# curriculum guide 2023–2024

### **Academics at Bay**

#### Course offerings, schedule, and curriculum highlights

Bay's program develops students into sophisticated, ethical thinkers. From Humanities 1 to Honors Calculus, our teaching continually encourages students to go further, always asking, *How*? *Why? Is there a better way?* Our schedule, with its long blocks during semesters and three-week Immersive terms, reflects the value we place on digging into thorny problems, having deep discussions, collaborating, and working together in community. Everything we do reflects our mission to provide a rigorous academic experience with "a mindful approach to learning and life."

The Bay School is celebrating its 20th anniversary this year, allowing us to reflect on the many paths taken by our alumni. They've created their own interdisciplinary majors in college, pursued PhDs and Fulbright scholarships, and started companies—it's clear that from a strong foundation, you can take big leaps. This guide will help you imagine your own path at Bay.

# **Honors Courses**

Whether they're learning to derive and prove their own equations in Physics 2 or collaborating to analyze a surprising data set in Chem 2, students get next-level challenge in our honors courses. "I never give my physics students the equations—we spend the time to learn mathematical principles," says teacher Julie Spector-Sprague. "And I had a student recently come up with a way to represent average velocity that *I* had not considered. That's a beautiful thing."

Students in 11th and 12th grades can take honors courses, which we offer in all subject areas. These classes let students who are academically ready for college-level work drill down into subjects of interest. You'll see the wide range of options in the course list on the following pages.

Honors classes are developed by Bay faculty and reflect our commitment to depth over breadth. The curriculum of Advanced Placement courses, with its emphasis on memorization, does not provide the opportunity to incorporate the depth and interdisciplinary perspective that distinguish a Bay education. For this reason, prepackaged AP content does not align with Bay's curriculum.

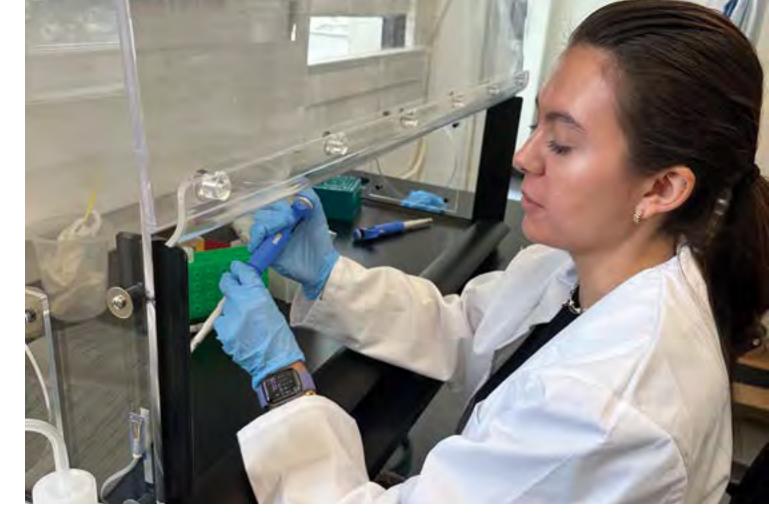
To take honors courses, Bay students must fill out an application and get approval from current teachers and their advisor. These classes are challenging, but the view from the top is worth the climb.

### 2023-2024 Offerings

honors courses

**75** semester courses

**42** Immersive courses



### Immersives

Immersives are hands-on academic courses structured around a final project. These UC-approved classes offer a greater level of experiential learning than can take place during a semester. What else makes Immersives different? They offer a whole other way of learning. Here's what might happen for you in just three weeks:

In the Mathematics of Democracy, you'll explore the fundamental features

of democratic government—voting and representation—through the lens of data.

In Modern American Family, you'll examine the depiction and remaking of family structures in our culture *and* write your own memoir.

In Biotechnology, you'll learn and apply the lab techniques for isolating, cloning, and analyzing plant gene sequences. And the possibilities go on. What the courses have in common is that you'll learn by doing every day. Immersives are different from the non-academic experiential intersessions offered between terms at some schools. Immersives are graded, collegeprep courses that are required for graduation.

