Biology 1 and 2
This course is a study of the major topics in the Life Sciences that include: cell and molecular biology, biochemistry, bioenergetics, genetics, evolution, plant and animal taxonomy and the role of human beings in their natural environment.
Fulfills one year of UC-d lab life science requirement

Biology AP (Advanced Placement)
This course is the equivalent to an introductory college level biology course. The course differs from 9th grade Biology in respect to the textbook used, range and depth of topics covered and effort required of students. In the spring, a cumulative AP Biology exam is administered by the College Board. Successful completion of the exam could lead to college credit.
Students must apply with the instructor in order to take AP Biology.
Fulfills one year of UC-d lab life science requirement

Physiology 1 and 2
This course examines the structure and function of the human body.
Career Path - Biological Science and Health.
Fulfills one year of UC-d lab life science requirement

Conceptual Chemistry 1 and 2
This is a general introductory chemistry course that covers all of the chemistry standards, but does not emphasize mathematics.
Career Path - Environmental Science (Preparation for AP), and Health.
Fulfills one year of UC-d lab physical science requirement

Chemistry 1 and 2
This course reflects the California standards in chemistry that include: atomic / molecular structure, nuclear chemistry, chemical bonds, kinetics, thermodynamics, gases, solutions, chemical reactions, equilibrium, stoichiometry.
prerequisite: C or higher in 1st year algebra
D or higher in Chemistry 1 required to continue into Chemistry 2 (or instructor's consent)
Career Path - Environmental Science (Preparation for AP), and Health.
Fulfills one year of UC-d lab physical science requirement

Honors Chemistry 1 and 2
This course reflects the California standards in chemistry (see Chemistry). Course goes into more depth and higher workload (including laboratory) than regular Chemistry.
prerequisite: B (or higher) in 1st year algebra *and* recommendation of current science teacher (or consent of instructor)
C or higher in Honors Chemistry 1 required to continue into Honors Chemistry 2 (or instructor's consent)
Career Path - Environmental Science (Preparation for AP), and Health.
Fulfills one year of UC-d lab physical science requirement and earns extra honors credit

Chemistry AP (Advanced Placement)
This course is equivalent to a first-year college chemistry for science majors. In the spring, a cumulative AP Chemistry exam is administered by the College Board. Successful completion of the exam could lead to college credit.
prerequisite: B (or higher) in 2nd year algebra *and* prior chemistry (or physics) or consent of instructor
C or higher in Chemistry AP 1 required to continue into Chemistry AP 2 (or instructor's consent)
Fulfills one year of UC-d lab physical science requirement and earns extra honors credit

Physics 1 and 2
Students study the most central concepts of physics including mechanics, the wave model, electromagnetism, special relativity, geometric optics and the conservation laws (mass, energy, and momentum).
prerequisites: C or higher from prior math class *and* completion of or concurrent enrollment in Advanced Algebra *or* consent of instructor
Fulfills one year of UC-d lab physical science requirement

Honors Physics 1 and 2
Students study the most central concepts of physics including mechanics, the wave model, electromagnetism, special relativity, geometric optics and the conservation laws (mass, energy, and momentum). Course goes into more depth and higher workload than regular Physics.
prerequisites: B or higher from prior math class *and* completion of or concurrent enrollment in Advanced Algebra *or* consent of instructor
Fulfills one year of UC-d lab physical science requirement

Physics AP C (Advanced Placement)
AP Physics C is a rigorous calculus-based physics course for physical science majors and engineers. The fall semester focuses on mechanics and the spring semester on electricity and magnetism. This course prepares students to take the national advanced placement exam. Successful completion of the exam could lead to college credit.
prerequisite: Completion of or concurrent enrollment in any calculus course and completion of any physics course (regular, honors, or AP physics B). Exceptions will be made in rare cases for highly capable students with permission of instructor for placement in **all Physics** courses.
Fulfills one year of UC-d lab physical science requirement

Environmental Science
Environmental Science is an interdisciplinary course, designed to further students' understanding of ecological interactions, environmental problems, and their possible solutions. Topics of concern include population growth, pollution, waste disposal, soil conservation, food production, pesticide hazards, wilderness and wildlife conservation, environmental laws, and ethics.
Career Path - Environmental Science.
Fulfills one year of UC-g elective requirement

Environmental Science AP (Advanced Placement)
This course offers students a unique and exciting opportunity to explore the natural world through hands on learning and weekly trips to the Presidio National Park. While working side-by-side with professional scientists, students will gain valuable workplace and life experience. Students participating in the class will earn an extra five high school science credits and at least one college credit from City College.
Career Path - Environmental Science. This course prepares students to take the national advanced placement exam, which if passed successfully allows them to obtain college credit for the course.
prerequisite: Completion of Environmental Science OR completion of Biology with a C or better AND a letter of recommendation from a teacher
Fulfills one year of UC-d lab physical science requirement

Emergency Medicine (Physiology/EMT)
Galileo Health Academy's *Health Pathway* is a two-year program designed to help Juniors and Seniors explore careers in the health care field. All courses are taught at Galileo and students receive double high school science credit their senior year along with 11.5 units of college credit. Students earn Emergency Medical Technician, CPR certifications. Students are offered a variety of paid internship opportunities as well as volunteer opportunities.
Students must apply at the end of their sophomore year.

Year one of the Health Pathway is designed for Juniors. In the first year, students focus on career exploration.
Each week during block days students visit CPMC, watch live surgery, and interact with doctors and other health care providers in different departments.
Students will be concurrently enrolled at CCSF and receive 3 units of college credit.

Year two of the *Health Pathway* is designed for Seniors.
In the second year students focus on learning human anatomy, physiology, and emergency medicine.
This class is an engaging course that focuses on the principles of human anatomy, physiology and emergency medicine. Students learn to save lives from a paramedic. Earn your Emergency Medical Technician Certification and become immediately eligible for work.
Fulfills one year of UC-d lab life science requirement

Biotechnology and Genetics Program

Principles of Biotechnology 1

Are you curious about why you look like your parents? Do you know how bacteria can make medical drugs for us? Why is biotechnology a hot topic in the news? How can you make bacteria glow in the dark? We have the answers and you are invited to join our study program!

Fulfills one year of UC-d lab life science requirement

Fall Semester Program

Basic Microbiology Techniques
Basic Molecular Biology Concepts
DNA Purification and Manipulation
Human Genetics (Probability and Genetic Disorders)

Spring Semester Program

PCR
Bacteria Transformation
Ethics in Genetic Engineering
Job Shadowing Day at Genentech
Come and explore the endless possibilities of tomorrow's science!

Career Path - Biological Science and Health

Principles of Biotechnology 2

UC-d lab life science requirement pending approval process of course

Fall Semester

Bacterial Transformation
Human Immunology
Protein Structure & Function

Spring Semester

Protein Isolation & Chromotography
Immunology tests
ELISA & Uestern Blot