equipment. Students are expected to be active participants in creating a safe learning environment.

TOPICS COVERED: (NGSS indicated with a *)

FIRST QUARTER

Mining Activities and Fracking*

Earth's Internal Energy and Convection Currents*

Matter and Change

Scientific Measurement

Atomic Structure

Models of the Atom

Nuclear Chemistry

Periodic Table

Chapters 1, 2, 3, 4, 5, 6, 25

SECOND QUARTER

Global Climate Change*

Ozone Depletion*

Ionic, Covalent, Metallic Bonding

Chemical Naming

The Mole Concept

Chemical Reactions

Chapters 7, 8, 9, 10, 11

THIRD QUARTER

Role of Water in the Geosphere*

Stoichiometry

State Changes

Behavior of Gases

Water and Aqueous Systems

Solutions

Chapters 12, 13, 14, 15, 16

FOURTH QUARTER

Ocean Acidification*

Thermochemistry

Reaction Rates and Equilibrium

Acids, Bases, and Salts

Oxidation-Reduction Reactions

Electrochemistry

Chapters 17, 18, 19, 20, 21

Textbook:

Wilbraham, A., Staley, D. et al. **Chemistry**. Pearson Prentice-Hall. 2007

All students will sign out a textbook. These texts should be covered and left at home. A class set of textbooks are available for use in the classroom.

CHS Testing Schedule:

The designated testing day for the Science Department is FRIDAY. This does not apply to quizzes, long-term projects, or benchmark tests (if applicable).

Attendance Policies:

The sequential nature of chemistry instruction makes regular attendance a prerequisite to academic success. All CHS guidelines related to Tardiness and Truancy will be adhered to in this class. When excessive absences, or unexcused absences/tardies/truancies, begin to affect the academic progress of the student or adversely affect the learning environment- parents will be notified and a teacher/student/parent/counselor conference will be arranged to help identify and remediate the cause of the problem. Makeups for assignments/activities missed due to unexcused absence or truancy will be accepted following a teacher/student conference.

Grading:

Formative assessments (homework, problem sets, etc), laboratory activities, and summative assessments (tests, quizzes, and semester exams) will be used to assist the learning process and provide objective evidence of mastery of the Content Standards. **Quarter grades will be based on 30% (Laboratory activities), 10% (Homework/Classwork), and 60%(quizzes and tests).** A minimum of three (3) summative assessments (tests) will be administered each Quarter and the Semester Final will be comprehensive in nature. The comprehensive semester final will comprise 20% of the Semester grade. Electronic calculators are permitted on all quizzes, tests, and exams and should be brought to class every day.

Semester letter grades will be assigned as follows: 90-100%: A; 80-89%: B; 70-79%: C; 60-69%: D; and 59% and below: F.

My School/Moodle:

Students should log on regularly to the Honors Chemistry Moodle in order to access daily and weekly assignments, answer keys, rubrics, supplementary readings, class notes and study guides, and links to Chemistry resources.

Extra Credit:

Multiple opportunities to demonstrate mastery of standards will be provided to all students throughout the year. No “extra credit is available. Your course grade will reflect your mastery of the Content Standards.

I HAVE READ THE COURSE SYLLABUS FOR CHEMISTRY.

Student:_____ Parent:_____