Bay's two Immersive terms end with an exhibition and presentations of learning—or POLs—during which student groups discuss their project, process, obstacles, and successes. Through this consistent practice, Bay students become adept at analyzing and explaining their work.

# **The Bay School Year**

The school year at Bay is divided into four terms: fall semester, winter Immersive, spring semester, and spring Immersive. In a semester, you'll take five classes. During Immersives, you'll take one class for three weeks. The structure of our school year means that Bay's annual schedule differs slightly from those of other schools.

#### **Daily Schedule: Semesters**

Our day begins at 8:30 a.m. We have Morning Meeting on Mondays, Wednesdays, and Fridays it's as important as class time. Advisory groups meet on Tuesdays or Thursdays, and tutorial and after-school activities take place three days a week.

#### **Daily Schedule: Immersives**

We switch it all up for Immersives. The official school day runs from 9 a.m. to 3 p.m., but many classes are held off-campus or do extended field study. Some courses—like Negotiation, Legislation, and Diplomacy—include travel within the United States, which may affect the start and end date.

#### A Sample Year in 9th Grade

FALL SEMESTER Spanish 1A Math 2A Conceptual Physics 1A

Flex block 9th-Grade Seminar The Creative Process

After-school activity: Bay Theater

WINTER IMMERSIVE: The Mathematics of Digital Animation

**SPRING SEMESTER** 

Math 2B Humanities 1B Photography 1A Flex block 9th-Grade Seminar Spanish 1B

After school activity: Bay Theater

SPRING IMMERSIVE: Humanities 1: Everyone Has a Story

#### A Sample Year in 11th Grade

#### **FALL SEMESTER**

Asian American Literature Calculus (Honors) Biology 2 (Honors) American Studies A Flex block Spanish 3A

After-school activity: Varsity soccer

WINTER IMMERSIVE: Rhetoric and Debate

#### **SPRING SEMESTER**

Biology 2 (H) Spanish 3B Computer Science 1 Calculus (H) American Studies B Flex / College Counseling

After-school activity: Varsity tennis

SPRING IMMERSIVE: Biotechnology

### 2023-2024 Course Offerings

#### FALL SEMESTER: AUGUST 24-DECEMBER 17, 2023 SPRING SEMESTER: FEBRUARY 1-MAY 18, 2024

🜔 = interdisciplinary

h = honors

Project Center-based

#### ARTS

**h**Advanced Drama: Creating and Performing **h**Advanced Drawing and **Painting Studio h**Advanced Projects in **Digital** Arts Artist as Activist The Creative Process (9th grade requirement) Design IA-IB Drama 1A-1B Drawing IA-IB Jazz lA-lB Jazz 2 (H) Music Production IA-IB Painting IA-IB Photography IA-IB Video Production IA-IB Vocal Music 1A-1B

#### COMPUTER SCIENCE, DESIGN/ENGINEERING

Advanced Mechanism Design
 Advanced Product Design
 Computer Science 1 & 2

#### **HUMANITIES CORE**

American Studies (11th grade) Civics (10th grade)
Humanities 1A-1B (9th grade)
Humanities 2A-2B (10th grade)

#### LITERATURE

Advanced Composition **/** Essay and Memoir  & Gothic Literature
 & Russian Literature
 Creative Writing
 Breaking the Singular Story
 Dramatic Literature
 & The Good Life
 American Rage: A Course in Political Discourse
 Asian American Literature
 Indigenous American
 Literature

Literature of Neurodivergence

#### MATH

Analysis of Functions Analysis of Functions Calculus Group Theory Math 1A-1B Math 2A-2B Math 3A-3B Statistics Topology Data Science

#### **RELIGION/PHILOSOPHY**

Comparative Philosophy
 Ethics and Ethical Decision
 Making
 The Good Life

#### SCIENCE Astronomical Research Seminar Biological Psychology Biology 1A-1B Biology 2

Chemistry 1A-1B Chemistry 2 Climate Change Conceptual Physics 1A-1B Environmental Science Physics 2

#### SENIOR PROJECTS

In 2023–2024, there will be a makers' section for those doing product design or engineering projects. Juniors now have the option to start SPs in their spring semester with teacher permission.

