

International Polytechnic High School
11th Grade Chemistry
Course Description
Instructor: Mr. Pang – Room 4

Mission Statement

The International Polytechnic H.S. science program is a four year integrated curriculum, covering the California State Science standards for Chemistry, Physics, Biology and Earth Science.

The program objective is to build life-long critical thinking skills through inquiry-based learning. Students are encouraged to use their creativity and knowledge through experimentation, team building, corporate structures, organization, global and problem solving activities with real world application. In the process students are engaged in research, inductive and deductive laboratory investigations, field work activities and computer assisted instruction. Through an interdisciplinary project based approach, students will formulate an appreciation and understanding of the scientific principles that govern everyday life. Students will be challenged to apply and synthesize key concepts in order to function as active and responsible members in the world community, in addition to working toward developing implementing future solutions to global issues.

Vision

The vision of the department of Integrated Science is to help students progress along a continuum of scientific, chemical and physical science literacy beyond the nominal level, through a structural and functional level, to a multidimensional level where students can accurately abstract, use chemistry terms and formula, write equations, analyze, synthesize, construct and understand conceptual schemes, explain chemical concepts in their own words, understand the place of chemistry among other disciplines and the interactions between chemistry and society.

Course Description: Chemistry is the study of matter and the changes they undergo. Students will explore the scientific method, atomic and molecular structure, chemical bonds, conservation of matter and stoichiometry, gases and their properties, acids and bases, solutions, chemical thermodynamics, reaction rates, chemical equilibrium, organic chemistry, biochemistry, and nuclear process.

Course Credit: This course is designed to give students one-year credit toward graduation from I-Poly and has met U.C. approval for college. *Please note that a NC (No Credit) assessment in either or both of the semesters may affect student's eligibility for graduation.*

Course Grading: Students will be assessed in an on-going basis through attendance, participation, laboratory activities, assignments, homework, quizzes, exams and projects. Everything counts and is assessed. Student presentations and demonstration of consistency and effort is considered. Missing and/or late work may affect assessment of **P** (proficiency) or better (refer to the transcript key in the handbook).

Absences: After excused or unexcused absences, students are expected to obtain a re-admit from the office before returning to class. Students are responsible for obtaining and completing any missed work. Missed work will need to be sought before after class or school. *Extended absences will be dealt will on a case-by-case basis.*

Texts: While several texts and various resources will be utilized during the course, each student will be issued their own copies of *Chemistry Addison-Wesley* (5th edition). These books will function as reference books and students will be expected to read and study the designated areas to obtain clarification and depth in class content. The student is responsible for the care and return of the text issued and books are to remain at home. Classroom sets are available for use at school.

Grading:

Exams 40%
Project 30%
Classwork/Homework 10%
Laboratory Experiments 10%
Participation 10%

Grading Scale:

100%	E
90% - 99%	AE
80% - 89%	P
70% - 79%	AP
60% - 69%	CR
0% - 59%	NC

Materials List:

Spiral Note Book
Pen/Pencil
Scientific Calculator
Three Ring Binder