

Science Department

SCIENCE DEPARTMENT**2 -EARTH SCIENCE (36 Weeks) *Required for Graduation***

Credit:	1 Unit	Grade Placement:	9
Semesters:	2	Prerequisite:	None

26 -GENERAL BIOLOGY (36 Weeks) *Required for Graduation*

Credit:	1 Unit	Grade Placement:	10,11,12
Semesters:	2	Prerequisite:	None

59 -CHEMISTRY (36 Weeks)

Credit:	1 Unit	Grade Placement:	10, 11, 12
Semesters:	2	Prerequisite:	Enrollment or passed Algebra II or Instructor

60 -ANATOMY AND PHYSIOLOGY (36 Weeks)

Credit:	1 Unit	Grade Placement:	11,12
Semesters:	2	Prerequisite:	C- or better in Biology or Instructor approval

85 -PHYSICS (36 Weeks)

Credit:	1 Unit	Grade Placement:	11, 12
Semesters:	2	Prerequisite:	Enrollment or passed trigonometry or Instructor approval

54 -INTEGRATED SCIENCE (36 WEEKS)

Credit:	1 Unit	Grade Placement:	11, 12
Semesters:	2	Prerequisite:	None

SCIENCE DEPARTMENT

The development of skills and critical thinking contributes to the education of the total individual. All science courses should be relevant, and geared to the personal and social development of the student. It can be assumed that certain broad areas of personal and social significance should be studied by all students and therefore be part of required courses. These required courses should be organized around basic and important areas, issues and problems. Elective courses should be made available to all who care to take them and who would profit from them.

- 2 - EARTH SCIENCE (36 Weeks) **Required for Graduation**
 Credit: 1 Unit Grade Placement: 9
 Semesters: 2 Prerequisite: None

Course Description: A survey of Earth science as seen from Camanche: meteorology and weather forecasting; GIS systems and mapping; interpreting the rock record: minerals, rocks & fossils; tectonic process: mountains, volcanoes & earthquakes; river and groundwater systems; glaciers; the Earth's place in space.

- 26 - GENERAL BIOLOGY (36 Weeks) **Required for Graduation**
 Credit: 1 Unit Grade Placement: 10,11,12
 Semesters: 2 Prerequisite: None

Course Description: General Biology is a basic course of study of living things in the world around us. Biology will cover basic units in biological principles, the cell, genetics, evolution, microbiology, plants, animals, and a comparative anatomy of most life forms. The laboratory work that we will do centers on scientific procedure, microscope technique, and inquiry investigations, which will give us an understanding of structure and functions of different life forms. The General Biology course gives the student the opportunity to develop a needed understanding of what life and life around us is all about.

- 59 - CHEMISTRY (36 Weeks)
 Credit: 1 Unit Grade Placement: 11, 12
 Semesters: 2 Prerequisite: Enrollment in Algebra II, first semester grade of at least C- to advance to second semester

Course Description: A broad view of chemical principles. Chemistry requires good math skills and better study habits. Topics include: the atomic model; radioactivity; formulas and equations; stoichiometry; gas laws; thermodynamics; chemical bonding; molecular structure; acid-base chemistry.

- 60 - ANATOMY AND PHYSIOLOGY (36 Weeks)
 Credit: 1 Unit Grade Placement: 11,12
 Semesters: 2 Prerequisite: Open to Juniors and Seniors who have had one year of Biology with grades of C- or better (or permission of the instructor). Must have at least C- first semester to continue into second semester.

Course Description: This course is an in-depth study of the normal and abnormal structures of the human body. The course will cover the organizational levels of the human body, which includes: cells, tissues, organs and organ systems, as well as bones and muscles.

- 85 - PHYSICS (36 Weeks)
 Credit: 1 Unit Grade Placement: 11, 12
 Semesters: 2 Prerequisite: Trigonometry, first semester grade of at least C- to advance to second semester

Course Description: This course for students interested in science and technology topics offers an overview of classical physics: linear & circular motion; gravity; relativity; sound & light; electricity. Physics requires logical thinking. The course is a balance of laboratory work, detailed lecture, and problem solving with students applying knowledge to practical experimentation.

- 54- INTEGRATED SCIENCE (36 WEEKS)
 Credit: 1 Unit Grade Placement: 11, 12
 Semesters: 2 Prerequisite: None

Course Description: This course will present a general overview of physics and chemistry. Topics covered will include: motion, force, waves, chemical reactions, and acids and bases. Emphasis will focus mainly on hand-on lab activities relating to the world around the students.