The Brearley School, in observance of state and federal laws and regulations, does not discriminate on the basis of race, color, religion, sexual orientation, disability or national or ethnic origin in administration of its admission, financial assistance, educational or other school policies. Every Brearley student is admitted to all of the rights, privileges, programs and activities generally accorded or made available to students at the School.

Brearley is chartered by and registered with the Education Department of the State of New York. It is accredited by the New York State Association of Independent Schools.
# Table of Contents

- Statement of Beliefs .............................................. 3
- Administration and Department Heads ....................... 4
- Faculty and Staff .................................................. 5
- Academic Life ....................................................... 18
  - Overview .......................................................... 18
  - The Co-Curricular Program ................................. 19
  - The Lower School ............................................. 20
  - The Middle School ............................................ 29
  - The Upper School ............................................. 38
- College Advising .................................................. 52
- College Entrance 2017–2021 ..................................... 53
- Academic Calendar 2021–2022 ................................. 54
- Board of Trustees ............................................... 56
A Note on the 2021–2022 Academic Year

For the health and safety of our students, faculty and staff during 2021–2022, we may adapt or redesign many of the trips, performances and activities that are a regular part of our academic program. At the time of publication, we do not know how, whether or how long we will continue these adaptations in order to comply with state and federal guidelines.
Statement of Beliefs

■ Mission

The Brearley School challenges girls of adventurous intellect and diverse backgrounds to think critically and creatively and prepares them for principled engagement in the world.

Guided by a dedicated community of adults, students develop a command of many disciplines, a love of learning and a resilient and generous spirit. The bond among students and with their teachers is rooted in a passionate exchange of ideas and an appreciation for the unique and lively contributions of each individual.

A Brearley education unfolds over a lifetime. The School instills in its alumnae the confidence to pursue their ambitions and the wisdom to live balanced and purposeful lives.

■ Diversity, Equity and Inclusion

The Brearley School believes that diversity of thought, practice and identity are essential elements in preparing students for principled engagement in the world. We believe in the importance of establishing and strengthening the structures and practices necessary to achieve equitable representation and participation in our School. We are committed to putting these beliefs into action and are therefore engaged in continuous study, self-reflection and dialogue in order to improve and adapt as we learn.

We embrace the opportunities and challenges of learning and working in a diverse environment characterized by respect and consideration for the needs of others. In partnership with faculty, staff, students, families and alumnae, we are endeavoring to instil and sustain shared values that promote a welcoming, inclusive and affirming community.

■ Antiracism

The Brearley School condemns racism in the strongest possible terms and is committed to building an antiracist community. This work requires active introspection, self-awareness and the determination to make conscious and consistently equitable choices on a daily basis. We expect our faculty, staff, students, parents and trustees to pursue meaningful change through deliberate and measurable actions. These actions include participating in antiracist training and identifying and eliminating policies, practices and beliefs that uphold racial inequality in our community.
Administration

Head of School
Jane Foley Fried
Assistant Head of School for Academic Life
James Mulkin, Jr.
Assistant Head of School for Student Life and Head of the Lower School (K–IV)
Maria-Anna Zimmermann
Chief Advancement Officer
Anne S. Bergen
Chief Financial Officer and Chief Operating Officer
Rahul Tripathi
Dean of Students
Sheila Kramer
Director of Athletics
Danielle King
Director of College Advising
Carolyn W. Clark
Director of Communications
Jennifer Stewart
Director of Construction and Facilities
Doris Coleman
Director of Counseling and Wellness
Karen Ezra
Director of Inclusive Teaching and Learning
Tanya Huelett
Director of Equity and Community Engagement
Coy Dailey
Director of Food Services
Marsha Gomez
Director of Human Resources
Arlene Fabio
Director of Lower School Admission
Winifred M. Mabley
Director of Middle and Upper School Admission and Financial Assistance
Melissa Cassis
Director of Publications
Jane Newman
Director of Security and Safety
Noel Lamberty
Director of Technology
Colin Samuel
Head of Middle School Student Life
Tim Brownell
Head of Upper School Student Life
Betty Noel-Pierre
Registrar
Joan Krause

Department Heads

Art
Raquel Muslin
Classics
Tom Wright
Drama
Robert D. Duke, Jr.
English
Sherri Wolf
History
Gabriel Sanchez
Learning Skills
Annah Clontz
Library
Celia Dillon
Mathematics
Debra Glick
Modern Languages
Sylvie Lucile
Music
Matthew Aiken
Physical Education
Susan Seufert
Science
James Karb
Faculty and Staff

JANE FOLEY FRIED, HEAD OF SCHOOL; ADVISOR, CLASS XII
B.A., Bowdoin College; M.A., Tufts University

MICHAEL ABBOTT, PIANO
B.Mus., Hampshire College, California Institute of the Arts; Charles Banacos, Lennie Tristano, Roland Hanna

SARAH ABRAHAM, ROOM TEACHER, LOWER SCHOOL
B.S., Pennsylvania State University; M.S., Touro College

MATTHEW AIKEN, HEAD OF THE MUSIC DEPARTMENT, PERCUSSION; ADVISOR, CLASS XII
B.Mus., University of Oregon; M.Mus., Eastman School of Music; John Beck, Charles Dowd

JULIÁN ALTSCHUL, MATHEMATICS; ROOM TEACHER, CLASS VII
B.A., Rice University; M.Ed., Hunter College

ERIC ANTANITUS, WEBSITE AND ADMINISTRATIVE SYSTEMS SPECIALIST
B.F.A., New York University; M.S., Polytechnic Institute of New York University

OLIVIA BALL, DRAMA; GRADE HEAD, CLASS IX
A.B., Harvard College; M.A., Columbia University

*** MARISA BALLARO, DANCE
B.A., State University of New York at Brockport

JOY BARBOSA, LEARNING SKILLS
B.S., Syracuse University; M.A., Bank Street College of Education

SARAH BARLOW, DEVELOPMENT ASSISTANT
B.S., Skidmore College

JANELLE BARTH, ROOM TEACHER, LOWER SCHOOL; LOWER SCHOOL DIVERSITY EQUITY INCLUSION COORDINATOR
B.S., Carnegie-Mellon University, M.S.Ed., Bank Street College

JENNIFER M. BARTOLI, DIRECTOR OF GRAPHIC DESIGN
B.A., East Stroudsburg University

KATHERINE BATEMAN, HISTORY; ADVISOR, CLASS XI
B.Ed, University of Toronto; M.A., McMaster University; B.A., Concordia University

JEBAH BAUM, ART
B.F.A., State University of New York at Purchase; M.F.A., Cornell University

*** Sabbatical Leave, 2021–2022  † Leave, 2021–2022
ANNE S. BERGEN, Chief Advancement Officer  
B.A., Colgate University

†SHERI L. BLAU, Mathematics  
B.S., University of Michigan; M.A., Teachers College, Columbia University

KAREN BLUMBERG, Math and Technology; Room Teacher, Class VIII  
B.A., Bryn Mawr College; M.A., Teachers College, Columbia University; Ed.M., Teachers College, Columbia University

ARIELA BOHROD, Accompanist  
Mannes College of Music; Piano: Pavlina Dokovksa, Vladimir Valjarevic

CAIT BRADLEY, Mathematics; Room Teacher, Class VI  
B.A., Dickinson College; M.A., Teachers College, Columbia University

MATTHEW BRADY, Music; Advisor, Class IX  
B.Mus., Eastman School of Music; Artist/Teacher Diploma, Association for Choral Music Education; Seymour Bernstein, Doreen Rao

ROBERT BRODY, Controller and Assistant Chief Financial Officer  
Certified Public Accountant, AICPA; B.A, Queens College

TIM BROWNELL, Head of Middle School Student Life; Drama  
B.A., Middlebury College

ANNIE SPADER BYERLY, Room Teacher, Lower School  
B.A., Wellesley College; M.S., Hunter College of Education

PAUL J. BYRNES, Science; Advisor, Class XI  
B.S., State University of New York at Buffalo; M.S., Pace University

MELISSA CASSIS, Director of Middle and Upper School Admission and Financial Assistance  
B.A., Middlebury College; M.A., Teachers College, Columbia University

KRISTEN CHAE, Associate Director of Admission and Social Media Lead  
B.S., Boston University

CAROLINE CHANG ’08, English; Advisor, Class X  
B.A., Yale University; M.A., Middlebury, Breadloaf School of English

SARAI CHICO, Administrative Assistant to the Head of Middle School Student Life  
Lehman College, CUNY

AMY CHOW, Library, Advisor, Class VII  
B.Mus., McGill University; M.L.I.S., Dalhousie University, Halifax
BRIAN CHU, English; Grade Head, Class XI
B.A., M.F.A., Columbia University

ARUNA CHUNG-A-HING, Science
B.A., New York University; M.A., Harvard Extension School

LUIGI CICALA, Art and Technology

JOSEPH CIVITA, Food Service Consultant
New York Community College

ANNA CLADERA, Spanish; Advisor, Class VIII
Universidad Complutense de Madrid; L.L.M., London School of Economics and Political Science; M.A.T., Manhattanville College

CAROLYN W. CLARK, Director of College Advising; Advisor, Class XII
B.A., Wesleyan University; M.P.A., Columbia University School of International and Public Affairs

ANNAH CLONTZ, Director of Student Support and Head of the Learning Skills Department; Advisor, Class VII
B.A., Elon University; M.Ed., University of North Carolina, Charlotte

DORIS COLEMAN, Director of Construction and Facilities; Advisor, Class VII
B.S., Cornell University; M.B.A., Pepperdine University

TABITHA CORE, Room Teacher, Lower School
B.A., Elon University

KENNETH M. CRONIN, JR., Building Superintendent

COY DAILEY, Director of Equity and Community Engagement
B.S., Colby College; M.S.Ed., University of Pennsylvania

CHRISTEL DE LA OSSA, French
B.A., Catholic University of America; M.S. Georgetown University; M.A., Hunter College, City University of New York

LEILANI DELEON, Administrative Assistant to the Registrar

JEAN DELGADO-CACERES, Assistant Director for Technology Operations
B.E.T.C., CUNY New York City College of Technology

JENELLÉ DEODATH, Administrative Assistant to the Assistant Head of School for Student Life and Head of the Lower School
B.S., M.S., New York Institute of Technology

JILL DIJOSEPH, Receptionist
Fordham University; New School for Social Research; Hunter College
CELIA DILLON, Head Librarian
B.A., College of the Holy Cross; M.L.I.S., Queens College

SUSAN DONOVAN, Mathematics and Technology
B.A., Carnegie Mellon University; M.A., Hunter College

ROBERT DOREMUS, Security Officer

KEITH DRISCOLL, Lower School Community Life Associate, Supervisor of Quiet Interlude, Co-Director of Play and Crafts
B.A., Marymount Manhattan College

MARIA DUCKETT, Director of Special Projects and Research Initiatives; Room Teacher, Class VII
B.A., Loyola University (Maryland); M.A., New York University

ROBERT D. DUKE, JR., Head of the Drama Department
B.A., Williams College

MICHELLE ECHEVERRIA, Administrative Assistant to the Director of Facilities

DALE EMMART, Art; Advisor, Class VI
B.F.A., Cooper Union School of Art; M.F.A., Rhode Island School of Design

PIETRO ENNIS, Technology
B.F.A., New York Institute of Technology; M.A., Teachers College, Columbia University

DANIELLE ERRICO, Piano
B. Mus., Manhattan School of Music; Jeffrey Cohen, Michael Lewin, Christina Dahl

KAREN EZRA, Director of Counseling and Wellness
B.A., Yale University; M.A., Ph.D., New York University

ARLENE FABIO, Director of Human Resources
B.A., Tufts University; M.B.A., Clark Atlanta University

AYANA FLETCHER-TYSON, Room Teacher, Lower School
B.A., Southern Methodist University; M.Ed., Vanderbilt University, Peabody College

PAUL FOGLINO, Mathematics
B.A., B.S., Columbia University

JENNA FOTI, Learning Skills
B.A., University of Michigan; M.A., Teachers College, Columbia University

KHYASIA FOULKS-CRUZ, Associate Teacher, Lower School
B.A., Hunter College

DARCY R. FRYER, History; Advisor, Class X
B.A., University of Michigan; M.A., Ph.D., Yale University
YUSI GAO, Mandarin
B.A., Hebei University; M.A., New York University; Graduate Study, Irkutsk State Linguistic University