#### SOCIAL STUDIES

- Artist as Activist
   Ethical Economics
   Ethnic Studies: Race, Class, and Gender
   Regional Studies: Africa
- *h* U.S. Foreign Policy

#### WORLD LANGUAGES

Mandarin 1-4

- **∕** Mandarin 5
- ℎ Advanced Topics in Mandarin Spanish 1–4
- Advanced Topics in Spanish: Literature & Culture

Spanish for Spanish Speakers 1-2

ℎ Spanish for Spanish Speakers 3

#### WINTER IMMERSIVES: JANUARY 2024

**9TH GRADE** Assembling San Francisco: Geology of the Greater Bay Region Biology of Health and Wellness Geometry in Islamic Art How Can We All Get Along? Mathematics of Digital Animation

**10TH GRADE REQUIREMENT** Humanities 2: Shakespeare Unbound

#### **11TH AND 12TH GRADE BY SUBJECT**

ARTS Immersive Art Studio Modern American Family

#### LITERATURE

Essential Questions Through Film Futures Past and Present Modern American Family Rhetoric & Debate Stories of San Francisco

#### MATH

Cryptography Mathematics of Democracy

**RELIGION/PHILOSOPHY** Buddhism

#### SCIENCE

Applied Chemistry: Better Cooking Through Chemistry Astronomy: Observatory Experience Marine Biology PRobotics Wilderness First Responder

#### **SOCIAL STUDIES**

Art History: Museum Studies at the de Young Mathematics of Democracy Poverty and Justice

#### SPRING IMMERSIVES: MAY 25-JUNE 16, 2024

#### 9TH GRADE REQUIREMENT

Humanities 1: Everyone Has a Story (immigration, law, and government)

#### **10TH AND 11TH GRADE BY SUBJECT**

**ARTS** Filmmaking Painting in Nature

LITERATURE

Art of the Short Story Mythology Novels in Nature The Writer's Life: A Creative Exploration

**RELIGION/PHILOSOPHY** Buddhism

#### SCIENCE

Atmospheric Science and Engineering: Launching Near-Space Weather Balloons Biotechnology California Geology: A Field Experience P Design 2

Fire Ecology Water in the American West

#### **SOCIAL STUDIES**

Civil Rights in the American South Bay Area Culture: The Evolution of Food Water in the American West

#### **CO-CURRICULAR REQUIREMENTS**

Activities or athletic team participation—3 years

9th Grade Seminar—2 semesters

10th Grade—1 semester of Choices (health and relationships class)

College counseling: 2 semesters (spring of 11th grade–fall of 12th grade)



#### **Bay Requirements**

A few of Bay's required courses are intentionally designed to set our students up for meaningful engagement with ideas, help them develop ethical frameworks, and give them confidence in their ability to solve problems.

### **The Creative Process**

Where do ideas come from? How do we put them into action? The principles of design thinking give us a reliable foundation for problem solving in so many areas. This course, required for all 9th graders, walks students through the processes of identifying and researching problems, coming up with solutions, and then testing and changing their solutions in response to feedback.

Will you make an app to help other new students find their way around campus? Reinterpret a classical piano composition? *Try to reinvent the wheel*? These are real projects that Bay 9th graders have done.

Much of Bay's academic program relies on sustained project work. The Creative Process gives you skills in idea generation, design, experimentation, and collaboration. Most importantly, you'll practice iteration, learn the value of failure, and see that there is usually more than one way to solve a problem. It develops a mindset that students continue to build upon during their time at Bay and will serve them well beyond our hallways.



# Civics

This course helps students develop skills in creating the conditions needed for productive civic conversations and expands their sense of agency and responsibility in civic life. From the starting point of several contemporary issues, students investigate the role of government in our lives, learn the ways they can make informed decisions, and start gaining the tools they need to responsibly formulate ideas and ideals for their lives within society.

### Religion or Philosophy

Global citizens need to understand a wide range of religious and philosophical traditions. Students also benefit from examining a diversity of ethical frameworks– whether philosophic or religious in nature– as they develop their own.

Every Bay student must take one semester of religion or philosophy, and our Humanities 2 course begins with the study of the Abrahamic religions to examine how religious values inform historical and contemporary social systems. We offer a rotating selection of electives, including Islam, Buddhism, Ethics, Comparative Philosophy, and more.

