# 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 llth and 12 th 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

19
honors courses
75
semester courses

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 Fridaysit'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

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FALLSEMESTER
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Spanish 1A
Math 2A
Conceptual Physics 1A

Flex block
9th-Grade Seminar
The Creative Process

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After-school activity: Bay Theater
WINTER IMMERSIVE: The Mathematics of Digital Animation
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## SPRING SEMESTER

Math 2B
Humanities 1B
Photography 1A

Flex block
9th-Grade Seminar
Spanish 1B

After school activity: Bay Theater
SPRINE IMMERSIVE: Humanities 1: Everyone Has a Story
A Sample Year in 11th Grade

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FALLSEMESTER
    Asian American Literature
    Calculus (Honors)
    Biology 2 (Honors)
    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
```


## 2023-2024 Course Offerings

FALL SEMESTER: AUGUST 24-DECEMBER 17, 2023
SPRING SEMESTER: FEBRUARY 1-MAY 18, 2024
$l=$ interdisciplinary $\quad a=$ honors $\quad a$ Project Center-based

## ARTS

hAdvanced Drama: Creating and Performing
hAdvanced Drawing and Painting Studio
hAdvanced Projects in
Digital Arts
¿Artist as Activist
The Creative Process (9th grade requirement)
${ }^{2}$ Design 1A-1B
Drama 1A-1B
Drawing lA-lB
Jazz lA-lB
Jazz 2 (H)
Music Production 1A-lB
Painting lA-lB
Photography lA-lB
Video Production lA-lB
Vocal Music lA-1B

## COMPUTER SCIENCE, DESIGN/ENGINEERING

ค Advanced Mechanism Design
$\beta$ Advanced Product Design
Computer Science l\& 2

HUMANITIES CORE
¿American Studies (llth grade)
Civics (10th grade)
¿Humanities lA-lB (9th grade)
¿Humanities 2A-2B (10th grade)

## LITERATURE

Advanced Composition
hEssay and Memoir
h Gothic Literature
h Russian Literature
Creative Writing
Breaking the Singular Story
Dramatic Literature
$\ell$ The Good Life
American Rage: A Course in Political Discourse
Asian American Literature
Indigenous American
Literature
Literature of Neurodivergence

## MATH

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

## RELIGION/PHILOSOPHY

hComparative Philosophy
Ethics and Ethical Decision
Making
¿ The Good Life

## SCIENCE

Astronomical Research Seminar

Biological Psychology
Biology lA-IB
hBiology 2

Chemistry lA-1B
hChemistry 2
Climate Change
Conceptual Physics lA-lB
Environmental Science
hPhysics 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 l-4
h Mandarin 5
h Advanced Topics in Mandarin
Spanish l-4
h Advanced Topics in Spanish:
Literature \& Culture
Spanish for Spanish
Speakers l-2
hSpanish 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

## IITH 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
R Robotics
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 l: Everyone Has a Story
(immigration, law, and government)

## IOTH AND IITH 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
$\ell$ 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.


## Civies

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 frameworkswhether philosophic or religious in natureas 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

Agnes Scott College American University Amherst College Arizona State (Barret 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 Colle California Cal Poly Humboran Cal Poly Pomona Cal Poly San uis Cal State Chan Obispo Cal State Ch
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 S Clark Atlanta University Clark University Clemson University Colby Colleg Colgate University College of Charlesto Colloge of Marin Colorado College Colorad School of Mines Colorado State University (Chicago)
Columbia University Connecticut College Contra Costa Colleg 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-Riddie Aero

Emerson College Emory University Eugene Lang College at The New Schoo 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 Howart and William Smity Hobartand Willam Smith Colleges
Hofstra University
Illinois Institute of Illinois Institute Indiana University Ithaca College Johns Hopkins University Johnson \& Wales University Kalamazoo College Kansas State Universit Kenyon College Lafayette College Lake Forest College Landmark College Lawrence University Lehigh University Lesley University Lewis \& Clark College Liberty University Linfield University Loughborough University Lovisiana State University Loyola Marymount Loyola Chicago Loyola New Orleans Macalester College Marian University Mara Maryland Collegersity Marymount Manhatta College Manhattan Massachu 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 Ohio University Ohio University

Ohio Wesleyan University
Oklahoma State
Olin College of Oregon Institute of Technology Oregon State University
Oxford College of Emory University Pace University Pacific Northwest College of Art parsons School of Design ennsylvania Academy o the Fine Arts
Pennsylvania State Pepperdine University Pitzer College
omona College
Portland State University
Pratt Institute
Princeton University
Purdue University
Purdue University
Quinnipiac Un
Qeed College
Reed College
Rensselaer Polytechnic
Institute
hode island School of Design
Rice University
Richmond, The American
International College
in London
ingling College of Art and Design

Technology
ose-Hulman Institute of Technology
Rutgers University, New
Brunswick
aint Joseph's University
saint Louis University
Saint Mary's College of
California
Salve Regina University
San Diego State San Francisco Stat antasa Sarah Clara University Savannah College of and Design
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The Boston Conservatory at Berkle
The College of William
and Mary

The College of Wooster The Evergreen State College
The New School
The Ohio State University
The University of
Edinburgh
The University of 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
dorwood internationa College, Yonsei Univer sity (Seoul) University College Dublin University of Arizona University of Bath University of British Columbia, Vancouve Columbia, Vancouver JBC Berkeley UC Davis
UC Irvine
UC Los Angeles UC Merced
UC Riversid 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 Ex
(England)
University of Florida
University of Georgia
University of Georgia University of Hartford University of Hawail at Hilo

University o at Manoa University of linston 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 Ne
Hampshire

University of New Haven University of New Mexico University of North Carolina School of the Arts UNC Chapel Hill 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 University University of Southern California University of St. Andrews University of the Pacific University of Utah University of Utah University of Vermon 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 Technology Westeyan Michiversity Western Michigan Western Washington University Westmont College Wheaton College (MA) Whitman College Whittier College Willamette University Williams College
Woodbury University