†ROSE GARDNER, French
B.Phil., University of Pittsburgh; M.A., Hunter College; Master’s I, Université Paris-Sorbonne; Pensionnaire étrangère, École Normale Supérieure; Ph.D., Columbia University

PHOEBE T. GEER ’97, ASSOCIATE DIRECTOR OF DEVELOPMENT
B.A., Williams College; J.D., University of Virginia School of Law

CARY GENTRY, LEARNING SKILLS; ADVISOR, CLASS VIII
B.A., James Madison University; M.L.I.S., University of North Carolina, Chapel Hill

KYLE GERRY, Math
B.A., Columbia University

SUZANNAH GIFFORD, ASSOCIATE TEACHER, LOWER SCHOOL
B.A., Barnard College

ANDREA M. GILROY, MATHEMATICS; ADVISOR, CLASS VI
B.A., Hartwick College; M.A., State University of New York at Stony Brook

ROBERT GINGERY, Guitar
B.A., California State University; Diploma, Berklee College of Music; M.A., City College of New York

DEBRA EVE GLICK, MATHEMATICS; GRADE HEAD, CLASS X
B.A., Hunter College; M.A., New York University

TANYA KOTRU GODE, ASSOCIATE TEACHER, LOWER SCHOOL
B.A., Vassar College

SUSANNAH GOLDSTEIN, LIBRARIAN; ADVISOR, CLASS XII
B.A., Barnard College; M.L.I.S., Rutgers University

MARSHA GOMEZ, FOOD SERVICE MANAGER

ANNABEL GORDON, CELLO
B.Mus., Mannes College of Music; Timothy Eddy, Jerry Grossman

***NATASHA GRAY, HISTORY
B.A., Bryn Mawr College; M.A., Ph.D., Columbia University

ANALISA CIPRIANO HEINZ, ASSOCIATE DIRECTOR OF COLLEGE ADVISING; ADVISOR, CLASS X

JAKE HERTZ, HISTORY
B.A., Wesleyan University; M.A., Brown University
SARAH HERVIEUX, Science  
B.A., Drew University; M.S., Columbia University

MICHELLE HEYL, Assistant Athletics Director; Advisor, Class VII  
B.A., Salisbury University

AMINA HOLMAN, Annual Fund Director  
B.A., Howard University; M.S.Ed., Baruch College

JENNA HOROWITZ, Middle School Counselor  
B.S., Syracuse University; M.S.W., Columbia University School of Social Work

SAMANTHA HOSEIN, Student Life Coordinator; Room Teacher, Class VIII  
B.A., University of Pittsburgh

TANYA HUELETT, Director of Inclusive Teaching and Learning;  
Advisor, Class X  
B.A., Spelman College; Ph.D., New York University

MARIEL ISAACSON, History; Advisor, Class X  
B.F.A., M.A., New York University; Ph.D., The Graduate Center, CUNY

MARINA JACKSON, Technology  
A.B., Harvard College; M.A., Teachers College, Columbia University

WHITNEY JACOBS, Physical Education, Dance  
B.F.A., Ohio University; M.F.A., University of Wisconsin-Milwaukee

KATE JAVENS, Art; Advisor, Class IX  
C.F.A., Pennsylvania Academy of Fine Arts

KARYN JOAQUINO, Music; Advisor, Class IX  
A.B., Princeton University; M.A., Teachers College, Columbia University; Clifford Herzer, José Ramos-Santana

TYQUANDA JOHNSON, Dance  
B.A., Livingston College; M.S., Pratt Institute

KATHARINE JONES, Art; Advisor, Class XI  
B.A., Columbia University; M.F.A., University of New Mexico

ILYSSA KAPLAN, School Psychologist  
B.S., Pennsylvania State University; M.S., Psy.D., Pace University

JAMES KARB, Head of the Science Department  
Sc.B., M.A., Brown University

SAMUEL KATZ, Violin  
B.Mus., M.Mus., The Juilliard School; Daniel Phillips, Sylvia Rosenberg, Sally Thomas
TRACEY KEE, Physical Education; Advisor, Class VI
B.S., M.A.Ed., East Carolina University

NINA KELLER, Head School Nurse
B.S.N., Wagner College; M.S.N., Hunter College

ANDREW KEMP, Brass
B. Mus., M. Orchestral Performance, Manhattan School of Music; Robert Sullivan, William Vacchiano

***RACHEL KERCHMAN, Mathematics
B.A., Bucknell University; M.A., Johns Hopkins University

JIA KIM, Cello
B.Mus., M.Mus., The Juilliard School; Joel Krosnick

JU YEON KIM, Room Teacher, Lower School
B.A., Smith College; M.A., Teachers College, Columbia University

DANIELLE LAROCHE KING, Director of Athletics; Advisor, Class XII
B.A., University of Maryland; M.S., State University of New York at Cortland

JEE LEONG KOH, English
B.A., University of Oxford; M.A., Sarah Lawrence College; Postgraduate Diploma in Education, National Institute of Education, Singapore

STERLING KOURI, French
B.A., Johns Hopkins University; Master I, École Normale Supérieure Paris III, Paris IV; M.A., Ph.D., University of Pennsylvania

RENÉE KRAIEM, Associate Teacher, Lower School
B.A., Barnard College

SHEILA KRAMER, Science; Dean of Students; Room Teacher, Class VIII
B.A., Truman State University; M.F.A., Kent State University; M.A., Columbia University

JANE KRAUSE, Associate Teacher, Lower School
B.A., Agnes Scott College

JOAN KRAUSE, Registrar; Voice; Advisor, Class IX
B.Mus.Ed., Northwestern University; M.Mus., Hartt School of Music; Artist’s Diploma, Cleveland Institute of Music; Maria Farnworth, Benton Hess

TAMMY H. KUO, Mandarin
B.S., University of British Columbia; M.Ed., Boston College

CHRISTOPHER LA MORTE, Physical Education
University of New Mexico; B.S., Hunter College
NOEL LAMBERTY, DIRECTOR OF SECURITY AND SAFETY
B.A., Clark University; M.A., John Jay College of Criminal Justice

SARAH LANNOM, CLASSICS; ADVISOR, CLASS XI
B.A., Swarthmore College; A.M., Ph.D., Harvard University

DOUGLAS LEVINE, PHYSICAL EDUCATION
B.S., University of Maryland; M.S., University of New Mexico

LAURA LONDON, ATHLETIC TRAINER
B.A., State University of New York at Buffalo; M.S., Serton Hall University

SYLVIE LUCILE, HEAD OF THE MODERN LANGUAGES DEPARTMENT
B.A., M.A., Université de la Sorbonne Nouvelle Paris 3

FRANCES LYONS, ASSOCIATE DIRECTOR OF ATHLETICS; ADVISOR, CLASS IX
B.S., Brooklyn College

Maura Lyons, Physical Education
B.S., State University of New York at Cortland

WINIFRED M. MABLEY, DIRECTOR OF LOWER SCHOOL ADMISSION
B.A., University of Pennsylvania; Graduate Study, Bank Street College of Education

AYSHA MAISONET, ROOM TEACHER, LOWER SCHOOL
B.S., State University of New York at Oneonta; M.S., State University of New York at Albany

MAGGIE MALUF, MATHEMATICS; ADVISOR, CLASS XII
B.A., Vassar College; M.A., Teachers College, Columbia University

THOMAS M. MARCH, ENGLISH
B.A., Northwestern University; M.A., Ph.D., New York University

GAIL SUSSMAN MARCUS, HISTORY; ROOM TEACHER, CLASS VII
B.A., Cornell University; M.A., M.Phil., Yale University

OLIVIA MARTINEZ, VIOLA, VIOLIN
B.Mus., University of Massachusetts, Amherst; M.Mus., Mannes College of Music;
Michelle La Course, Karen Ritscher

ROISIN MCARDLE, MATH
B.S., University of Strathclyde, Glasgow; P.G.Dipl, University of Glasgow

KEVIN MCCOY, LEARNING SKILLS; ADVISOR, CLASS VIII
B.A. Fordham University; M.Ed., Manhattanville College; M.Ed., Fordham University

JAMES MCDONALD, ROOM TEACHER, CLASS V
B.A., Dickinson College; M.Ed., Rutgers University
PETER MCKAY, Development Database Manager
B.A., James Madison University

ARACELIS MEDINA, Executive Assistant to the Head of School
B.A., Lehman College

VALERIE MENDELSON ’75, History
A.B., Harvard College; M.F.A., Brooklyn College; Ph.D., The Graduate Center, CUNY

MAUREEN MERVIL, Room Teacher, Lower School
B.A., Hunter College; M.S., Bank Street College of Education

ROBERT RAOUl MEYER, History
A.B., Brown University; Ed.M., Teachers College, Columbia University; J.D., New York University School of Law

JILLIAN MINELLO, Room Teacher, Lower School
B.A., Marist College; Graduate Studies, Hunter College

JIBRILL MORRIS, Administrative Assistant to the Associate Head of School for Academic Life
B.A., Brooklyn College

JAMES MULKIN, JR., Associate Head of School for Academic Life; Advisor, Class XI
B.A., University of the South; M.F.A., Carnegie-Mellon University; M.A., Ph.D., The Graduate Center, CUNY

ARIELLE MULLER, Room Teacher, Lower School
B.S., University of Vermont; M.Ed., Hunter College

ERICA MUÑOZ-GONZALEZ, Circulation Assistant; Advisor, Class X
B.S.W., University of Cincinnati; M.S.W., Fordham University

RAQUEL MUSLIN, Head of the Art Department; Advisor, Class VIII
B.A., Vassar College; Graduate Study, Bank Street College, Pratt Institute

KAREN A. NEDBAL, Science
B.A., Vassar College; M.Ed., Harvard University; Graduate Study, Teachers College, Columbia University

JANE NEWMAN, Director of Publications; Advisor, Class IX
B.A., Kenyon College; Graduate Study, New York University

NADIA NOBREGA, Associate Teacher, Lower School
B.A., Elon University; Graduate Study, Teachers College, Columbia University

BETTY NOEL-PIERRE, Head of Upper School Student Life
B.A., Brooklyn College; Ph.D., Stony Brook University
NNAMDI OLISAH, Physical Education
B.S., Pennsylvania State University; M.P.S., St. John’s University

ERIN OLSEN, Room Teacher, Lower School
B.Ed., Indiana University; M.L.I.S., University of Wisconsin-Milwaukee

ZACHARY PAPAS, Room Teacher, Lower School
B.A., University of California, Berkeley; M.A., Teachers College, Columbia University

STEPHANIE L. PARKER, Admission and Financial Assistance Coordinator
M.B.A., Mercy College

ALLISON PATRICK ‘02, Lab Assistant, Co-Director of Play and Crafts
B.A., Tufts University; M.Arch., Columbia University College

DIANA PETRELLA, Clarinet
B.Mus., M.Mus., Canterbury Christchurch University; David Campbell, Leon Russianoff

KYMARI PHILLIPS, Middle School Associate
B.A., Fisk University

LISA A. POLLACK, Administrative Assistant to the Head of Upper School
Student Life
B.A., Beloit College

ALISON POLLOCK, Director of Clubhouse
B.S., Tulane University; M.Ed., Bank Street College of Education

SCOTT POMERANTZ, Drama; Technology
B.F.A., Five Towns College

MARY POTTER, Associate Teacher, Lower School
A.B., Harvard College; M.Ed., Lesley University

LENNARSHA PRESCOD, Associate Teacher, Lower School
B.A., Hunter College

ALIYA QUENTIN, French; Advisor, Class XII
B.A., University of the Punjab; M.A., National University of Modern Languages, Islamabad; Licence, Université Aix-Marseille; M.S.Ed., City College

HANNAH RAU, Learning Skills
B.A., Occidental College; M.S., Bank Street College of Education

WANDA RIVERA-RIVERA, Spanish
B.A., M.A., University of Puerto Rico, Río Piedras; Ph.D., Harvard University

