

California High School's Biomedical Sciences Pathway

California High School's Biomedical Sciences Pathway incorporates core –academic classes, Project Lead The Way curriculum and Career Technical Education to expose students to the array of careers available in the health industry while preparing them for post-secondary opportunities. Project Lead The Way is a nationally recognized program that provides students with hands-on, relevant curriculum that integrates core curriculum with Biomedical Sciences. California High School has been offering Biomedical Science courses since 2010. Students will take courses with a core set of teachers. Typically, students begin taking courses during their sophomore year, however they are free to join any time. Students will be exposed to career exploration in the field of Biomedical Sciences, engage in project-based curriculum and integrate core curriculum into their career classes. The experience exposes students to “real-world” experiences, including guest speakers, field trips and mentorships. The teachers collaborate to support the academic success of academy students. In addition, the club Health Occupation Student Association (HOSA) is available for students who wish to learn more about potential careers and compete with other California High School students in regional, state, and national HOSA competitions.

Biomedical Sciences Pathway Courses

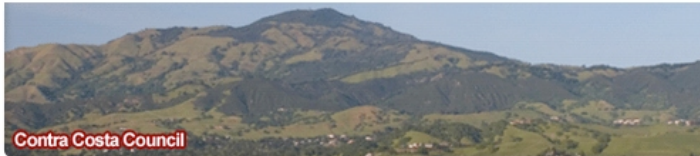
- **Principles of the Biomedical Sciences (PBS)**
 - Students investigate the human body systems and various health conditions including heart disease, diabetes, sickle-cell disease, hypercholesterolemia, and infectious diseases. This course is designed to provide an overview of all the courses in the Biomedical Sciences program and lay the scientific foundation for subsequent courses
- **Human Body Systems (HBS)**
 - Students examine the interactions of body systems as they explore identity, communication, power, movement, protection, and homeostasis. Students design experiments, investigate the structures and functions of the human body, and use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration.
- **Medical Interventions (MI)**
 - Students investigate the variety of interventions involved in the prevention, diagnosis and treatment of disease as they follow the lives of a fictitious family. The course is a “How-To” manual for maintaining overall health and homeostasis in the body. Students are exposed to the wide range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics. Lifestyle choices and preventive measures are emphasized throughout the course as well as the important roles scientific thinking and engineering design play in the development of interventions of the future.
- **Biomedical Innovation (BI)**
 - Students apply their knowledge and skills to answer questions or solve problems related to the biomedical sciences. Students design innovative solutions for the health challenges of the 21st century as they work through progressively challenging open-ended problems, addressing topics such as clinical medicine, physiology, biomedical engineering, and public health.

Students also may take courses in Sports Medicine, Advanced Sports Medicine, Biotechnology and Forensic Science. Students will work with mentors and complete internships.

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For more information visit:

www.calhigh.net/biomedicalsciences

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CALIFORNIA HIGH SCHOOL

BIOMEDICAL SCIENCES PATHWAY



A PROJECT LEAD THE WAY PROGRAM

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