



BIOSCIENCE HIGH SCHOOL

512 E. Pierce St., Phoenix, Arizona 85004 • www.BioscienceHS.org • (602) 764-5600 • CEEB 030645

Bioscience High School opened its doors in 2006. Years of planning, research and focused dialogue, and revision with community members, post-secondary institutions and leaders from business and industry evolved into the following mission (mission + vision) statement:

BHS provides a rigorous, collaborative, and relevant academic program emphasizing an innovative, problem-based curriculum that develops literacy in the sciences, mathematics, and the arts, thus cultivating critical thinkers, creative problem-solvers, and compassionate citizens, who are able to thrive in our increasingly complex and technological communities.

The foundation of Bioscience High School was cast in its history and its mission statement. Bioscience High School educators believe that students learn best in diverse communities, where the exploration of complex challenges provides an opportunity for students to experience substantive learning and intellectual growth. Through inquiry and constructivist practices, students are empowered to demonstrate their learning and to continuously refine their understanding of the world through reflection, application and discourse. Supporting the core beliefs of the school are four design principles, developed and articulated during the planning of the school. Those design principles are: Multiple Perspectives, Scholarly Endeavors, Authentic Experiences, and Personalization.

Fast Facts 2018-2019

Grades	9-12
Student Enrollment	372*
Teaching Faculty	23
Support Staff	12
Student-Faculty Ratio	1:16
Average Class Size	1:23
Attendance Rate	99.8%
Four-Year Graduation Rate (2019)	100%
Students on Free & Reduced Lunch	72%
Arizona Letter Grade	A

*The 2020 senior class is the largest in school history – 78

Key Contacts

Administration

Dr. Holly Batsell, Principal batsell@phoenixunion.org

Counseling Staff: 602-764-5600 or 602-764-5603

Ms. Pamela Haggerty, M.Ed./M.C. - Academic Counselor
phaggerty@phoenixunion.org

Ms. Heather Earle – earle@phoenixunion.org
College Visitation Coordinator/Sr. Office Assistant

Curriculum

All courses are taught on a two-semester calendar system with an emphasis on real world exposure to higher level concepts and curriculum, Socratic seminar discussions, and problem-based learning. This year, the entire teaching staff is moving to an evidenced-based/standards-focused grading system.

Ethnic Breakdown

Hispanic	75%
Anglo	12%
Black	5%
Native American	1%
Asian	5%
Two or more	2%

Grading System

Honors marks are weighted 5 points for grade-point averages (GPA); highest weighted GPA possible is 4.864. Bioscience does not assign class rank. Grading is numerical; letter grade equivalents and grade points are as follows:

A = 100-90 (Exceed Expectations) = 4.0 grade points
B = 89-80 (Meet Expectations) = 3.0 grade points
C = 79-72 (Approach Expectations) = 2.0 grade points
D = 71-70 (Far Below Expectations) = 1.0 grade points
F = Below 70 (Failing) = 0.0 grade points

Current Grades – Class of 2020

Un-Weighted				
GPA	<2.49	2.5-2.99	3.0-3.49	3.5-4.0
Number of Students	1	19	29	29

Weighted				
GPA	<2.99	3.0-3.49	3.5-3.99	>4.0
Number of Students	2	12	18	46

District/School Graduation Requirements

	2011-2012	2013 & on	Bioscience
English	4	4	4
Fine Art or CTE	1	1	1
Mathematics	3	4	4
Biology	1	1	1
Science Lab*	1	2	6**
Social Science	3	3	3
Health	.5	.5	1
Spanish			3
Electives**	6.5	6.5	6.5**
TOTAL	20 Credits	22 Credits	28 Credits

* Juniors choosing the engineering pathway are considered to be in a PUHSD Career/Technical Education science course.

**Many of the science courses required by BHS exceed PUHSD & state requirements and are counted as electives.

Bioscience's Unique Curricular Pathways

All Bioscience students now complete 6 year-long science* courses by graduation, starting with Honors level Methods of Scientific Inquiry, biology, and chemistry in their first two years. Bioscience juniors choose between two science pathways: engineering (*which is a CTE science course) or bio-medical. Each 11th-grade science pathway is taught as a block.