ANA SABATER, Spanish
B.S., M.S., Universidad Complutense de Madrid; M.S., Universidad Pontificia de Comillas, ICADE, Madrid; M.Ed., Manhattanville College School of Education
COLIN A. SAMUEL, Director of Technology; Advisor, Class X
B.S., Cooper Union; M.S., State University of New York at Buffalo

VALERIE SAMUELS, Assistant to the Dean of Students and Director of Equity and Community Engagement
B.B.A., Baruch College

ARIEL SANABRIA, Room Teacher, Lower School
B.S., Fordham University; M.S.Ed., Hunter College

LUIS GABRIEL SANCHEZ ROSE, Head of the History Department; Homeroom Teacher, Class VIII
B.A., M.A, State University of New York at Albany

KRIS SANTOS, Archivist, Lower School Library Assistant
B.A., Hunter College; M.L.I.S., Long Island University Post

ANN SAUNDERS, Science; Advisor, Class XI
B.S., Yale University; Ph.D., Brown University

LAURIE SEMINARA, Science; Advisor, Class IX
B.S., Barnard College; M.A., Ed.D., Columbia University

SUSAN SEUFEERT, Physical Education
B.A., M.Ed., University of North Carolina, Greensboro

KAITLIN SIMONSON, Music; Advisor, Class VI
B.M.E., Northern Arizona University; M.M., University of Nevada, Las Vegas

IVAN SMITH, Building Night Supervisor
A.A.S., Bronx Community College

LORRE SNYDER, Physical Education; Advisor, Class VII
B.S., State University of New York at Brockport; Graduate Study, Teachers College, Columbia University

RAYSA SOSA, Associate Teacher, Lower School
B.S.Ed., State University of New York at Geneseo

RACHEL HAY SPRADLEY, Director of Events
B.A., University of Texas at Austin; M.A., Southern Methodist University

CLAYTON SQUIRE, Science
A.B., Harvard University; M.A., San Francisco State University; M.A., Teachers College, Columbia University

KASANDRA STARK, Science; Room Teacher, Class VI
B.S., University of Rhode Island; M.A., Brooklyn College

HANNAH STEBBINS ’88, Science
B.A., Trinity College; M.A., University of Montana
KELLY STEIN, Room Teacher, Lower School
B.A., Marist College, M.S.Ed., State University of New York at Oneonta

JENNIFER BUKSBAUM STEWART, Director of Communications
A.B., Harvard College; M.A., M.S., Columbia University

AKIYO SUZUKI, Music
B.A., Musashino Academia Musicae, Tokyo; M.A., New York University; Kodály Certificate, New York University

KATHERINE BARRETT SWETT ’78, English
A.B., Harvard College; M.A., MPhil., Ph.D., Columbia University

YUE TANG, Mandarin
B.A., Beijing Union University; M.A., Point Park University; Coursework at University of Pittsburgh; TCFL, Beijing Language and Culture University

RUNAKO TAYLOR, Classics; Grade Head, Class X
B.A., M.A., Hunter College

SUSANNA CHANG TERRELL, Room Teacher, Class V
B.A., M.Ed., University of California, San Diego

DARA TESSE, Art
B.A., Wellesley College, M.A., New York University, Graduate Study; Bank Street College of Education

ADRIANNE THOMPSON, Network and Information Systems Specialist
B.P.S., DeVry College of New York; M.N.C.M., Keller Graduate School of Management

***RANDI TIMAN, Room Teacher, Lower School
B.A., State University of New York at Binghamton

RAHUL TRIPATHI, Chief Financial Officer and Chief Operating Officer
B.A., Trinity University; M.A., Claremont Graduate School

GABRIELLA TUBOLY, iPad Coordinator
B.S., Teachers Training College, Budapest; Technical Career Institutes

BRYNN TURKISH, Lower School Math Coordinator
B.S., Vanderbilt University; M.A., New York University; M.Ed., Arizona State University

WILLA VAIL, Learning Skills
B.A., University of Chicago; M.S.Ed., Bank Street College of Education

ANDY VERNON-JONES, Art; Advisor, Class XI
B.A., Wesleyan University; M.Ed., City College
LIU VOLPE, ASSOCIATE TEACHER, LOWER SCHOOL
B.A., Davidson College

RENATE VON HUETZ ’72, ENGLISH
B.A., Sarah Lawrence College

ELLA VORENBERG, ROOM TEACHER, CLASS V
B.A., Colorado College; M.Ed., Lesley University

IRIS WILLIAMSON, ENGLISH; ROOM TEACHER, CLASS VI
B.A., M.S.Ed., University of Pennsylvania

SHERRI WOLF, HEAD OF THE ENGLISH DEPARTMENT; ADVISOR, CLASS XI
B.A., Yale College; M.A., M.Phil., Ph.D., Columbia University

JOHN WRIGHT, STUDENT BILLING SPECIALIST
B.B.A., Berkeley College

TOM WRIGHT, HEAD OF THE CLASSICS DEPARTMENT
B.A., Dickinson College; M.A., Ph.D., University of Virginia

NORA YANAI, ROOM TEACHER, LOWER SCHOOL
B.S., Vanderbilt University

CORALIE (COCO) HINES YANG, ASSISTANT HEAD OF THE LOWER SCHOOL
B.A., Connecticut College; M.A., Teachers College, Columbia University

ELIZABETH YOUNGLING, DEVELOPMENT ASSOCIATE; ADVISOR, CLASS IX
B.A., University of Virginia; Graduate Study, University of Oxford

REVA YOUNGSTEIN, FLUTE
B.Mus., Manhattan School of Music; M.Mus., Yale University School of Music; Julius Baker, Ransom Wilson

SIAN ZELBO, MATHEMATICS
B.A., Louisiana State University; J.D., University of Texas; M.A., Ph.D., Teacher’s College, Columbia University

MARIA-ANNA ZIMMERMANN, ASSISTANT HEAD OF SCHOOL FOR STUDENT LIFE; HEAD OF THE LOWER SCHOOL
Juilliard Pre-College; B.A., Barnard College; M.Mus., Manhattan School of Music; M.S.Ed., Bank Street College of Education; Violin: Louise Behrend, Hamao Fujiwara

CORDELIA ZUKERMAN, ENGLISH; ADVISOR, CLASS XII
A.B., Dartmouth College; M.A., Ph.D., University of Michigan
Academic Life

OVERVIEW

At Brearley, students learn to think for themselves and to challenge assumptions. From Kindergarten on, they relish the work of sifting and evaluating the wealth of information available to them, and they rejoice in the life of the mind. Our curriculum is the product of the collective expertise of a highly skilled faculty and is guided by the belief that the best preparation for the demands of the future is based on a strong foundation in the liberal arts disciplines.

Small section sizes ensure that students probe ideas daily—their own, their classmates’ or their teachers’, as well as those of Charles Darwin, Zora Neale Hurston, Mohandas Gandhi or Martha Graham, among others. Teachers balance the intellectual appetite of eager students with developmentally appropriate experiences that they can fully assimilate. We ask students, over time, to take greater control over her program by offering them an increasing choice of courses to teach them lessons in independence and individuality.

Brearley encourages each girl to consider for herself how she best learns. This encouragement begins with the strategies that help students learn to read and write in the Lower School and continues with attention to organization and initiative in the Middle School. In the Upper School, as they begin to tailor their own course programs, students are able to take into account their personal strengths as well as their interests so that they can both continue to increase and exploit the skills they have acquired with growing exuberance.

Teachers are eager to give appropriate help in individual sessions or in small groups. Occasionally, especially in the lower grades, a student may benefit from help provided by learning specialists as a regular part of the school program. The Learning Skills Department works closely with students in all divisions of the School, and every effort is made to identify issues and develop helpful strategies early on. The three Division Leaders and the Dean of Students also attend carefully to the progress of each student, and beginning in Class VI, small groups of students met regularly with an academic advisor.

There are fourteen curricular disciplines: the traditional academic subjects, the arts, Physical Education and the more interdisciplinary Library, Learning Skills, Elementary Education, and Technology. Department Heads, the Head of the Lower School and the Director of Technology oversee the academic program in their respective fields; they are responsible for maintaining standards and for encouraging the development of new curricula. Teachers who share sections of a course meet regularly to discuss, plan and reflect on their work.

The faculty is made up of teachers at all stages of their careers, from talented novices to masters of the art. What draws them to Brearley is the triple inspiration of talented, spirited students; dedicated, thoughtful colleagues; and the high level of intellectual work that all participate in together. With most of the faculty teaching in more than one division of the School, their experience with students at several stages of learning informs thinking about how the curriculum should unfold. A math teacher may well teach linear algebra to older students and fractions to younger, for example, and art teachers regularly teach...
both Class II and Class X. Cross-divisional teaching allows faculty the satisfac-
tion of watching students grow and often leads to lifelong friendships between
students and their former teachers. Academic excellence at Brearley is dynamic:
it grows out of responses to what happens in the classroom and exploration
within departments, and it is further stimulated by a cross-fertilization of ideas
within the larger school community and the world.

School begins after Labor Day in September and ends mid-June. Classes meet
on a six-day rotation that was designed to balance more effectively the student’s
desire to learn with her need for reflection and refreshment. Each rotation has
an assembly period, during which students attend music, dance or dramatic
performances, hear speakers, enjoy demonstrations of student public speaking
skills and, in the Middle and Upper Schools, consider the merits of candidates
running for school offices. Both the Middle and Upper Schools have weekly
gatherings of a more informal sort for announcements and for sharing.

THE CO-CURRICULAR PROGRAM

An integral part of the educational experience, activities provide opportuni-
ties to explore new areas, develop talents and become acquainted with students
in different grades. Girls in the Lower School may choose from among three
optional after-school programs. Clubhouse, in collaboration with the Chapin
School, offers activities like inline skating, cooking and baking, and a variety of
STEAM offerings. On Fridays, girls may stay for a program of play and crafts
or organized sports. A further Extended Day program, ending at 5:45 pm,
includes reading stories, quiet time and indoor/outdoor play. Activities in the
Middle and Upper Schools offer greater opportunities for girls to shape their
own programs. Brearley’s numerous co-curricular activities include Middle and
Upper School branches of the robotics team, coding and maker clubs, orchestra
and chorus, math team, environmental action committee, student publications
(the newspapers, literary magazines and yearbook), drama productions, debate
team and an array of art courses, from photography to bookmaking. In the
Upper School, students may participate in the Model UN and Model Con-
gress programs and affinity groups like Asian Awareness or Umoja. Organiza-
tions like the Athletic Association and the Middle and Upper School Student
Government groups are led by students elected from each grade and advised by
faculty. These organizations offer opportunities for leadership, public speaking
and the planning and execution of events.
The Lower School

The Brearley Lower School cultivates five core values: honesty, kindness, respect, responsibility and courage. Character development, problem-solving, and the expression of ideas, along with the acquisition of skills across a variety of domains, are the primary focus of the Lower School. Full of energy, enthusiasm and curiosity, Brearley’s K–IV students inspire their peers and their teachers to learn and think in interesting and varied ways. The School encourages integrity in its youngest students, as well as an awareness and mindfulness that they exist not only as individuals but as members of a community of eager learners.

There are many opportunities for responsibility and independence in the Lower School. At first, they may act as messengers or visit other classrooms at snack time; later on, as they become more adept at individual decision making, they take on the responsibility of trips to the gym, music rooms or cafeteria on more distant floors, sometimes on their own. While the homeroom is the center of the girls’ academic and social lives, they congregate once during a rotation in assemblies to share songs, plays, and recitations and to welcome guest speakers on topics such as the history of jazz, children’s literature, and science-related topics.

The development of character forms a substantial part of the Lower School curriculum through formal lessons in social and emotional learning as well as during the informal interactions during the school day. Children learn how to express and manage themselves as they explore notions of cooperation, respect and community responsibility. In addition to service projects and the beehive of daily life in every homeroom, studying literature and drama helps students to think beyond themselves. In all Lower School classes, conversations about relationships arise from reading and other activities. With teachers as guides, Lower School students establish the social and academic skills that will support their learning and growth throughout a lifetime of education.

