



Biotechnology Academy (BTA)

SHELDON HIGH SCHOOL

The Biotech Academy is for students interested in science-related occupations. Students learn advanced scientific concepts and cutting-edge lab skills that prepare them for both post-secondary education and employment. The academy provides a powerful school-to career educational experience – a blend of academic instruction and on-the-job experience with local industries.

The BTA prepares students for both post-secondary education and employment in the current and emerging high-growth science career labor market. The Biotechnology Academy meets the needs of all students by combining ongoing and direct contact with local and regional industries and post-secondary institutions with rigorous, integrated academic instruction and meaningful, on-the-job experiences.

“ I just finished my 3rd year of med school, finished all of my clinical rotations and am now studying for my boards. I wanted to thank the Biotech Academy for stimulating my interest in science while I was in high school and acknowledge again that I would not be in the place that I am without it.

JOEY CHIN (C/O 2007)



ACADEMY BENEFITS

- Curriculum focused on a career theme and coordinated with related academic classes.
- Team of teachers who work together to plan and implement the program.
- Motivational activities with private sector involvement to encourage academic and occupational preparation, such as: integrated and project-based curriculum, mentor program, classroom speakers, field trips, and exploration of postsecondary and career options.
- Work place learning opportunities such as job shadowing, student internships, and work experience.

OUR BUSINESS PARTNERS

- BloodSource
- UC Davis Biotechnology program
- California State University, Sacramento
- American River College
- Novozymes
- Arcadia Biosciences
- Bayer Crop Science
- California Institute for Regenerative Medicine
- Sacramento Zoo
- Seminis Seeds
- California Northstate University

FUTURE CAREER OPTIONS

High School Diploma

- Physical Therapy Assistant
- Respiratory Care Practitioner
- Optometric Assistant
- Medical Assistant
- Medical Office Secretary
- Home Health Aide
- Laboratory Assistant
- Pharmacy Aide
- Dental Assistant
- Medical Equipment Preparers
- Personal and Home Care Aide
- Psychiatric Aides
- Veterinary Assistants
- Laboratory Animal Caretakers
- Biotechnology Assistant
- Central Supply Aide
- Geriatric Assistant

AA, AS Degree or Certificate

- Certified Nursing Assistant
- Pharmacy Technician
- Registered Nurses (2 yr)
- Paramedic
- Operating Room Technician
- Medical Records Technician
- Emergency Medical Tech
- Licensed Vocational Nurse
- Radiology Technologist
- Dental Lab Tech
- Respiratory Therapists
- Cardiovascular Technologists
- Dental Hygienist
- Diagnostic Medical Sonographers
- Biomedical Tech
- Environmental Services Tech
- Gerontologist

BS or BA Degree

- Surgeons
- Speech-Language Pathologists
- Registered Nurses (4 yr)
- Pharmacists
- Physicians
- Orthodontists
- Nurse Practitioner
- Anesthesiologists
- Athletic Trainers
- Dietitians and Nutritionists
- Clinical Trials Researcher
- Biomedical Chemist
- Geneticist
- Health Services Administrator
- Industrial Hygienist
- Materials Management
- Medical/Public Health Social Workers

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Industry Sector: Health Science and Medical Technology | Pathway: Biotechnology

CAREER THEMED COURSES

*The sample program of study outlined below lists academy-specific courses and does not include the full list of graduation requirements in writing, math, VAPA, WL, etc.

9th Grade	Biotech I: A base-level course designed to introduce students to the history of Biotech, laboratory skills and current biotech applications. The biotech focus of this course will be on basic cell biology.
10th Grade	Biotech II: This course emphasizes the historical, legal and ethical concepts in Biotech. Biotech II will also explore the numerous opportunities available in the field of Biotech.
11th Grade	Microbiology: This course provides structure and function of pathogenic and nonpathogenic microorganisms studied in theory and in practice with an emphasis upon techniques and rationale used in modern laboratories.
12th Grade	Molecular Biotechnology: This laboratory-based course emphasizes beginning recombinant DNA technology. Specific lab techniques will be emphasized for students entering the medical, agricultural and scientific professional.

How to Apply

Applications are available in the Sheldon or Smedberg Counseling offices and on Sheldon the website:

<http://shs.egusd.net/>

CONTACT INFORMATION



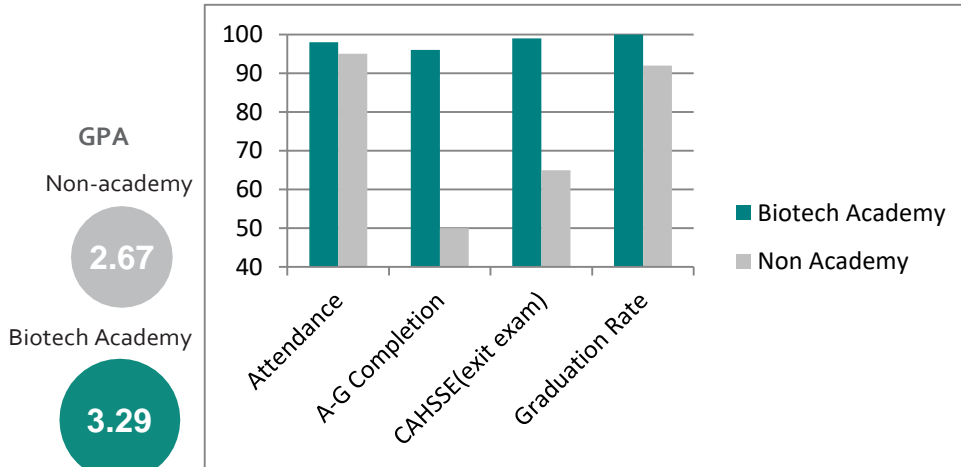
Sheldon High School
Biotechnology Academy

<https://sheldonbiotech.wixsite.com/shsbta>

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ACADEMY STUDENT DATA

NON-ACADEMY vs BIOTECH ACADEMY DATA



For general information about EGUSD's academies and pathways:
Web: EgusdExplore.com
Phone: 916.686.7709
Email: Explore@egusd.net

INTERNSHIPS

- Twenty BTA have served paid summer internships with the California Institute for Regenerative Medicine.
- Many of BTA students have participated in research teams and have had work published in prestigious scientific journals.