All seniors must complete a 200-hour capstone internship/externship in an area of interest related to their future major or career. At each grade level, students complete year-long, collaborative, 7-step Sustainable Transformation Framework Projects in which they identify a problem in the existing local or global community, actively research and talk with stakeholders, and propose and/or implement viable solutions. It should be noted that all Bioscience classes are rigorous, integrated, project-based, collaborative and hands-on. The only Advanced Placement course offered is Spanish 7-8 AP for native Spanish speakers in 11th-grade. Despite not offering a menu of AP courses the past three years, Bioscience students have led the Phoenix Union High School District with the top scores (5) on the AP Physics exam. Last year many of our students studied in small cohorts within their grade levels and then took AP tests in Chemistry, Calculus AB and BC, Macroeconomics, Physics, Spanish Language and Culture, US Government and Politics, US History, Physics 2, and English Language and Composition.

Honors/AP Courses (29 separate year-long courses)

Freshman courses are: English 1-2 Honors, Integrated Math 1-2 Honors, Methods of Scientific Inquiry 1-2 Honors (formerly Physics 1-2 Honors,) and Spanish 1-2 Honors or Spanish for Spanish Speakers 1-2 Honors. Due to the level of rigor, many students would challenge that the two other freshman courses: Art 1-2 and Health & Fitness 1-2, should also be worth honors credit though the PUHSD course catalog does not allow these courses to be offered for honors credit.

Sophomore honors courses are: English 3-4 Honors, Integrated Math 3-4 Honors, World History/Geography 1-2 Honors, Biology 1-2 Honors, Chemistry 1-2 Honors, and Spanish 3-4 Honors or Spanish for Spanish Speakers 3-4 Honors. All 10th-grade courses are taken at honors level.

Junior honors or AP weighted classes are: English 5-6 Honors, Integrated Math 5-6 Honors, U.S. History 1-2 Honors, Spanish 5-6 Honors or AP Spanish, and either: Anatomy & Physiology 1-2 Honors (dual credit course with Phoenix College) and Introduction to Epidemiology 1-2 Honors or Introduction to Engineering Design 1-2/Physics of Engineering 1-2. All 11th-grade courses are taken at honors/AP level. Junior transfer students

Senior honors weighted classes are: English 7-8 Honors, Integrated Math 7-8 (Calculus) Honors, U.S. Government 1 Honors/Economics 1 Honors, College & Career Readiness, Bioscience Internship Research Experience 1-2 Honors or CTE Engineering Internship 1-2 Honors, and either: Physics of Engineering 3-4 Honors, or Biotechnology 1-2 Honors.

Dual Enrollment/Concurrent Enrollment

Students may simultaneously earn high school, community college, and university credit in approved Bioscience dual enrollment courses. These courses are taught by college certified PUHSD/BHS teachers. This year, on the junior level, Anatomy & Physiology and Spanish are offered for dual credit, and on the senior level, our biotechnology course meets criteria for Chem. 151.

Standardized Testing

While we pride ourselves on our 21st century approach to learning and instruction, standardized testing in the form of PSAT, ACT, and SAT is neither our focus nor our forte. Our faculty has chosen not to use curricular time for test prep, which directly impacts pacing and test completion strategies. With that said, Bioscience leads all PUHSD schools in state-required AZ Merit scores, based on Common Core initiatives. A portion of Class of 2018 seniors participated in Saturday test prep opportunities in January, 2017 and as a result, 13 of our 57-member class earned ACT composite scores in the 30's with a high composite score of 35. February 2019 results were similar, again with highs of 35.

Phoenix Union High School District

PUHSD, now celebrating its 125th year of existence, is the largest high school district in the state with 11 comprehensive campuses and 7 smaller magnet or micro-schools, including Bioscience. We are expanding in both the portfolio of schools offered and in student enrollment with over 27,000 students. PUHSD is the most ethnically diverse district in Arizona with over 60 languages spoken.