Classes run in forty-minute blocks in a six-day rotating schedule. There is a mid-morning snack, a lunch period and a time for recess. At the beginning and end of each day, a transitional period allows girls to begin and end their kaleidoscopic day with serenity and to take stock as they organize themselves, listen to announcements, or finish up projects begun earlier in the day. While the majority of the girls’ studies take place in the classrooms, teachers take advantage of the rich variety of experiences that New York City, our backyard, provides. The students travel by foot, train, bus, ferry and tram to reach destinations in and among the five boroughs to explore such sights as Ellis Island, Union Square Greenmarket and Wyckoff Farmhouse, or to see a performance at Alvin Ailey Dance Theater.

Families are expected to read aloud with their children daily from Kindergarten on, and girls are expected to read to themselves daily once they have developed the skills to do so. In addition to reading for pleasure, formal homework assignments begin in Class II and the demands increase incrementally as students make their way through the Lower School.
Kindergarten

LANGUAGE ARTS: phonemic awareness, phonics and sight word reading; reading aloud from several genres; listening and reading comprehension through discussion; D’Nealian handwriting; self-expression through creative writing.

MATHEMATICS: sorting and classifying; shapes and solids; nonstandard measurement; number bonds and relationships; addition; subtraction; numbers to 100; time to the hour; recognizing coins.

SOCIAL STUDIES: exploration of identity through self, family, classroom community and school community; the impact of innovators and the introduction and application of Brearley’s core values.

SCIENCE: characteristics of leaves; the biology and ecology of earthworms; the process of composting; study of motion and forces, using marbles; water on Earth; sinking and floating; dissolving and evaporating; day and night.

WORK AND PLAY: time to play, learn, explore and experience; block building, board games, puzzles and self-initiated projects.

RESPECT AND RESPONSIBILITY: character development, social and emotional learning, friendship and resolving conflicts through discussions, team-building activities, art projects and dramatic role-playing.

SERVICE LEARNING: a partnership with All Souls Soup Kitchen.

HEALTH AND WELLNESS: topics include our wonderful bodies, healthy bodies, safe bodies, families and feelings.

LIBRARY: listening to stories; learning how to care for books and how to check out a book; the parts of the library; an exploration of the author and illustrator Jan Thomas.

ART: an exploration of many media through work in two and three dimensions; development of strong fine-motor skills.

CRAFTS: three-dimensional art projects; sewing as a lifelong skill.

MUSIC: learning about high and low, loud and soft, slow and fast, up and down, and beat and rhythm through singing and percussion instruments.

PHYSICAL EDUCATION: exploration of locomotor patterns, movement pathways, kinesthetic awareness and basic sport skills in Physical Education, dance and Funfit classes.
**Class I**

**LANGUAGE ARTS:** small group classes focusing on phonemic awareness, phonics and sight word reading; nonfiction and fiction, plays and poetry for guided reading; listening and reading comprehension; spelling regular and irregular words; D’Nealian handwriting; creative writing.

**CREATIVE WRITING:** emphasis on writing freely from the imagination and from the inspiration of literature; story structure, sequencing of events and character development; elementary editing of grammar and punctuation.

**MATHEMATICS:** number bonds and relationships; place value with numbers to 100; two-digit addition and subtraction; shape attributes; ordinal numbers; nonstandard measurement; introduction to multiplication and division; halves and fourths; time to the nearest half hour; coin combinations.

**SOCIAL STUDIES:** a yearlong study of the five boroughs of New York City with attention to transportation, geography, cultures and landmarks.

**SCIENCE:** comparative study of human and animal teeth; behavior, anatomical structure and ecology of mollusks; states of matter; the solar system; comparison of seeds and germination; bird anatomy, identification.

**MANDARIN:** poems, songs and games designed for a playful introduction to oral communication in a language other than English.

**RESPECT AND RESPONSIBILITY:** continuation of the program begun in Kindergarten.

**SERVICE LEARNING:** partnerships with Citymeals on Wheels, Harlem Grown and God’s Love We Deliver.

**HEALTH AND WELLNESS:** topics include babies and families, the birth of a baby, and celebrations.

**LIBRARY:** listening to stories, wordless picture books, folktales, and collaborative research about transportation.

**ART:** introduction to the tools, techniques, materials and practices of the art studio. Students learn the basic concepts associated with art making through a variety of imagination-based projects, including a sequential journey of a dot as it becomes a line, and travels through space.

**CRAFTS:** continuation of the program begun in Kindergarten.

**MUSIC:** introduction to rhythmic and five-line staff notation; songs sung during the year are collected in a music book that grows through the Lower School years.

**PHYSICAL EDUCATION:** locomotor patterns, functional movement exercises, individual sport skill practice; in dance, a study of Isadora Duncan and a collaboration with Science for dances inspired by nature.
**LANGUAGE ARTS:** small group classes focusing on phonics, fluency and reading multisyllabic words; story structure and nonfiction reading strategies; listening and reading comprehension including inferential and analytical skills; writing sentences and simple paragraphs; spelling patterns in longer words; handwriting.

**CREATIVE WRITING:** emphasis on the stages of the writing process; introduction to free-form poetry.

**MATHEMATICS:** place value with numbers to 1,000; multi-digit addition and subtraction; standard measurement; multiplication and division; adding and subtracting quantities of money; introduction to fractions; time to the nearest minute; picture and bar graphs; shapes and solids.

**SOCIAL STUDIES:** exploration of students’ names and family histories; lifestyle and culture of the Lenape people; the development of New Amsterdam; leaders in the Harlem Renaissance and the influence of jazz, art and poetry as unifying forces in American society.

**SCIENCE:** a study of rocks and geological change; sound and light energy, including stars; structure and function of the eye and ear; mineral identification; behavior, anatomical structure and ecology of snakes; structure and growth requirements of plants.

**MANDARIN:** simple character writing, pinyin reading and basic sentence building; continued exploration of Chinese culture.

**RESPECT AND RESPONSIBILITY:** continuation of the program begun in Kindergarten.

**SERVICE LEARNING:** partnership with New York Common Pantry.

**LIBRARY:** the further building of skills and exploration of reading for pleasure; indigenous authors; collaborative research about changemakers using printed and electronic sources.

**TECHNOLOGY:** introduction to computer graphics, including copying and pasting objects; introduction to the file server, network login, saving and retrieving files; learning how to explore new programs; robotics and basic computer programming.

**ART:** an exploration of visual density through the creation of overlapping shapes. Subject matter varies but emphasizes imagination while learning about the world of art.
MUSIC: expansion of rhythmic and intervallic vocabulary through songs with richer texts and more complicated melodic structure; continued work with the full five-line staff and pentatonic melodies. Each girl who studies an instrument privately has the opportunity to perform in school-sponsored recitals.

PHYSICAL EDUCATION: functional movement exercises and fitness, basic gymnastics routines, sport skill practice with partners and in dynamic games; in dance, a study of Merce Cunningham.
Class III

**LANGUAGE ARTS:** small group classes focusing on advanced phonics concepts, multisyllabic words and fluency; story structure and nonfiction reading strategies; listening and reading comprehension including inferential and analytical skills; the writing of simple and expanded paragraphs; advanced spelling patterns; grammar and punctuation.

**COMPOSITION:** guided writing of a variety of assignments in connection with the social studies curriculum.

**MATHEMATICS:** place value with numbers to 10,000; rounding; multi-digit addition and subtraction, multi-digit multiplication and division; bar graphs and tables; fraction concepts and equivalency; standard measurement; angles and shapes; area and perimeter; elapsed time; adding and subtracting money.

**SOCIAL STUDIES:** an exploration of identity and community; building classroom community; encouraging empathy for a wide range of human behavior; American Women’s Rights and Civil Rights movements: democracy, rights afforded to American citizens, and the injustices and historical context that prompted these movements.

**SCIENCE:** design and construction of bridges using newspaper; chemical and physical properties of common household powders; phases of the moon; investigation of acids, bases and pH; behavior, anatomical structure and ecology of crayfish.

**MANDARIN:** continued practice in character recognition and writing of simple characters; sentence composition; continued exploration of Chinese culture through the celebration of various holidays.

**RESPECT & RESPONSIBILITY:** continuation of the program begun in Kindergarten.

**SERVICE LEARNING:** through classroom discussion, presentations from Coalition for the Homeless and Brearley faculty, girls examine the crisis of homelessness as it relates to young children.

**LIBRARY:** introduction to the library online catalog and Dewey Decimal System; reading aloud of stories or chapter books; pleasure reading.

**TECHNOLOGY:** introduction to touch-typing and digital citizenship; continued exploration of computer graphics and animation; reinforcement of the concepts of saving and retrieving files, copying and pasting objects; learning new applications and robotics and computer programming.

**ART:** projects inspired by different artistic traditions involving preliminary planning and revision as well as spontaneous creative choices.

**CARPENTRY:** development of spatial and mechanical skills through the use of basic tools and practices of a woodshop; building a small functional object.
MUSIC: one period of vocal music and one period of ensemble study per rotation in either a stringed musical instrument or soprano recorder and Orff instruments.

PHYSICAL EDUCATION: Functional movement exercises and fitness, introduction to basic sport concepts and rules, modified game play, gymnastics routines, study of choreography through the work of Anna Sokolow.
ENGLISH: small group classes focusing on reading comprehension, vocabulary development, analytical and creative writing, and spelling; guided reading strategies such as character mapping, self-questioning, note-taking and use of textual evidence to draw conclusions and summarizing; reading novels and poetry, including those which connect to History.

WRITING: small group classes focusing on expository writing, grammar, parts of speech, sentence structure, expanded paragraphs; strategies for planning, writing and editing.

MATHEMATICS: place value with numbers to 1,000,000; rounding and estimation; multi-digit addition and subtraction; multiples and factors; multi-digit multiplication and division; fractions and fraction operations; line graphs and line plots; standard measurement with fractions; area and perimeter; decimals and decimal operations; angles, lines, and shapes; solid shapes and nets.

SOCIAL STUDIES: a yearlong study of immigration and migration in the US; comparison of the major waves of migration from the 1840s to the present day. Topics include Chinese, Irish and German immigration in the 1800s, Angel and Ellis Islands, and The Great Black Migration. Students consider the pushes and pulls of migration, the enrichment of culture through the contributions of migrant communities and issues of social justice.

SCIENCE: factors affecting mold growth; mold structure, uses and prevention; properties of magnets; behavior, anatomical structure and ecology of selected insects; phases of the moon; simple machines and mechanical advantage.

MANDARIN: continued speaking, writing and listening with a focus on consolidation of previously learned materials; students perform a short play in Mandarin.

LIBRARY: further study of the Dewey Decimal System, collaborative research about insects with the Science department; using appeal terms to identify qualities of a book; developing a deeper understanding of personal reading interests.

RESPECT & RESPONSIBILITY: continuation of the program begun in Kindergarten.

HEALTH AND WELLNESS: topics include sexuality and values, images in popular culture, body image and the changes of puberty.

SERVICE LEARNING: partnership with All Souls Soup.

TECHNOLOGY: continued development of touch-typing skills and computer programming; creation of slideshow presentations; digital citizenship.

ART: students rotate through the following three courses, each of which takes place over ten weeks:

MEASURE CUT CODE: creation of designs based on traditional ruler and compass constructions and the translation of these designs into computer programs for 3D printing.
PHOTOSHOP: creation, editing and manipulation of images to produce digital artworks using graphics editing software.

PRINTMAKING: introduction to several printmaking techniques including stencil, paper intaglio and relief.

MUSIC: continued vocal and instrumental study of strings or the alto recorder; English handbells for performance at the Winter and Last Day Assemblies.

PHYSICAL EDUCATION: functional movement exercises and fitness; the application of skill, strategy and sportsmanship in game play; student-developed dance performance.
The Middle School

The Middle School encourages each girl to develop a sense of her strengths as she masters new intellectual, social, emotional and physical skills. Recognizing not only the needs of each student but also the fact that those needs change from year to year, the program includes a progression of growing responsibility and independence. As in Lower School, students in Class V learn English, history and geography under the guidance of a single room teacher, but beginning in Class VI, every subject is taught by a teacher from one of the academic departments. Students assume increasing responsibility for their work through supervised study halls and through “floats,” extra help sessions that a teacher may propose but that students learn to seek for themselves if needed.

Some girls take a language in Class V, either beginning Spanish or French or continuing with Mandarin, while those who would still benefit from reinforcement of their English reading and writing may take a series of skills courses throughout the Middle School instead. In Class VII all students start Latin, and entering students or those who no longer seek additional support may begin French.