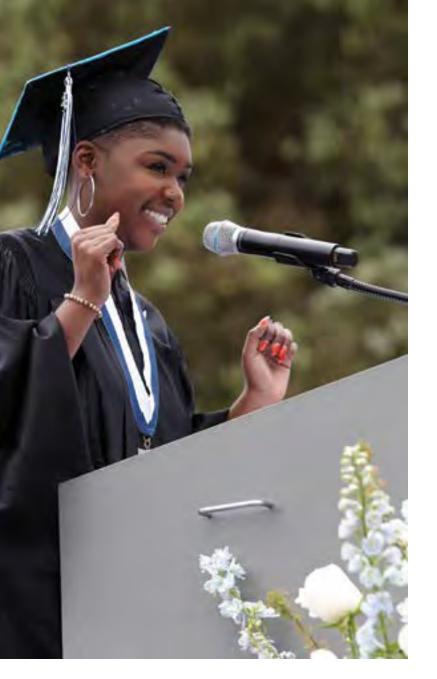
# **Senior Projects**

Now it's time to apply those problemsolving skills to devising and completing a project of your own. Over the course of two semesters, you will propose a project, define your goals, work with a community mentor who provides expertise and guidance, and plan and execute the process of creating the final product. You will encounter obstacles, twists and turns, and probably some failure. But you'll learn to analyze the problems along the way, change your method (or even your goal), and keep going.

A (very) short list of recent senior projects:

- A system for prison inmates to play chess by mail with members of a wellestablished San Francisco chess club
- An improved cargo system for bike commuters
- A working prototype of a handheld light that does not require batteries
- A solar-powered battery for small boats





### **Future Forward**

Why do more than 180 colleges and universities visit Bay every year? Because they know our graduates to be inventive, thoughtful, and exceedingly well-prepared.

Our college counselors have decades of experience helping students find the path that is right for them.

### **College Acceptances and Matriculations 2019–2023**

Engineering

Technology

Ohio Wesleyan University

Agnes Scott College **American University** Amherst College Appalachian State Arizona State (Barrett Honors College) Art Center College Babson College **Bard College Barnard College Bates College** Baylor University Beloit College Bennington College **Bentley University** Berklee College of Music Boise State University **Boston College Boston University** Bowdoin College **Brandeis University Brown University** Bryn Mawr College **Bucknell University** California College of the Arts California Lutheran Cal Poly Humboldt Cal Poly Pomona

Cal Poly San Luis Obispo Cal State Channel Islands CSU Chico **CSU** Dominguez Hills CSU Bay CSU Fullerton CSU Long Beach **CSU Los Angeles** CSU Maritime Academy CSU Monterey Bay CSU Northridge CSU Sacramento **Carleton College** Carnegie Mellon Case Western Reserve **Chapman University** City College of SF Clark Atlanta University **Clark University** Clemson University Colby College **Colgate University** College of Charleston College of Marin **Colorado College** Colorado School of Mines Colorado State University Columbia College (Chicago) **Columbia University Connecticut College Contra Costa College** Cooper Union **Cornell University** Dalhousie University **Dartmouth College** Davidson College Denison University **DePaul University** Dickinson College **Dillard University** Dominican University of California **Drew University Drexel University Duke University** Durham University **Eckerd College Elon University** Embry-Riddle Aeronautical University

**Emory University** Eugene Lang College at The New School Florida Institute of Technology Fordham University Franklin & Marshall Furman University George Mason University **George Washington** Georgetown University Georgia Tech Gonzaga University **Goucher College** Grinnell College Hamilton College Hampshire College Hampton University Harvey Mudd College Haverford College Hawai'i Pacific University Hobart and William Smith Colleges Hofstra University **Howard University** Illinois Institute of Technology Indiana University Ithaca College Johns Hopkins University Johnson & Wales University Kalamazoo College Kansas State University **Kenyon College** Lafavette College Lake Forest College Landmark College Lawrence University Lehigh University Lesley University Lewis & Clark College Liberty University Linfield University Loughborough University Louisiana State University Lovola Marymount Loyola Chicago Loyola New Orleans **Macalester College** Marian University Marist College Marquette University Maryland College of Art Marymount Manhattan College Massachusetts College of Art and Design Massachusetts Institute of Technology **McGill University** Mercy College Miami University (Ohio) Michigan State University **Middlebury College** Montana State Morehouse College Mount Holyoke College **New York University NYU Shanghai** Newcastle University **Northeastern University Northern Arizona** University **Northwestern University** Norwich University **Oberlin College Occidental College** 