Awards and Recognitions

2019 – Recognized as the “Top Small School in Arizona”; #1 ranking in NICHE Standout Schools in Arizona – A+ Overall Grade; 4 QuestBridge Scholars (MIT, Swarthmore, Lehigh, Tufts), 1 Dorrance Scholar; 1 LEDA Scholar; 1 Hispanic Recognition Scholar
2018 – 1 Gates Scholar, 2 Flinn Scholars, 3 QuestBridge Scholars (Stanford, Brown, Notre Dame), 1 Dorrance Scholar, 1 Doran Scholar; 1 LEDA Scholar; 1 Hispanic Recognition Scholar; P21 Exemplar School
2017 - #1 Ranking – Governor’s List of “Top AZ High Schools for Preparing Low Income Students for Higher Education,” 2 QuestBridge Scholars, US News national recognition – Bronze ranking; Niche – “A” Arizona rating; Great Schools 10/10 rating; P21 Exemplar School
2016- 1 Flinn Scholar, 2 QuestBridge Scholars, 1 AXA Achievement Scholarship Nat’ Scholar, 5 QuestBridge College Prep Scholars, 2 Gates Millennium Finalists, Robotics Chairman’s Award recipient; US News National recognition – Bronze ranking; Niche – 7th Best High School in Arizona ranking
2015 - 2 QuestBridge Scholars, 1 National Merit Scholar, 4 Hispanic Recognition Scholars; Chairman’s Award recipient – Robotics/Nat’I qualifier; Niche 4th Best High School in Arizona ranking
2014 - 1 PSAT/NMSQT Merit Semi-Finalist; 1 Hispanic Recognition Scholar
2014 - 1 Gates Millennium Scholar, 3 QuestBridge Scholars
2013 - Top 30 Most Architecturally Beautiful Campuses in the World
2012 - 3 Gates Millennium Scholars and 1 Flinn Scholar
2011 – 1 Gates Millennium Scholar and 1 Dorrance Scholar
2011 – 1 National Merit Semi-finalist

Post-secondary Plans – Class of 2019

Graduates directly entering 4 yr. post-secondary education - 80%
Graduates directly entering 2-yr. community college - 20%
Graduates going directly into military service - 0%

College Scholarships:

2018-2019	\$10,702,533		
2017-2018	\$18,704,054	2013-2014	\$5,738,260
2016-2017	\$10,610,885	2012-2013	\$3,861,540
2015-2016	\$4,849,256	2011-2012	\$198,964
2014-2015	\$6,082,148	2010-2011	\$1,616,000

College Acceptance - 2015-2018

In all, the Classes of 2015-2019 were accepted to over 60 universities, colleges, and honors programs across North America. including: Allegheny College, Amherst College, American University, Antioch College, Arizona State University, Arizona State University - Barrett Honors College, Benedictine University, Brandeis University, Bowdoin College, Brown University, Bryn Mawr College, Carleton College, Case Western Reserve University, Claremont-McKenna College, Colby College, Colgate University, Coe College, Columbia University, Cornell University, Cottey College, Dartmouth University, Embry-Riddle Aeronautical University, Franklin & Marshall College, Grand Canyon University, Grinnell College, Hampshire College, Harvey Mudd College, Hawaii Pacific University, Hofstra University (New York), Hope College, Hiram College, Jacksonville State University, LA City College, LA College of Music, Lafayette College, Lewis & Clark College, Lehigh University, Loras College, Massachusetts Institute of Technology, McGill University, Middlebury College, Mills College, Morehouse College, Northern Arizona University, Notre Dame de Namur University, Oberlin College, Occidental College, Ohio Wesleyan University, Pitzer College, Prescott College, Purdue University, Reed College, Rensselaer Polytechnic Institute, Scripps College, Smith College, Sterling College, St. Mary’s University-San Antonio, Swarthmore College, Stanford University, Trinity College, Tufts University, Universidad Autonoma de Ciudad Juarez, University of Arizona, University of Arizona Honors Program, University of California-Berkeley, University of California-San Diego, University of California-Santa Cruz, University of California-Santa Barbara, University of Denver, University of Iowa, University of Louisiana – Lafayette, University of Maryland, University of New Mexico, University of Portland, University of Puget Sound, University of Rochester, University of Texas-Austin, University of Wisconsin- Madison, Wabash College, Wartburg College, Washington State University, Wellesley College, Wesleyan University, Western Washington University, Whitman College, Willamette University, Williams College, and Yale University.