Visual arts, music and drama provide an opportunity for students to express their creativity in a variety of modes as well as to appreciate the artistic expression of others. Physical education challenges and nurtures students, whatever their abilities, as they refine their motor skills, learn to work together, and develop a sense of fair play. A no-cut policy for participation on athletic teams further encourages girls to explore and feel comfortable in a variety of sports.

Several important disciplines are taught mostly through integration into other courses. Technology—including word processing, spreadsheets, robotics, programming, presentations and audio resources—is incorporated into the curriculum to support and extend learning, and students in the Middle School have access to Chromebooks for this purpose. In addition, the curriculum of the Library course in V and VI is integrated into the research programs of other subjects including Class V Social Studies and Class VI History. Public speaking projects form part of the curriculum each year in the Middle School, increasing girls’ confidence through the delivery of speeches they have written or memorized, until Class VIII when students participate in a semester-long Public Speaking course. Students in Class VII learn how to collaborate on a larger scale by working with the faculty of Music and Drama on the presentation of a work of musical theater.

The Middle School begins with a homeroom period three times per cycle, a Middle School community morning meeting once per cycle, and two days on which school begins later so that students may have more sleep. During every lunch period, Middle School students also have outdoor recess at Carl Schurz Park or on the Pier. They also have an advisory period once per cycle where, in small groups, they focus on interpersonal skill building and an understanding of identity. A wide variety of activities, including photography, ceramics, chorus, orchestra, robotics and drama, supplement the academic program and reflect student interest from year to year.

The number of homework assignments gradually increases: a student who normally has two, or occasionally three, assignments a night in Class V can expect three, or sometimes four, assignments in Class VIII. A test calendar regulates the number of large assignments that may be due in any given week.

MATHEMATICS: continued development of number sense; computation with positive rational numbers in both fraction and decimal forms; percentage; probability; geometry, including area and perimeter; applications and problem solving.

HISTORY: the early history of the United States up to the Civil War; related work in English; introduction to global geography.

SCIENCE: exploration of electricity, gears and properties of matter; wiring a household circuit; experimenting with different types of gears; exploring physical changes and chemical reactions.

MODERN LANGUAGES

FRENCH: the beginning of a five-year integrated French curriculum with initial emphasis on oral communication through the memorization of poems, dialogues and songs. Basic grammar and the reading of simple stories help to increase oral and written comprehension.

MANDARIN: continuation of the Lower School program; development of writing, listening and speaking skills through dialogue, poems, nursery rhymes, songs and games; exploration of Chinese culture and further work with simplified Chinese characters.

SPANISH: the beginning of a five-year integrated Spanish curriculum with a focus on listening and accurate pronunciation. Students develop their ear for the language while learning vocabulary and basic grammatical structures.

READING AND WRITING PRACTICUM: the first year of a two-year sequence for students who benefit from practice in expository writing; close reading of a variety of genres and texts; reinforcement of study skills such as outlining and note taking.

DRAMA: exploration of the craft of acting through the rehearsal and performance of an adapted play by Shakespeare at an assembly in the spring.

MUSIC: singing, solfège, theory fundamentals and group instrumental instruction. All students in Classes V–VIII have the opportunity to participate in extracurricular choral, jazz and orchestral ensembles, handbells and a recorder consort. Girls who study privately may perform in school-sponsored recitals.

STUDIO ART: students rotate through the following three courses, each of which takes place over ten weeks:

CERAMICS: working in clay, including wedging, handbuilding techniques and glazing, to make a functional object.
PHOTOGRAPHY: introduction to technique and self-expression in photography; creating images with light, working with traditional and non-traditional cameras, and the black and white darkroom.

WOODWORKING: introduction to basic joinery and the proper use of woodworking tools lead to the design and completion of small-scale utilitarian projects.

LIBRARY: development of personal reading taste through stories read aloud; pleasure reading; research skills in connection with student reports.

TECHNOLOGY: final year of touch-typing instruction; transfer of files between home and school, file management, introduction to email and exploration of other software tools.

PHYSICAL EDUCATION: transition from learning motor skills and movement concepts to learning sport-specific skills in increasingly complex game play and performance situations; continued focus on social-emotional learning as students are exposed to the demands of competition and higher expectations for decision making, collaboration and sportsmanship; fitness, dance—salsa, swing and jazz; monthly Red/White competitions.
ENGLISH: folktales from around the world; stories of origins, including selections from Genesis (KJV); the Koran; Indaba, My Children; and Native American stories; Monkey; the Odyssey; analytical and creative exercises; a class play.

MATHEMATICS: review of fundamental operations with whole numbers, fractions and decimals; order of operations; negative numbers; ratios, rates and proportions; percentage, with practical applications; area and perimeter, volume and surface area; introduction to algebraic expressions and equations.

HISTORY: complex ancient societies: Egypt; the development of Judaism from Moses through Solomon; the rise and fall of the Persian Empire; Greek history through Alexander the Great; Indian history through the Mauryan Dynasty; Roman history through Augustus; Chinese history through the Han Dynasty.

SCIENCE: the human body; study of physiological systems with an emphasis on their interdependence and on the relationship between structure and function.

MODERN LANGUAGES

FRENCH: continued acquisition of basic grammar; ongoing practice in oral and written communication; introduction to cultural topics pertinent to France and francophone countries.

MANDARIN: continued emphasis on communication through the use of authentic materials; more extensive classroom activities to develop speaking, reading, listening and writing skills; research projects to strengthen understanding of Chinese culture.

SPANISH: continued emphasis on communication skills and fundamental grammatical concepts; introduction to cultural topics pertinent to Spanish-speaking countries.

READING AND WRITING PRACTICUM: the second part of a two-year sequence (see Class V); further practice in writing paragraphs, essays and creative pieces; researching and delivering an oral report; analyzing and reading complex texts.

DRAMA: each English section presents a play in collaboration with the Drama Department.

MUSIC: continuation of program begun in Class V.

STUDIO ART: continued work on the basic skills of visual expression through projects relating to the mythology of the ancient and non-Western world.

LIBRARY: genre study including biographies, poetry and nonfiction titles; research skills integrated with history classes for a presentation on ancient cities; instruction on and practice of media literacy skills through picture books.
**LANGUAGE:** studies in grammar and composition; public speaking; nature of language; introduction to philology through etymology and the relationship of English to other Indo-European languages.

**TECHNOLOGY:** an introduction to block coding and an intensive look at cybersafety and digital civics.

**PHYSICAL EDUCATION:** see Class V.
ENGLISH: poetry; grammar; *Great Expectations*; *A Raisin in the Sun*; formal introduction to poetic terms; critical and creative writing.

MATHEMATICS

**VII MATH:** review of order of operations; solving equations, solving applications with equations; geometry topics including parallel lines, polygons, area, volume and surface area; set theory and inequalities; combinatorics and probability; equations and graphs of lines; computer programming; guided problem solving throughout the year to reinforce and deepen conceptual understanding.

**VII MATH EXTENDED:** review of order of operations; equations with applications; geometry topics; set theory and inequalities; combinatorics and probability; graphs of linear equations and inequalities; systems of linear equations and inequalities; introduction to exponents, polynomial operations and factoring; computer programming with processing; graphing utilities used as needed; integrated challenges and active problem solving throughout the year to reinforce and deepen conceptual understanding.

HISTORY: world history from 200 through 1500 C.E., including the origins of Christianity and the fall of the Roman Empire; the Byzantine Empire; the rise and spread of Islam in Asia to India and to sub-Saharan Africa on the Swahili Coast and in the Mali Empire; Hinduism and the spread of Buddhism to China; the Chinese Empire from Han to early Ming; China’s impact on Japan; the impacts of the Mongol conquests on Eurasia; the emergence of Europe from feudalism through the Renaissance.

SCIENCE: the first year of a two-year program on matter, energy and the atmosphere. Topics include the law of conservation of matter and energy; density; heat; wave energy; weather and climate change; Newton’s laws of motion.

MODERN LANGUAGES

**BEGINNING FRENCH:** introduction through oral and written exercises; skits and poems, using elementary grammar and vocabulary.

**FRENCH:** for those continuing from Class V, further development of oral and grammatical skills through discussion, storytelling, reading, skits and oral presentations.

**MANDARIN:** further development of listening, speaking, reading and writing; reinforcement of character writing and typing skills; reading of simplified stories; regular journal entries; oral presentations and multimedia projects.

**SPANISH:** further development of listening, speaking, reading and writing, continued study of grammar; introduction to reading comprehension.

**WRITING WORKSHOP:** for students who do not study a modern language and who benefit from further practice in the analysis of fiction and nonfiction texts, expository writing, and the research process.
LATIN: introduction to the language and culture through reading about daily life in a first-century Roman family combined with practice in declensions, conjugations and elementary grammar using the Suburani Latin program.

MUSIC, DRAMA: Music and Drama collaborate to produce a work of musical theater in the spring term; the class also attends a dress rehearsal at the Metropolitan Opera. The study of music continues as it began in Class V, with the addition of percussion to the offerings in instrumental music.

STUDIO ART: exploration of the elements of design, focusing on complex pattern development inspired by diverse historic examples. One museum study assignment is required.

PUBLIC SPEAKING: lessons on practical application of public speaking skills, including interview etiquette; storytelling without filler language; introducing and greeting with confidence.

PHYSICAL EDUCATION: see Class V.

HEALTH: lessons on drugs, nutrition, human sexuality, safety and peer pressure are integrated into the Middle School advisory program, following guidelines established by New York State for health education.
ENGLISH: short stories; grammar; *Maud Martha*; poetry; *Twelfth Night*; formal introduction to narrative structure; critical and creative writing.

MATHEMATICS

**ALGEBRA I:** development of problem-solving skills and conceptual understanding of algebra; review of equations, inequalities and applications; polynomial and rational expressions; radicals; solutions of linear, quadratic and rational equations; quadratic functions and models; computer programming with Arduino boards; graphing utilities used as needed; guided problem solving throughout the year to reinforce and deepen conceptual understanding.

**ALGEBRA I EXTENDED:** development of problem-solving skills and conceptual understanding of algebra; review of equations, inequalities and applications; polynomial and rational expressions; radicals; functions; solutions of linear, quadratic, rational and radical equations; quadratic models; geometry topics including coordinate geometry, algebraic proofs, constructions and locus; computer programming with Arduino boards; graphing utilities used as needed; integrated challenges and active problem solving throughout the year to reinforce and deepen conceptual understanding.

HISTORY: global history from 1500 to the late nineteenth century. Topics focus on the emergence of globalization including the European conquest of the Americas; the Ottoman and Mughal Empires; Ming and Qing China; Tokugawa Japan; the American, French, Haitian and Latin American Revolutions; the Industrial Revolution; nineteenth-century European imperialism; and the Meiji Restoration in Japan.

SCIENCE: the second year of a two-year physical science program on matter, energy and the earth. Topics include an introduction to concepts of chemistry and geology and study of the conservation and sustainable use of the Earth’s resources.

MODERN LANGUAGES

**BEGINNING FRENCH:** for students who began in Class VII, development of listening, speaking, reading and writing through class conversations, skits, student-created videos, the reading of French texts and poetry, the study of grammar and the writing of narrative paragraphs using the past, present and future tenses.

**FRENCH:** for students who began in Class V, emphasis on advanced grammar skills through class conversations; written compositions; the reading of an extended narrative; the viewing of selected scenes of films.

**MANDARIN:** continued development of skills through supplementary audio and video materials that present students with real-life situations and exercise their ability to listen and speak; further practice in character writing and enrichment of vocabulary; exploration of Chinese culture.
SPANISH: continued development of listening, speaking, reading and writing; expansion of vocabulary and knowledge of syntax; emphasis on the use of past tenses in narrative; introduction of the subjunctive; the reading of a short novel.

WRITING WORKSHOP: the second part of a two-year sequence (see Class VII); further practice in the analysis of texts; expository and creative writing.

LATIN: continuing study of vocabulary and syntax, with attention to uses of the participle and subjunctive in subordinate clauses, in the Cambridge Latin program.

MUSIC: see Class V.

STUDIO ART: drawing and color work based on direct observation of the natural world. Techniques include drawing, collage and mixed media. One museum study assignment is required.

