# Upper School Profile 2023-24

# School

Since 1967, the Nueva School has delivered an innovative, award-winning learning experience designed to meet the needs of academically gifted learners.

Over the past 50 years we have become internationally recognized for our unique curricular approach, which inspires the passions, purpose, and potential in each student while igniting a lifelong love of learning.

Nueva's Upper School, launched in 2013, is a re-imagination of high school. In many ways more like a university than a traditional high school, Nueva offers broad-based interdisciplinary studies coupled with deep explorations into specific areas of interest.

Nueva is accredited by the Western Association of Schools and Colleges and is a member of the California Association of Independent Schools.

# **Students**

Nueva attracts inquisitive, highperforming students from the greater San Francisco Bay Area who have been drawn to the possibilities and challenges of a young, innovative high school.

These socially minded intellectual entrepreneurs, researchers, and artists — a senior class of 111 students who possess a high degree of agency and self-direction — enjoy hard problems, risk-taking, and peer-to-peer learning.

# Advanced Curriculum

At the heart of Nueva's program is an advanced, interdisciplinary curriculum with significant emphasis on self-directed learning, collaboration, and primary research. A typical student course load is 7–8 classes per semester. Seniors typically take 7 classes.

In scope and depth, all courses offered range from college preparatory to college-level. The majority of core courses meet or exceed the rigor of Advanced Placement courses; Nueva does not designate Honors or AP courses.

The academic program builds a robust foundation in the major disciplines, supports deep inquiry into topics of individual interest, and provides explicit instruction in methods of thinking and reasoning. Advanced electives and independent courses of study allow students to move at an accelerated pace in the directions they choose.

# **Faculty**

More than 80% of our upper school faculty hold advanced degrees. Many have taught at the university level and have been recognized by local, state, and national organizations for leadership, excellence, and innovation in teaching.

# Facts and Figures

Class of 2024 enrollment	112
Upper School enrollment	450
Student-to-faculty ratio	6:1
Average class size	16
Students of color	<b>70</b> %
Students receiving financial aid	21%
Admitted to four-year colleges	100%

## **National Merit**

Class of 2024	
Semifinalists	25
Commended	27
Total	52
Total % of class	47%



#### **Test Scores**

Class of 2023 and 2024

O1833 O1 2023 81	14 2024	
	mean	mid 50%
ACT	33	32-35
SAT		
EBRW	760	730-790
Math	750	710-790

# Grading

Nueva intentionally discourages academic competition among our students. We do not calculate class rank and do not offer academic honors, prizes, or valedictorian status.

To facilitate meaningful assessment of students' skills against absolute benchmarks, students receive both standards-based grades and indepth written narratives focused on core learning competencies. Nueva reinforces continuous feedback and recognizes the need for students to learn from their mistakes as they take risks and tackle difficult problems.

Grade 9 courses are Credit/
No Credit. In Grades 10–12, the highest grade is an A (no "A+" grades), which indicates the student has reached an Exemplary status with regard to the standards for that course; a "B" indicates Proficiency; and a "C" indicates a Foundational achievement of the standards.

We do not weight grades.

It is Nueva's policy not to report disciplinary infractions; our expectation is that students will self-report any serious violations of school conduct policy. Nueva's college counseling office works with students to ensure they provide colleges with appropriate context for the students' decisions and their consequences.

# **Applied Learning**

Nueva supports in-depth inquiry, research, and experimentation through programs that extend and deepen the core curriculum.

Quest Projects, an annual requirement, enable individual, mentored pursuits in areas of passionate interest. Recent projects include developing a public health initiative to address obesity in post-embargo Cuba, designing and building a jet-pack for human flight, and writing a screenplay adaptation of Hamlet.

### The Global Citizenship Program

provides students with broadening academic and cultural perspectives. They have studied anthropology and history (Peru), wildlife biology (Costa Rica), land management (American West), military culture (North Carolina), political caucuses (Nevada), immigration (Mexico), and AIDS activism (New York).

Intersession is a two-week intensive that allows students to work, think, experiment, and lead in courses taught by local and international experts in their fields. From surgical virtual reality to constitutional law to graffiti art, Nueva students describe this mid-year program as an "intellectual party."