**Emerson College** 

Pace University Pacific Northwest College of Art Parsons School of Design Pennsylvania Academy of the Fine Arts **Pennsylvania State Pepperdine University Pitzer College** Pomona College Portland State University **Pratt Institute Princeton University Purdue University** Purdue University Northwest Quinnipiac University **Reed College** Rensselaer Polytechnic Institute **Rhode Island School of** Design **Rice University** Richmond, The American International College in London Ringling College of Art and Design **Rochester Institute of** Technology Rose-Hulman Institute of Technology Rutgers University, New Brunswick Saint Joseph's University Saint Louis University Saint Mary's College of California Salve Regina University San Diego State San Francisco State San Jose State Santa Clara University Sarah Lawrence College Savannah College of Art and Design School of the Art Institute of Chicago School of Visual Arts Scripps College **Seattle University** Simmons University Skidmore College **Smith College** Sonoma State Southern Methodist St. John's College, Santa Fe St. Olaf College **Stanford University** Stevens Institute of Technoloav Stony Brook University Suffolk University Syracuse University Temple University **Texas Christian** The Boston Conservatory at Berklee The College of William and Mary

Oklahoma State **Olin College of** College The New School Oregon Institute of The Ohio State University The University of Oregon State University Edinburgh Oxford College of The University of Emory University Montana The University of Sheffield The University of Tampa The University of Tennessee The University of Texas at Austin The University of the Arts Trinity College (CT) **Trinity College Dublin** Trinity University Tufts University Tulane University of Louisiana Tuskegee University Underwood International sity (Seoul) Union College University College Dublin University of Arizona University of Bath **University of British** UBC Okanagan **UC Berkeley UC Davis UC** Irvine **UC Los Angeles** UC Merced **UC Riverside** UC San Diego UC Santa Barbara **UC Santa Cruz** University of Chicago University of Cincinnati University of Colorado, Boulder University of Colorado, Denver University of Connecticut University of Dallas University of Delaware University of Denver University of Exeter (England) University of Florida University of Georgia University of Glasgow **University of Hartford** University of Hawai'i at Hilo University of Hawai'i at Manoa University of Houston University of Illinois at **Urbana-Champaign** University of Iowa University of Maryland, **Baltimore County** University of Maryland, **College Park** University of Massachusetts Amherst University of Miami University of Michigan University of Minnesota University of Nevada, Las Vegas UN Reno University of New

Hampshire

University of New Haven The College of Wooster University of New Mexico The Everareen State University of North Carolina School of the Arts **UNC Chapel Hill** UNC Charlotte **University of North Dakota** University of Notre Dame University of Ontario Institute of Technology University of Oregon University of Pennsylvania University of Pittsburgh **University of Portland** University of Puget Sound University of Redlands **University of Richmond University of Rochester** University of San Diego University of San Francisco University of South Carolina University of Southern College, Yonsei Univer-California **University of St. Andrews** University of the Pacific University of Toronto University of Utah **University of Vermont** Columbia, Vancouver University of Victoria University of Virginia University of Washington, Bothell University of Washington, Seattle University of Wisconsin, Madison University of Wisconsin, Oshkosh Utah Valley University Vanderbilt University Vassar College Villanova University Virginia Polytechnic Institute and State University Wake Forest University Washington State Washington University in St. Louis **Wellesley College** Wentworth Institute of Technology Wesleyan University Western Michigan Western University Western Washington University Westmont College Wheaton College (MA) Whitman College Whittier College Willamette University **Williams College** Woodbury University Worcester Polytechnic Institute Xavier University of Louisiana **Yale University** 

Text in bold indicates schools attended.

Ohio University