PUBLIC SPEAKING: introduction to formal and extemporaneous skills of presentation and exchange, with applications in several disciplines throughout the year.

PHYSICAL EDUCATION: a continuation of the program begun in Class V, with the addition of one trimester of West African dance and spring electives designed by the students.

HEALTH: discussion of health-related topics through the Middle School advisory program. Articles from periodicals serve as background, and students are encouraged to bring their questions to the groups. Topics include nutrition, body image, healthy diet, decision making, relationships with parents and peers, human sexuality and substance abuse. This course fulfills the New York State requirement for health education.
The Upper School

The Upper School represents the final stage in a program that develops a student's confidence in herself and her growing skills in a number of disciplines. Its rich and rigorous academic, athletic and artistic curriculum, centered in a strong community that supports students in their self-discovery, produces resourceful young women who are prepared to find their places in the world outside of Brearley.

As they learn to make academic choices, students may take advantage of conversations with a wide range of adults who help them assess their interests and talents and encourage them to take appropriate risks. Most students in Classes XI and XII take five or five and a half courses. All students fulfill basic requirements:

1. English through Class XII.
2. Mathematics through Class XI.
3. Biology plus two additional years of science, one of which must be a full laboratory course.
4. Four-credit sequence in one foreign language, or three credits in one language plus two credits in a second language (a language begun in the Middle School receives two points of credit if continued through the end of Class IX).
5. Twentieth-Century World History, US History and one history elective with a research component.
6. Studio Art, Drama or Music in Classes IX and X. There is no prerequisite in either year.
7. Physical Education through Class XII, including CPR/First Aid; Health in Class IX.
8. Community Service in Classes IX–XI.
9. Sophomore, Junior and Senior Seminar.

Students have many opportunities to pursue their interests beyond the curriculum. The School offers arts activities—photography, sculpture, ceramics, dramatic productions, orchestra and chorus, for example—in addition to the regular courses, as well as writing and publishing opportunities. Students in the Upper School may be admitted to Brearley’s Advanced Science Research Seminar or Poetry Workshop; they may also participate in clubs that focus on model government, robotics, debate, and many other topics; they may join Interschool advanced math courses as juniors or seniors. Students may join affinity groups that celebrate and support aspects of their identity. The community service program, which is a requirement in Classes IX–XI, is founded on the premise that community service is a personal habit and works best when students are guided in their exploration of possible commitments. In Class IX, students participate as a group in a Saturday soup kitchen program and also research and engage in volunteer opportunities. In Classes X and XI,
students are required to make a long-standing commitment to a specific cause, activity or organization. Upper Schoolers may also work through school groups like the Brearley Service Committee, assist in Lower School classrooms or tutor children elsewhere. Additionally, the Upper School participates in a service day with the Collegiate School every year. Classes are suspended so that each grade can work together on a project in the community, ranging from planting trees on Randall’s Island to volunteering at the New York Public Library.

Seniors who have exhausted the offerings in a particular discipline are eligible to apply for an independent study program. Acceptance depends on a student’s capacity for extended work on her own, the availability of an appropriate teacher and the nature of the proposed study. In the spring of senior year, students petition to create their own program, which may include dropping academic courses to sample new topics in mini-courses taught by faculty or to concentrate on one particular subject through individual independent study. A senior may also pursue an extracurricular project or internship that worthily replaces some or all of her academic work.

Each year, a few members of Class XI spend a semester in New England, either in the Mountain School program of Milton Academy in Vershire, Vermont, or in the Maine Coast program of the Chewonki Foundation in Wiscasset. Juniors may also study in France, Spain, Italy or China under the auspices of School Year Abroad. Brearley offers language immersion programs in French, Mandarin or Spanish to students in selected grades and alternating years. Students entering Classes X, XI and XII may apply to join a June travel/study program in Vermont, India or Alabama.

In the Upper School, students assume increased responsibility for themselves and others. Heads of student organizations participate in leadership training sessions and learn to guide the younger students who will eventually succeed them. Students learn to lead in other arenas, as athletic team captains or stage managers of the drama productions, for example. The major school publications are run by members of Classes XI and XII and are staffed by members of all the classes.

The Upper School follows a six-day rotating schedule; each day includes five teaching periods and a morning community time for advisory, club meetings or assembly, depending on the day; a break later in the day provides each student with time for lunch and time to meet with teachers or relax with friends. Each course meets four times in a six-day cycle, and the schedule varies so that classes meet at different times each day and no two days are the same. In addition to the thirty minutes each day at lunch time, most students will have at least one fifty-minute period free each cycle.

The number of assignments a student takes home each night varies according to her individual program, but the average time assigned each day for work outside of class is designed to increase gradually from approximately two and a half hours in Class IX to three hours in Classes XI and XII.
Class IX

(Courses are full credit, lasting a full year, unless otherwise noted.)

**ENGLISH:** personal essays; grammar; sonnets; *The Tempest; Pride and Prejudice; Their Eyes Were Watching God*; practice in close reading and analytical writing; creative assignments.

**MATHEMATICS**

**GEOMETRY:** an intuitive and analytical approach to the mathematics of shapes and space. The properties of triangles, quadrilaterals, polygons and circles are studied through the use of logic and deductive proofs. Algebraic problem-solving skills are reinforced throughout.

**GEOMETRY WITH EXTENDED EXPLORATIONS:** an investigation into geometric concepts through a more abstract lens. The course will explore the properties of triangles, polygons and circles from first principles through the use of logic and deductive proofs, geometry of motion and algebra of transformations, and will provide an introduction to Algebra II through mappings and functions. Computer software (Geometer’s Sketchpad) will be used to extend and explore concepts.

**TWENTIETH-CENTURY WORLD HISTORY:** global history from the late nineteenth century to the present, with a strong emphasis on reading, interpreting and contextualizing primary sources.

**BIOLOGY:** study of life processes, with emphasis on cell biology, DNA, biotechnology, genetics, evolution, plant reproduction and animal physiology. The course culminates with a field trip to investigate the ecology of an intertidal zone.

**MODERN LANGUAGES**

**FRENCH II COMPREHENSIVE:** for those who began in Class VII, a consolidation of the student’s knowledge of syntax and the beginning of the study of literature.

**FRENCH II:** for those who began in Class V, a consolidation of grammar, expansion of vocabulary, and continuation of the study of short literary works and the skills of textual analysis.

**MANDARIN II:** for those who began in Class V, continued study of listening, speaking, reading and writing with emphasis on formal grammatical structures; exploration of Chinese culture through project-based learning and trips to local Chinese communities.

**COMPREHENSIVE SPANISH I:** an introduction to the language, emphasizing listening and speaking, vocabulary acquisition and grammar, as well as the culture and customs of Spanish-speaking countries.

**SPANISH II:** for those who began in Class V, a thorough review of grammar and introduction of advanced structures, and the reading of adapted versions of classical literature such as *Don Quijote de la Mancha* as well as selections from the fiction, poetry and film of Latin American and Spanish authors; extension of oral proficiency through presentations on cultural and historical topics.
LATIN II: completion of the introduction to basic vocabulary and syntax using the Cambridge Latin program, followed by stories from the Fabulae Faciles collection and excerpts adapted from Roman authors.

DRAM (half credit; throughout the year): introduction to the art of playmaking in all of its aspects, from the actor’s approach to the script to the creation of scenery, props and costumes. Particular attention is paid to vocal projection, physical poise and strengthened concentration. Students rehearse and perform a full-length play during the second semester.

MUSIC (half credit; throughout the year):

  VOCAL TECHNIQUE AND LITERATURE: fundamentals of vocal technique and introduction to the solo song literature, ending with a performance. Participation in the Upper School Chorus is required (open also to X–XII).

  CHAMBER MUSIC/ORCHESTRA: study of standard chamber repertoire in small groups, ending with a performance. Participation in the Upper School Orchestra is required (open also to X–XII).

  INSTRUMENTAL TECHNIQUES: exploration of technique in a small group setting of like instruments. This course extends the work accomplished in Middle School instrumental classes and supports the repertoire played in the Upper School Orchestra. Each semester ends with a performance. Participation in the Upper School Orchestra is required (open also to X–XII).

STUDIO ART (half credit; throughout the year): fundamentals of oil painting, color, collage and composition taught through direct observation and imaginative invention of still life. Participation in conceptual and historically based discussions, group critique and one museum study assignment are required.

PHYSICAL EDUCATION: emphasis on lifelong fitness and exercise. Offerings vary by trimester, including courses on fitness, dance, sports, special programming and mindfulness. Students are required to complete one semester of Health in Class IX and to become certified in First Aid/CPR before graduation. This course, offered to Classes XI and XII, follows the American Heart Association training course for first responders.

HEALTH: integrates the five core competencies of social and emotional intelligence into a solid health education. Curriculum covers mindfulness, values clarification, relationships, human sexuality, media literacy, drug and alcohol education. Classes are designed to promote small group discussion and culminate in a project in which students design public service announcements on topics of their choice.

CO-CURRICULAR

  ACTIVITIES: see page 19.

  COMMUNITY SERVICE (required of all students in Class IX): see page 38.
ENGLISH: American literature, novels, novellas, essays, autobiographies and poems from the Puritans through the moderns. Authors include Wheatley, Franklin, Douglass, Zitkala-Sa, Hawthorne, Melville, Cather, Baldwin and Morrison.

MATHEMATICS

ALGEBRA II: study of mathematical relations, functions and transformations; specific topics include polynomial and rational functions, trigonometric functions, exponential and logarithmic functions, and the complex number system. The TI 84 graphing calculator is used as a tool for extension, exploration and solution.

ALGEBRA II WITH EXTENDED EXPLORATIONS: in-depth study of mathematical relations, functions and transformations; specific topics include polynomial and rational functions, trigonometric functions, exponential and logarithmic functions, and the complex number system. The TI-84 graphing calculator is used as a tool for extension, exploration and solution.

ALGEBRA II AND PRECALCULUS: an in-depth study of Algebra II and Precalculus; specific topics include polynomial functions, rational functions, trigonometric functions, exponential and logarithmic functions, sequences and series, vectors, parametric equations, polar coordinates and graphs. An introduction to the study of Calculus will include the topics of limits, continuity and derivatives. This course prepares students for Advanced Calculus and may be taken with the permission of the Math Department.

UNITED STATES HISTORY: an introduction to the political, economic, social and cultural issues of the society in which the students live, within an historical framework to explain how they came about. It balances the achievements and promises of the nation with its failures and challenges. Students read the US Constitution over the summer and start the fall with the years of the 21st century before going back to the beginnings of European colonization and a chronological overview that provides students the background they need to understand the present. It uses a textbook, extensive primary sources and group work, with focuses on media analysis, historiography and independent research projects. In the spring the class visits public servants in Washington, DC, to gain more understanding of how our government works.

CHEMISTRY: an investigation into the nature of matter and chemical change. Topics include electron configuration, bonding, gas behavior, the concept of moles, stoichiometry, redox reactions, thermochemistry and acid-base chemistry. Whenever possible, the course explores the chemistry of environmental issues, and the year culminates with an independent research project (open also to XI and XII).

MODERN LANGUAGES

FRENCH III COMPREHENSIVE: for students who began in Class VII, emphasis on speaking, reading and writing through the study of increasingly advanced vocabulary and grammar; the examination of French society and culture, and the reading of literary and expository texts.

FRENCH III: the expansion and refinement of speaking, writing and reading skills through the continuing study of grammar and the in-depth analysis and discussion of current events and literary works.
MANDARIN III: for students who began in Class V, continued study of increasingly advanced syntax and vocabulary, with discussion of a broader range of issues in Chinese society, history and culture.

COMPREHENSIVE SPANISH II: for students who began in Class IX, a continuation of the study of syntax and vocabulary. A variety of media resources are used to enhance not only the student's reading, writing, listening and speaking skills, but also her cultural understanding of the Hispanic world.

SPANISH III: for students who began in Class V, strengthening of communication skills and cultural competency in Spanish through the study of literary texts and films from Latin America and Spain; emphasis on textual analysis, cultural understanding and analytical writing.

LATIN III: in the fall, readings from either Caesar's De Bello Gallico or Cicero's In Catilinam; in the spring, selections from Books I, II and IV of Virgil's Aeneid.