# Defining Elements of a Nueva Education

## **Design Thinking**

Students learn and develop an approach to problem-solving in which they identify pressing and practical needs and problems, generate creative ideas, and introduce, test, and refine solutions under real-world conditions.

#### Science of Mind

Students study foundational principles of psychology and neuroscience, developing fluency in social-emotional best practices through peer feedback and coaching.

#### What Is a Nueva Student?

In their free time, Nueva students write programs and poetry, create laboratories in their basements and other worlds in their journals, borrow quantum mechanics textbooks from their teachers, and stay up late debating Dante. On a Friday evening, student-built robots cruise the halls, debates about global economics unfold at teachers' desks, and goggle-clad students pursue supervised but purely extracurricular research.

The 414 students currently enrolled in college applied to 253 colleges, were admitted to 231, and are attending 100 different institutions in 29 states, the District of Columbia, Canada, England, the Netherlands, and Scotland. Adventurous and independent, over 70% of Nueva graduates choose to leave the state of California for college and annually over a third are the sole matriculant to their college.

# Upper School Course Offerings 2020-2023

#### Math

#### 3 years required

\*Math 1, 2, and 3 is an integrated math sequence in which students learn geometry, algebra 2, trigonometry, pre-calculus, basic statistics, and functions.

Math 1\* Math 2\*

Math 3\*

Calculus

Statistics and Probability

#### **Post-Calculus Options**

Complex Analysis Differential Equations Knot Theory (Intro/Adv.) Linear Algebra Mathematical Modeling Multivariable Calculus **Number Theory** Quantum Information/ Computation

#### **Electives**

Cryptology

#### Lab Science

## 3 years required

#### **Required Courses**

Biology Chemistry

#### **Electives**

Advanced Biological Research Methods Applied Molecular Biology Bioorganic Chemistry Calculus-based Mechanics

Computational Biology Drug Design

**Experimental Biology** Mechanisms of Cancer

Modern Physics

Neuroscience of Addiction Optics, Imaging and

Astrophysics

**Physics** 

Physics Research Sensory Neuroscience Social Action Science Research XRT: Experiment and

Research Team

#### **Interdisciplinary Courses**

Environmental and Earth Science

## History, Social Sciences, and Civics

3 years required

#### **Required Courses**

American History Global History I Global History II

#### **Senior Seminars**

American Government International Relations Religion in America

#### **Electives**

American Indian History California History: Foot, Hoof, Rail Capitalism and the Apocalypse Death and Life in Cities **Economic Inequality Environmental Economics** 50 Words for Snow: Translation Theory How Not to Think Wrong Interpreting Religions Japanamerica: Japanese Pop Culture Macroeconomics Microeconomics Philosophy of Consciousness and Personhood Post-Colonial Latin-American History Psychology Senior Economic Thesis Seminar Steel, Telescopes and Trains:

# World Languages

Recreating Science and

3 years required

Technology

**Urban Studies** 

Chinese 1, 2, 3, 4, 5 Japanese 1, 2, 3, 4, 5, 6 Spanish 1, 2, 3, 4

Advanced Spanish Classes Spanish Communication Spanish Literature

## Design Thinking, Engineering, and Computer Science

Advanced Programming Workshop Chemical Engineering Computer and Digital Security Computer Vision Creature Comforts Electric Bike Building **Functional Programming** I-Lab Engineering and Fabrication Workshop Intro to Computer Programming Intro to Mechanical Engineering Machine Learning (Intro/Adv) Mobile App Design Object-Oriented Programming Product Design (Intro/Adv) Programming and Data Analytics Software Engineering Video Game Development

#### Independent and Collaborative Study

## Literature and Communications

4 years required

#### **Required Courses**

English 9: The Great Dialogue English 10: Landscapes of Self and Other English 11: American Literature

# **Senior Seminars**

Adaptations: From Text to Screen and Stage Afrofuturism: Black Histories, **Black Futures** 

Anna Karenina in Our Time Chronicles of Wandering **Fiction Writing** 

The Immortal Gothic Genre Reading Like Victorians Shakespeare in the World

#### **Electives**

Intro to Journalism Speech and Debate Yearbook and Online Media Production

#### Independent and Collaborative Study

## Arts: Fine and Performing

2 semesters required in the same subject

#### **Performing Arts**

A Cappella Soundwaves Chorale (Intro/Adv) Fall Play Groove Workshop Jazz Ensemble Music Design and Production (Intro/Adv) Musical Theater (Intro/Adv) Steel Drums

#### Fine Arts

Drawing (Intro/Adv) Graphic Design (Intro/Adv) Mixed Media (Intro/Adv) Painting (Intro/Adv) Sculpture (Intro/Adv)

## **Interdisciplinary Arts**

Fabricating Your Artistic Vision (Intro/Adv) Stained Glass Yearbook and Online Media Production

#### Independent and Collaborative Study

## Additional Requirements

#### Athletics and Wellness

8 seasons required

# **Interdisciplinary Studies** 2 years required Nueva Quest: Pursuit of

In-Depth Mastery 4 years required

Design Engineering Design Thinking History and Philosophy of Science

#### Science of Mind

4 years required

# College Acceptances and Matriculation Classes of 2020 to 2023

#### 10 or more

Carnegie Mellon University
 Columbia University
 Cornell University

#### 5 or more

Brown University
 California Institute of Technology
 Case Western Reserve University
 Dartmouth College
 Duke University

#### 1 or more

American University Amherst College Barnard College **Boston University** Bowdoin College **Brandeis University** Bryn Mawr College California Institute of the Arts California Polytechnic State University (San Luis Obispo) California State University (Long Beach) Carleton College Claremont McKenna College Colorado College Colorado School of Mines Connecticut College **Drexel University** Georgetown University Georgia Institute of Technology Haverford College

# Acceptances (partial list)

American University Arizona State University Bard College **Bates College Boston College Bucknell University** California State Polytechnic University (Pomona) Chapman University Clemson University Colby College Colgate University Davidson College DePaul University Dickinson College Emerson College **Emory University** Fordham University

Harvard University Northeastern University Northwestern University

Harvey Mudd College Massachusetts Institute of Technology New York University Reed College

Johns Hopkins University Lehigh University Loyola Marymount University Macalester College Maryland Institute College of Art Middlebury College Oberlin College Occidental College Olin College of Engineering Pacific Northwest College of Art at Willamette University Pitzer College Pomona College **Pratt Institute** Purdue University (Main Campus) Rhode Island School of Design Rice University Santa Clara University Sarah Lawrence College School of the Art Institute of

Chicago

Rhodes College

George Washington University Grinnell College Hamilton College Indiana University (Bloomington) Kenyon College King's College London Lafayette College Lake Forest College Lawrence University Lewis & Clark College Michigan State University Mount Holyoke College Muhlenberg College Oregon State University Penn State University (University Park) Rensselaer Polytechnic Institute

at Chapel Hill Rose-Hulman Institute of Technology **Rutgers University** (New Brunswick) San Diego State University San Francisco State University San Jose State University Syracuse University Temple University The Ohio State University Trinity College Tulane University of Louisiana Union College United States Air Force Academy University College London University of California (Merced) University of California (Santa Barbara)

University of Chicago University of Pennsylvania University of Southern California

Tufts University
University of Michigan
University of California
(Los Angeles)
University of Illinois
University of Illinois
University of Illinois
Wellesley College
Yale University

**Princeton University** 

Stanford University

School of Visual Arts

Swarthmore College

Southern Methodist University

St. John's College (Annapolis)

United States Naval Academy

University of British Columbia

University of California (Davis)

University of California (Irvine)

University of California

University of California

University of California

University of Miami University of North Carolina

(Riverside)

(San Diego)

(Santa Cruz)

The University of Texas at Austin

Scripps College

Smith College

Skidmore College

University of California (Berkeley)

University of Oregon University of Oxford University of Rochester University of St Andrews University of Toronto University of Utah University of Vermont University of Wisconsin (Madison) Vanderbilt University Vassar College Villanova University Vrije Universiteit Amsterdam Wesleyan University Whitman College Willamette University William & Mary Williams College Worcester Polytechnic Institute

University of Colorado Boulder University of Connecticut University of Denver University of Hawaii at Manoa University of Maryland (College Park) University of Massachusetts (Amherst) University of Pittsburgh University of Portland University of Richmond University of San Diego University of San Francisco University of the Pacific University of Washington (Seattle Campus) Wheaton College - MA