DRAMA (half credit; throughout the year): the actor's art is the particular focus of the course: script analysis, developing a character, the actor as an interpreter of the playwright's story. Students rehearse and perform a full-length play during the second semester.

MUSIC (half credit; throughout the year): see Class IX.

STUDIO ART (half credit; throughout the year): practice in refined observational drawing and mixed medium. One museum study assignment is required.

PHYSICAL EDUCATION: see Class IX.

CO-CURRICULAR ACTIVITIES: see page 19.

ADVANCED SCIENCE RESEARCH SEMINAR: a three-year sequence; reading and discussion of peer-reviewed scientific articles with their authors who visit Brearley from various New York City research institutions; laboratory experiments that may include RNA interference, Polymerase Chain Reaction and DNA barcoding. The program accepts five to seven students from Class IX at the end of each year to comprise a group of fifteen to twenty-one students. Not for credit.

COMMUNITY SERVICE (required of all students in Class X): see page 38.

POETRY WORKSHOP: conducted as a workshop, this yearlong course focuses on student work and offers a rigorous apprenticeship to the art of poetry writing. Students learn to write about what they know (e.g., family, grief, place) as a metaphor for the broader human experience. Over the course of the year, they develop their skills in using imagery, figurative language, lineation, repetition, meter, rhyme and syntax. In addition to completing writing assignments, students are expected to read modern poetry and other relevant literature to deepen their understanding of their practice. Not for credit.

SOPHOMORE SEMINAR: a yearlong class in health education, service leadership development and public speaking (required of all students in Class X).
ENGLISH: fall elective in poetic analysis (for example, readings in Eliot, Hughes and Moore, or in Brooks, Lorde, Clifton and Nelson, or in Fu, Dickinson, Walcott and Ali); a required trimester on drama, including *King Lear*; and a spring elective on narrative works (for example, readings in Levi, Otsuka and Coates, or in Joyce, Ferrante and Nunez, or in Milton, or in Mistry and Lahiri).

MATHEMATICS

**PRECALCULUS AND AN INTRODUCTION TO DIFFERENTIAL CALCULUS:** extended study of functions and trigonometry begun in Class X. Additional topics may include vectors, conic sections, parametric equations, polar coordinates, probability and statistics, and sequences and series. Calculus topics include limits and derivatives. This course prepares students for the study of AB Calculus.

**PRECALCULUS EXTENDED AND DIFFERENTIAL CALCULUS:** extended study of functions and trigonometry begun in Class X, as well as vectors, conic sections, parametric equations, polar coordinates and graphs, probability and statistics, and sequences and series. Calculus topics include limits, derivatives and applications of derivatives. This course prepares students for the study of BC Calculus.

**ADVANCED CALCULUS:** differential and integral calculus of functions of one variable with applications; power series. Students wishing to take the College Board AP BC Calculus exam will find that this course provides suitable preparation.

**STATISTICS AND STATISTICAL MODELING:** introduction to the practice of statistics. Topics include organization of data; probability and random variables; and drawing inferences from data. Computers and calculators are used extensively.

**INTERSCHOOL GAME THEORY** (half credit; throughout the year): theoretical analysis of game theory taught through applications in economics, politics, business, evolutionary biology, religion, philosophy, computer science and sports, as well as through games such as poker and chess. Quantitative models are developed for strategic situations, and analysis includes optimization and graphical analysis. This course is offered through the Interschool consortium.

**INTERSCHOOL NUMBER THEORY** (half credit; throughout the year): The study of number theory delves into the foundations of mathematics to understand the integers, their properties and the application of these ideas to other areas of mathematics. Topics may include infinity of primes, the Fundamental Theorem of Arithmetic, the Euclidean algorithm, the Greek notion of incommensurable lengths, alternate number systems and their properties, repeating decimals and their connection to infinite series, modular arithmetic, and notions of infinity that arise from counting the integers. This course is offered through the Interschool consortium.
**INTERSCHOOL PROBLEM SOLVING** (half credit; throughout the year): A collaborative exploration of problem-solving skills and strategies including topics from combinatorics, number theory, advanced algebra, geometry, probability and graph theory. Problems studied include examples from past AIME and US Math Olympiad competitions. This course is offered through the Interschool consortium.

**HISTORY**

[The following list of electives is representative; some may not be offered in 2021–2022.]

**HISTORY OF CHINA, KOREA AND JAPAN:** a survey of the history of the region, starting with the history of the 20th and 21st centuries in China and including China’s world role, then looking back chronologically at political, social and cultural developments in China, Korea and Japan, and culminating in consideration of the disparate Chinese, Korean and Japanese responses to European incursions in the modern period, the legacies of World War II and the division of Korea, and the position of Korea and Japan in the world today.

**MODERN EUROPEAN HISTORY:** a survey of European history from the Renaissance to the present, with particular attention to nationalism and other sources of identity (open also to XII).

**MODERN LATIN AMERICA:** an introduction to issues and themes in the history of Latin America since 1800 in which students explore political, economic, social and cultural developments that characterize the region as a whole, while keeping in mind the considerable variation among the countries of which it consists (open also to XII).

**HISTORY OF WARFARE:** a survey of the history of war from the gunpowder revolution of the 15th century to the present. Students will examine the development of modern armies, military technology and insurgency warfare (open also to XII).

**MODERNISM IN ART:** a study of significant developments in art beginning with the French Revolution up until the present (open also to XII).

**LAW, ECONOMICS AND PUBLIC POLICY:** an introduction to the history and structures of American civil and criminal law, with a focus on the ways that law and economic thinking structure foreign and domestic policies (open also to XII).

**THE UNITED STATES POST-1945:** a seminar-style research intensive course in which students evaluate historical events and ideas from 1945 on using advanced research methods to examine the relationship between the recent past and the present.

**URBAN HISTORY:** an exploration of different ways of studying and analyzing urban environments locally and globally, using New York City as an initial case study, then moving to an exploration of the urban world outside the US and concluding with a consideration of mid-twentieth century ideas of urban planning and examples of utopian cities (open also to XII).
WORLD ART: a survey of world art from prehistoric through the contemporary period. Formal, contextual and methodological problems in art history are explored in a wide range of cultures. Regular visits to local museums are part of the course (open also to XII).

MODERN AFRICA: an exploration of twentieth-century African history, giving special attention to political, military and religious history (open also to XII).

SCIENCE

ADVANCED BIOLOGY: investigation of biological processes where major life innovations are placed in chronological and evolutionary context. Topics include ecology, gene regulation, cancer, bioethics, immunology; laboratory investigations include polymerase chain reaction and a fetal pig dissection; statistical analysis of data is stressed. Students create an in-depth research proposal in a field of their choice. Prerequisites: Biology and Chemistry (open also to XII).

ADVANCED CHEMISTRY: a deeper exploration of equilibrium, acids and bases, and electrochemistry introduced in Chemistry as well as new topics such as kinetics, thermodynamics, redox titrations, molecular architecture and orbital hybridization. Prerequisites: Biology and Chemistry (open also to XII).

CHEMISTRY: see Class X.

PHYSICS: the investigation of the nature of forces and energy and their interactions with matter. Topics include mechanical, thermal, wave, electromagnetic and nuclear energy (open also to XII).

ENVIRONMENTAL SUSTAINABILITY (full-year non-lab course): exploration of the role of science, economics and government policy in developing an environmentally sustainable world. Topics include human population growth, energy production, climate change, freshwater resources, agriculture, fisheries, waste management and biodiversity (open also to XII).

MODERN LANGUAGES

FRENCH IV: a consideration of classic and contemporary French literature and culture with an emphasis on speaking and writing. Students learn contemporary idioms, review grammar, and read and interpret texts from a variety of sources.

FRENCH IV COMPREHENSIVE: greater independence in the use of the language through the study of complex grammatical structures and extension of vocabulary; analysis of cultural and linguistic materials; discussion and debate.

MANDARIN IV: extensive reading of essays, stories, and newspaper and magazine articles; discussion of current events; analytical and creative writing; exploration of contemporary culture through television and other media.

COMPREHENSIVE SPANISH III: for students who began in Class IX, continued study of grammar and, in particular, of advanced structures; readings from short stories, novels and adapted versions of literary masterpieces.
SPANISH IV: for students who began in Class V, continued formal study of selected short stories, poetry and nonfiction about the history of Spain and Latin America; reinforcement of grammar usage and literary analysis reinforced through writing assignments and oral communication activities.

CLASSICS

LATIN IV: selections from Ovid’s *Metamorphoses*, *Ars Amatoria* and *Heroides*, and from the poems of Catullus.

GREEK I (half credit; throughout the year): introduction to Attic Greek. Topics include the principles of word formation and syntax, Aesop’s fables and the life of Alexander the Great (open also to XII).

ART

STUDIO ART (half credit; throughout the year): advanced work in the studio with in-depth exploration of various drawing and painting media. One museum study assignment is required.

ART INTENSIVE (half credit; fall or spring semester): for curious and committed students, an opportunity to explore the visual arts and self-expression through a range of traditional and contemporary media, including painting, drawing, printmaking and simple bookmaking. Thought-provoking and interpretive concepts will be examined in a relaxed, inclusive studio setting focusing on student-driven projects.

DRAWING (half credit; fall or spring semester): drawing as a way of thinking; an expansion of the student’s visual literacy and technique through intensive exposure and observation-based exercises. Fundamental concepts from earlier years are again brought to bear. Class critiques and one museum study assignment is required.

DRAMA

PLAYWRITING (half credit; spring semester): introduction to the art and craft of playwriting. Students write and edit their own short plays; at the end of the semester there is a lightly staged presentation to the public using student actors.

MUSIC: see Class IX.

TECHNOLOGY

INTRODUCTION TO COMPUTER SCIENCE (half credit): introduction to the concepts of computer science utilizing the Python programming language. Topics include recursion, computer security, algorithm complexity and game programming.
PHYSICAL EDUCATION: see Class IX.

CO-CURRICULAR ACTIVITIES see page 19.

COMMUNITY SERVICE (required of all students in Class XI): see page 38.

   JUNIOR SEMINAR (required of all students in Class XI):
   a yearlong class that encompasses health education, life
   skills, college advising and the transition to college.

   POETRY WORKSHOP: see Class X.

SCIENCE RESEARCH SEMINAR: see Class X.
ENGLISH: required unit of essays; electives from late fall through the winter term (for example, readings in Russian literature, in the genre of magic realism, or from the authors Virginia Woolf and James Baldwin); electives in the spring term determined by interests of students (in recent years, primarily individual projects in fiction, drama or writing).

MATHEMATICS

FUNDAMENTALS OF CALCULUS: concepts, techniques and applications of differential and integral calculus paced to allow both depth and exploration.

CALCULUS: differential and integral calculus of functions of one variable with applications. Students wishing to take the College Board AP AB Calculus exam will find that this course provides suitable preparation.

ADVANCED CALCULUS: see Class XI.

LINEAR ALGEBRA: vectors, linear transformations, general vector spaces and the algebra of matrices.

STATISTICS AND STATISTICAL MODELING: see Class XI.

INTERSCHOOL GAME THEORY: see Class XI.

INTERSCHOOL NUMBER THEORY: see Class XI.

INTERSCHOOL PROBLEM SOLVING: see Class XI.

HISTORY: see Class XI.

SCIENCE

ADVANCED BIOLOGY: see Class XI.

ADVANCED CHEMISTRY: see Class XI.

ADVANCED PHYSICS: an extended study, based on calculus, of relationships between forces, matter and energy. Selected topics include kinematics and dynamics, rotational mechanics, electrostatics, circuits, and nuclear and particle physics. Prerequisite: Physics.

CHEMISTRY: see Class X.

PHYSICS: see Class XI.

ENVIRONMENTAL SUSTAINABILITY: see Class XI.

MODERN LANGUAGES

FRENCH V: culmination of the study of classic and contemporary French literature and culture; exploration of French, francophone and global cultural and societal issues through discussion and textual analysis; conversation and thoughtful debate inspired by various media sources and classic and contemporary texts.
FRENCH V COMPREHENSIVE: consolidation of proficiency in reading, writing, speaking and listening; deeper understanding of French literature, language and culture.

MANDARIN V: culmination of the study of Mandarin through reading, writing and discussion; investigation of popular culture; reinforcement of advanced grammar and vocabulary through creative expression and critical analysis.

COMPREHENSIVE SPANISH IV: completion of the course of study begun in Class IX; discussion and written analysis of literary and cultural topics; reinforcement of the four skills.

SPANISH V: completion of the course of study begun in Class V; culmination of the study of literature from various Hispanic countries; investigation of art, film and nonfiction to enhance cultural understanding; reinforcement of advanced grammar and literary analysis through analytical writing and activities in oral communication.

CLASSICS

LATIN V: the study of a particular author or genre; for example, the speeches or letters of Cicero, the comedies of Plautus, Horace’s *Odes* or selections from the Roman historians.

GREEK I: see Class XI.

GREEK II (half credit; throughout the year): continuation of the study of Attic Greek. Students read adapted versions of the *Apology*, the *Clouds* and the histories of Herodotus.

ART

STUDIO ART: see Class XI.

ART INTENSIVE: see Class XI.

DRAWING: see Class XI.

DRAMA

ACTING AND DRAMATIC LITERATURE (half credit; throughout the year): this course combines the study of major plays, predominantly modern, with the opportunity to perform in an intensive scene workshop. Playwrights in the syllabus include Williams, Miller, Ibsen, Wilson, Treadwell, Hansberry and Kushner. The class meets at least two evenings in the semester to attend professional theater productions.

MUSIC: see Class IX.

TECHNOLOGY

INTRODUCTION TO COMPUTER SCIENCE (half credit): see Class XI.
**ADVANCED COMPUTER SCIENCE:** students learn to write, test and debug efficient programs using multiple classes and interacting objects. The focus is on object-oriented programming using Java, although students will be exposed to a variety of languages. Students who take this course will be prepared for the AP Computer Science A exam.

**PHYSICAL EDUCATION:** see Class IX.

**CO-CURRICULAR ACTIVITIES:** see page 19.

**ADVANCED SCIENCE RESEARCH SEMINAR:** see Class X.

**POETRY WORKSHOP:** see Class X.

**SENIOR SEMINAR** (required of all students in Class XII): a yearlong class that encompasses health education, life skills, college advising and the transition to college.
The search for an application to college provides students with many opportunities to exercise their decision-making skills, independence and self-knowledge. The College Advisors offer a comprehensive advising program that begins formally in the fall of Class XI, although they will offer information and counsel to students in Class X on such topics as college entrance examinations. While the College Advisors oversee the entire college application process, it is essential that each girl feels confident in and responsible for making choices that suit her academic and personal goals. Students meet in seminars with the Advisors throughout Class XI and through the fall and winter of the senior year. A student in Class XI begins to meet individually with the Advisors during the winter for a series of conversations that eventually includes her parents. The process is a very personal one, in which the Advisors come to know each girl quite well and are thereby able to serve as her partner throughout the process.

The College Advisors program a series of events to educate families about college, and meet frequently and correspond regularly with students and their parents. All of these exchanges depend on honest and open communication. Families are also invited to attend college-related events, including a college fair and financial aid event, sponsored in conjunction with other Interschool institutions. During the autumn of each year, over eighty college representatives visit Brearley to meet with students in Class XII who may be interested in their college or university. The College Advisors, as the School’s representatives to colleges, write a lengthy letter of recommendation for each student, drawing upon their knowledge of the individual girl; the recommendation is supplemented by substantial commentary from teachers and advisors and is endorsed by the Head of School. The College Advisors are available as counselors and editors as the students complete their applications, and they remain a source of information and guidance until a student has made the decision about which college she will attend. While the primary relationship is forged with the student, the College Advisors serve as a resource for parents as they, too, navigate the college application process.
<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amherst College</td>
<td>3</td>
<td>Oberlin College</td>
<td>2</td>
</tr>
<tr>
<td>Bard College</td>
<td>1</td>
<td>Occidental College</td>
<td>2</td>
</tr>
<tr>
<td>Barnard College</td>
<td>4</td>
<td>Pomona College</td>
<td>1</td>
</tr>
<tr>
<td>Bates College</td>
<td>3</td>
<td>Princeton University</td>
<td>11</td>
</tr>
<tr>
<td>Boston College</td>
<td>3</td>
<td>Rice University</td>
<td>2</td>
</tr>
<tr>
<td>Boston Conservatory</td>
<td>1</td>
<td>Sarah Lawrence College</td>
<td>1</td>
</tr>
<tr>
<td>Bowdoin College</td>
<td>5</td>
<td>Skidmore College</td>
<td>1</td>
</tr>
<tr>
<td>Brown University</td>
<td>6</td>
<td>Smith College</td>
<td>1</td>
</tr>
<tr>
<td>California Institute of Technology</td>
<td>1</td>
<td>Stanford University</td>
<td>5</td>
</tr>
<tr>
<td>Carleton College</td>
<td>3</td>
<td>Swarthmore College</td>
<td>2</td>
</tr>
<tr>
<td>Carnegie Mellon University</td>
<td>3</td>
<td>Trinity College</td>
<td>3</td>
</tr>
<tr>
<td>Case Western Reserve University</td>
<td>2</td>
<td>Tufts University</td>
<td>3</td>
</tr>
<tr>
<td>Clark University</td>
<td>1</td>
<td>Union College/Albany Medical School</td>
<td>1</td>
</tr>
<tr>
<td>Colgate University</td>
<td>6</td>
<td>University of California, Berkeley</td>
<td>1</td>
</tr>
<tr>
<td>College of the Holy Cross</td>
<td>1</td>
<td>University of Cambridge</td>
<td>1</td>
</tr>
<tr>
<td>College of William and Mary</td>
<td>2</td>
<td>University of Chicago</td>
<td>15</td>
</tr>
<tr>
<td>Columbia University</td>
<td>22</td>
<td>University of Edinburgh</td>
<td>1</td>
</tr>
<tr>
<td>Connecticut College</td>
<td>1</td>
<td>University of Miami</td>
<td>1</td>
</tr>
<tr>
<td>Cornell University</td>
<td>13</td>
<td>University of Michigan</td>
<td>2</td>
</tr>
<tr>
<td>Dartmouth College</td>
<td>4</td>
<td>University of Oxford</td>
<td>1</td>
</tr>
<tr>
<td>Dickinson College</td>
<td>1</td>
<td>University of Pennsylvania</td>
<td>7</td>
</tr>
<tr>
<td>Duke University</td>
<td>5</td>
<td>University of Richmond</td>
<td>1</td>
</tr>
<tr>
<td>Emory University</td>
<td>2</td>
<td>University of Rochester</td>
<td>1</td>
</tr>
<tr>
<td>Georgetown University</td>
<td>8</td>
<td>University of Southern California</td>
<td>3</td>
</tr>
<tr>
<td>Hamilton College</td>
<td>2</td>
<td>University of St. Andrews</td>
<td>2</td>
</tr>
<tr>
<td>Harvard University</td>
<td>28</td>
<td>University of Tokyo</td>
<td>1</td>
</tr>
<tr>
<td>Haverford College</td>
<td>2</td>
<td>University of Vermont</td>
<td>1</td>
</tr>
<tr>
<td>Howard University</td>
<td>1</td>
<td>University of Virginia</td>
<td>2</td>
</tr>
<tr>
<td>Kenyon College</td>
<td>2</td>
<td>University of Zurich</td>
<td>1</td>
</tr>
<tr>
<td>Lafayette College</td>
<td>1</td>
<td>Vanderbilt University</td>
<td>3</td>
</tr>
<tr>
<td>Lehigh University</td>
<td>2</td>
<td>Wake Forest University</td>
<td>2</td>
</tr>
<tr>
<td>Macaulay Honors College at CUNY</td>
<td>2</td>
<td>Washington University in St. Louis</td>
<td>3</td>
</tr>
<tr>
<td>Massachusetts Institute of Technology</td>
<td>2</td>
<td>Wellesley College</td>
<td>1</td>
</tr>
<tr>
<td>McGill University</td>
<td>2</td>
<td>Wesleyan University</td>
<td>3</td>
</tr>
<tr>
<td>Middlebury College</td>
<td>4</td>
<td>Williams College</td>
<td>8</td>
</tr>
<tr>
<td>New York University</td>
<td>5</td>
<td>Worcester Polytechnic Institute</td>
<td>1</td>
</tr>
<tr>
<td>Northwestern University</td>
<td>6</td>
<td>Yale University</td>
<td>15</td>
</tr>
<tr>
<td>Date</td>
<td>Event Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td>--------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monday, August 30</td>
<td>Opening Faculty Meeting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friday, September 3</td>
<td>Labor Day: School closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monday, September 6</td>
<td>Labor Day: School closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuesday, September 7</td>
<td>Rosh Hashanah: School closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wednesday, September 8</td>
<td>Opening Day for Classes K–XII</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thursday, September 9</td>
<td>First full day of classes (Day 1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thursday, September 16</td>
<td>Yom Kippur: School closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thursday, September 23</td>
<td>Middle School Curriculum Night</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuesday, September 28</td>
<td>Upper School Curriculum Night</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thursday, September 30</td>
<td>Lower School Curriculum Night</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monday, October 11</td>
<td>Fall Weekend: School closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thursday, November 4</td>
<td>Diwali: School closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friday, November 12</td>
<td>Lower School Parent-Teacher Conferences and IX Teacher/VI–VIII Advisor-Parent Conferences: No classes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wed.–Fri., November 24–26</td>
<td>Thanksgiving Recess: School closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friday, December 17</td>
<td>Last day before Winter Break for K–XII</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Event/Comment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monday, January 3</td>
<td>School reopens</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monday, January 17</td>
<td>Martin Luther King, Jr. Day: School closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuesday, January 18</td>
<td>Professional Development Day: No classes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuesday, February 1</td>
<td>Lunar New Year: School closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friday, February 4</td>
<td>VI Teacher/IX–XII Advisor-Parent Conferences: No classes VI–XII</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monday, February 21</td>
<td>Presidents’ Day: School closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friday, March 11</td>
<td>Last day before Spring Break for K–XII</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monday, March 28</td>
<td>School reopens</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wednesday, April 13</td>
<td>Lower School Conferences: No classes K–IV</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friday, April 15</td>
<td>Good Friday: School closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuesday, May 3</td>
<td>Eid al-Fitr: School closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monday, May 30</td>
<td>Memorial Day: School closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wednesday, June 8</td>
<td>Lower School Last Day</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thursday, June 9</td>
<td>Middle School Last Day</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friday, June 10</td>
<td>Upper School Last Day</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monday, June 13</td>
<td>Closing Faculty Meeting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wed.–Fri. June 15-17</td>
<td>Professional Development Seminars</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**A NOTE ON THE 2021–2022 SCHOOL CALENDAR**

To keep in accordance with evolving health and safety guidelines during the Covid-19 pandemic, these dates may be subject to change.
2021–2022 Board of Trustees

Modupe Akinola ’92, President
David Philip, Senior Vice President
Susan Berresford ’61, Vice President
Paula Campbell Roberts ’94, Vice President
Jocelyn Strauber ’91, Secretary
Munib Islam, Treasurer

Tara Abrahams
Gideon Berger
Elizabeth Chandler
Ranika Cohen
Joseph DiMenna
Amina Elderfield ’94
Thomas Farrell
Jane Foley Fried
Martha Haakmat
Rebecca Haile
Sue Meng ’99
David Raso
Pam Selin
Siclaya Moore Sherwood ’90
Bill Shutzer
Lita Tandon ’06
Olivia Wassenaar ’97
Lauren Wasson
Alan Yan

TRUSTEES EMERITI
Georges F. de Ménil
Evelyn Janover Halpert ’52
David T. Hamamoto
Stephanie J. Hull
Ellen Jewett ’77
Alan Jones
Edward F. Rover
John F. Savarese
Priscilla M. Winn Barlow

FACULTY REPRESENTATIVE
Ann Saunders
The Brearley School, in observance of state and federal laws and regulations, does not discriminate on the basis of race, color, religion, sexual orientation, disability or national or ethnic origin in administration of its admission, financial assistance, educational or other school policies. Every Brearley student is admitted to all of the rights, privileges, programs and activities generally accorded or made available to students at the School.

Brearley is chartered by and registered with the Education Department of the State of New York. It is accredited by the New York State Association of Independent Schools.